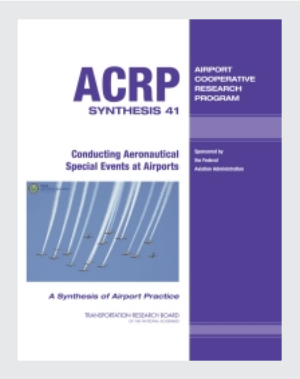

Conducting Aeronautical Special Events at Airports

DETAILS

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AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP SYNTHESIS 41

Conducting Aeronautical Special Events at Airports

A Synthesis of Airport Practice

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AIRPORT COOPERATIVE RESEARCH PROGRAM

Airports are vital national resources. They serve a key role in transportation of people and goods and in regional, national, and international commerce. They are where the nation's aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports. Research is necessary to solve common operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the airport industry. The Airport Cooperative Research Program (ACRP) serves as one of the principal means by which the airport industry can develop innovative near-term solutions to meet demands placed on it.

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The ACRP was authorized in December 2003 as part of the Vision 100-Century of Aviation Reauthorization Act. The primary participants in the ACRP are (1) an independent governing board, the ACRP Oversight Committee (AOC), appointed by the Secretary of the U.S. Department of Transportation with representation from airport operating agencies, other stakeholders, and relevant industry organizations such as the Airports Council International-North America (ACI-NA), the American Association of Airport Executives (AAAE), the National Association of State Aviation Officials (NASAO), Airlines for America (A4A), and the Airport Consultants Council (ACC) as vital links to the airport community; (2) the TRB as program manager and secretariat for the governing board; and (3) the FAA as program sponsor. In October 2005, the FAA executed a contract with the National Academies formally initiating the program.

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Research problem statements for the ACRP are solicited periodically but may be submitted to the TRB by anyone at any time. It is the responsibility of the AOC to formulate the research program by identifying the highest priority projects and defining funding levels and expected products.

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Cover Figure: Aircraft in formation during air show (*Source*: Jon Ross, FAA).

FOREWORD

Airport administrators, engineers, and researchers often face problems for which information already exists, either in documented form or as undocumented experience and practice. This information may be fragmented, scattered, and unevaluated. As a consequence, full knowledge of what has been learned about a problem may not be brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is information on nearly every subject of concern to the airport industry. Much of it derives from research or from the work of practitioners faced with problems in their day-to-day work. To provide a systematic means for assembling and evaluating such useful information and to make it available to the entire airport community, the Airport Cooperative Research Program authorized the Transportation Research Board to undertake a continuing project. This project, ACRP Project 11-03, "Synthesis of Information Related to Airport Practices," searches out and synthesizes useful knowledge from all available sources and prepares concise, documented reports on specific topics. Reports from this endeavor constitute an ACRP report series, *Synthesis of Airport Practice*.

This synthesis series reports on current knowledge and practice, in a compact format, without the detailed directions usually found in handbooks or design manuals. Each report in the series provides a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems.

PREFACE

By Gail R. Staba
Senior Program Officer
Transportation Research Board

Aeronautical special events, defined as those events that involve aviation activities or aircraft, are popular among numerous airports across the United States. These events do provide benefits for the airport and the local community, and they require a great deal of planning to be successful. This report consolidates available information and lessons learned in successfully planning, organizing, and conducting an aeronautical special event, and restoring normal operations after the event.

Conclusions are based on a literature review and a survey of geographically diverse sponsors known to have conducted recent aeronautical special events. Survey responses were received from 34 of 35 airports [97% response rate and event sponsors (such as Experimental Aircraft Association chapters] across the country and five of six aeronautical special event organizers.

C. Daniel Prather, Prather Airport Solutions and California Baptist University, Riverside, California, collected and synthesized the information and wrote the report. The members of the topic panel are acknowledged on the preceding page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

CONTENTS

Note: Many of the photographs, figures, and tables in this report have been converted from color to grayscale for printing. The electronic version of the report (posted on the Web at www.trb.org) retains the color versions.

CONDUCTING AERONAUTICAL SPECIAL EVENTS AT AIRPORTS

SUMMARY

Special events involving aviation activities or aircraft are common at airports across the United States. These events are designed to (1) enhance public awareness of the airport; (2) stimulate interest in and growth of the airport and aviation; (3) foster community support; (4) provide community benefits; and (5) possibly generate revenue for the airport or community/charitable organization.

Aeronautical special events include air shows, fly-ins, airport open houses (if aircraft are on display), aircraft static display, EAA Young Eagles or Eagle Flight events, or community appreciation events involving aircraft. Nonaeronautical events, such as car shows, 5K or 10K runs, concerts, terminal dedications, or pancake breakfasts with no fly-in component, have similar requirements for planning and organizing; however, only aeronautical events and the unique considerations involved are addressed in this report.

Although these events can provide tremendous benefits for the airport and the local community, they require extensive planning, frequently commencing a year or more in advance of the event. Although the process can be lengthy and may vary according to the event type, it is characterized by the following four phases:

- Planning phase
- Organizing phase
- Event itself
- Return to normal operations and event analysis.

Event planning involves the initial discussions about reasons for holding the event, the organization to be responsible for the event, whether an air show will be included, the theme for the event, the date, site of the event, and duration of the event. Although not all decisions will be made during this initial brainstorming phase, those decisions that are made will be fundamental to the next phase.

The lengthiest of the four phases is the event organizing phase, which generally lasts from about 11 months to one day before the event. All decisions regarding such issues as committees, budgeting, admission fees, insurance, support facilities, corporate sponsorships, volunteers, parking, concessions, marketing and promotion, security, emergency response, media, static aircraft display, air show performers, air show safety, ground operations, and contingencies will be made during this phase.

The event phase is the only part which actually covers the day or days of the event. At this point, the event sponsor is focused on the success of the event, from parking to performers to volunteers and more. If sufficient planning and organizing has taken place, the day(s) of the event need not be stressful for the event sponsor. However, if planning and organizing has not been completed, the event phase can be characterized by lack of organization, problems among volunteers, dissatisfaction among attendees, and a general impression of mediocrity.

Once the event is over, the airport returns to normal operations and event analysis begins, not only ensuring proper clean-up but also determining the success of the event in light of the original objectives. Success, in other words, can be measured in more than financial terms.

Conclusions of this report are based on a thorough literature review and survey of geographically diverse sponsors known to have conducted recent aeronautical special events. Survey responses from 34 of 35 airports and event sponsors such as Experimental Aircraft Association (EAA) chapters across the country (a 97% response rate) and five of six aeronautical special event organizers provide numerous lessons learned regarding conducting aeronautical special events at airports:

- Conducting an aeronautical special event is hard work, with significant benefits.
- Begin planning one year prior to the event.
- Committees are an important way to ensure the many aspects of organizing the event are addressed.
- Airport operators rely on volunteers as much as possible, but volunteer training is important.
- Developing specific plans for parking, emergencies, safety and security, communicating with media, and ground operations, especially for air shows or events with significant attendance expected, is important for success.
- Private organizations, typically in the form of event organizing firms, are available to assist with or assume responsibility for conducting an aeronautical special event.
- Events are more appealing if they are promoted as child/family-friendly, which will generally require child-friendly attractions.
- It is important to ensure sufficient vehicle parking, seating, toilets, and food/beverage concessions to avoid long lines and dissatisfied attendees.
- Substantial event publicity is important to "get the word out;" however, this may result in greater attendance than expected, so it is important to plan appropriately.
- Conducting an air show and having jet performers can significantly increase attendance (as contrasted to an air show without aerial demonstrations or a non-air show event), but significant expenses will be encountered and coordination will be required.
- Organizations such as the International Council of Air Shows (ICAS), Aircraft Owners and Pilots Association (AOPA), and Experimental Aircraft Association (EAA) have resources that may prove useful to those organizing events.
- Corporate and community sponsorships and partnerships are crucial to ensuring "buy-in" as well as financial support.

CHAPTER ONE

INTRODUCTION

The U.S. civil aviation industry, at more than 100 years old, has grown into a $1.3 trillion industry supporting more than 10 million jobs and accounting for 5.2% of total U.S. Gross Domestic Product. The nation's airports support this activity by providing runways and taxiways, apron areas, terminal buildings, automobile parking areas, and more. Generally, the public has been well aware, and supportive, of commercial-service airports, because they regularly use these airports as they catch a flight to a business meeting or begin a vacation. Even individuals who do not fly typically recognize the benefits of an airport with scheduled airline service.

However, only a fraction of airports have scheduled airline service. According to the National Plan of Integrated Airport Systems (NPIAS), of the 5,179 airports in the United States open to the public, only 503 have commercial service. Therefore, the vast majority of public-use airports do not enjoy the visibility and community support accorded commercial-service airports. Additionally, according to Thatcher (2011, p. 2), "For almost four decades, the number of public-use airports in the United States has been in decline." In summary, "America's airports face more challenges than ever before" (AOPA 2007, p. 1). Indeed, these general aviation (GA) airports have often found the public either unaware or unconcerned about their facilities. This may result in the public organizing an effort to close the airport or resisting any and all development of the airport. In general, GA airports are often not visible or perceived as unwelcoming to the nonflying public. It is important, therefore, for these airports to proactively engage the community to generate positive exposure and stimulate support for the airport [AOPA 2007; Federal Aviation Administration (FAA), 2010a; FAA 2011].

The most common method of engaging the community and possibly generating revenue for the airport or community/charitable organization is through a special event. In broad terms, a special event may be aeronautical or nonaeronautical, an aeronautical special event being one which involves aviation activities or aircraft, such as fly-ins, air shows, Young Eagles or Eagle Flight events, and community appreciation events with aircraft. Aircraft need not be flying, however. An aircraft static display is also categorized as an aeronautical special event, as is an airport open house that has aircraft on display. According to the event calendars of the Airport Owners and Pilots Association (AOPA), Experimental Aircraft Association (EAA), and International Council of Air Shows (ICAS), there were more than 200 aeronautical special events held nationwide in 2012, with such titles as Salute to Veterans, Chili at the Airport, Plane Crazy, Festival of Flight, Wings, Wheels, and Warriors, and Airport Appreciation Days.

A nonaeronautical event employs the airport facilities as a venue but does not involve aviation activities or aircraft. Pilots may be in attendance, but not necessarily. In effect, a nonaeronautical event could be held anywhere, but is located at the airport generally because of the space available. Although there are some similarities in planning for and organizing aeronautical and nonaeronautical events, this report addresses only the unique considerations that are required for most aeronautical events.

Although similarities exist among these events, the differences can be pronounced. For instance, the event may be held at a large commercial-service airport; at a small community airport; or possibly at or near a local venue or landmark (such as the Ohio River). The event may only last one day, or may span several days or a week. The event may be coordinated by the airport or by an aviation organization. The event sponsor may be holding the event purely to give back to the community, so waive an admission fee. On the other hand, the event sponsor may budget for thousands of dollars in expenses and hope to realize substantial net revenues through admission and/or parking fees. The event may allow overnight camping on airport grounds or may expressly prohibit such activity.

Regardless of the type of event, certain phases are associated with event success, beginning with the initial planning phase. This first phase, generally held 12 months before the event, consists of the preliminary discussions on the reasons for holding the event, possible locations for the event, and possible attractions. During this phase, airports will often consult *The Complete Guide to Holding an Airport Open House,* produced by the AOPA, or seek guidance through state aviation agencies. The second, organizing phase generally lasts from 11 months up to the day before the event, during which time airports and sponsors consider the planning timeline, committees, budgeting, marketing and promotion, support facilities, corporate sponsorships and hospitality, admission fees, special invitations, volunteers, parking, insurance and indemnification, concessions and vendors, aircraft rides, security and emergency planning, media plan, static aircraft display, nonaeronautical attractions, air shows, and more. Eventually, it will be time to move into the event phase, which technically only occurs while the event is actually being held and involves

concerns unique to the event such as weather, scheduling, parking, crowd control, first aid, concessions, and vendors. The fourth phase, during which the airport returns to normal operations and the event's success is analyzed, occurs after conclusion of the event. Though it typically only takes a few hours or a day or so to return to normal operations [including clean-up and Notice to Airmen (NOTAM) cancellation], analyzing and debriefing, including a financial analysis of the event, may last for several weeks.

For airports considering holding an aeronautical special event, the four phases and the many considerations may appear daunting. Indeed, much of the knowledge about planning, organizing, and conducting aeronautical special events resides in experts in this area. Although these individuals have made themselves available as consultants and contract event organizers, not all airports have the funds or desire to arrange with such an expert or organizer. Without such an expert on staff, airports often are in search of guidance, especially if planning to conduct an aeronautical special event for the first time. Although guidance is available from a number of different sources, such as the FAA, AOPA, EAA, ICAS, the Airport Cooperative Research Program (ACRP), and various state aviation agencies and DOTs, there is currently not a single source document on the topic of aeronautical special events that can be referenced by airports and others in organizing such an event.

This synthesis attempts to meet the need for a single source document on conducting aeronautical special events by consolidating the information currently available on planning, organizing, and conducting aeronautical special events, including event analysis and the return to normal operations. To do so, this synthesis focuses on the entirety of aeronautical special events, not just air shows (which are admittedly the most visible of all aeronautical special events). Accordingly, the available literature on this topic was reviewed from a variety of sources and organizations, including the FAA, AOPA, EAA, ICAS, and military performing flight teams. Additionally, the airport manager or EAA chapter president at 35 airports nationwide were surveyed. These airports were randomly selected from aeronautical events listed on AOPA, EAA, and ICAS event calendars, as well as panel insight, to allow for geographic diversity. The airport managers or event organizers at five additional airports were interviewed for the purpose of developing case examples highlighting their experiences and lessons learned. These case example airports were specifically selected based on panel insight. Six event organizers were also surveyed to gather insight from professional event organizing firms.

Two unique surveys were developed for this synthesis. First, the "ACRP Aeronautical Event Survey of Airport Operators" was administered to the 35 airport managers and event sponsors; 34 responded (a 97% success rate). Five of the six organizing firms responded to the "ACRP Aeronautical Event Survey of Event Organizers" (83%).

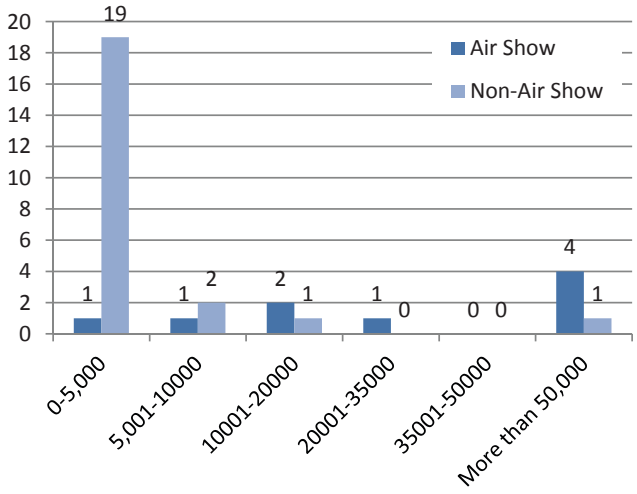

FIGURE 1 Number of attendees.

As shown in Figure 1, among respondents holding air shows, almost half (four of nine) of these events had 20,000 or fewer attendees, while the same had more than 50,000. Among respondents holding events other that air shows, 19 of 23 (82%) had 5,000 or fewer attendees. (The remaining respondent reported attendance between 20,001 and 35,000.) Among event organizing firms, three of five organized three or fewer aeronautical special events annually, whereas the other two organized 20 or more events annually.

This synthesis has been developed with a wide audience in mind, including airport managers, aeronautical special event organizers, state aviation agencies, and others interested in holding an aeronautical special event.

The report is organized in the following chapters:

- Chapter One—Introduction
- Chapter Two—Event Planning Phase
- Chapter Three—Event Organizing Phase
- Chapter Four—Event Phase
- Chapter Five—Return to Normal Operations and Event Analysis Phase
- Chapter Six—Case examples
- Chapter Seven—Conclusions and Further Research

In an effort to standardize references to the responsible organization, in this report, the phrase "event sponsor" is used to refer to the entity organizing and holding an aeronautical special event. Likewise, the phrase "corporate sponsor" is used to refer to an organization providing financial and/or in-kind contributions, whether or not this organization is a corporation. The Appendices contain additional reference material.

CHAPTER TWO

EVENT PLANNING PHASE

> "How can we get better exposure, both physical exposure and awareness, of our airport and of general aviation? By inviting the public out to the airport to have a look around, that's how."
>
> AOPA (2007, p. 2)

TWELVE MONTHS PRIOR TO EVENT

During this phase, airport and/or event personnel considering hosting an aeronautical special event should be brainstorming on such topics as:

- What are the reasons for holding the event?
- What are our goals for holding the event?
- Who will be responsible for holding the event?
- What type of event will we have?
- What will be our event theme?
- When will the event be held?
- Where will the event be held?
- What will be the duration of the event?

ESTABLISH AN OBJECTIVE

One of the first questions to ask during the planning phase is, "What do you and your group hope to accomplish by having an airport open house [or other aeronautical event]?" (AOPA 2007, p. 3). In reality, there may be several answers to this question. One objective may be to promote the use and boost the value of the airport. Another objective may be to display the airport in a positive light. Others might include attracting potential flight training students and aircraft buyers, fundraising, education, entertainment, and the promotion of aviation.

Although several objectives may come to mind, it is most effective to prioritize one primary objective. Airports have found that by establishing a general objective, such as "giving back to the community," several sub-objectives can also be achieved. According to all survey participants, enhancing community relations and provoking interest in aviation are the most common objectives in holding an aeronautical special event (Figure 2) (AOPA 2007).

RESPONSIBLE ORGANIZATION

After an objective for the event is determined, discussions will likely center around the organization that will assume responsibility for the event. Options for the responsible organization (or event sponsor) include the airport, a local military base, a civic or charitable organization, a local municipality, a flight club, an aviation organization/association, the state aviation agency, the Civil Air Patrol, fixed base operator (FBO), and more. If an organization other than the airport will be responsible for organizing the event, it is worthwhile for the organization to seek approval from the airport authority, owner, or other entity that sponsors the airport to garner full support. "Having that official seal of approval will pave the way for cooperation from airport staff, and possible in-kind assistance in the form of manpower supplies and equipment, and perhaps even funding" (AOPA 2007, p. 5).

Discussions may also include contracting with a professional event organizing firm. This may be especially helpful for larger events and first-time event sponsors. According to event organizing firms participating in the survey, they are available to assist with almost every aspect of the event, including marketing and promotion, public relations, announcing, air boss, concessions, insurance, FAA waivers, performer contracting, photography/video, printing/publishing, and sponsorships. Additionally, various industry associations, including ICAS, AOPA, Professional Airshow Performers Association and the EAA, are available to offer support and assistance to event sponsors. However, many airports report having held successful events without the use of a professional event organizing firm.

Regardless of the event sponsor, it is important to include all concerned parties in the planning and organizing phases for the event. In addition to airport management, air traffic management and controllers, and a representative from the municipality or county, it is advantageous to include airport tenants, such as FBOs, flight schools, user groups, and other interested parties. Additionally, local law enforcement, fire rescue, the FAA Flight Standards District Offices (FSDO), and the state aviation agency can prove helpful in the planning and organizing phases of the event. In total, this may involve six to 20 individuals (or more) in the planning and organizing phases of the event.

TYPES OF EVENTS

The types of aeronautical special events from which the event sponsor can choose will also likely be discussed during this initial planning phase. An airport open house is a relatively simple aeronautical special event that need not involve an air show or even aircraft in flight (although those held at military bases often have an air demonstration). It can simply involve opening

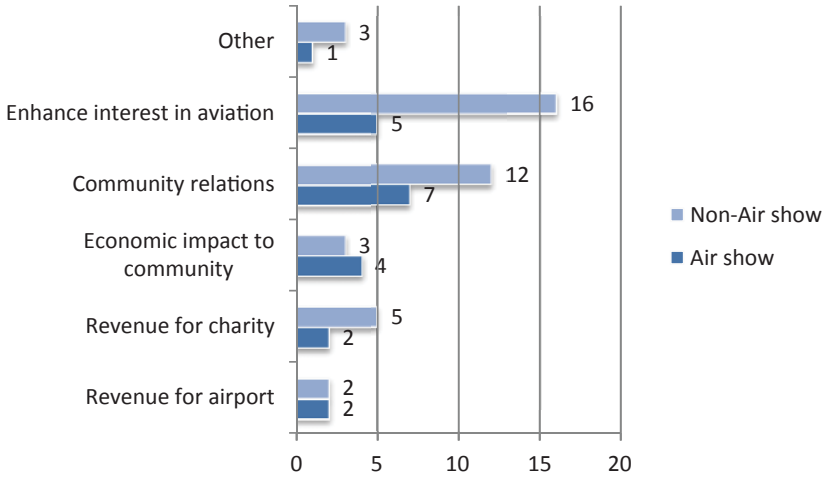

FIGURE 2 For which of the following reasons did the airport hold the event?

the doors to the airport and inviting the public to see everything the airport has to offer, including the on-site businesses.

> Invite [the public] to come take an up-close-and-personal look at a single-engine family aircraft, an experimental design . . . an emergency medical service helicopter, a workaday charter twin, or a proud old warbird [or on-airport businesses]. Offer them a chance to take an inexpensive ride in an airplane or helicopter. Show them an airport control tower, a pilot's flight-planning area, and an aircraft maintenance shop. Give them demonstrations of the expertise and equipment of local fire and rescue squads, educate them with informational and product exhibits, and entertain them with music, clowns, and activities. In short, hold an open house at your airport, and invite the public in (AOPA 2007, p. 2).

According to the FAA (1990) and aviation experts, aeronautical/aviation events include:

- Air shows
- Air races
- Aerobatic contests
- Fly-ins (Figure 3)
- Parachute demonstration jumps
- Practice areas designated for aerobatic proficiency or training
- Balloon meets and races (Figure 4).

In particular, fly-ins may consist of Young Eagle flights, poker runs, spot landing contests, tethered hot air balloon rides, orientation flights, airplane rides by commercial vendors, and pilot proficiency events (FAA 1990; EAA 2009).

Of the many types of aeronautical special events, air shows have the most appeal. Air shows are, in essence, "sporting events" where aerial performers display aerobatics, formation flights, and other thrilling aeronautical feats on the main stage (Figure 5). An air show may be part of a larger event with static aircraft on display and various aviation-related exhibits and activities; may be free (typically at military bases), or may charge an admission fee and/or a parking fee (Warnick et al. 2009).

FIGURE 3 Fly-in aircraft. (*Source*: Jon Ross, FAA.)

FIGURE 4 Balloon fest. (*Source*: Gary Shafer, Southern Illinois Airport.)

FIGURE 5 Airshow performer in flight. (*Source*: Jon Ross, FAA.)

Thus, a major consideration in planning for an aeronautical special event is whether or not to make an air show part of the event. This decision cannot be made lightly, as an air show will affect the event's finances, insurance requirements, waiver requirements, anticipated number of attendees, etc. Indeed, two things are certain if an air show is held: Larger crowds are assured; and the complexity of planning the event and the cost of staging it will rise significantly. Although those involved with planning an aeronautical event may believe that incorporating an air show is a necessity, it is important to determine during the planning phase whether an air show will contribute to the objectives established for the event. The experiences of many airports indicate that an air show will increase revenues for the event and the airport, which is important if profits are an objective. "If the primary objective of having an open house is to educate the community about the transportation, economic, public safety, and lifestyle benefits of having a vibrant local general aviation airport, however, then it can be argued that an air show may actually be a distraction" (AOPA 2007, p. 4). One option is to incorporate some fly-by demonstrations, rather than a comprehensive air show. A benefit to this option is that no FAA waivers are required if the aircraft do not perform aerobatic maneuvers. Another option which may not require an FAA waiver is a parachute jump (AOPA 2007).

Among the events held by survey participants, air shows were the most common type of aeronautical special events, with fly-ins the second most common. Open house with aircraft, EAA Young Eagles or Eagle Flight events, and "other" (including aviation summer camps and tours) were the third most common type of aeronautical special events (Figure 6).

DEVELOP A THEME

Once the type of event is decided, a theme for the event may be developed. Used properly, a theme can enhance interest in the event among pilots and nonpilots alike; and can be integrated into the name of the event as well, such as Sun 'N Fun, Planes 'n Pancakes, or Wings and Wheels, which can pique public interest and has more marketing value than Airport ABC Fly-In, for instance.

DATE OF EVENT

Although an exact date for the event may not be decided at this stage, potential dates will likely be discussed. Aeronautical events are held throughout the year; however, there are some general issues to consider when selecting a date for the event. First, weather: Generally, aeronautical special events are more enjoyable during moderate temperatures, making late spring and summer popular seasons for these events. Second, families often take vacations during the summer and although that may mean more families vacationing in the area where the event will be held (if it has tourist attractions), it may also mean that local residents are vacationing out of the area, resulting in lower attendance at the event. Third, it is important to consider

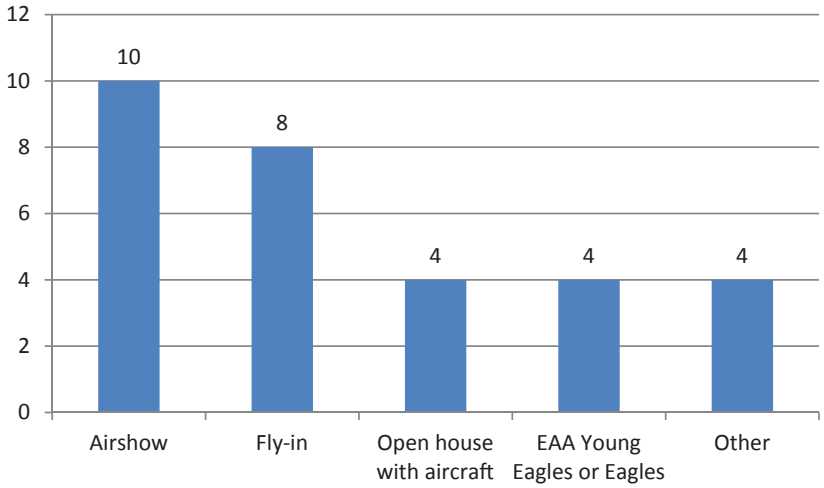

FIGURE 6 Most common aeronautical events.

the dates of other events, aeronautical and nonaeronautical, that may conflict with the event. Some of these competing events may actually cost less and offer more opportunities for active involvement; as the number of air shows and aeronautical special events continues to increase, they may also affect the availability of performers, static display aircraft, and exhibitors. Therefore, appropriate advance planning is integral to ensuring that preferred performers, static display aircraft, and exhibitors are secured.

SITE SELECTION

Possibly one of the most important decisions to be made in organizing the event involves the site for the event. Although some initial thoughts about this likely occur during the initial planning, final decisions regarding the site are generally made during the organizing phase. It is essential that the site be able to accommodate the anticipated types of aerial demonstrations without derogating safety or causing a hazard to any nonparticipating aircraft or attendees. It is also important to evaluate areas adjacent to the show site, including homes, businesses, roads, or any occupied vessel, vehicle, or structure in selecting the site. Generally, three types of sites may be selected:

- Airports—Probably the best site for an aeronautical event, the local airport will typically be given first consideration as a potential site.
- Fairgrounds—If the airport is not an ideal location, a fairgrounds may be. Fairgrounds provide such assets as fencing, grandstands and/or bleachers, concession stand areas, first-aid stations, police, and possibly fire services on-site. Additionally, a fairgrounds may be better able to accommodate the large volume of vehicular traffic expected during the event.
- Other sites—In addition to airports and fairgrounds, lakes, rivers, parks, and other open areas may suffice (although it is important to consider potential wildlife hazards).

DURATION OF EVENT

Although major aeronautical events such as the Sun ‘N Fun International Fly-In and Expo in Lakeland, Florida, and EAA AirVenture at Oshkosh, Wisconsin, are week-long events, most aeronautical events are either one or two days in duration. Past experience indicates that expenses are recovered during the first day and net profits are earned during the second day. However, there are plenty of one-day events that also cover expenses. Once permits and approvals are secured, volunteers are in place, and vendors, equipment, aircraft, and performers are scheduled, extending a one-day event into a second day requires little more commitment on the part of the event sponsor. However, the second day will require volunteers, pilots of static aircraft, performers, and other personnel to return. There will also be additional cost involved for rentals of equipment, as well as lodging, meals, and transportation for performers. These additional expenses will need to be considered in deciding whether to extend the event to two days (AOPA 2007).

CHAPTER THREE

EVENT ORGANIZING PHASE

> "Thorough planning [organizing] has a direct bearing on the success and safety of any event. Therefore, it is in everyone's best interest that an effective plan for all facets of the event be developed."
>
> FAA (1990)

Once the initial planning discussions have taken place, and the event sponsor has committed to holding an aeronautical special event, the next phase—event organizing—begins. Considered the most complex segment, this phase generally lasts from 11 months to one day before the event. During this extended period, staff is often consumed with the many aspects of planning, including:

- Committees
- Budget
- Insurance
- Attractions/performers
- Support facilities
- Marketing and promotion
- Corporate sponsorships and hospitality
- Contingency plans
- Temporary frequencies and communications
- Air boss
- Ground operations plans
- FAA waivers and coordination
- Accommodations
- Concessions and vendors
- Security plan
- Emergency plan
- Media plan
- Safety/layout plan
- Crowd lines and show lines
- Signage
- Support facilities
- Volunteers
- Transportation/auto parking/traffic
- Emergency aircraft repair.

CHRONOLOGICAL EVENT ORGANIZING CHECKLIST

To assist airports and event organizers with planning and organizing an aeronautical special event, a 12-month chronological checklist has been developed based on findings and the AOPA guide, previously discussed. Although this may appear to be a long period of time, it is better to have everything taken care of months in advance than to attempt to organize everything at a feverish pitch during the months or weeks leading up to the event. This is especially crucial for first-time sponsors (Appendix B).

ELEVEN MONTHS PRIOR TO EVENT

Committees

Various committees should be established during this phase to project a sense of organization, as well as assign responsibilities to key people. Each committee will need a chair, or leader, to direct the work of the committee. Committees will also need clear goals, or the chair will likely be ineffective in keeping meetings on topic. Committees may include:

- Air operations
- Ground operations
- Transportation/parking and disability services
- Pilots
- Public safety/fire
- Public safety/police
- Private security
- FAA/tower
- Volunteers
- Permitting and approvals from FAA, airport, municipality
- Exhibitors and vendors
- Supplies and equipment
- Signage
- Corporate sponsors
- Static display
- Fly-in aircraft
- Flight operations
- Daily program/schedule
- Event programs
- Promotion
- Insurance
- Incidentals
- Cleanup (AOPA 2007, p. 6; "Safety From the Ground Up" 2010).

The all-volunteer, not-for-profit California International Air show in Salinas, California, which is led by a 13-member board of directors, requires approximately 75 committees. The board is divided into specific areas of responsibility,

including admissions, air operations, concessions, facility, ground operations, hospitality, marketing, security, sponsorships, and transportation. Each board member also has general areas of responsibility, such as budgeting, controlling expenses, staffing, schedules, etc. The airport executive director reports to the board president and is responsible for all administration, contributing significantly to marketing efforts and securing sponsorships. This event has contributed more than $7 million to charities since 1981 (Brown 2010).

If the event sponsor enters into any agreement (for portable toilets, performers, etc.) through a committee, it is beneficial to provide copies to each committee to keep all members informed of progress being made toward the event and to prevent duplication of efforts (AOPA 2007).

According to survey participants, the six most common committees established for air shows include security, parking/traffic, marketing, finance, emergency response, and performers (Figure 7). The four most common committees established for events other than air shows are safety, parking/traffic, sponsorships, and marketing.

In addition to committees, it is common practice to appoint an executive director or chairman of the event. Survey participants indicated this individual most often serves in an unpaid capacity. For air show events, this person may be the airport director or other airport staff, volunteer, or local elected official. For non-air show events, this individual is most often a volunteer, but may also be the airport director or other airport staff. Six of nine (two-thirds) of survey participants reported that air shows are governed by a board of directors, whereas a little over half (12 of 23) of non-air shows are governed by a board of directors.

Budget

Finances will become a central topic early in the organizing phase. Whether the event is to be offered free (to benefit the community), with a dedicated fee (for charity), or to generate enough money to fund the next year's event, developing a budget for the event is a necessity (Appendix C). A one-day airport open house may have a budget of less than $1,000. However, a two-day air show may have a budget of $350,000 or more. According to Hirschman (2005), it cost about $250,000 to hold the California International Air Show about 20 years ago; however, that number has grown to around $1.4 million. Experienced event sponsors point to rising marketing expenses, increased costs for air show performers and static display aircraft and their crews, and higher operational expenses such as insurance, hired personnel, etc.

Actual expenses will vary based on the size of the event, extent of volunteer labor, donated equipment and supplies, and in-kind contributions.

Consider the amount of funding available to stage the event, whether an admission fee and/or parking fee will be charged to recover costs, and whether any profits for the event will be donated to a charity. Many performers and equipment rentals will require payment (or at least a deposit) prior to the event, which requires funds to be available in an account to make these payments before a single dollar in revenue is realized from the event. This "seed money" is essential; if it is not available, the event sponsor will likely go into debt in the months leading up to the event. If revenues are not projected to cover expenses, the event may need to be scaled back and/or ways to increase revenues may need to be explored. In-kind (or noncash) contributions, which can greatly reduce budgeted expenses, include fuel for aircraft; personnel for directing and parking aircraft; police, fire, and rescue support; crowd con-

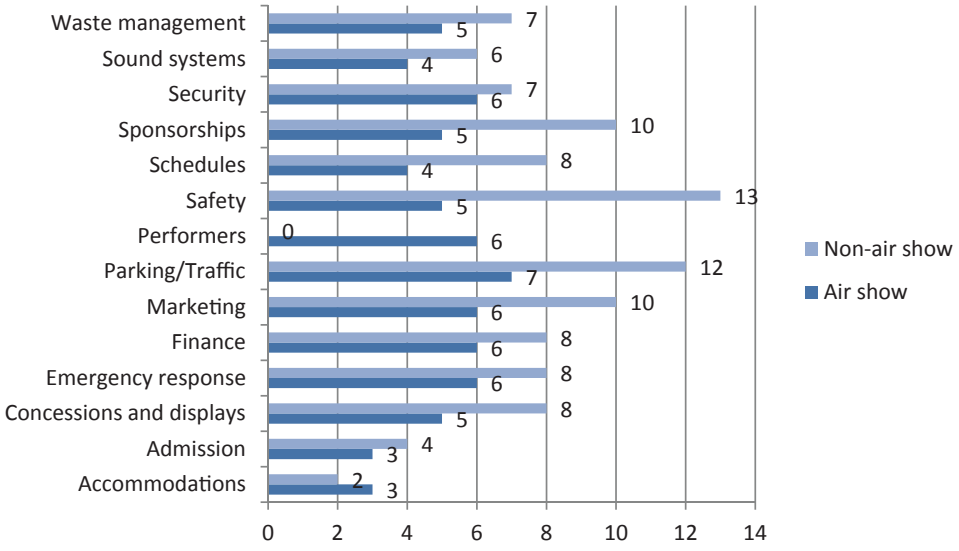

FIGURE 7 Which of the following committees were established in preparation for the event?

trol equipment; portable toilets; printing services for promotional materials; and discounted lodging, loaner vehicles, golf carts, tents, and public address equipment (Hirschman 2005). According to survey participants, the majority (25 of 37) rely on volunteers in an effort to cut costs (Figure 8).

An aeronautical special event may also earn revenues in a number of ways. Potential sources of revenue include admission ticket sales, parking fees, vendor and exhibitor fees, sales of programs and program advertisements, and merchandise sales. Gone are the days in which an admission fee was the only source of revenue for an aeronautical event. Indeed, many aeronautical events charge no admission fees and yet earn thousands of dollars by charging vendors a portion of their gross profits, collecting a share of revenue from aircraft rides, and charging nonaviation exhibitors or vendors. Local tourism or Chamber of Commerce funding may also be available. Although grants and other funding opportunities may be available to financially support the event, among survey participants, this was not a common source of funding (Hirschman 2005).

As seen in Figure 9, the most common methods of boosting revenues include adding more aeronautical and nonaeronautical attractions, and increasing food/beverage concessions (i.e., more choices). However, charging higher food prices will have a negative effect on revenues and attendee satisfaction.

Admission Fees

Generally, aeronautical special events charge an admission fee either to generate a profit or to recover costs incurred in holding the event. Some may also charge a fee for parking, or a parking fee may be charged in lieu of an admission fee. Of those aeronautical events charging admission fees, these fees are commonly the main source of revenue for the event. However, it appears that many airshows (especially smaller shows) do not charge an admission fee, instead relying on sponsors, vendors, and volunteers to hold the event.

According to Zimmerman (2009), recession-weary families in search of affordable family-friendly entertainment and activities are increasingly turning to aeronautical special events, specifically air shows. Generally, air shows do not charge an admission fee. Some do, however, and of these, advance purchase tickets are about $5 to 15 for adults, $5 to 10 for seniors, and $5 or less for children. It is even rare for aeronautical events other than airs shows to charge an admission fee. However, there are some non-air show events that charge admission fees. Generally, these events charge $10 to 15 for adult advance purchase, $5 to 10 for senior advance purchase, and $5 to 10 for child advance purchase. On-site admission fees are a bit higher (ICAS 2011).

Insurance, Indemnification, and Use Agreements

Certain risks are inherent at aeronautical events. Aeronautical events consisting of aircraft performing aerobatic maneuvers only increases this risk; indeed, some performers may require aeronautical event insurance before they agree to operate at the event. If the event sponsor is an organization other than the airport, the airport will generally require the sponsor and any commercial vendors to obtain liability insurance with the airport named on the policy as an additional insured party.

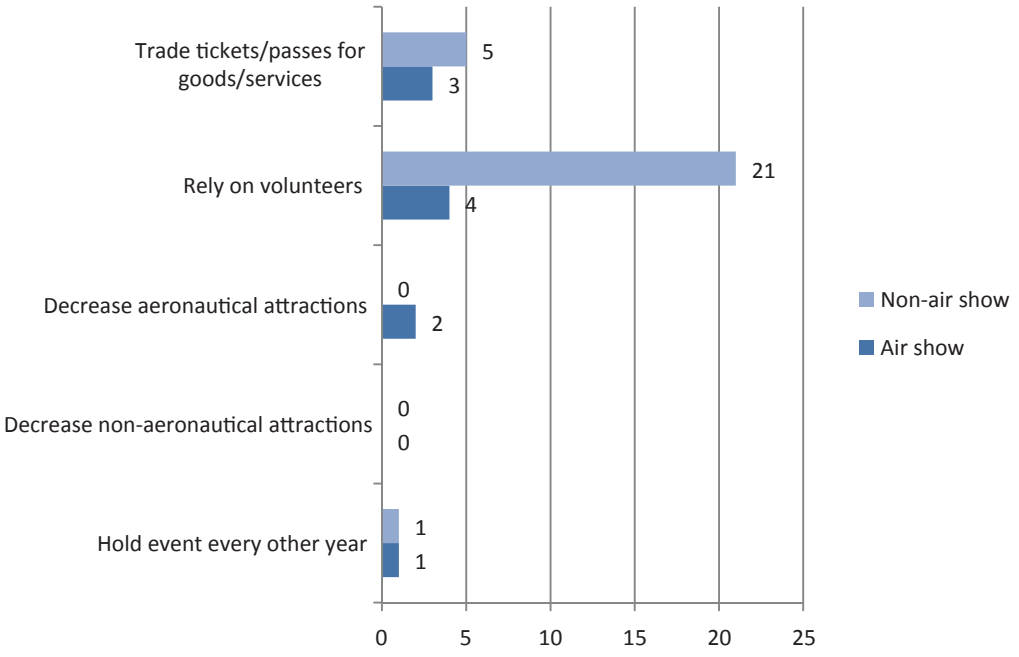

FIGURE 8 What methods are used to limit expenses?

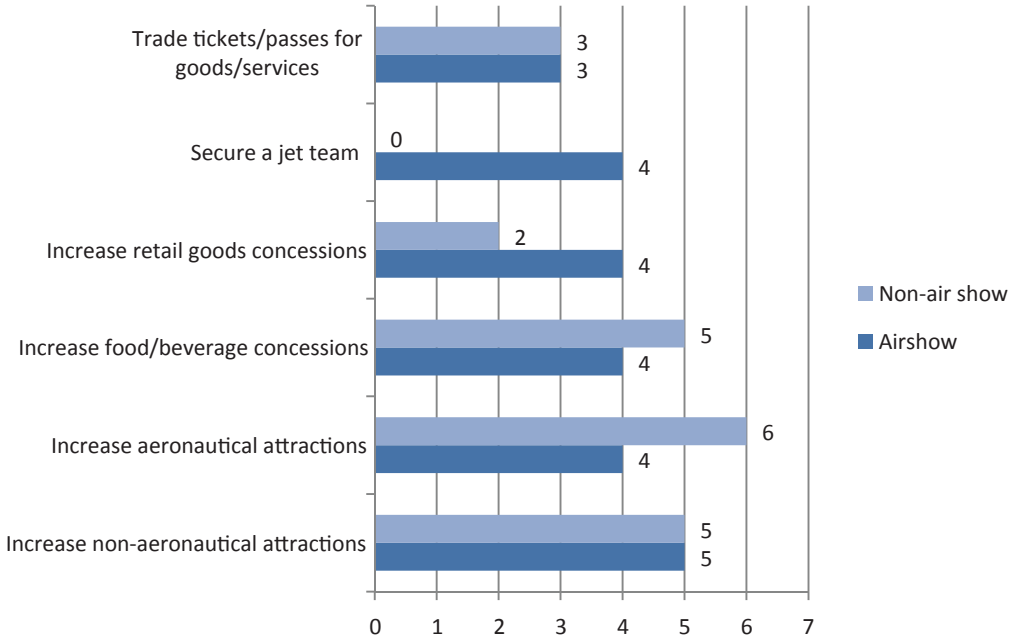

FIGURE 9 What methods are used to increase revenues for the event?

The local municipality may also require liability insurance, naming the municipality as an additional insured. Air show performers may request evidence of liability coverage as well. If vehicles will be used during the event, it is important to include vehicle liability coverage (as well as comprehensive coverage if the vehicles are rented). If set-up is to begin a day or so prior to the event, with cleanup lasting a day or so after, it is important that coverage extend though this period. The typical coverage limit for the event sponsor is $1 million, although mid- to larger-sized events may have insurance requirements of $5 million or more. An important factor in the amount of insurance is the structure of event management. A for-profit entity may require more insurance coverage than a nonprofit entity (AOPA 2007; R. Hansen, personal communication, September 2012).

When discussing types of insurance, amount of coverage, and other factors, three considerations are:

- Risk assessment—Determine potential risk associated with each event, the types and extent of injuries that could result, etc.
- Risk management—Consider actions that may be taken to mitigate the risk of each event.
- Risk finance—Work with insurance professionals with expertise in aviation events who are able to assist in identifying risks and developing mitigation strategies. These professionals will ensure that sufficient insurance is purchased to cover all potential risks (R. Hansen, personal communication).

It is also beneficial to include indemnification language in any Airport Events Application or contracts. Such language is designed to protect the airport and may be similar to what appears in Appendix D.

In addition to liability insurance and indemnification language, air meet rain insurance will provide lost revenue protection if the event is rained out. These policies can be very expensive (i.e., $20,000 for $100,000 coverage) and specify the amount of rain in a certain period of time for the insurance policy to pay benefits. However, rain always negatively impacts attendance and can make the difference between a profitable and unprofitable event. Without rain insurance, a two-day event becomes a one-day event as far as revenues are concerned, and yet the event sponsor's expenses will not change.

All of the agreed upon terms and conditions, requirements, and expectations will be spelled out in a Use Agreement between the airport and the event sponsor (if the event sponsor is other than the airport). This not only prevents confusion, but also clearly spells out expectations regarding the event, including space to be dedicated to the event. Appendix E includes a sample use agreement.

Aircraft Rides

People attend an aeronautical special event to enjoy and learn more about aviation. One way to encourage this is to offer aircraft rides. The EAA is one organization that promotes interest in aviation through its Young Eagles and Eagles programs. The EAA Young Eagles program, launched in 1992, gives young people ages 8 to 17 an opportunity to experience flight in a general aviation airplane. Flights are

offered free by volunteer members of the EAA. Since 1992, more than 1.7 million Young Eagles have enjoyed a flight through the program. Commercial helicopter flights, biplane sightseeing flights, DC-3 sightseeing flights, Commemorative Air Force flights, and aircraft rides by the local flight school are also options to pursue.

Static Aircraft Display

Aeronautical events often involve some degree of static aircraft display, especially as the highlight of an airport open house (Figure 10). Indeed, such a display may be the one component which turns a nonaeronautical event into an aeronautical event. Aircraft might include hot air balloons; warbirds; ultralights; experimentals; antiques and classics; seaplanes and amphibians; rotorcraft; unmanned aerial vehicles; single-engine and multi-engine general aviation aircraft; and turboprops and business jets. Additionally, on-airport flight training providers, maintenance schools, and charter operators may be part of the static aircraft display (AOPA 2007).

Advanced planning is necessary to solicit owners of interesting and unusual aircraft for their participation in displaying their aircraft. Local and regional EAA, Warbirds of America (WOA), Vintage Aircraft Association (VAA), and International Aerobatic Club (IAC) are excellent resources to find interesting and unusual aircraft for static display. Although billing the event as a fly-in may bring in aircraft for the static aircraft display at no cost to the event sponsor, it may be helpful to offer a full tank of fuel on departure. For two-day or longer events, it may be necessary to provide lodging, meals, and vehicles or escorts (typically required by military participants, as well as compensation for services). Consider welcoming pilots flying in aircraft for the static display with a package containing instructions, event schedule, aircraft judging guidelines, map of the site and local area, thank-you gift, and an invitation to the sponsor's party. Aircraft owners are typically attracted to events that present an opportunity to have their aircraft judged by their peers (AOPA 2007).

FIGURE 10 Attendees visiting the static aircraft display. (*Source*: Jon Ross, FAA.)

Hands-on aircraft are a helpful attraction at a static aircraft display. Simply arranging a long line of aircraft that attendees may only admire from afar will not be as effective as allowing attendees to get up close and personal. This is especially true for children. However, such attractions require aircraft to be staffed throughout the duration of the event to provide security and answer questions. At the Van Nuys (California) Airport Aviation Expo, for example, a local aviation maintenance school provides "Vinne," which is a real but non-flying homebuilt aircraft modified to be child-friendly. Major parts of the aircraft are labeled and children are invited to climb in and get a feel for flying the plane, even while it remains on the ground (AOPA 2007).

Nonaeronautical Attractions

Although this synthesis focuses on aeronautical events, event organizers may wish to consider the benefits provided by nonaeronautical attractions and the degree to which they may be used as part of the event. Nonaeronautical attractions and activities that have proven popular include:

- Public safety demonstrations
- Live music
- Dance/gala/banquet
- Police dog demonstration
- Child-friendly hands-on activities
- Motorcycle, car, and RV shows
- Military equipment displays
- Radio-controlled model demonstrations
- Historical exhibits
- Pavilion with civic, military service, and business exhibits (AOPA 2007, p. 11).

Of the survey participants holding events other than an air show, nearly all (21 of 23) promoted the event as being child/family-friendly, while all 10 respondents holding air shows promoted the event as being child/family-friendly. The most common nonaeronautical attraction at air shows is in the form of military equipment, while a car show is the most common attraction at aeronautical events other than air shows.

Air Show or Not?

All event sponsors are faced with this question: "Should we incorporate an air show?" Generally, this question is answered based on economics and philosophy. True, an air show will always increase attendance numbers, but it also costs substantially more money to hold. Philosophically, the event sponsor may decide that having aerobatic performances is integral to the event, regardless of the added expense. Of course, there are additional considerations, such as FAA coordination (waivers, NOTAMs), performers, showlines,

contracting with an airboss and announcer, developing a ground operations plan, etc. (AOPA 2007).

According to the FAA, an acrobatic or aerobatic maneuver is one in which the aircraft is intentionally placed in "sustained inverted flight or is rolled from upright to inverted or from inverted to upright position" (FAA 1990, p. 1). According to the regulations, "aerobatic flight means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight" (FAA 2003). Aerobatic maneuvers include slow rolls, snap rolls, loops, Immelmanns, cuban eights, spins, and hammerhead turns. Steep banked, level, climbing, or descending turns necessary to maneuver between aerobatic maneuvers are not considered to be acrobatic maneuvers, nor are normal positioning turns for high performance aircraft operated by the military regardless of angle, bank, or pitch attitude. Furthermore, normal maneuvers involved in air racing, such as steep turns, are not considered acrobatic (FAA 1990).

Selection of Performers

There are many different types of performers who make their services available for air shows. When evaluating prospective performers, however, it is useful to think outside the traditional box and consider comedy acts, sail planes, helicopters, civilian demonstration teams, parachute jumpers, wing walkers, crop dusters, banner towing airplanes, fire bombers, skywriters, and mosquito control airplanes (Figure 11). As one expert put it, "Variety doesn't appear to be a priority for a lot of air show organizers—and that's a shame" (Hirschman 2002, p. 19). Another expert suggested, "The best air shows are the ones that come up with the right mix" (Hirschman 2002, p. 20). In providing "food for thought" on this topic, another experienced organizer wants people to be educated at his air show. "It's not enough to be entertained" (Hirschman 2002, p. 30).

According to survey participants holding air shows, the most common performances are military acts and civilian

FIGURE 11 Airshow performer. (*Source*: Jon Ross, FAA.)

FIGURE 12 Flyover during an airshow. (*Source*: Anonymous.)

piston aerobatics, followed by civilian jet aerobatics, comedy routines, formation flights, helicopters, and parachutists. The third most common group of acts included sailplane aeronautics, skywriting, and wingwalking. Of the choices provided, balloons were the least common. According to survey participants hosting air shows, fewer than half (four of nine) placed a priority on securing a jet team, military or civilian, to perform at the air show (Figure 12).

In deciding on the acts and specific performers to incorporate at an air show, event organizers need to remember that the FAA requires performers of aerobatic routines to satisfy certain criteria to perform low-level aerobatics in close proximity to spectators or other persons on the surface. Although members of military teams are exempt, the FAA requires each pilot to be properly certified and rated for each aircraft to be flown and also possess a current FAA Form 8710-7, Statement of Aerobatic Competency, signed by an FAA inspector. If a pilot does not possess this certificate, the FAA will require a satisfactory demonstration of the aerobatic routine before issuing a Form 8710-7. The pilot, however, remains responsible for maintaining currency and obtaining Form 8710-7. Event sponsors simply require prospective performers to provide evidence of FAA Form 8710-7. For parachutists, a license issued by the United States Parachute Association will suffice. The FAA does not require certification or licensing of operators of ultralight vehicles, wing walkers, ribbon cutting personnel, and drivers of vehicles for a car-to-plane transfer (FAA 1990; Hirschman 2002).

Military Demonstration Teams

The Department of Defense (DOD) sanctions two aerial demonstration teams—the U.S. Air Force Thunderbirds and the U.S. Navy Blue Angels (Figure 13). The U.S. Army Golden Knights parachute team is also sanctioned by the DOD. Additionally, the Army and Navy Service Academy Teams, although not sanctioned by the DOD, frequently perform at public events. The DOD receives hundreds of requests annually for these performers, especially the Thunderbirds and

FIGURE 13 U.S. Air Force Thunderbirds performance. (*Source*: Anonymous.)

Blue Angels. Generally, once requests are screened by the DOD for basic eligibility, the requests are forwarded to the commanding officer of the team. The squadron reviews each request, considering input from the recruiting command. The events coordinator then meets with branch officials to make final decisions (FAA 1990).

These teams have certain requirements when performing at an air show. Consider, for example, the requirement for arresting gear for the Blue Angels demonstration team. According to the Blue Angels Support Manual:

Arresting gear for the F/A-18 must be located at or within 60 nautical miles of a normal show site at or within 40 nautical miles for a remote site. Gear must be available for an approach end arrestment (BAK-12, 14, E-28). If this requirement cannot be met, mobile arresting gear must be installed at the show site (DOD 2012, p. 19).

Mobile arresting gear typically costs around $10,000 (including labor, travel, and transportation) to install. Additional requirements are specifically spelled out in an extensive manual produced by the Blue Angels. This manual, based on their 65 years of air show experience, appears in Appendix F. The event sponsor will also have specific requirements of air show performers. For example, all air show performers will:

1. Meet all guidelines set forth by the FAA
2. Meet all air show requirements before landing at the airport by providing:
   a. Air show registration form
   b. Pilot's license
   c. Airworthiness certificate & aircraft registration
   d. Medical certificate
   e. Maintenance log—must show current annual or 100 hour inspection
   f. Insurance certificate—$1 million minimum coverage listing the following as additionally insured:
      i. Airport
      ii. City
      iii. County
      iv. Major sponsor ("Safety from the Ground Up" 2011, p. 13–14).

TEN MONTHS PRIOR TO EVENT

Marketing and Promotion

Effective marketing and promotion is as important as developing an engaging and exciting event. If few people are aware of the event, failure is almost guaranteed. If, on the other hand, the event has been promoted in different venues, through different media outlets, and far enough in advance for people to make plans to attend, success is much more likely. Methods of publicizing the event can include:

- Various aviation calendars of events
- Regional EAA/AOPA chapters
- Airport flyers
- Paid advertisements (newspapers, etc.)
- Public service announcements
- Direct media contacts
- Website/social media/applications
- Library summer reading program
- Bulletin boards (EAA 2009, p. 11).

Of these methods, possibly the most essential ingredient in marketing and promotion is an effective website. Eight of nine survey participants holding air shows and nine of 23 holding events other than air shows developed a website specifically to market/promote the event.

An event website is most effective if it is simple and easy to use. This "usability" can be summed up in the acronym HOMERUN. According to Loj (2004, p. 29), "users look for **H**igh quality content, that is **O**ften updated, with **M**inimal download time, **E**asy to use, is **R**elevant to the user needs, **U**nique to the online world, and **N**et-centric to corporate culture." Generally, visitors to an event website are searching for information, such as dates, times, admission fees, etc. Thus, it can be easy to create a site with minimal download time. Loj (2004) recommends the following outline for an event website, based on existing successful event websites:

- Home page
- Performer page
- Schedule
- Tickets
- Sponsors
- Volunteers
- Frequently asked questions (FAQ)
- Directions and parking
- Dates for next year's event
- Contact us.

Today, in addition to creating a quality website, event organizers can have substantial impact by utilizing social media. Whether this includes Facebook, Twitter, a blog, or other platforms, developing a social media presence allows individuals to interact with organizers before the event, and the "buzz" that is created can have significant positive impacts on attendance. The key to social media is actively updating them; interacting with users by answering questions, holding polls, etc.; and making sure that the same person (or team) represents the event to create a unified voice.

Further marketing ideas include:

- Infomercials
- Table tents
- Mobile applications
- Quick Response codes
- Ticket outlet advertising
- Billing inserts
- Performer drop-in for media event
- Periodic press release
- Press conference
- Honorary chairperson press release
- Party fundraiser
- Media day
- Hangar parties
- Poster and brochures
- Magazine, newspaper
- Grass roots publicity
- Mailing to state airports
- Newspaper insert
- Tradeouts and giveaways
- Billboards
- Parades
- Media rides
- Produce "cockpit notes" to update media daily
- Photography or coloring contests for children with free admission to winners
- Summer reading program with free event tickets
- In-person presentations or mailings to social clubs and organizations
- Establish a 1-800 event hotline number
- Banners throughout community ("How About" 2000).

Of all marketing ideas, engaging the media can produce the best results. Invite reporters out to the airport in advance of the event to learn more about the airport, what will be available at the event, and possibly participate in an orientation flight. If the event sponsor is able to secure a military flight team, it will often make available "key influencer" flights that can be used for the media. Although promotion can be expensive, this is one area in which in-kind contributions can be very effective. Local media can be solicited for in-kind contributions of broadcast and print promotions in return for sponsorship recognition at the event, resulting in quality, low-cost promotion of the event (AOPA 2007).

Another aspect of promoting the event involves educating the public about how best to prepare for and enjoy the event. An effective way to do this is to have a section on the event website entitled "What to Bring," or something similar. One regular air show attendee suggests the following for this section:

- Hat
- Sunglasses
- Sunscreen
- Something to sit on
- Water
- Snacks
- Moist towelettes
- Notebook and pen
- Binoculars
- Camera
- Aeronautical scanner
- Small backpack (VanHorn 2011, p. 52).

This same air show veteran also suggests the following do's and don'ts:

- Do come early and leave late.
- Don't touch the aircraft.
- Don't smoke around the aircraft.
- Do find out where you can get medical aid.
- Do consider where you are going to sit.
- Don't litter.
- Do stay aware of your surroundings.
- Do ask questions.
- Do appreciate all the aircraft (VanHorn 2011, p. 53).

Alternately, the event website may have a FAQ section. Questions may include:

- Where can I buy a ticket?
- Can I use my credit card to pay for my tickets?
- Do I have to buy a ticket for my three-year old son?
- Is there a senior/veteran/military discount?
- Can I leave the show and come back?
- Is there a fee to park?
- Is handicapped parking available?
- Is there shuttle or bus service from downtown (or other) to the site?
- What activities/event/performances will be available?
- When do gates open or flying performances begin?
- Is the air show safe?
- Is there shade at the air show?
- What if it rains?
- Can I bring a lawn chair or blanket?
- Will there be food and gift vendors at the show?
- Are coolers allowed?
- Are backpacks and bags permitted?
- Is smoking permitted at the air show?
- Can I bring my dog?
- Can my kids bring their bikes?
- Will the air show be televised? (Loj 2004, p. 36).

Corporate Sponsorships and Hospitality

An important part of the budgeting equation is corporate sponsorships. Although some typical corporate sponsors may initially come to mind, such as the community bank or local grocery stores, it is more effective to have an open mind about potential backers; and while in-kind (noncash) contributions are important, the most valuable corporate sponsorships directly increase revenues for the event. Developing a sponsorship proposal is essential to properly promoting sponsorship opportunities. Sponsor visibility is important and can be in the form of "banners, company names and logos on the official program, advertisements in the program, mentions by the announcer throughout the event, invitations to a VIP party with aircraft pilots and performers, and a tent assigned to the sponsor and its guests" (AOPA 2007, p. 7). In developing the proposal, it is helpful to point out the captive audience that will be exposed to the sponsor's presence at the event.

Although a sponsor may only ask to have its name visible at the event, others may want to enjoy the show, possibly with clients and employees. To develop a unique experience for corporate sponsors, event organizers may develop chalets. As corporate hospitality, a chalet allows a corporation or other organization the opportunity to experience an aeronautical special event (typically an air show) in comfort and relative security. By offering a tent or other facility (including those climate-controlled) equipped with chairs, tables, catered food and beverages, and other amenities, organizers provide a level of corporate hospitality that is similar to box seats at a sporting event. A lower-priced chalet may consist of reserved umbrella table seating with food and beverages, whereas the more expensive facilities typically consist of reserved seating (possibly theatre-type) in an air-conditioned tent with restrooms, high-quality food and beverages including snacks and desserts, free parking, and free shuttle service. As an example, the Dayton Air made several levels of chalets or reserved seating available to attendees in 2012 (see Figure 14):

FIGURE 14 Chalets. (*Source*: Jon Ross, FAA.)

- LaRosa's Pavilion Seating ($37.00 per person)
  - Reserved umbrella table seating
  - Free parking
  - Free shuttle service
- Blue Sky Chalet ($99.00 per person)
  - Reserved umbrella table seating
  - Access to air-conditioned tent and restrooms
  - Continental breakfast
  - Grilled luncheon entrees with side dishes
  - Snacks/desserts
  - Unlimited beverages including beer, wine, iced tea, soda
  - Free parking pass for reserved lot
  - Free shuttle service
- The Chairman's Club ($1,200 membership donation per person)
  - Reserved market umbrella table for six
  - On-site VIP parking
  - Food buffet, including continental breakfast, lunch, gourmet desserts, and snacks
  - Premium bar
  - Air-conditioned restrooms
  - Special recognition
- Private Chalet ($4,750 for 150 people for one day; $7,750 for 300 people for one day) (see Figure 15)
  - Umbrella table seating
  - Front line viewing of air show
  - Free dedicated parking and shuttle
  - Private, air-conditioned tent and restrooms
  - Custom size tents available.

When developing the chalet experience and marketing this to prospective customers, however, it is important to remember why many corporations secure chalets: potential customer leads and sales. Although a corporation may arrange for a chalet simply to reward employees, they are often used to entertain clients and prospective customers. Thus, "packages can—and, in some cases, must—be designed to meet sponsors' goals" (Brenner 2004, p. 36). In other words, "tell the prospect how you're going to help them use a chalet to achieve sales and marketing objectives" (Brenner 2004, p. 37). Chalet benefits may include access to air show performers for meet and greets, photos, or autograph sessions. Although superb air show viewing is expected as part of the chalet, it is important not to place chalets in an area that interferes with air show viewing by other attendees. According to Brenner, benefits should not be offered to every company that buys a chalet; rather, there should be levels of sponsorship with more benefits at higher levels. Because of the chalet experience at various professional sporting events, corporate sponsors with chalets have high expectations. If the event sponsor is not prepared to provide a similar level of corporate hospitality, it may be best not to offer chalets at all. In deciding whether to offer this level of corporate hospitality, it is prudent to consider the following recommendations:

> You or somebody on your staff should plan on checking in several times a day . . . to make sure their expectations are being met. You should ensure the grass is cut short, parking is easy

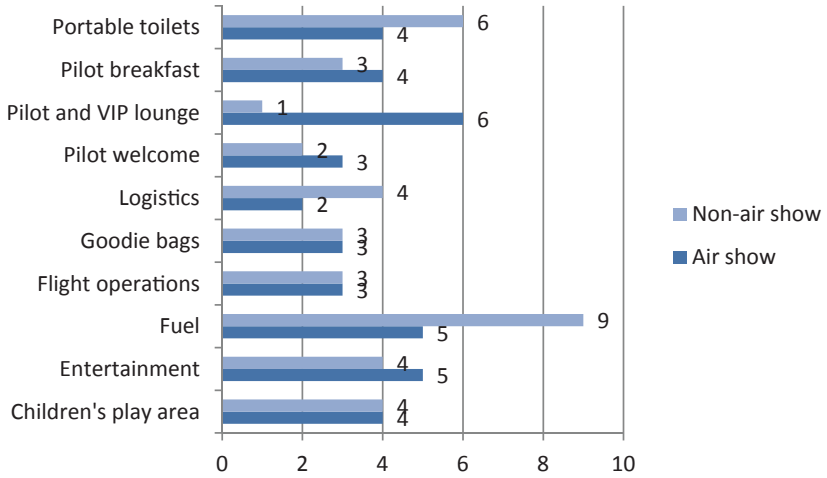

FIGURE 15 For which of the following attractions/services are sponsors typically secured?

> in/out, tents are clean, the sound system is working properly, and the chalet food is fresh, plentiful, and of the highest quality (Pacific 2010, p. 26).

Among survey participants holding air shows, sponsors are most commonly secured for pilot/VIP lounge, fuel, and entertainment. Among survey participants holding events other than air shows, sponsors are most commonly secured for fuel, portable toilets, logistics, entertainment, and children's play area (Figure 15). In addition, sponsors may be secured for seating areas, free refreshments, pilot/VIP meals, and the event program.

Event sponsors frequently offer corporate sponsors such benefits as banner placements, brochure ads, and PA announcements during the event (Figure 16).

In developing a sponsorship proposal, it is important to provide details on the event, including the projected number of attendees, and information on the sponsorship levels/opportunities available. Among survey participants, including contact information and basic facts (at a minimum) is most common (Figure 17).

Notification

Making sure that civic groups and community leaders, as well as airport tenants and businesses, buy into the event requires proper notification. Although they will learn about the event through the marketing and promotion efforts, it is beneficial to specifically invite them to participate. Involving them during the organizing phase will contribute to positive

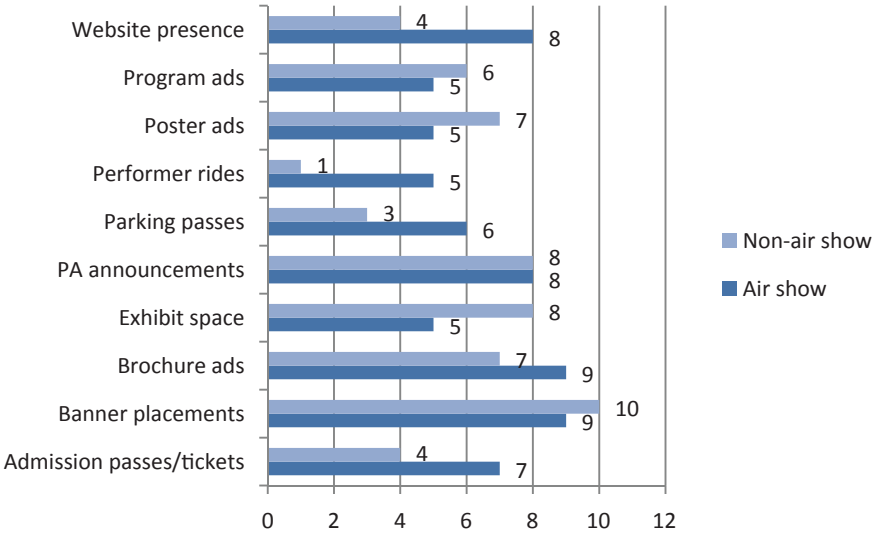

FIGURE 16 Which of the following are typically part of the sponsorship program?

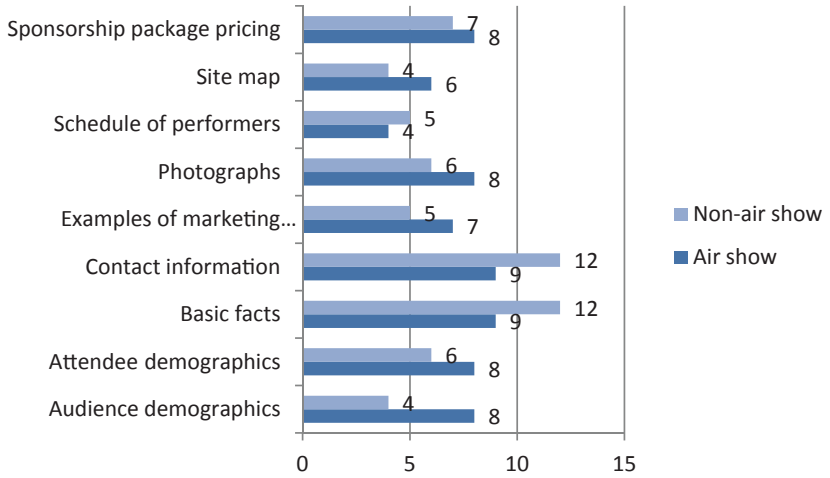

FIGURE 17 Which of the following is typically included in the sponsorship proposal?

support and allow these groups to believe they are a part of the event.

NINE MONTHS PRIOR TO EVENT

Contingency Plans

With all outdoor events, contingency planning is important. This is especially true for aeronautical events. What if it rains, for example? Will the event be canceled? If not, will attendees have anything else to do? Consider the following contingencies for an aeronautical special event:

- Weather—Assess how weatherproof the event will be. If it rains, are there activities that can be held indoors, such as inside a large hangar? Also consider the parking area. Will it become impassable after a heavy rain?
- Financial loss—Although financial loss can be minimized with effective planning and promotion, it can still occur. As an example, admission fees may be too high and the weather may impact attendance. To mitigate any potential for loss, it is advisable to make as many expenses as possible variable, rather than fixed. If the weather is forecast to be poor in the week leading up to the event, food and beverage orders may be reduced, for example. Some suppliers may also be willing to accept returns on unopened food and beverages.
- Too much success—Although success is positive, it can create problems. Include a plan for overflow airplane and car parking. Have the ability to purchase more food and beverages if needed. Can additional portable toilets be delivered on short notice? (EAA 2009, p. 16).

Temporary Frequencies

Owing to the level of aircraft activity typically associated with aeronautical special events, and the use of temporary towers to control those aircraft, the creation of temporary air/ground frequencies may be needed. In that vein, the Spectrum Engineering Services group of the FAA has developed "Procedures for Assigning Temporary A/G Frequencies for Air Shows." This group supports temporary aviation events by engineering and assigning frequencies that are used for communication between the aircraft that participate in the event and air traffic controllers and the air boss. When existing towers are used, existing frequencies are also used, although additional frequencies may be requested. For temporary towers, new temporary frequencies are always necessary. To obtain a temporary frequency license, the FAA requires applicants to coordinate with the FSDO and the Air Traffic Organization (ATO) Service Area Office at least 45 days before the "need date" (FAA 2012).

Air Boss

Ensuring safety during aircraft operations is imperative. An air boss, considered a required element of an air show and approved by the FAA, is often contracted to ensure safety of flight operations by overseeing aircraft movements and coordinating activities with performing pilots (Figure 18). As Gaffney (2009) states, "In every good air show, one of the most important 'performers' never gets in an airplane, never leaves the ground, and never gets the crowd's applause. That performer is the air boss, the unseen maestro of the air show's aerial symphony" (p. 32). According to the FAA, the air boss is "the individual who has the primary responsibility for air show operations on the active taxiways, runways, and the surrounding air show demonstration area" (FAA 2010). According to a 2010 ICAS survey, the majority of respondents strongly agree that the air boss is an essential element of the safety program for any air show. Among those participating in this survey, seven of nine hired an air boss for their air show, and all believe

FIGURE 18 Air boss at work during an event. (*Source*: Anonymous.)

that the air boss is the one individual directly responsible for aircraft safety at the air show. According to a current air boss, the air boss "should be a subject matter expert in all things that are supposed to happen in front of the crowd line" (Gaffney p. 32).

In reality, the duties of an air boss may vary, depending on the contract with the event sponsor. The air boss may develop a flying schedule, file FAA paperwork, brief pilots, and handle airspace. At non-towered airports, advance planning will determine if a non-air traffic control tower (ATCT) is needed to house the air boss, or if a temporary FAA ATCT tower is needed to manage the aviation event, including arrivals and departures. Although the air boss is not required to be located in a tower (either permanent or temporary), the event sponsor may decide to erect a temporary tower to house the air boss. A temporary tower is most beneficial if a large number of arrivals and departures are expected, if the field or airspace is complex, or if an air show is planned. The FAA requires that a letter requesting a temporary tower be submitted to the Regional Administrator of the nearest FAA regional office at least six months before the event. If approved, the FAA may request reimbursement for expenses associated with the tower, including air traffic controller expenses. However, many temporary towers are not FAA towers; rather, they are contracted through an outside source. In either event, NOTAMs are required to be issued as appropriate.

Air Show Ground Operations Plans

For Part 139-certificated airports, the Certificate of Waiver or Authorization is only one prerequisite to holding an air show. The FAA requires an Air Show Ground Operations Plan to be submitted by the event organizer or airport sponsor/manager to the FAA Regional Airports Division as part of FAA Form 7711-12. The Plan must address at least the following Part 139 issues related to the air show:

- Airline operations—Consider procedures for commercial operations during air show activities or setup (special taxi routes, access to terminal gates, crowd control).
- Marshaling personnel—Consider requiring all personnel assisting with the ground movement of aircraft to wear orange safety vests and use orange batons or paddles. It is important to brief these personnel on aircraft arrival and departure procedures and ensure that a standardized set of signals and procedures are used. Wing-walkers for aircraft taxiing on the flight line are also essential.
- Aircraft rescue and firefighting capability and special emergency response procedures—Consider prepositioning of ARFF equipment, identification of emergency access routes, required ARFF personnel, hazardous materials procedures and training, and special emergency procedures specific to the air show.
- Temporary arresting gear installed in a runway safety area—Consider the requirement to temporarily relocate a threshold to provide 1,000 feet of safety area past the arresting gear. The temporarily relocated threshold will require proper marking and lighting.
- Integrity of runway safety areas, taxiway safety areas, object-free areas—Consider the center aiming point for military flight demonstration teams and what will be used, as well as whether airport maintenance personnel and equipment will be available to restore safety areas damaged by air show activities.
- Pyrotechnic devices—Consider the location and placement of pyrotechnic devices and the safety of those operations, including special procedures to provide protection of spectators and fire protection.
- Temporary closures of runways and taxiways—If runways or taxiways will be closed, consider how they will be marked and any NOTAMs to be issued.
- Movement area maintenance—Consider areas where aircraft or vehicles will be parked on the movement area or adjacent to the movement area and barriers or procedures to be in place to keep personnel and vehicles clear of active movement areas.
- Fueling operations—Consider special fueling areas to be established during the event.
- Public protection—Consider spectator areas, including crowd control barriers and procedures to be in place to protect spectators from jet blast, as well as taxi routes for air show aircraft in relation to the spectators.
- Special self-inspections—Consider procedures and personnel to be responsible for safety self-inspections during the event, including planned time periods during which inspections will be performed.
- Ground vehicle operations—Consider procedures for escorting personnel in the movement area, as well as air show-related personnel who will be authorized to operate vehicles on or adjacent to the movement area,

and any special precautions or procedures to be in place during air show activities to prevent runway incursions.
- Impact to NAVAIDs (navigational aids)—Consider which NAVAIDs will be impacted by air show activities and the personnel responsible for placing NAVAIDs in and out of service.
- NOTAMs—Consider NOTAMs to be issued.
- Mitigation of wildlife hazards—Consider any special wildlife mitigation procedures to be in place during the event (EAA 2009; FAA n.d.).

FAA Concerns

Application for Certificate of Waiver or Authorization

According to 14 Code of Federal Regulations (CFR) Part 91.303, "No person may operate an aircraft in aerobatic flight—

a) Over any congested area of a city, town, or settlement;
b) Over an open air assembly of persons;
c) Within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport;
d) Within 4 nautical miles of the center line of any Federal airway;
e) Below an altitude of 1,500 feet above the surface; or
f) When flight visibility is less than 3 statute miles" (FAA 2003).

Clearly, however, air shows involve numerous aerobatic maneuvers which would generally be near a congested area, an open air assembly of persons, within the lateral boundaries of terminal airspace, and below an altitude of 1,500 feet above the surface. Therefore, to allow airports to hold such an event and pilots to operate an aircraft not in compliance with the requirements of 14 CFR Part 91.303, a waiver or authorization is required by the FAA. Fortunately, the FAA has provided for this and spells out the process of applying for and obtaining such a waiver in Advisory Circular (AC) 91-45C, "Waivers: Aviation Events." This AC is the premier FAA guidance on planning and organizing an aeronautical special event, including applying for a Certificate of Waiver or Authorization that is required for events involving aerobatic activity. These waivers are issued by the FAA whenever the agency determines a proposed event will be in the public interest, and safety and environmental concerns can be satisfied.

Waivers can vary in the degree of what is actually being waived. Some events require waiving the prohibition on aerobatic flight at less than 1,500 feet above the surface. Other events may require the FAA to lift aircraft speed limitations, minimum safe altitudes, or limitations while operating in the vicinity of airports. However, waiving the minimum three statute mile flight visibility is only granted when (a) air traffic can provide separation between participating aircraft and nonparticipating aircraft, and (b) when provisions are made to advise participants of any hazards presented by nonparticipating aircraft. Additionally, 14 CFR Part 91.79(a) shall not be waived. 14 CFR Part 91.79(b) and (c) may be waived for aerial demonstrations by the U.S. Air Force "Thunderbirds," the U.S. Navy "Blue Angels," tactical aircraft demonstrations approved by the appropriate military command, and the Canadian "Snowbirds." Performances by these teams are eligible for a waiver of Part 91.79(b) and (c) because they have developed maneuver packages that are approved by their command and the FAA. These maneuver packages entail normal routines that do not result in aerobatics over congested areas, over persons, or spectator areas.

Additionally, a waiver may be issued to other performers for the purpose of:

- Transitioning a congested area at less than the minimum altitudes described in Part 91.79(b) and (b) in nonaerobatic flight
- Aerobatic flight demonstrations by ultralight vehicles
- Conducting low passes over the runway below the minimum safe VFR altitudes as specified in 14 CFR Part 91.119 (FAA 1990).

14 CFR Part 91.905 contains a comprehensive list of flight procedures that the FAA may waive.

Airports desiring to hold an aeronautical special event with aerobatic performances will need to complete and file FAA Form 7711-l, Certificate of Waiver or Authorization (with the assistance of the local FAA FSDO if necessary). The airport or organization holding the event will need to determine which sections of the FARs will need to be waived, based on the types of aeronautical operations to be conducted during the event. Asking the following questions, according to the FAA, will assist with this determination:

- What sort of routines will be staged?
- Will there by demonstrations by small, slow-speed aircraft only or will high performance aircraft be involved?
- Will military demonstration teams participate?
- Will a parachute demonstration be staged?
- Will the event include hot air balloon ascensions?

FAA Form 7711-2, Application for Certificate of Waiver or Authorization is used when applying for FAA Form 7711-1, Certificate of Waiver or Authorization. AC 91-45C, Appendix 1, contains instructions for completing FAA Form 7711-2. The most important items to be completed on the form have to do with the FAR section and number to be waived (Item 4), the proposed operation (Item 5), and the area of operation (Item 6). Specifically with regard to the area of operation, the FAA requires the

sponsor to depict the flight maneuvering area as a cubic or cylindrical cell of airspace. Also, the FAA requires current, properly marked charts, maps, drawings, or photographs of the area of operation. The FAA also requires any depiction to include to-scale indications of flight lines, showlines, race courses, the location of the aviation event control point, police dispatch, ambulance, and firefighting equipment. Photographs and to-scale diagrams may be submitted as supplemental material. All flight operations will need to be limited to the area defined in the FAA-approved application (FAA 1990, p. 17).

NOTAMs

AC 150/5200-28D, entitled NOTAMs for Airport Operators, explains the main purpose of NOTAMs—to provide essential information to personnel concerned with flight and airport operations. NOTAMs are used to provide information on unanticipated or temporary changes to components of, or hazards in, the National Airspace System (NAS). As a result, NOTAMs will often need to be issued by the airport in relation to an aeronautical special event. This may include notice of a runway, taxiway or airport closure; ramp closure; restriction on certain activities, etc.

Temporary Flight Restrictions

AC 91-63C, entitled Temporary Flight Restrictions (TFRs/TFR), explains Temporary Flight Restrictions (TFRs) and the conditions by which the FAA may establish a TFR. A TFR is "a regulatory action issued through the NOTAM system to restrict certain aircraft from operating within a defined area, on a temporary basis, to protect persons or property in the air or on the ground" (FAA, 2004, p. 1). As stated in the AC, a TFR may be issued by the FAA for a number of reasons, including aerial demonstrations. For aerial demonstrations, and as necessary, the FAA issues a TFR under 14 CFR Part 91.145, Management of Aircraft Operations in the Vicinity of Aerial Demonstrations and Major Sporting Events. According to the AC, an aviation event organizer or participant may request a TFR. To make a request, in addition to filing Form 7711-2, airports submit a request to the Directors of Terminal or En Route and Oceanic Area Operations (or designee) at least 45 days before the event (FAA 2004).

National Aviation Events Team

The FAA has a National Aviation Events Team that is concerned with ensuring safety at aeronautical special events. The team is located at FAA headquarters in the Flight Standards General Aviation Division (AFS-800) and has identified typical areas of concerns, which include:

- Pilot documentation with proper credentials for the air show performers and other aviation event participants, but not the non-participating pilots who fly in to watch the event
- Air show briefings focused on safety
- Nonessential personnel, including nonparticipating aircraft taxiing under aerobatic box during act
- Cloud clearances, including smoke and cloud penetration during performance
- Crowd control, including aircraft starting and taxiing in close proximity to spectators
- Qualification of air boss, including one with no aviation experience
- Repositioning turns past end of runway over densely populated areas
- The investigator in charge working outside FAA policy
- Incidents not being reported to the national aviation events team or region
- Scope of waiver, which should only be for the time needed, not a blanket time
- Timeliness of waiver and authorization requests
- Airport aerial event feasibility surveys, with a Google map not sufficient
- TFR requirements, which are not imposed on event organizers
- Industry knowledge of military and civilian team's maneuver packages
- FAA acceptance for civilian parachute team program
- Safety and emergency plans
- Responsible person
- Invited assembly of people on "practice day" (Umstead 2011, slides 10–13).

Airports considering organizing an aeronautical special event might want to remain aware of these concerns.

FAA Surveillance of an Aviation Event

Each year, FAA inspectors monitor hundreds of aviation events across the country. The primary objective of FAA FSDO surveillance is to determine if the holder of a Certificate of Waiver or Authorization and the participating pilots/aircraft are in compliance with the terms set forth in the waiver or authorization. During that process it is necessary for the inspectors to weave constantly through complex regulatory, technicalities and interpersonal situations. If it is determined that the conditions of the waiver or authorization are not being met, the FAA FSDO inspector may elect to cancel the event or require the holder of the waiver or authorization to take immediate corrective action before resuming the event.

Aviation events are also gatherings of general aviation airmen and aircraft that arrive simply to observe the event, and their contact with FAA FSDO inspectors is rare. To ensure these pilots have a good experience, the FAA FSDO inspector follows these guidelines (FAA Order 8900.1):

- Under no circumstances should these gatherings be targeted for a blanket sweep inspection of spectator airmen and aircraft.
- The scope of the surveillance conducted on holder of the waiver or authorization, the aviation event performers,

and their aircraft will be determined by the FAA FSDO manager.
- Inspectors assigned work functions at aviation events should strive to earn the confidence of the attending and participating airmen.
- Inspectors must obtain the permission of the aircraft owner/operator before entering any aircraft.

This general guidance does not preclude FAA FSDO inspectors from taking appropriate action to resolve situations they observe that require immediate corrective action.

EIGHT MONTHS PRIOR TO EVENT

Accommodations

Performers, out-of-town attendees and participants will likely need accommodations to be arranged during the event. Even if the event does not incorporate performers who require lodging, it is beneficial to arrange for hotel rooms and discounts for those affiliated with the event.

Concessions, Vendors, and Fee Schedule

At any special event, attendees expect to be able to purchase food, drink, and souvenirs. At an aeronautical special event, arrangements for these concessions and vendors are generally through contract providers (or possibly through charitable organizations or volunteers). "An excellent way to win support in the community is to invite area nonprofit organizations, such as the Rotary Club, Lions Club, church groups, or Boy Scouts or Girl Scouts, to set up concession stands. . . . One caveat, however: Insist on experience. Don't risk your event on first-time nonprofit food concessionaires" (AOPA 2007, p. 10). Although it is important to offer concessions and vendors, it is advisable to do this prudently. Too many vendors will result in diluted vendor profits. Variety is often the key to success. Local regulations may also require vendors and concessionaries to possess appropriate permits or licenses to sell food, beverages, and souvenir products, and the event sponsor will need to insist this is accomplished.

The event sponsor may decide to charge concessionaires and vendors a flat fee, a percentage of gross sales, or enter into some other arrangement. If nonprofits are serving as concessionaries and vendors, they may be allowed to keep all proceeds. In these cases, it is advantageous for attendees to know, for example, that "100% of proceeds from food and beverage sales benefit the Rotary Club."

Security and Emergency Planning

Aviation security forever changed as a result of the terrorist attacks on September 11, 2001. Today, aeronautical special events deserve special consideration for security and emergency planning. For events held at Part 139-certified airports, TSA Part 1542 defines the airport's security requirements. Certified airports will already have an Airport Security Plan (ASP) in place, but it is advantageous to also consider the unique security issues associated with aeronautical special events and the large crowds they attract. Although these security requirements may be addressed in an event-specific security plan, often airports develop an emergency plan for the event, which may also incorporate security considerations unique to the event. According to Rozek and Hansen (2003):

> A good emergency plan for an air show [or other aeronautical event] now needs to cover responses to terrorist acts, all types of explosions (accidental or purposeful) and plane crashes, in addition to typical crowd-control issues, fires, a multitude of medical problems, as well as natural disasters such as high winds, tornado, or flooding—all that before the unexpected (p. 31).

Cooperatively working with local law enforcement to ensure an effective security posture is important. Regarding security threats, including possible terrorist attacks, Rozek and Hansen (2003) suggest thinking like potential terrorists. This requires an awareness of any weaknesses in the airport's security posture, which can be corrected with the insight of local law enforcement.

Although an actual terrorist attack is unlikely with proper security measures in place, industry data has shown that for "every minor or major aircraft-related incident . . . there may be as many as 47 nonaircraft-related accidents, including golf cart accidents, parking lot incidents, problems involving wind or thunderstorms, pyro-induced damage to property, and the unavoidable and relatively frequent 'trip and fall' accidents" (Cudahy 2005, p. 25). Accordingly, a Comprehensive Air Show Emergency Response Plan (CASERP), which is tested or discussed annually, should be developed for all air shows (Cudahy 2005). The CASERP may be separate from the Airport Emergency Plan (AEP) required by 14 CFR Part 139.325. In this way, it is unique to the aviation event (Appendix L). Although GA airports are not required to have an AEP in place, nine of 10 airports responding to a recent survey have one in place (Williams 2007) (Figures 19 and 20).

FIGURE 19 Emergency response during an aeronautical special event. (*Source*: Anonymous.)

FIGURE 20 ARFF on standby. (*Source*: Anonymous.)

The CASERP is developed in consideration of the National Incident Management Systems (NIMS), which provides a set of standardized organizational structures [such as the Incident Command System (ICS), multiagency coordination systems, and public information systems], as well as processes, procedures, and systems in training, resource management, personnel qualification and certification, equipment certification, communications and information management, technology support, and continuous system improvement. According to the FAA (2010b, p. 4), "The NIMS uses a systems approach to integrate the best of existing processes and methods into a unified national framework for incident management."

Establishing proper channels of communication is important in being prepared for an emergency. According to Rozek and Hansen, "early and frequent communication should be officially established between the air show and all the groups which will be involved with your emergency response plan—local, county, state, and federal law enforcement agencies as well as fire and emergency services" (p. 32). Training for the unthinkable is also key in ensuring event safety. Consider conducting a tabletop or mini-exercise to provide a scenario-based level of preparedness. The process of conducting such an exercise may reveal possible weaknesses in the AEP and/or the CASERP that may need to be addressed. Additionally, deciding where to locate a command center, in case of emergency, is important. By locating the command center away from crowds, onlookers, and the media, security can be better ensured. It is also important to prevent unauthorized access by individuals without proper credentials. Although Security Identification Display Area (SIDA) badges may already be in the possession of those who would need access to a command center, by developing credentials and distributing these credentials immediately prior to the event to those who may need them will provide less time for unauthorized duplication. Controlling gate entrance points is another layer of security—possibly the first. Having uniformed personnel to control access is also important (Rozek and Hansen 2003; Williams 2007).

Although the event sponsor will determine security needs based on the aeronautical and nonaeronautical events, spectator areas, etc., the FAA does provide guidance on policing. Specifically, if fencing is used for crowd control, there may be little need for crowd control personnel. However, if the crowd is only cordoned off, it might be necessary to enlist crowd control/security personnel. The FAA is quick to remind airports that crowd control is an event sponsor responsibility, not the FAA's. The FAA also reminds airports that areas beneath the aerobatic maneuvering box need to be cleared of vehicles, persons, and vessels, possibly requiring policing and road closures. If structures are beneath aerobatic maneuvering areas, these buildings are required to be evacuated. This may require advance notice to owners of private property and buildings, as well as active policing during the event (FAA 1990).

Educating attendees about safety rules and procedures during the event will contribute to a safe event. This can be done with signage and regular announcements over the PA system. Keeping an eye out for tripping and slipping hazards is part of a proactive safety posture. This also involves minimizing stairs and platforms if possible. All tables, chairs, power cords, fire extinguishers, etc. will need to be in good operating condition as well (EAA 2009).

Because of the inherent risk in aeronautical events, organizing emergency response facilities and personnel is essential. Some performers may actually stipulate adequate first aid, emergency medical transportation, and fire rescue services to be available on-site before agreeing to perform at the event. Although mutual aid or private first aid/ambulance providers may be relied upon to provide this service, the FAA recommends consideration of the following:

- Physician—An emergency rescue squad, paramedics, emergency medical technicians, or a first-aid station can be substituted for a physician, except for events that are a great distance from a hospital or medical clinic.
- Ambulance—If an emergency rescue squad is provided, an ambulance is also typically provided.
- Firetruck/crash wagon—Although aircraft rescue firefighting (ARFF) equipment is preferred, if performers are willing to accept a pickup truck with handheld fire extinguishers, this would suffice. The number of nonparticipating aircraft flying into the event will also have a bearing on the type of equipment used.

A key component of the emergency plan is developing a training program for fire truck and crash wagon first responders. Ensuring that first responders are familiar with each type of aircraft, performer and nonparticipant, and the equipment installed in them (e.g., ballistic parachutes, ejection seats, fuel cutoff switches, etc.) and the best methods to extract pilots/passengers from the aircraft will reduce potential delays in emergency management of the incident site.

All nine survey participants holding air shows developed a safety/security plan for the air show, as well as an emergency plan specific to the air show. On the other hand, about two-thirds (16 of 23) of survey participants holding events other than air shows developed a safety/security plan, whereas about half (11) developed an emergency plan specific to the event.

Media Plan

Members of the media are typically always interested in aeronautical special events, and as such, it is important to develop a plan for dealing with the media. First, consider credentialing. Media personnel, including reporters, will prefer access close to the activities, and if this access will allow them an opportunity to go places "off limits" to attendees, requiring appropriate credentials will be key to allowing media access. Volunteers and security personnel will need to know specifically which credentials allow access to typically "off limits" areas. Second, consider media staging areas. Especially if satellite trucks are involved, consider where these can be located to allow the media access to them, but without blocking access roads, parking areas, etc. Third, consider media arrival time. Allowing them access earlier than the general public may prevent congestion caused by slow moving media trucks searching for the media staging area, and provide additional time for set-up.

It is also beneficial to consider communication with the media during a crisis. Developing a crisis media plan or strategy will be helpful in avoiding public relations disasters that may result from an accident or incident at the event. According to Berman (2005), a crisis media plan is "like insurance: you hope you'll never need it, but it's shortsighted not to have it" (p. 33). Although it may be difficult to plan a media response to an event that has not yet occurred, it is important to keep the "Four R's" of crisis management in mind:

- Regret—Be sorry about the problem that has developed, even if it is not your fault.
- Reform—Inform the media about steps being taken to make sure this problem does not re-occur.
- Restitution—If appropriate, discuss how those harmed by the event will be compensated.
- Responsibility—Take responsibility for solving the problem (Berman 2005, p. 34).

In the end, it is important to develop a crisis media plan, train spokespeople, test the plan through simulated drills, and revise and update the plan regularly (Berman). Of survey participants holding air shows, nine of 10 develop a strategy or plan to handle the media during a crisis. Among those survey participants holding events other than air shows, only one out of four develop a strategy or plan to handle the media during a crisis.

SEVEN MONTHS PRIOR TO EVENT

Layout Plan

With many different activities planned for the event, it is important to develop a ramp layout that will graphically indicate where all activities and aircraft will be located, including:

- Static display aircraft
- Performer aircraft
- Portable toilets
- First aid
- Entrance gates
- Concessions
- Crowd lines
- Show lines
- Parking areas
- Chalets.

Establishing Crowd Lines and Show Lines

In defining the area for the event and ensuring protection for spectators, establishing show lines should be the first order of business. According to the FAA, a show line, which is required for an air show, is defined as "a prominent, readily visible ground reference such as a river, runway, taxiway, canal, breakwater, road, or any straight line that enhances pilot orientation during aerobatic routines" (FAA 1990, p. ii). In essence, the show line serves as the horizontal axis for the air show, providing guidance to the performers during their routines. Although natural show lines, such as a river, are preferred, snow fences spread flat on the ground may also serve as an acceptable show line. Less preferable are lines of parked buses, cars, or boats (FAA 1990).

A 500-foot show line is the minimum required horizontal distance. This minimum distance is never waived with regard to any spectator area. This requires airports or event organizers to ensure that routines involving several aircraft in formation or nonaerobatic fly-bys are not closer than 500 feet to the spectator area. In practice, this may require the show line to be more than 500 feet from the spectator area. Additional distances may be required by the FAA based on the category of aircraft operating at the event (Table 1).

TABLE 1
SHOWLINE CATEGORIES, SPEEDS, AND DISTANCES

Category	Cruise Speed	Showline Distance from Spectator Area
I	More than 245 knots	1,500 feet
II	More than 156 knots, but less than 245 knots Aerobatic helicopters	1,000 feet
III	Less than 156 knots Aerobatic gliders Non-aerobatic aircraft	500 feet

Source: FAA (1990, p. 10).

Regardless of the specific site selected, it is important to remember that any site selected for aerobatic demonstrations must be void of vehicles, persons, or inhabited structures during the performance. Additionally, if 1,000 feet does not exist between primary and secondary spectator areas, the location will not be approved for an aviation event waiver. Similarly, if the site cannot provide a 500-foot separation between the show line and the spectators, the location will not be considered for an aviation event waiver (FAA 1990).

Spectator areas, as defined by the FAA, include both the primary spectator area and the secondary spectator area. The primary spectator area is the main area provided by the sponsor for spectator use. This is the area where the public generally expects to view the air show. The secondary spectator area may be any other area where persons have a natural tendency to gather to observe the event, perhaps to avoid paying an admission fee. This is generally an area opposite the show line from the primary spectator area or a road, etc. It is important for the airport to consider potential gathering areas and specify secondary spectator areas before the event because it will not be possible to vacate people from secondary spectator areas.

Although the minimums listed in Table 1 are well-defined, the FAA does allow some leeway in applying these show line distances. For Category I aircraft, if the spectator area cannot be moved and the only well-defined show line is closer than 1,500 feet, the show line may be approved down to an absolute minimum of 1,200 feet. A similar reduction is not allowed related to the secondary spectator area. As a result, in no case will the FAA allow less than 2,700 feet between primary and secondary spectator areas. For Category II aircraft, the show line may be moved to a minimum of 800 feet from the spectator area. In no case will the FAA allow less than 1,000 feet between the primary and the secondary spectator areas. For Category III aircraft, 500 feet is the minimum (FAA 1990).

SIX MONTHS PRIOR TO EVENT

Signage

Signage for the day of the event is the most common method of relaying information to attendees once on site, as well as guiding everyone to the event site. Although there may be adequate signage on the interstate and local roads directing everyone to the airport, it may be more effective to also erect site-specific signage. In this way, attendees arriving from outside the local area will be more easily directed to the site. Signage on the event grounds directing attendees to concession areas, restrooms, first aid areas, and ATMs will also prove beneficial. As signage will take time to create, it is important to consider it six months before the event.

Support Facilities

With hundreds or possibly thousands of people attending an aeronautical event, support facilities are essential for comfort, starting with portable toilets if permanent facilities with restrooms are not on site. A general guideline is a minimum of one toilet for every 250 attendees. Generally, if alcoholic beverages are consumed at the event, the number of units should be increased by 10%. It is important to keep facilities clean and well-stocked, which may require a service truck on premises at all times. It may be beneficial to contract more upscale restroom facilities that can be moved to the site on a self-contained mobile platform. Most self-contained units can service 5,000 people per day (10% fewer if alcoholic beverages are consumed).

Second, providing multiple trash receptacles within 100 feet of each food or beverage location will not only serve to meet attendee needs, but will also result in cleaner event grounds. Trash liners will need to be changed every two hours. If there are not enough trash cans or if they are overflowing, litter will become a significant problem during the event and negatively impact overall appearance, thus affecting attendee satisfaction. Innovative event organizers may paint a sponsor's logo on trash cans for even more value-added sponsorship.

In planning for support facilities, it is also important to consider the needs of handicapped attendees. Those in wheelchairs or powered scooters, or using service animals or other mobility aids should have the same access to the air show and other aeronautical and nonaeronautical events, as well as food and beverage, retail vendors, restrooms, and first aid. Providing full access to the event will require ramps, handicapped parking and seating, signage, and proximity of restrooms and food and beverage vendors to accommodate those attendees with special needs (EAA 2009; Brown 2010; R. Hansen, personal communication).

Volunteers

An aeronautical special event will require a large number of personnel to handle aircraft parking, vehicle parking, security, crowd control, information, food and beverage concessions, vendors, ticketing and entrance gates, and more. Event sponsors have historically relied on volunteers for such tasks. As one airport director has cautioned, however, "You can actually have too many volunteers." To avoid this, and to make certain that the volunteers that are utilized are utilized effectively, some event sponsors have found it helpful to develop a volunteer handbook.

The Hawaii Air Show Invitational volunteer handbook states, "Becoming a volunteer at Hawaii Air Show Invitational is an exciting and rewarding experience. We want to make all volunteers and guests welcome. This Handbook is

designed to help make your experience [as a volunteer] as safe, enjoyable, and uncomplicated as possible" (Hawaii Air Show Invitational 2011, p. i). The handbook contains the following elements:

- Air show site plan
- Becoming a volunteer
- Volunteer training
- Volunteer tent
- Volunteer work process
- Air show/Airport operation schedule
- First aid
- Emergency procedures
- Security
- Guest services/Information
- Problem solving
- Website.

In addition to receiving a copy of the handbook, volunteers at the Hawaii Air Show Invitational are required to attend a volunteer training meeting. In recognition of the importance of volunteers in answering questions from attendees, the handbook contains important information on all areas for which volunteers may be asked questions.

Volunteers at the Oregon International Air Show are required to read and follow regulations and expectations and to sign a volunteer release form. The Oregon Air Show has also developed a volunteer safety training program (Appendix G) that cover the following topics:

- Safety concern highlights
- Safety check-off list per area
- Non-emergency contact information
- How to contact security or safety personnel
- Review of key safety locations on the field during the air show
- Proper clothing and sun protection ("Safety from the Ground Up" 2011, p. 4).

Among participating airports holding air shows, five of nine have fewer than 200 volunteers. Three, however, have more than 1,000 volunteers (Figure 21). Among participating airports holding events other than air shows, the vast majority (20 of 23) have fewer than 50 volunteers, with some having as many as 300. Volunteers for air shows were generally provided by community groups, airport tenants, and the local EAA chapter. Volunteers for events other than air shows were generally individuals, the local EAA chapter, and airport tenants. Other sources of volunteers for air shows and non-air shows include businesses, city/county staff, flying clubs, schools/universities, and state aviation agencies.

Vehicle Parking/Traffic

Aeronautical special events often draw hundreds, if not thousands, of attendees. Although some participants may fly in, generally a large majority will drive to the site. Thus, providing sufficient prepared area for parking is important (Figure 22). As one expert puts it, "The objective is to keep cars from backing up on the street and to maximize the number of cars that can be parked in a given space" (Brown 2010, p. 50). According to this expert, on average, each car brings in 2.8 persons. Another expert suggests 3.3 persons per car (Oldham 2006). Whichever number is applied, each car requires a space that is 10 feet wide by 20 feet long, with an aisle equivalent to the space required for one car for every two cars. This equals 600 square feet for two cars, including the aisle, or 300 square

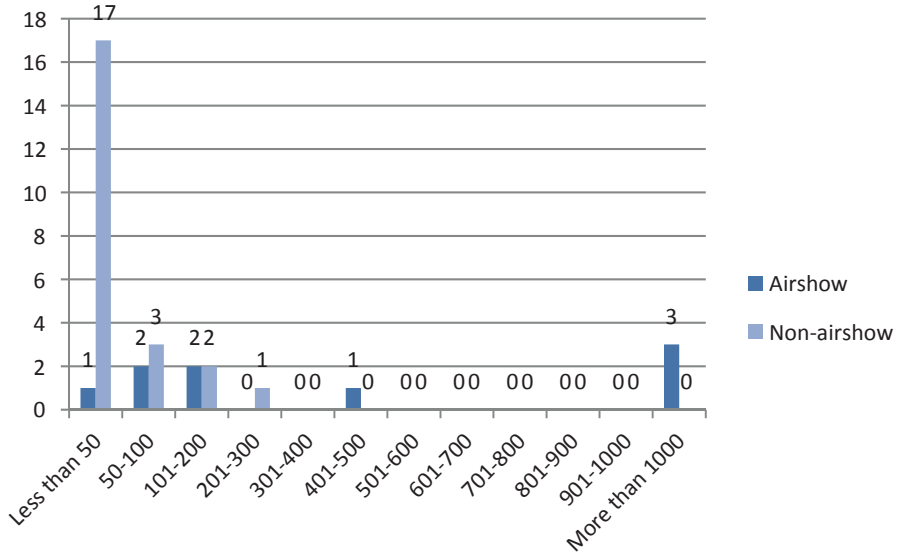

FIGURE 21 Number of volunteers.

FIGURE 22 Automobile parking at an aeronautical special event. (*Source*: Anonymous.)

feet per car. About 145 cars can be parked per acre. For example, if an event is anticipating 5,000 people, and if all of these attendees will be parked at the same time, at 2.8 people per car, there will be 1,785 cars parked simultaneously. At 300 square feet per car, a total 535,714 square feet (or about 12 acres) of parking area would be needed (Brown 2010). Remember, traffic flow into an event is usually spread out over several hours, while traffic flow out of the event may occur during a short time period, which can lead to significant congestion for vehicles exiting the site (EAA 2009). To assist with determining parking needs and providing adequate parking area, survey participants suggest:

- Hiring a professional parking contractor
- Initiating a free shuttle service from satellite parking areas off-site
- Using a tally counter as autos enter the airport to maintain a real-time count/inventory
- Using early registration or advance ticket sales plus 20% to gauge number of autos in advance
- Using prior year as a baseline
- Providing a properly prepared surface (such as blacktop, gravel, or concrete) to avoid the fire hazard of parking vehicles over dry grass.

Once sufficient space is arranged, adequate signage, cones, and personnel will need to be in place to guide drivers as they enter and exit the site. It is helpful to have cones and signs in place one day before the event, with personnel in place 90 minutes before gate opening on the day of the event. Positioning some personnel at the entrance and others at the first row allows drivers to be directed from row to row so that every space is completely utilized. It is important for personnel to have bright flags and properly use them by keeping them high in the air: If drivers are not guided, they will tend to leave space between cars, preventing efficient utilization of the parking area and possibly resulting in drivers being turned away (Brown, 2010).

Rather than just keeping a few of these points in mind, experts suggest developing a comprehensive traffic management plan to guide the flow of traffic and parking. Such a plan may have the following components:

- Site access and parking plan—Designed to provide a birds-eye view of the site, including all parking areas and entrance and exit areas.
- Traffic flow plan—Consider the flow of traffic into and out of the site, especially if there will be large volumes of autos leaving simultaneously.
- Traffic control plan—Consider how traffic will be controlled, to prevent a "free-for-all" with parking and as autos are entering or exiting.
- Traveler information plan—Consider how those traveling to the air show from outside the local community will access the site, including interstate exits, use of city streets, alternate routes, etc. Will preferred or suggested travel routes be made available to these individuals prior to their leaving for the event? If not, everyone will take the most convenient "GPS-route" which may result in unacceptable levels of congestion.
- Local resident information plan-–Consider how local residents will travel to the event. Also consider how spillover traffic may affect residential streets by individuals who choose to park on the street.
- Traffic surveillance plan—Consider how surveillance of the traffic situation during the event will take place. Will local law enforcement be relied upon? Any alternate plans if necessary?
- Incident management and safety plan—Although such a plan will be developed for aircraft activities, consider also a traffic incident. How will safety be enhanced in the parking areas at night? Will first responders have easy access to parking areas if there is a car fire or other emergency?
- Staffing assignment plan, contact list—This will include a list of all staff and volunteers assigned to parking and traffic management, with their contact information (whether radio, cell phone, or other).
- Contingency plan—Owing to the sheer volume of vehicles that will be arriving on site, it is important to develop a contingency plan. What if all parking areas are full and more vehicles are arriving? What if there is a car fire? (Oldham 2006, p. 18).

All nine survey participants holding air shows had traffic management plans; nearly two-thirds (16 of 23) of survey participants holding events other than air shows had plans. As seen in Figure 23, signage is the most common technique used to manage parking, whether the event is an air show or non-air show. Another common response was the use of volunteers to direct traffic.

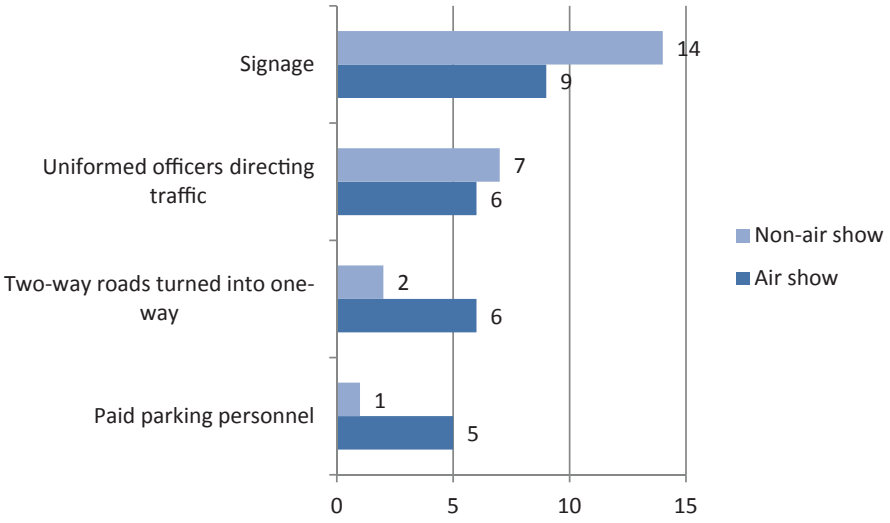

FIGURE 23 Which of the following requirements were in place to manage parking during the event?

Emergency Aircraft Repair Plan

One consideration often overlooked during the organizing phase of an event is that an aircraft may become disabled during the event. As such, an event organizer may wish to arrange for dedicated assistance and facilities through an emergency aircraft repair plan. Often, this may be provided through an on-field FBO. If aircraft manufacturers are exhibiting, they will also likely have a show maintenance package. At a minimum, volunteers can be on standby with auxiliary power units in case a "jumpstart" is needed. One example of an event equipped with emergency aircraft repair is that of EAA AirVenture, which has a facility staffed by the volunteers of EAA chapter 75 staff to provide assistance to pilots of disabled aircraft by making repairs to enable a safe return flight or ferry flight for permanent repairs. The volunteers staffing the facility can also provide hand tools, jacks, clocks, air, torches, welding equipment, drills, brake and magneto tools, plug cleaners, battery chargers, a field level maintenance shop, some manuals, and limited technical assistance to aircraft owners ("Emergency Aircraft Repair" 2012; J. Collins, AOPA, personal communication, October 2012).

FIVE TO TWO MONTHS PRIOR TO EVENT

Special Invitations

Although marketing will be in place to attract the general public, including those outside the local area, consider those groups of people that may benefit from attending the event but might not attend unless they are personally invited. This includes decision-makers; media; critics; local, state, and federal governmental officials, and civic organizations. To benefit these groups, consider offering "VIP" passes, to include guided tours, special seating, or other personal attention (AOPA 2007).

ONE MONTH PRIOR TO EVENT

Review and Promote

By one month prior to the event, most every task should have been accomplished. This final month should be used to review the event checklist, follow up on any remaining open items, and emphasize promotion. Additionally, in the days before the event, it is important that the media once again be reminded about the event through press releases and a final planning meeting be held with participants.

CHAPTER FOUR

EVENT PHASE

The Event Phase occurs only while the event is being held, and despite the many months of planning and organizing, the success of this phase alone will determine the success of the event. Further, this phase is the only phase generally visible to event attendees.

First, on the morning of the event, several briefings or meetings will be held. This may include an initial meeting of volunteers to make certain everyone is aware of their responsibilities for the day. It may also include a mandatory briefing for pilot performers. Handled by the air boss, the pre-show pilot briefing is detailed in FAA Order 8900.1, which specifies that all performers, key operations/support personnel, the FAA or assigned monitor, and weather briefer should attend. This agenda will include:

- Roll call—Attendance by performers is mandatory
- Introduction of key officials
- Time hack
- Current weather and forecast
- Review of NOTAMs
- Review of waiver and special provisions
- Review of area map—Including hold points, turn directions, altitudes, noise abatement procedures, sensitive areas, special areas of operation, remote recovery airports, obstructions, controlled/emergency bail out/ditching procedures
- Airport status—Including airspace, runways in use, facilities, arresting cables
- Air show layout—Including show lines, spectator areas (primary/secondary), ground-based pyro, hazards, taxi routes, CRS runway watch locations, unique local items/conditions
- Communications—Including primary/backup/discrete, tower/UNICOM, procedures for aircraft without radios, transponders
- Specialty briefings—Warbird formation, fuel/smoke oil, marshallers, CRS runway watch, maintenance, pyro, announcer
- Emergency briefings—Communication failure, stuck microphone procedures, no radio aircraft (NORDO) procedures, ground/in-flight emergencies, runway closures, hold/divert locations, recall/stop show/divert procedures, aircraft in pyro area, deteriorating weather conditions
- Performance safety—Stall speeds vs. "G" load vs. density altitude, personal physical condition, minimum altitude, show line
- Review/distribute flying schedule by act
- Administrative notices
- Questions/comments—Resolve all conflicts and require all performers to sign the waiver and/or participants briefing signature document (FAA 2007, pp. 23–26).

Additionally, AC 91-45C provides topics for the preshow performer briefing (Figure 24):

- Weather briefing
  - Who gives the briefing; that is, sponsor, Flight Service Station specialist, etc.
  - Source of information
  - If forecasts are involved, the valid time of forecasts
- Runway in use
- Taxi instructions
- Performer aircraft parking
- Aviation event radio communication frequencies
- Emergency procedures
- Show lines
- Area avoidance
- Review of provisions on the FAA waiver
- Review of the schedule
- Aircraft departure plan
- Next briefing (if necessary)
- Questions
- Credential check and signing area
- ALL participants sign waiver
- Fueling procedures (FAA 1990, p. 15).

To make certain the event is successful, it is important to outline responsibilities and tasks to be carried out during the event, as well as safety guidelines. Everyone, volunteers included, should understand his/her specific role during the event (Appendix G). Guidelines may be developed that cover areas such as:

- Admissions
- Communications
- Concessions
- Electrical
- Financial
- General aviation and runway safety
- Ground operations and non-aircraft refueling
- Hot pit
- Motorized vehicles
- Parking
- Performer requirements

FIGURE 24 Pre-show briefing. (*Source*: Anonymous.)

- Unattended property
- Seating
- Static display requirements
- Sterile corridor/aerobatic box
- Weather, insects, and other natural environmental concerns.

As various issues will likely arise during the event that need addressing, it is beneficial to have a troubleshooting team with authority to make on-the-spot "executive" decisions. Without such a team, volunteers may either make decisions that are not in the best interest of the event or event sponsor, or have to chase down the one person who has the authority (such as the airport manager), which for large events can be difficult. Experience indicates that providing each member of the troubleshooting team a brightly colored shirt or vest with the event logo and a cellular telephone is advantageous**.** Rather than congregating in the same tent all day, the members of this team should be highly visible and dispersed during the event (AOPA 2007).

Additionally, it is very helpful to assign one person or several individuals the task of making sure all event sponsors are well taken care of during the event, ensuring that tents, chairs, refreshments, and any other items called for in the sponsorship agreement are in place at the start of the event and maintained throughout. If a sponsor does not have a good experience, he or she is unlikely to sign up again next year.

Finally, a point should be made to stay hydrated and keep an eye out for safety hazards, but also enjoy themselves. Aeronautical special events are a lot of work and volunteers may need to be rotated, allowing for appropriate rest breaks to get off their feet and into some air conditioning.

CHAPTER FIVE

RETURN TO NORMAL OPERATIONS AND EVENT ANALYSIS PHASE

> "Most successful sponsors dedicate considerable time and effort planning for the conclusion of the aviation event. They do this because they understand that all the effort expended producing a successful show could be ruined in the chaos that follows the termination of the event."
>
> FAA (1990)

Although event personnel may feel like taking a deep breath and relaxing immediately upon the conclusion of an event, this final phase, return to normal operations and event analysis, is integral. Especially if the event concludes with a big finale in the form of fireworks, major jet team or other act, event staff may find that large crowds of attendees are attempting to leave simultaneously, which can create significant problems at bathroom areas, exit areas, parking areas, and roads leading out of the site. Without appropriate planning, crowd control personnel may also quickly leave, resulting in even more chaos. According to the FAA, to better regulate the exit of attendees, it is preferable to keep some of them at the show site for 30 to 40 minutes after the main attraction by providing additional attractions and activities after the main event. For instance, (a) make demonstration pilots available after the show to talk with attendees and sign autographs, (b) conduct a raffle or drawing for prizes, and/or (c) place demonstration aircraft on display to allow attendees to interact with the aircraft and performer(s) (FAA 1990).

DAY AFTER EVENT

Clean-up

After the conclusion of the event, the event sponsor must clean up the event grounds to return the airport to full normal operations. However, as EAA states, "Informally leaving this part of the . . . event workload to the hardy few that stay till the end is inefficient and unfair" (EAA 2009, p. 15). Thus, post-event clean-up is an important consideration. It may even be worthwhile to contract with a commercial cleaning company to ensure proper cleaning of the site grounds. Leaving it to chance or those who choose to stay and help is not an effective plan. If the event sponsor is an organization other than the airport, the agreement for the event space will likely specify the requirement to return the grounds to normal within a certain period of time.

Cancel Notices to Airmen

Although NOTAMs for the event may have been issued with a preset expiration, it is common at this point to double-check any NOTAMs that were issued during the event and make certain they're cancelled as appropriate. For instance, if a taxiway was closed to accommodate static display aircraft, the NOTAM will be cancelled once these aircraft depart and the area has been cleaner. It may be appropriate to coordinate any NOTAM cancellations with airport operations.

WEEK/MONTH AFTER EVENT

Follow-Up

Even after clean-up is completed, the event is not quite complete, at least as far as the airport and event sponsor are concerned. Specifically, by thanking volunteers, the event sponsor can ensure sufficient volunteer participation next year. This may include hand-signed thank-you notes and a verbal thank-you at the next airport board meeting. An advertisement of thanks could also be placed in the local newspaper. Whichever method is chosen, volunteers are integral to a successful event and their contributions deserve a word of gratitude (EAA 2009).

In addition to volunteers, the sponsors of the event also deserve acknowledgement. Indeed, without sponsors to "stand in the gap," some events would not even be held, Therefore, it is important to thank them for their participation in making the event successful (EAA 2009).

Although volunteers and sponsors are essential, participants—whether air show performers, owners of static-display aircraft, or fly-in participants—are also integral to aeronautical special events. Consider next year's event and ensure good participation by extending a word of gratitude to this year's participants (EAA 2009).

Analysis of Success/Debriefing

Although the analysis of success may occur at the "management level," it is important for all involved to participate in a debriefing of the event. At the most basic level, questions that may be asked include:

- What worked?
- What did not work?
- What should we do different next year?

Determining what worked and what did not is the very foundation of event debriefing. Answering these three questions

will allow the event sponsor to adopt improvements that can be implemented for future events.

Additionally, questions can be asked that address the reasons for holding the event in the first place. For instance:

- Did the event (long and/or short term):
  - Enhance the public awareness of the airport?
  - Stimulate interest in the airport and aviation?
  - Foster community support for the airport and activities on the airport?
  - Provide community benefits?
  - Grow participation in aviation?
  - Create future airport public awareness opportunities; for example, speaking opportunities at civic organizations, schools, etc.?
  - Generate revenues? (EAA 2009, p. 19; R. Hansen, personal communication).

It may be that the answer to some of these questions is yes, whereas the answer to others is no. Practically speaking, there are degrees of success that can be revealed in contemplating these questions. For example, if the event was designed as a community outreach event, net profits would not necessarily determine the level of success; however, the number of attendees would. The "quality" of attendees is also important. Good attendance from community business leaders, elected officials, and civic leaders who are satisfied with the event is an indicator of success. Likewise, if exhibitors, concessionaires, and vendors were successful, the event could be considered a success.

One of the most common indicators of success, if the event was designed as a for-profit event, is the level of gross revenues and subsequent net profit. The level of financial success is directly determined based on the budget that was developed during the organizing phase. If the goal was to net $50,000, it will be relatively easy to determine whether this success indicator was met. If the goal was to break even, this can also be objectively determined. Although success may be obvious, the event sponsor may determine that the event met some objectives and not others. This realization can lead to alterations in future events.

Among survey participants, all 10 of those holding air shows measure revenues, with five measuring revenues by the day and five by the event. Although less common, about half (11 of 20) of survey participants holding events other than air shows measure revenues, with half (10) measuring revenue by the event. Three of 11 holding air shows fully retain profits from the event in-house, one participant donates 100% of profits and another partially donates profits. Among survey participants holding events other than air shows, almost one-third (six of 20) retain profits in-house, whereas three participants fully donate profits and another three participants partially donate profits. Of course, those not charging admission fees may not realize profits, unless a percentage of concession/vendor profits are collected (AOPA 2007; EAA 2009).

What makes a great air show or event? According to the experts, the following are characteristics of great air shows:

- Committed volunteer board of directors
- High levels of customer service
- Delicious food
- First rate parking
- Clean ramps
- Clean chalets
- Sufficient number of hard-working volunteers
- Well-briefed and taken-care-of performers
- Exceed expectations of sponsors
- Strong, entertaining announcer
- Superb level of safety during the event
- Interesting and varied acts
- Signage and everything within the gates having a look of cleanliness, consistency, and pride
- Sufficient and clean portable toilets
- Sufficient and convenient trash receptacles
- Plentiful concessions
- Sufficient parking and access (Cudahy 2010, pp. 48–60).

Success can also be determined by measuring customer satisfaction in the form of attendee satisfaction surveys, which can be conducted during the event or as exit interviews. If attendee information was collected by means of online ticket sales before the event or through a city feedback app, most likely the e-mail address of the purchaser was recorded, providing the opportunity for a quick follow-up satisfaction survey after the event. According to survey participants, attendee satisfaction surveys are more common at air shows than at events other than air shows. Specifically, six of 10 of participating air shows survey attendees, while only three of 23 events other than air shows do. Generally, survey participants hear complaints from attendees regarding parking, traffic, concessions, restroom and admission lines, and the weather. Clearly, not much can be done about attendee satisfaction with the weather other than providing shade or shelter of some sort. However, with proper planning, improvements can be made to provide more parking, ease traffic congestion, offer more food/beverage concessions, and minimize wait times. Although some of these issues are aggravated by higher attendance levels, survey participants shared some of their secrets for improving the event and boosting attendance. These include increasing publicity, activities, and variety among concessions and vendors. As part of the post-event analysis, it may be helpful to study attendee demographics. For events with online ticket sales, some demographics may have been collected during the ticket purchasing process. Although aeronautical event spectators may be diverse, studies have been conducted to determine the "typical" air show attendee, which can suggest more effective marketing efforts. According to ICAS, 80% of air show spectators have at least some college education, with 45% holding at least one

college degree. Nearly two-thirds (64%) have a household income of $50,000 or more, with 40% reporting an income of $75,000 or more. Almost two-thirds (60%) of attendees are male. Interestingly, attendees are well-represented at the various age brackets, although nearly half (48%) are between the ages of 30 and 50 (ICAS 2011).

Among survey participants, air show hosts paid closer attention to attendee demographics, with five of nine collecting demographics on attendees. Among non-air show participants, only one-quarter (six of 23) collect demographics. Additionally, event sponsors may wish to collect information on the distance traveled by attendees. Among survey participants holding air shows, three of 10 of attendees came from more than 80 miles away, whereas the remainder came from within a 60-mile radius to the event site. Among survey participants holding events other than air shows, almost one-third (seven of 23) came from within a 30-mile radius to the event, with more than half (14 of 23) of attendees coming from within a 50-mile radius to the event site. Several of these participants do not collect such information on attendees.

ECONOMIC IMPACT ANALYSIS

To determine event success at the wider community level, some event sponsors perform (or contract the completion of) an economic impact analysis. Almost half (four of 10) of survey participants holding air shows determine the economic impact of the air show to the community. Only three of 23 of survey participants holding events other than air shows determine economic impacts.

It can be helpful to conduct an economic impact analysis of the event for the purposes of quantifying the financial benefits of the event to the airport and the local community, including businesses such as lodging establishments and restaurants.

Economic impact studies determine direct, indirect, and induced economic impact. Easiest to determine, direct economic impacts consist of the amount of spending that will remain within the local economy. Although some mistake direct economic impacts for the total dollars initially spent on a purchase, if a portion of these revenues are being sent to company headquarters in another state, they would not be included in an estimate of direct economic impacts. Thus, direct economic impacts may be less than actual revenues realized during the event. Indirect economic impacts are those impacts that result when a business makes purchases from other businesses. For example, if an attendee purchases event t-shirts from a vendor, that vendor then makes more t-shirt purchases from a supplier to replenish inventory. The financial benefit to the supplier comprises the indirect impacts. Finally, induced economic impacts result from the expenditures of employee wages, as when workers at a food and beverage concession at the event are paid and then use these wages to purchase products and services in the local community. With an understanding of these three types of economic impacts, one can see the importance of "buying locally." If revenues are sent to another community or state, the economic benefits that could have been realized in the local community are reduced. See Karlsson et al. (2008) for information on airport economic impact methods and models.

One such economic impact study that has been conducted for an aeronautical special event is the "Economic Impact and Market Analysis of a Special Event: The Great New England Airshow." In this 2009 study, the researchers determined that direct economic impacts totaled $8,968,169 as a result of 345,000 total attendees. Adding the indirect and induced economic impacts resulted in a total economic impact of $13,452,255. This number is based on a multiplier of 1.5, which was suggested by the Massachusetts Office of Travel and Tourism. There is conjecture involved in calculating economic impacts. The only number that can be ascertained is the total revenues realized during the event; once this is known, estimates are used. Even so, it can be enlightening to determine the economic impacts of an aeronautical special event (Warnick et al. 2009).

CHAPTER SIX

CASE EXAMPLES

CASE 1: SUN 'N FUN INTERNATIONAL FLY-IN AND EXPO

The Sun 'N Fun International Fly-In and Expo is held each April at Lakeland Linder Regional Airport in Lakeland, Florida. This six-day event features more than 4,000 airplanes, 500-plus commercial exhibitors, and hundreds of educational forums, seminars, and hands-on workshops. The highlight of each day is an afternoon air show featuring aerobatic pilots, jet team demonstrations, and WWII bombing reenactments. The Friday night event consists of an after-dark air show followed by a fireworks finale.

For 38 years, Sun 'N Fun has been a favorite of aviation enthusiasts. Beyond the event itself, however, the Sun 'N Fun facilities are home to the Florida Air Museum and open year-round. The mission of the Sun 'N Fun organization is to preserve and enhance the future of flight through world-class events, inspiring and educating people of all ages.

The expo is organized and entirely funded by Sun 'N Fun Fly-In, Inc., a 501 (c)(3) entity; at the same time, the Lakeland Linder Regional Airport benefits from the event. In essence, this is an example of an airport having a fly-in and air show that is coordinated by another entity and relies on the airport for coordination and operational event support.

According to the Lakeland Linder Regional Airport director, Sun 'N Fun Fly-In, Inc. is a year-around tenant on the airfield. The organization regularly leases 162 acres, which swells to 800-plus acres in the month prior to and the month after the six-day expo. This additional space requires a separate event use agreement, in addition to Sun 'N Fun's standard lease. Additionally, as part of this event use agreement, the airport requires an additional $10 million insurance policy for the event.

The airport benefits from the event in the form of promotion and visibility, and yet is typically only involved at the operational level—security, emergency response, air show operations, ground operations, and FAA coordination (including waiver and NOTAMs). Airport staff participate in planning meetings during the months leading up to the event, but are not concerned with issues such as concessions, vendors, exhibitors, performers, event sponsors, volunteers, marketing and promotion, ticketing, or insurance. Sun 'N Fun, Inc. handles all vehicle parking through a contracted private company, whereas the city and county pitch in with law enforcement support to handle traffic flow to and from the site. The airport also secures additional personnel for fire rescue services.

According to the airport director, the airport hosts the event, but is not the sole sponsor (although it does provide more than $100,000 of in-kind contributions and financial sponsorship). Because Sun 'N Fun, Inc. organizes the six-day event and assumes the financial burden, it is the primary financial beneficiary. The airport only receives 10% of gross proceeds from car rental activity and revenue associated with the additional land lease as spelled out in the event use agreement.

The airport does develop an incident action plan each year that relies heavily on mutual aid from the city and county (in the form of fire rescue and law enforcement). Although the airport has a contract tower, air traffic during the event is actually coordinated by approximately 50 FAA air traffic controllers. According to the airport director, he is only aware of one other event in which this occurs, EAA AirVenture at Oshkosh.

Once the event is complete, most of the analysis is handled internally by Sun 'N Fun, Inc., although airport staff engage in e-mail exchanges regarding items that need to be changed or improved upon from the operational perspective.

When asked to offer advice to other airports considering holding a fly-in or other event, the airport director responded:

1. Do not be too eager to say No. Be willing to think outside the box and consider how a proposed event will benefit the airport and the community. Try to make it happen for the benefit of aviation. Think of ways to get children involved. The best thing is not always the easiest. Consider the following activities, which at first glance appear impossible, but after thorough analysis with a willing perspective and open mind can be coordinated for the benefit of the airport and the community:
   a. Radio control (RC) aircraft events
   b. Large aircraft (C-5, 747) that may not generally fit on your airfield
   c. Aerobatic box during commercial operations
   d. Parachute jumping
   e. Balloon launch
   f. Blimp operations
   g. Wall of fire
   h. Glider operations.

2. Choose aeronautical events before (or instead of) non-aeronautical events.
3. Safety first.

CASE 2: OWENSBORO AIR SHOW

The Owensboro Air Show, hosted by the city of Owensboro and Daviess County, Kentucky, was first held in August 2012. The air show was conceived as part of a community celebration that coincided with the grand opening of the city's revitalized downtown riverfront and park space. As such, the event was free to the public (although spectators could purchase tickets for $20 that guaranteed a spot in the Riverpark Center). The city allocated almost $200,000 to hold the air show and the grand opening event. Although this expense was significant for an event not realizing any substantial revenues, the goal was to give back to the community.

Although it is not unheard of, this air show was unusual in that it was not held at an airport, but over the Ohio River in the vicinity of the revitalized downtown area. Two viewing locations were made available to the public on the banks of the river. Since the event was off-airport, the Owensboro Daviess County Regional Airport was only involved in planning for airport use, airspace, and operations at the airport during the event, while the city of Owensboro played the lead role in planning and organizing the event. The event was coordinated by the director for public events, who was interviewed for this case example.

Planning for this event began one year before the 2012 event, according to the director. Arranging sponsors for the event, marketing the event, and arranging for volunteers to assist with the event required a substantial effort on the part of the city. The city's public information officer was directly responsible for promoting the event, developing a website and utilized social media, print ads, direct mail, billboards, and radio ads. Additionally, although the city has insurance policies in force for major events, the city acquired air show/air meet insurance.

Challenges included parking and traffic at the event. Because of the free and inaugural nature of the event, attendance was higher than anticipated; however, since attendees did not have to pay to attend, the city was not concerned about people who had paid and were unable to see the event. It was also difficult securing the aerobatic box. Roads had to be closed, which required coordination among city, county, and state law enforcement agencies. Private property had to be vacated during the air show, which required coordination with property owners. The Ohio River had to be closed to barge traffic, which required coordination with the U.S. Coast Guard. A final challenge was the heat during the event. As with any outdoor event in the summer, heat exhaustion and dehydration of attendees was a concern. The city had numerous cooling stations, concessions, and fans available, as well as paramedics on-site to provide first aid for heat-related injuries.

Lessons learned include:

1. Communication. It is important to keep the general public informed during the event. This can be accomplished by means of signage, volunteers, and PA announcements. Attendees will need information about the location of restrooms, concessions, and the performance schedule. Some of this can be accomplished before the event with a "What Do I Need to Know?" or "What Do I Bring?" section on the airport's or air show's website. For instance, the Owensboro Air Show website listed:
   a. What should I bring?
      i. Sunscreen, hats, sunglasses
      ii. Camp chairs and blankets
      iii. Binoculars
   b. What to leave at home
      i. No tents or canopies of any kind will be allowed within city parks. Structures of ANY kind will be required to be taken down. This will be strictly enforced.
      ii. No taping or roping off of large areas will be allowed. This will be strictly enforced throughout the event area.
      iii. No overnight camping is allowed in city parks or the overall event area.
      iv. No glass bottles are allowed at the event site. Plastic containers, cans, and food are permitted. There are also plenty of food and soft drink vendors to take care of any needs you may have.
      v. No alcoholic beverages are allowed.
      vi. No grills are permitted in any of the viewing areas.
      vii. No bikes, skateboards, or skates are allowed in the event area. If you ride your bike to the air show, please be courteous and walk it through the event site for pedestrian safety.
      viii. Please leave any pets at home.
2. Emergency planning. Plans need to be made for severe weather, aircraft accidents, security incidents, etc.
3. Equipment. Sufficient portable toilets need to be available. Sufficient crowd control barriers need to be in place.

CASE 3: THE GREAT TENNESSEE AIR SHOW

In 1970, Nashville Aviation Days was held for the first time at Nashville International Airport. It was soon realized, however, that an air show and active commercial traffic was not a good combination. Thus, the air show was moved to nearby Smyrna Airport and renamed Tennessee Aviation Days. It was held off and on for the next 30 years with various attractions and performers. During these three decades, the event was coordinated by various local Rotary Clubs, who viewed this event as a major fundraiser.

In the years leading up to 2001, funding for the event and membership in the local Rotary had been declining. In 2001, the air show was to be held on September 15; however, after

the tragic events of September 11 and the temporary closure of the nation's airspace, the decision was made to cancel the air show. Unfortunately, performers had already been hired (although many returned deposits), marketing expenses had been incurred, and no revenues were realized. With this, the local Rotary Club ended its involvement with the air show.

Following completion of a new terminal building at the Smyrna-Rutherford County Airport in 2003, the airport board approached the airport's executive director with plans for reviving the decades-old air show. The director suggested first determining the reason for wanting to hold the air show. The board and executive director agreed the goal in holding the event would be community outreach—they wanted people to come to the airport. However, they also agreed that they did not have the staff or expertise to coordinate such an event. The executive director then contacted a professional event organizer and was able to negotiate a turnkey agreement. The agreement required the organizer to finance the event, coordinate all aspects of the event, and share some revenues with the airport. With this agreement in place, the Great Tennessee Air Show was born.

According to the airport's director, the one stipulation throughout the years has been to host a military jet team each year. He explained that jet teams greatly increase the number of attendees, with his event seeing 15,000 to 20,000 people on a good day. Even so, it is the military jet teams, rather than the airport, that decide which air shows they'll participate in. Airport staff eagerly await word each fall after having submitted the DOD Form 2535 to secure a jet team. In some years, the director has received a call from one of the teams asking if an alternate date (such as Mother's Day one year) would suffice. Fortunately, the Blue Angels are now on a two-year schedule, which enables some advanced planning for airports selected by this team. Additionally, the director explained that in the weeks leading up to the event, he will often receive phone calls from air show performers who are not yet booked for that weekend offering their services at greatly reduced discounts. He avoids getting caught up in the lure of lower rates, instead focusing on the air show schedule and making sure not to have too many performers with the same types of acts, for fear of losing audience interest.

In planning and organizing for the Great Tennessee Air Show, the airport's executive director chairs all of the meetings and purposefully keeps committee members to a core of six or seven people who can assume the major responsibilities associated with the event. Additionally, he does not require a substantial number of volunteers for the event. He typically only has about 40 nonpaid volunteers from the Civil Air Patrol, local university, and close friends of the airport assisting. The airport does, however, rely on several hundred "paid volunteers." For example, the National Guard located on the field is paid to work the parking lot and ensure traffic flow. Also, local civic organizations staff food booths and share in a percentage of profits from food sales.

Marketing of the event is through the website established for the air show by the event organizer, as well as billboards, television commercials, and print materials. The executive director also tries to arrange a ride for one or two journalists in one of the jet team's aircraft.

Equipment arranged for the event includes portable toilets, crowd control devices, snow fences (to prevent foreign object debris from blowing onto the air operations area), dumpsters and trash containers, smoke oil, and arresting gear for the runway. Smoke oil is becoming quite expensive at $500 per barrel. The performers at the Great Tennessee Air Show typically use 20–22 barrels at a cost of $10,000–$11,000.

As a Part 139-certificated airport, Smyrna–Rutherford County is required by the FAA to develop an emergency plan specific to the air show in order to get the necessary waiver for the aerobatic activity. The airport also hires an air boss and announcer each year, the air boss to ensure safety during aircraft operations and the announcer to keep the audience engaged and informed.

In 2012, the event was rained out on the second day. Generally, losing the revenues for one day of a two-day event has significant financial consequences. As in years past, however, the airport had purchased $100,000 of air meet rain insurance, at a cost of $20,000, in addition to event liability insurance. The rain exceeded the required threshold (a quarter-inch over four hours) of the policy, so the insurance substantially made up for the lost profits.

The airport gathers feedback from attendees by using an online ticket purchase system. Purchasers enter their personal information into the system, which allows the airport to send follow-up surveys after the event to gain perspectives. The event is also billed as a family-friendly event, incorporating a kids' zone with a zipline, inflatables, and other attractions.

The executive director's words of advice include:

1. Why do you want to hold an air show?
2. Do you have community support?
3. Are you willing to assume the financial risk of holding an air show?
4. Sponsorships and pre-sold tickets are the keys to financial success.
5. Don't go committee crazy. Committees with 30–40 members may not accomplish much.
6. You can actually have too many volunteers.

CASE 4: AIRPORT COMMUNITY DAY

For the past three years, the city of Guthrie, Oklahoma, has organized an Airport Community Day at the Guthrie–Edmond Regional Airport. According to the airport manager, who was interviewed for this case example, this event was developed as an effort to give back to the community by inviting residents

out to the airport. The 2012 air show, held in the spring, drew an estimated 600 to 800 attendees. This was down from the previous year's 1,000 attendees, but poor weather conditions persisted until late morning, which affected not only the number of attendees but also aircraft participating in the fly-in.

Held in a city with a population of 10,000, this event does not incorporate an air show, but does consist of many other aeronautical activities. Pilots in the area are invited to fly in for the day; volunteer members of the EAA offer Young Eagles flights; and a BD jet made an appearance and flew around the field a few times. Several World War II-era aircraft provided rides, while attendees tried out the FAA disorientation simulator or visited the radio-controlled aircraft demonstrations, the antique car show, and static A-26 aircraft.

The city did not charge an admission fee in 2012, although a $5 per carload admission fee had been charged in 2011 to cover the cost of a band performance. The airport manager believes that a community event such as this should be free, especially since the objective is to generate interest in aviation and the airport. Even with no admission fee, benefits of the event included more than 64 Young Eagle flights and 10 new flight training students for the on-airport flight school.

The airport also heavily relied on in-kind contributions and volunteers for the event. The local bank and grocery store provided sponsorships. Civil Air Patrol members parked cars, while local police were on scene for crowd control. Additionally, the local fire department sent a fire truck for display, as well as response, if needed.

Lessons learned that year included:

1. Develop an inclement weather contingency plan. Incorporating activities that can be held within hangars may be one part of this plan.
2. Allow sufficient time to plan for the event.
3. New ideas are beneficial. Be willing to think outside the box.
4. Don't forget to develop a detailed financial plan for the event.

CASE 5: EXPERIMENTAL AIRCRAFT ASSOCIATION AIRVENTURE OSHKOSH

Since its first gathering in 1953, the annual AirVenture Oshkosh has become one of the premier aeronautical special events in the country. Held one week each summer at Wittman Regional Airport in Oshkosh, Wisconsin, this event has grown to 508,000 attendees, more than 10,000 aircraft, almost 2,500 show planes, and more than 800 exhibitors yearly. In addition to static aircraft display, exhibits, presentations, meetings, and various education sessions, a 3½-hour air show is held each afternoon. This "World's Greatest Aviation Celebration" has a significant economic impact on Oshkosh and the surrounding area, estimated to be $111 million.

AirVenture is organized by the EAA, which handles all aspects of planning and organizing the event, including volunteers, marketing, attractions and performers, media, parking, financials, etc. However, since the event is held at the Wittman Regional Airport, the airport does play a crucial support role in ensuring the event's success. The airport manager coordinates directly with the EAA, and as such, was interviewed for this case example.

According to the airport manager, the airport is most involved on the operational side of preparing for and hosting the event. Specifically, in preparation for the event, one taxiway is transformed into a runway and two diagonal runways are closed, with the associated changes to markings and signage. The airport has also painted colored dots (seven total) on two runways to serve as visual aiming points that allow multiple aircraft to land simultaneously on the same runway. These dots are located 1,500 feet apart, are 50 feet in diameter, and remain on the pavement throughout the year (as per a Letter of Agreement with the FAA). The airport also accommodates various charters during the week of the event, requiring this GA airport to become a temporary, limited Part 139 airport. Normally operating with ARFF Index C capability, the airport increases to an Index D during the event.

The EAA handles a substantial portion of the planning and organizing for the event; however, airport staff are involved throughout the year in coordinating operational needs that have an impact on the airport. The EAA handles the FAA-required waiver for the aerobatic activity, whereas airport staff coordinates NOTAMs, etc. As Lakeland Linder Regional Airport benefits from hosting Sun 'N Fun, the Wittman Regional Airport significantly benefits from AirVenture, but does not have to fund or organize the event.

In discussing lessons learned during his seven years on staff at Wittman Regional Airport, the airport manager recommends that other airports considering holding an aeronautical special event should:

1. Ask other airports for advice. Don't just jump right in. Rather, spend time to network and learn from peer airports already holding events similar to the one you would like to hold. "When you think you've seen it all, you haven't."
2. Maintain a close relationship and open lines of communication with the organization organizing the event, whether a local EAA chapter, charitable organization, or Chamber of Commerce.
3. Make certain that the event organizer (whether the airport or another organization) communicates regularly with tenants at the airport. For instance, tenants need to know far in advance if there are certain dates on which they'll need to vacate their hangar or avoid driving on a service road because of the aerobatic box in place. Some tenants, such as a cargo operator, may prefer to temporarily relocate to a nearby airport to avoid disruption to their operation during the event.

CHAPTER SEVEN

CONCLUSIONS AND FURTHER RESEARCH

The purpose of this synthesis was to present a compilation of literature and current airport and event sponsor practices regarding planning, organizing, and holding aeronautical special events. In addition to separating the process of aeronautical special events into four phases and presenting the various components of each phase, the report also presented five in-depth case examples of aeronautical special events. The goal was to integrate guidance on this topic with actual industry practices for the benefit of readers.

Aeronautical special events are indeed "special" in that they provide airports and other event sponsors an opportunity to showcase aviation to the community, resulting in goodwill and possibly profits to the sponsor. Although air shows were included in the report, other types of aeronautical events also received attention. The synthesis did not examine the degree to which events are considered a success by event sponsors (other than those characteristics common to a successful event); thus, additional research could be conducted in this area. It would also be enlightening to gather the results of economic impact studies for aeronautical special events nationwide.

In conclusion, the four phases of conducting an aeronautical special event include the planning phase, the organizing phase, the event phase, and the return to normal operations and event analysis phase. The event organizing phase is the most complex and lengthy, typically the phase with which most event sponsors—airports, Experimental Aircraft Association (EAA) chapters, etc—are most familiar. However, neglecting the three other phases may result in a less successful event. Beginning the process up to one year in advance to allow sufficient time for all phases to be completed is a recognized best practice.

Additionally, although including an air show may ensure higher numbers of attendees, staging an air show is more complex and expensive. Thus, an aeronautical event that does not contain an air show may suffice. Indeed, numerous fly-ins are held across the country each year and meet the objectives of event sponsors in enhancing public awareness of the airport, stimulating interest in the airport and aviation, fostering community support, providing community benefits, and possibly generating revenue. Especially for first-time event sponsors, holding an aeronautical special event without an air show component may be worthwhile.

Although aeronautical events are as unique as the airports and venues at which they're held, there are common themes that were identified from survey responses:

- Common complaints of attendees revolve around automobile parking/traffic, seating, toilets, food/beverage concessions, and long lines. According to one survey participant, "Traffic and parking are the first and last thing that people think about after the event." According to another, "Make sure your food concessions are a top priority."
- Common methods of increasing attendance include more and enhanced marketing (including social media, website, and e-mails) and adding more high-profile performers or an air show component. Regarding marketing, one survey participant encourages event sponsors to "Publicize, publicize, publicize." However, as one event organizing firm cautioned, "Be careful with the advertising or you may get more of a crowd than you initially planned for, which will result in unsatisfied customers, i.e., not enough parking, too little bathroom access facilities, not enough food/beverage or services, etc."
- The most common reason for holding an air show was to improve community relations, whereas the most common reason for holding an event other than an air show was to enhance interest in aviation.
- Both air show and non-air show event sponsors established numerous committees to organize the event, with parking/traffic, emergency response, finance, marketing, performers, and security committees being the most common among air show event sponsors, and parking/traffic and safety committees being the most common among non-air show event sponsors. As one participant warned, "Organization can't be underestimated—be specific and hold people accountable." Yet one participant advised, "Keep the controlling committee small enough to be focused and effective."
- Although various functions, such as parking and concessions (or the entire event) can be contracted out, most events appear to be organized with in-house personnel and/or volunteers.
- Almost all events held by survey participants are promoted as child-friendly, with attractions such as inflatables, games, face painting, and rock climbing. One participant enthused, "We had a lot of young children."

- Ensuring a financially self-sufficient event requires the event sponsor to limit expenditures and enhance revenues. Common methods of limiting expenditures include relying on volunteers and trading tickets/passes for goods and services. Common methods of enhancing revenues include adding more nonaeronautical and aeronautical attractions, increasing food/beverage/retail concessions, and securing a jet team. Even so, it is desirable to have some funds in reserve before holding the event. As one participant reported, "We learned not to expect to pay for the air show entirely on admission fees. You must have your money up front to know that financially you'll end up in good shape."
- Corporate and community sponsorships of the event are crucial to ensuring "buy-in" as well as financial support. Although the sponsors will expect something in return, such as promotion of their organizations, free passes to the event, and possibly a chalet, the expense involved in providing these benefits to the sponsor should be less than the sponsor's donation. As one participant recommended, "Obtain at least one major sponsor who is committed to the event's success and is enthusiastic about making it happen."
- Developing plans specific to parking, emergencies, safety and security, ground operations, and handling the media during a crisis is beneficial and recommended by the majority of survey participants, especially those holding air shows. Particularly if fly-ins by numerous aircraft are expected, developing an aircraft parking plan is also important.
- The International Council of Air Shows specializes in assisting event sponsors with organizing an air show, whereas the Aircraft Owners and Pilots Association and the EAA can assist event sponsors in organizing non-air show events.
- Volunteers are extremely important and allow an event sponsor to hold an event at a lower cost, but training for volunteers should be provided. According to one survey participant, "Carefully assign tasks to volunteers based on their interests [however] plan on 20% no-show volunteers on event day." The most common sources of volunteers among survey participants are community groups, airport tenants, EAA chapters, and individuals.
- Planning one year or more in advance is very important. According to one survey participant, "The best advice I received was probably to start work a year before the event." According to another, "Most of the work was behind the scenes in preparation for the event."
- Conducting an aeronautical special event must not be undertaken lightly. As one survey participant put it, "This requires a lot of work. . . . There needs to be a team of people willing to work on it for several months [or more] all together."
- It might be beneficial to attend aeronautical special events at other airports for ideas and insight.
- Consider sponsorships as a fund-raising tool.
- Arrange for sufficient water and food for spectators and performers.
- Develop an emergency plan that includes having paramedics on scene.
- Wear comfortable shoes the day of the event.
- If relying on volunteer fire departments for event mutual aid, coordinate an opportunity for these first responders to see the aircraft, particularly experimental, so that they are familiar with the extraction and safety specifics for each aircraft.
- Be aware that local FAA Flight Standards District Offices personnel can attend an event for the purpose of observing event activities (as specified in FAA Order 8900.1), but should focus on event participants, rather than spectators and/or nonparticipants.

Possibly all of the comments regarding conducting aeronautical special events can be summarized in this one statement made by a survey participant: "It is a LOT of work, but [it is] extremely rewarding."

Indeed, the planning and organizing required to conduct an aeronautical special event, whether a large air show or a small fly-in, can be all-consuming, especially with a small staff handling all aspects in-house. However, for those who love aviation, aeronautical special events have proven to (1) enhance public awareness of the airport, (2) stimulate interest in the airport and aviation, (3) foster community support, (4) provide community benefits, and (5) potentially generate revenue for the airport or community/charitable organization. Airports and event sponsors across the country agree: These are goals worthy of the time and expense necessary to conduct an aeronautical special event.

GLOSSARY OF TERMS, ABBREVIATIONS, AND ACRONYMS

Advanced life support (ALS)
Advisory Circular (AC)
Aircraft Owners and Pilots Association (AOPA)
Aircraft Rescue and Fire Fighting (ARFF)
Airport Emergency Plan (AEP)
Comprehensive Air Show Emergency Response Plan (CASERP)
Experimental Aircraft Association (EAA)
Fixed base operator (FBO)
Flight Standards District Offices (FSDO)
General aviation (GA)
International Council of Air Shows (ICAS)
Navigational aids (NAVAID)
National Plan of Integrated Airport Systems (NPIAS)
No Radio Aircraft (NORDO)
Notice to Airmen (NOTAM)

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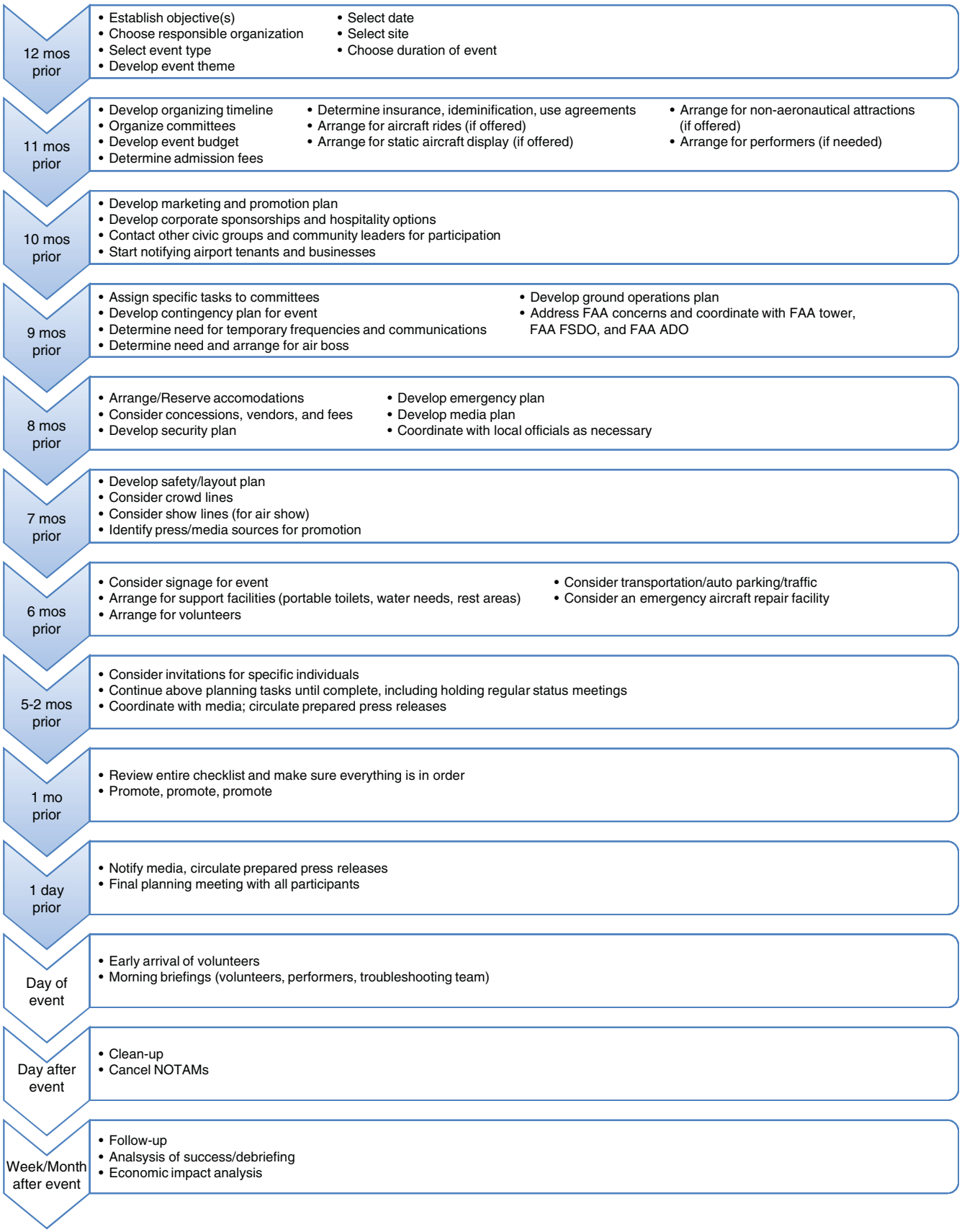
APPENDIX A

Participants in the ACRP Aeronautical Event Survey of Airport Operators

Event	City, State
2012 Salute to Veterans	Torrance, CA
2012 Aviation Roundup	Minden, NV
2nd Annual Gator Fly-In	Gainesville, FL
2nd Annual Oregon Air Rally	Hillsboro, OR
Airport Appreciation Days	Greencastle, IN
Airport Community Day	Guthrie, OK
American Barnstormers Tour	Brainerd, MN
Armed Forces Day Celebration & Fly-In	Brady, TX
Aviation Science Camp	Pittstown, NJ
Chili at the Airport	Greenwood, IN
Festival of Flight	Suffolk, VA
Fly-In, Cruise-In	Muhlenberg, KY
Ft. Worth Alliance Air show	Ft. Worth, TX
Frenchville Fly In and Air show	Frenchville, ME
Lake in the Sky Air show	South Lake Tahoe, CA
Mansfield Airport Day	Mansfield, OH
National Championship Air Races	Reno, NV
New York Air Show at Jones Beach	Wantagh, NY
Rockford Airfest	Rockford, IL
Simsbury Fly-In and Car Show, Wings Over Big South Fork Air/Car Show	Simsbury, CT
Thunder Over Michigan	Ypsilanti, MI
Warbirds Over Whiteside	Rock Falls, IL
Wings, Wheels, & Warriors Air show	Manassas, VA
Various Events	Various EAA Chapters

APPENDIX B

Chronological Event Organizing Checklist



APPENDIX C

Sample Event Budgets

Source: Airshows

Basic Budgetary

An Inside Look at How the Other Guys Keep Track of their Money

If you want to find out just what an air show is all about and you can use only one document with which to conduct your investigation, the choice is clear: Show me the money!

Air show budgets provide a wealth of information on a wide range of air show-related issues: organizational philosophy, operations, scope, community commitment, scheduling, and, of course, finances.

We thought it would be interesting and useful to publish an assortment of ICAS member budgets to provide our entire membership with an overview of the different methods for tracking financial information, the differences and similarities between air show budgets, and some of the bottom line income and expenses associated with conducting air shows in the first part of the twenty-first century.

In the process, we learned that different organizations account for their overhead expenses differently. We learned that some organizations keep track of their in-kind contributions on their financial statement and some don't. We learned that some air shows break out expenses in considerable detail and some don't. And we learned that attempting to standardize different air show budgets in a format that allows apples-to-apples comparisons is an exercise in futility. And so, we have deliberately refrained from commentaries on and analyses of these budgets. We present them here for you to use and learn from as you see fit and as they were provided to us.

AIR SHOW No. 1

Air Show #1is a well-established mid-west show.

Budget information shown here represents actual 1999 figures.

REVENUE	
Sponsor Contributions	$ 53,600
Chalet Sales	151,725
Advance Ticket Sales	51,151
Gate Sales	108,255
Flight Line Club	10,285
Box Seats	5,487
Concessions	112,650
Equipment Rental (in-kind contribution)	29,302
Souvenir Booths	7,600
Program Sales	8,382
Charitable Program Contributions	7,743
Interest Income	8,207
Miscellaneous	2,081
Total Revenue	$556,468

EXPENSES	
Shirts	$ 2,294
Advertising	58,467
Website Expenses	1,027
Tickets	5,348
Beverages	50,513
Contributions	17,152
Equipment Rental	69,201
Hotel	56,193
Performers	56,071
Fuel	11,621
Hospitality	25,083
Rental Cars	14,153
Programs	0
Insurance	6,839
Children's Area	5,204
Military Recruiters	671
Charitable Contributions	7,993
Sponsor Gifts	1,237
Services	46,540
Meeting Expenses	2,613
Professional Services	70,490
Miscellaneous	9,920
Postage	1,270
Telephone	3,644
Office Equipment	1,476
Office Supplies	3,267
Travel	4,743
Printing	2,683
Special Program	12,342
Supplies	6,894
Dues/Subscriptions	350
Total Expenses	$ 555,299
NET	**$ 1,169**

Breakdowns:

AIR SHOW No. 2

Air Show #2 is a well-established show with a sophisticated organization of volunteers and staff.

Figures shown here were actual figures for their 1999 show.

REVENUE	
Advanced Ticket Sales	$ 119,981
Gate Sales	44,198
Chalet Sales	195,531
Patron/Sponsor Income	223,375
Concessions	69,616
Promotions	21,944
Program Sales	4,834
Non-Cash Trades	13,689
Miscellaneous	26,177
Total Revenue	$719,345

EXPENSES	
Advertising	$ 30,944
Promotion	7,385
Programs	16,657
Printing	12,110
Sponsor Gifts	2,500
Hotel	33,155
Hospitality	7,702
Rental Cars	3,550
Performer Expenses	109,586
Pyro	1,742
Fuel	8,900
Air Operations	6,232
Grounds	12,875
Logistics	18,918
Site Preparation	15,635
Equipment Rental	78,037
Volunteer Expenses	6,119
Charitable Contribution	55,780
Office Equipment	15,718
Professional Fees	45,796
Training/Seminars	6,149
Sales Commissions	129,800
Ticket Sales Fees	1,167
Insurance	12,232
Chalet	43,941
Concessions	13,825
Total Expenses	$696,455
NET	**22,890**

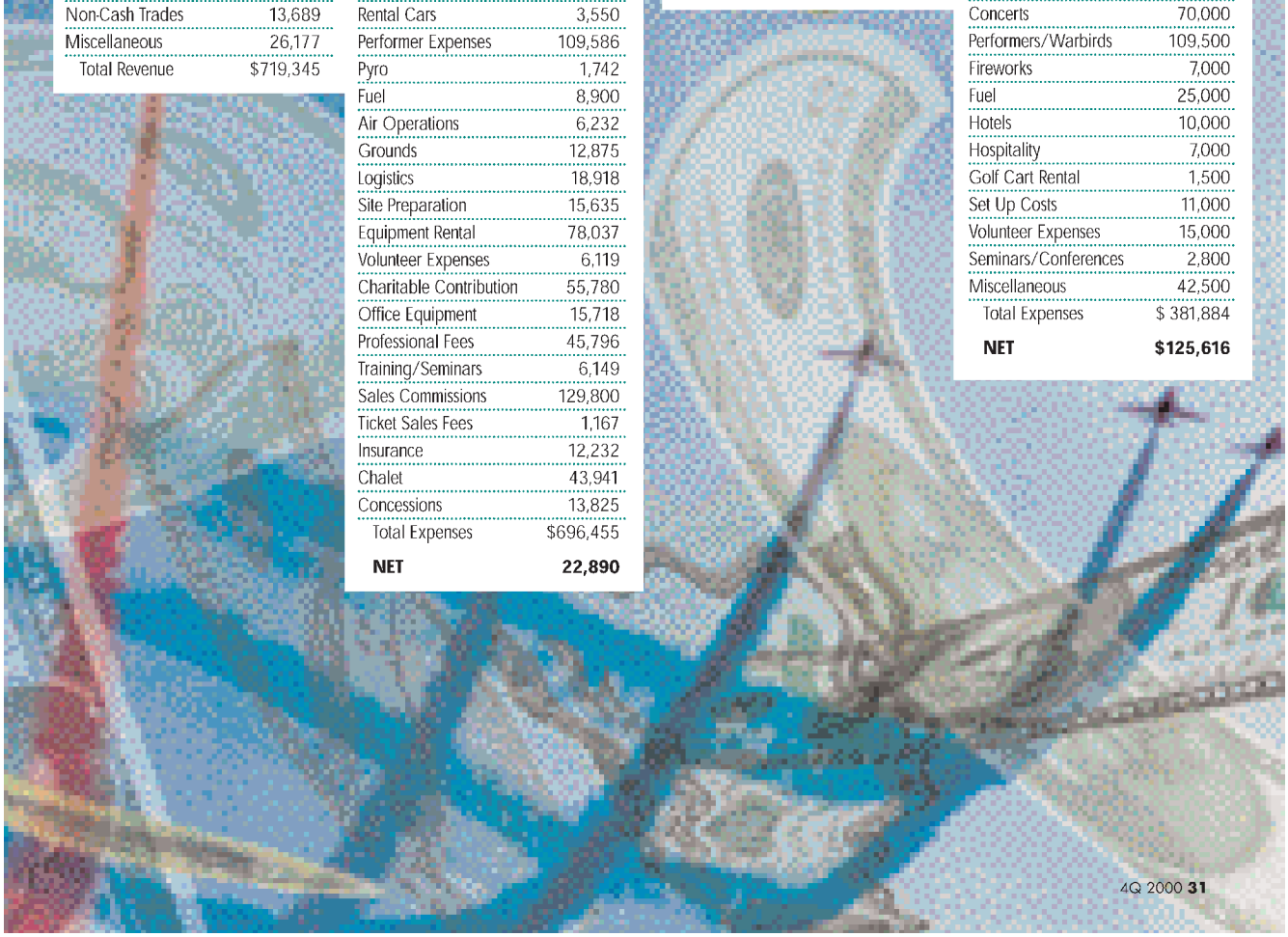
AIR SHOW No. 3

Air Show #3 is a free show.

Financial information shown here is for the 2000 show and does not include staff salary and other overhead allocations.

REVENUE	
Programs	$ 5,000
Cash Sponsorships	307,100
Ticket Sales	25,000
Concessions	150,000
Vendors	10,400
Miscellaneous	10,000
Total Revenue	$507,500

EXPENSES	
Programs	$ 18,054
Advertising	10,000
Web Site	4,000
Ticket Printing	1,200
Brochure	6,670
Banners	1,000
Equipment Rental	39,660
Concerts	70,000
Performers/Warbirds	109,500
Fireworks	7,000
Fuel	25,000
Hotels	10,000
Hospitality	7,000
Golf Cart Rental	1,500
Set Up Costs	11,000
Volunteer Expenses	15,000
Seminars/Conferences	2,800
Miscellaneous	42,500
Total Expenses	$ 381,884
NET	**$125,616**



Basic Budgetary Breakdowns

AIR SHOW No. 4

Air Show #4 is a large show in a major metropolitan area.

Figures shown here are actual figures for their 1999 show.

REVENUE	
Air Show Sponsorships	$153,627
Gala Sponsorships	11,900
Golf Cart Sponsorships	2,840
Programs	3,650
Concessions	72,916
Exhibit Space	4,297
Advanced Ticket Sales	369,884
Gate Ticket Sales	153,037
Donated AV Fuel	12,800
In-Kind Donations	1,000
Miscellaneous	4,452
Total Revenue	$790,403

EXPENSES	
Caps/Shirts	$ 30,528
Gala Dinner	20,316
Tickets/Other Printing	22,547
Wristbands	1,062
Billboard Rental	22,250
Public Relations Services	21,387
Local Area Ads	585
Air Show Truck	7,816
Performer Fees	33,810
Pyro	15,649
Hotel Room Rental	20,893
Automobile Rental	6,143
Fuel	15,000
Donated Fuel Consumed	12,800
Smoke/Engine Oil	2,314
Signs/Sign Repair	6,960
Tents/Chairs	20,693
Barricades	5,234
Sound System	5,651
Golf Cart Rental	8,790
Truck Rentals	3,484
Field Rental	17,850
Generators, Rental	1,999
Portable Buildings	2,335
Warehouse Rental	6,800
Traffic Control	28,853
Park and Ride Buses	4,260
Cash Handlers/Guards	4,055
Air Show Security	12,251
Donations for Services	3,500
Waste Management	33,934
Catering	39,836
Hospitality Beverages	5,102
Hospitality Hostesses	1,375
Postage/Telephone	2,932
Professional Fees	67,500
Liability Insurance	17,500
Audit	500
Credit Card Service	1,208
Miscellaneous	81,135
Total Expenses	$ 616,837
NET	**$173,566**

AIR SHOW No. 5

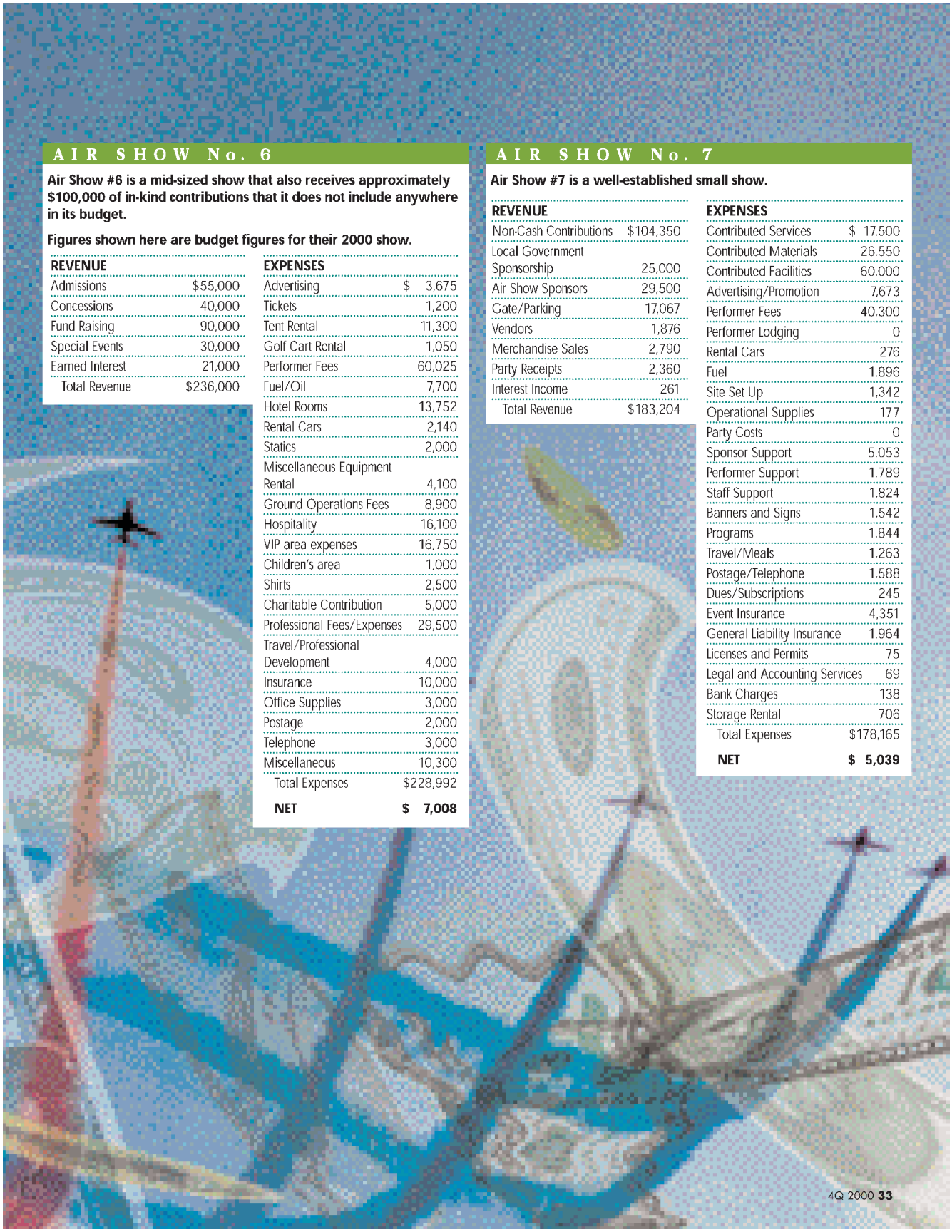
Air Show #5 was a free admission air show conducted over the beach in conjunction with a resort community's annual spring festival.

Hotel accommodations for civilian and military performers, the air boss and the announcer were contributed by local businessmen. All of the overhead-type expenses (postage, printing, office space, professional fees, telephone) were included in the larger festival budget. Advertising for the air show was contributed by local newspapers, television stations and radio stations. Information about the air show was included on the website of the festival and the air show bore no expense for their Internet exposure.

Figures shown here are actual revenue and expenses for the show's 2000 show.

REVENUE	
Festival Grant	$ 10,129
Air Show Sponsorships	34,879
Total Revenue	$45,008

EXPENSE	
Advertising	$ 320
Equipment Rental	9,868
Fuel/Smoke Oil	4,776
Office expenses	1,442
Guest Hospitality	2,355
Insurance	4,409
Performer Fees	17,000
Rental Cars	4,838
Total Expenses	$45,008
NET	**$ 0**



AIR SHOW No. 6

Air Show #6 is a mid-sized show that also receives approximately $100,000 of in-kind contributions that it does not include anywhere in its budget.

Figures shown here are budget figures for their 2000 show.

REVENUE	
Admissions	$55,000
Concessions	40,000
Fund Raising	90,000
Special Events	30,000
Earned Interest	21,000
Total Revenue	$236,000

EXPENSES	
Advertising	$ 3,675
Tickets	1,200
Tent Rental	11,300
Golf Cart Rental	1,050
Performer Fees	60,025
Fuel/Oil	7,700
Hotel Rooms	13,752
Rental Cars	2,140
Statics	2,000
Miscellaneous Equipment Rental	4,100
Ground Operations Fees	8,900
Hospitality	16,100
VIP area expenses	16,750
Children's area	1,000
Shirts	2,500
Charitable Contribution	5,000
Professional Fees/Expenses	29,500
Travel/Professional Development	4,000
Insurance	10,000
Office Supplies	3,000
Postage	2,000
Telephone	3,000
Miscellaneous	10,300
Total Expenses	$228,992
NET	**$ 7,008**

AIR SHOW No. 7

Air Show #7 is a well-established small show.

REVENUE	
Non-Cash Contributions	$104,350
Local Government Sponsorship	25,000
Air Show Sponsors	29,500
Gate/Parking	17,067
Vendors	1,876
Merchandise Sales	2,790
Party Receipts	2,360
Interest Income	261
Total Revenue	$183,204

EXPENSES	
Contributed Services	$ 17,500
Contributed Materials	26,550
Contributed Facilities	60,000
Advertising/Promotion	7,673
Performer Fees	40,300
Performer Lodging	0
Rental Cars	276
Fuel	1,896
Site Set Up	1,342
Operational Supplies	177
Party Costs	0
Sponsor Support	5,053
Performer Support	1,789
Staff Support	1,824
Banners and Signs	1,542
Programs	1,844
Travel/Meals	1,263
Postage/Telephone	1,588
Dues/Subscriptions	245
Event Insurance	4,351
General Liability Insurance	1,964
Licenses and Permits	75
Legal and Accounting Services	69
Bank Charges	138
Storage Rental	706
Total Expenses	$178,165
NET	**$ 5,039**

APPENDIX D

Sample Indemnification Language

Source: Santa Clara County, n.d.

To the extent not covered by insurance carried in favor of County, the sponsoring agency (the Sponsor) shall keep and hold harmless County from and against all claims, demands, suits, judgments, costs, and expenses asserted by any person or persons, including agents or employees of County or Sponsor, by reason of death or injury to person or loss of damage to property resulting from sponsor's operations, or anything done or omitted by Sponsor, under this Indemnification except to the extent that such claims, demands, suits, judgments, costs and expenses may be attributed to acts of negligence or willful misconduct of County or its agents or employees.

County shall not be liable to Sponsor for any damages arising from any act or omission of any tenant or lessee of _____ Airport.

County shall not be liable for damage to person(s) or property arising from fire, steam, electricity, gas, water, rain, breakage, leakage, obstruction or other defects of pipes, sprinklers, wires, appliances, plumbing, air conditioning or lighting fixtures, crime or any cause whatsoever, whether such injury or damage results from conditions arising upon the Premises or by Sponsor's activities upon portion of _____ Airport (Santa Clara County, n.d.).

APPENDIX E

Sample Use Agreement

Source: Lakeland Linder Regional Airport

USE AGREEMENT

THIS USE AGREEMENT, made and entered into this _____ day of _____, 2012, by and between the CITY OF LAKELAND, FLORIDA, a Florida municipal corporation (hereinafter the "City"), and SUN 'n FUN FLY-IN, INC., a Florida not-for-profit corporation (hereinafter "Sun 'n Fun").

W I T N E S S E T H:

THAT the City and Sun 'n Fun, for and in consideration of the mutual promises, agreements, and covenants hereinafter contained, do hereby mutually covenant, agree, and promise as follows:

SECTION 1. The City does hereby grant to Sun 'n Fun the use of property (hereinafter the "Premises") located at and comprising a part of the Lakeland Linder Regional Airport in Polk County, Florida (hereinafter the "Airport"), more particularly described in composite **Exhibit "A" and "A-1"** attached hereto and made a part hereof. It is specifically understood and agreed that the property described in composite **Exhibit "A" and "A-1",** attached, the Premises, shall not include any active runway or taxiway which is under Federal Aviation Authority or control and any such runway or taxiway shall not be within the scope of this agreement and, thus, not the responsibility of Sun 'n Fun to control or maintain.

SECTION 2. The term of this agreement commences February 20, 2011 and expires on April 20, 2011.

SECTION 3. It is mutually understood and agreed between the parties hereto that the Premises is contiguous and appurtenant to certain property leased to Sun 'n Fun for the purpose of an annual general aviation meet known as the Sun 'n Fun Fly-In (hereinafter "Fly-In"), and that the Premises will be maintained, prepared, and utilized for the Fly-In and is under the control of Sun 'n Fun for the term of this agreement. No installations in any area outside the Sun 'n Fun leasehold without prior approval from the Airport Director.

SECTION 4. Sun 'n Fun shall pay to the City as the fee for the use of the Premises pursuant to this agreement the amount of One Dollar ($1.00), together with any applicable sales tax, payable in advance on the date of this agreement.

SECTION 5.

(a) Sun 'n Fun shall indemnify, save harmless and defend the City, its officers, employees, or agents from all claims, suits, and actions of any kind brought against it for, or on account of, any injuries or damages received or sustained by any person or property by, from, or on account of any acts or omissions of Sun 'n Fun, its officers, employees, agents, servants, or invitees occurring on the Premises.

(b) Sun 'n Fun shall indemnify, save harmless, and defend the City, its officers, employees, or agents against any claim or liability arising from, or based upon, the violation of any federal, state, county or city law, ordinance, or regulation by Sun 'n Fun, its officers, employees, agents, servants or invitees.

(c) During the term of this agreement, Sun 'n Fun shall obtain and keep in effect comprehensive general liability insurance and property damage insurance with public liability coverage of not less that $500,000 per occurrence, combined single-limit for bodily injury liability, and property damage liability, premises and/or operations coverage, and broad form contractual coverage. The City shall be named as an additional insured on such insurance policy. Such insurance coverage shall be obtained from an insurer authorized to do such business in the State of Florida. Such coverage may not be canceled, terminated, or changed without thirty (30) days written notice thereof from the insurer to the City. An appropriate certificate of insurance evidencing such coverage issued by insurer shall be provided to the City and kept current during the term of this agreement.

(d) During the term of this agreement, Sun 'n Fun shall keep each building or structure constructed or located upon the premises, except temporary buildings or structures, insured against fire and other casualty, with such coverage obtained from an insurer authorized to do such business in the State of Florida with an extended coverage endorsement, in an amount not less than 90% of replacement cost of each structure as established by mutual agreement with the City. The City shall be named as an additional insured on such insurance policy. If any such building or structure is damaged during the term of this agreement, or any extension or renewal hereof by fire or other casualty, Sun 'n Fun shall have such structure restored within a reasonable time at its own expense. A certificate of insurance evidencing such coverage shall be provided to City and kept current during the term of this agreement. Such coverage may not be canceled, terminated, or changed without thirty (30) days notice thereof in writing to the City from the insurer.

(e) During the term of this agreement, Sun ‘n Fun shall obtain an umbrella insurance policy to cover aircraft / air meet liability for the period of the annual Fly-In plus reasonable set-up and take-down time in an amount not less than $5,000,000.

(f) Insurance requirements will be mutually reviewed and modified as history, experience, industry practice and prudent risk management indicate to be necessary to protect the City, Sun ‘n Fun and the public interest.

(g) Failure of Sun ‘n Fun to maintain the insurance coverage required by this section may result in immediate termination of this agreement upon written notification to that effect from the City.

(h) Sun ‘n Fun is required to follow all security rules and procedures as stated in Airport Minimum Standards. It is mandatory to be in compliance with the Airport Security Program which addresses Transportation Security Administration (TSA), Federal Aviation Administration (FAA) and Florida Statute requirements for airport security.

SECTION 6. The City has appointed a manager for Lakeland Linder Regional Airport, and the City reserves the right for that manager, or his duly authorized representative, to enter the Premises to perform inspections deemed necessary by the manager. Sun ‘n Fun shall promptly correct any condition constituting a hazard to life or property.

SECTION 7. Sun ‘n Fun shall, at its expense, during its actual use of the Premises or any portion thereof, and not for the use of the Premises or any portion thereof by any other person or entity, maintain the Premises, including any structures thereon, in a neat and orderly condition at all times and shall be responsible for the neatness and orderliness of the grounds, including the mowing of grass and removal of trash and garbage.

SECTION 8. Sun ‘n Fun may install any aviation aid permitted by the Federal Aviation Administration or other governmental agencies regulating the Lakeland Linder Regional Airport. No structure, sign, obstruction, appurtenance, projection or modification, shall be installed or kept in place by Sun ‘n Fun without the prior written approval of the City and any applicable federal, state, county, or other governmental agency.

SECTION 9. This agreement and all provisions hereof shall be subject and subordinate to the terms and conditions of the deed by which the City was conveyed the property now known as Lakeland Linder Regional Airport by the United States of America and any applicable federal law, and shall be given only such effect as will not conflict or be inconsistent with such terms and conditions and law.

SECTION 10. The Premises shall be used for those activities now set forth in the Articles of Incorporation of Sun ‘n Fun Fly-In, Inc., or other activities authorized by the City which are not detrimental to aviation, the Airport facility, or the City, provided such activities are for the sole use and benefit of Sun ‘n Fun and its invitees.

SECTION 11. In addition to the Premises, Sun ‘n Fun shall have the use of other ramps, runways, taxiways and other facilities provided for aircraft and the public at the Lakeland Linder Regional Airport. Such use of other ramps, runways, taxiways and other facilities are subject to the operational control of the Airport manager, leases already in existence, and the Federal Aviation Administration.

SECTION 12. If Sun ‘n Fun fails to timely make any payment of fee or perform any of the promises, covenants or agreements herein or otherwise violates any provision hereof, unless otherwise provided, the City may, after giving Sun ‘n Fun thirty (30) days notice, declare all future payments hereunder be immediately due and payable, and/or terminates this agreement and re-enter and take possession of the Premises. The City shall have a lien upon any property of the Sun ‘n Fun located upon the Premises for any amount due the City by Sun ‘n Fun as a result of such default; provided, however, this shall not be the City’s exclusive remedy or the only property of Sun ‘n Fun on which the City may obtain a lien by judicial process.

SECTION 13. If the United States or any agency thereof should take possession of the Premises, any compensation from the United States or such agency for improvements on the Premises shall be payable to the City. Sun ‘n Fun obligations hereunder shall terminate as of the date of such possession, or such other date mutually agreed upon, unless the United States indicates it will succeed to the interest of the City.

SECTION 14. This agreement shall be subordinate to the provisions of any existing or future agreement entered into between the City and the United States for the improvement, operation, or maintenance of the Lakeland Linder Regional Airport, the execution of which has been or may be required as a condition precedent to the expenditure of federal funds for the Airport.

SECTION 15. Nothing herein grants, or authorizes the granting of, an exclusive right as may be prohibited by Section 308 of the Federal Aviation Act (49 U.S.C. Sec. 1349(a)).

SECTION 16.

(a) Sun ‘n Fun, for itself, its successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that (1) no person on the grounds of race, color, sex or national origin shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of the Premises; (2) in the construction of any improvements on, over, or under the Premises and the furnishing of services thereon, no person shall be excluded

from participation in, denied the benefits of, or otherwise be subjected to any discrimination on the grounds of race, color, sex or national origin; (3) Sun ‘n Fun shall use the Premises in compliance with all requirements of Title 49, Code of Federal Regulations, Part 21, Department of Transportation Subtitle A, Office of the Secretary, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation-Effectuation of Title VI of the Civil Rights Act of 1964, and as may be amended.

(b) If there is a breach of any portion of subsection (a), the City may terminate the agreement and re-enter and repossess the Premises; provided the procedures for a finding of such violation set forth in Title 49, Code of Federal Regulations, Part 21, are followed and completed, including the exercise or expiration of any appeal rights.

SECTION 17. The City may take whatever action is necessary or appropriate for the operation, maintenance, and improvement of the Airport and its appurtenances and although consideration shall be made of the interests of Sun ‘n Fun, Sun ‘n Fun has no vested right to continued operation of the Airport in the manner in which it is operated on the date of this agreement.

SECTION 18.
(a) The City reserves unto itself, its successors and assigns, for the use and benefit of the public, a right of flight for the passage of aircraft in the air space above the surface of the Premises, including such noise as is inherent in the operation of aircraft, now known or hereafter used, in such air space for landing on, taking off from, or operation on the Airport.

(b) Sun ‘n Fun, its successors and assigns, shall restrict the height of structures, objects of natural growth, and other obstructions on the Premises to a height complying with Title 49, Code of Federal Regulations, Part 77, and as may be amended.

(c) Sun ‘n Fun, its successors and assigns, shall prevent any use of the Premises which interferes with or adversely affects the operation or maintenance of the Airport, or otherwise constitutes an Airport hazard.

SECTION 19. Sun ‘n Fun shall be responsible for and pay all ad valorem taxes or such other taxes which are assessed on the Premises or this lease, all sales taxes as well as all utility charges.

SECTION 20. Sun ‘n Fun shall observe and obey all reasonable and lawful rules and regulations which may, from time to time, during the term hereof, be adopted and promulgated by the City for operation of the Airport. Sun ‘n Fun shall conduct and operate its activities in accordance with any applicable federal, state, and local laws, ordinances, regulations, directives, orders, and judicial decisions.

SECTION 21. Sun ‘n Fun, its officers, employees, guests, invitees and suppliers of materials and services, shall have the right of ingress and egress to the Premises for the purpose of permitting Sun ‘n Fun to enjoy the rights, uses, and privileges granted by the City.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals the day and year first above written.

SUN ‘n FUN FLY-IN, INC.

ATTEST:_____ By:_____
Secretary President

APPROVED AS TO FORM AND CORRECTNESS:_____
General Counsel

CITY OF LAKELAND, FLORIDA

ATTEST:_____ By:_____
City Clerk Mayor

APPROVED AS TO FORM AND CORRECTNESS:_____
City Attorney

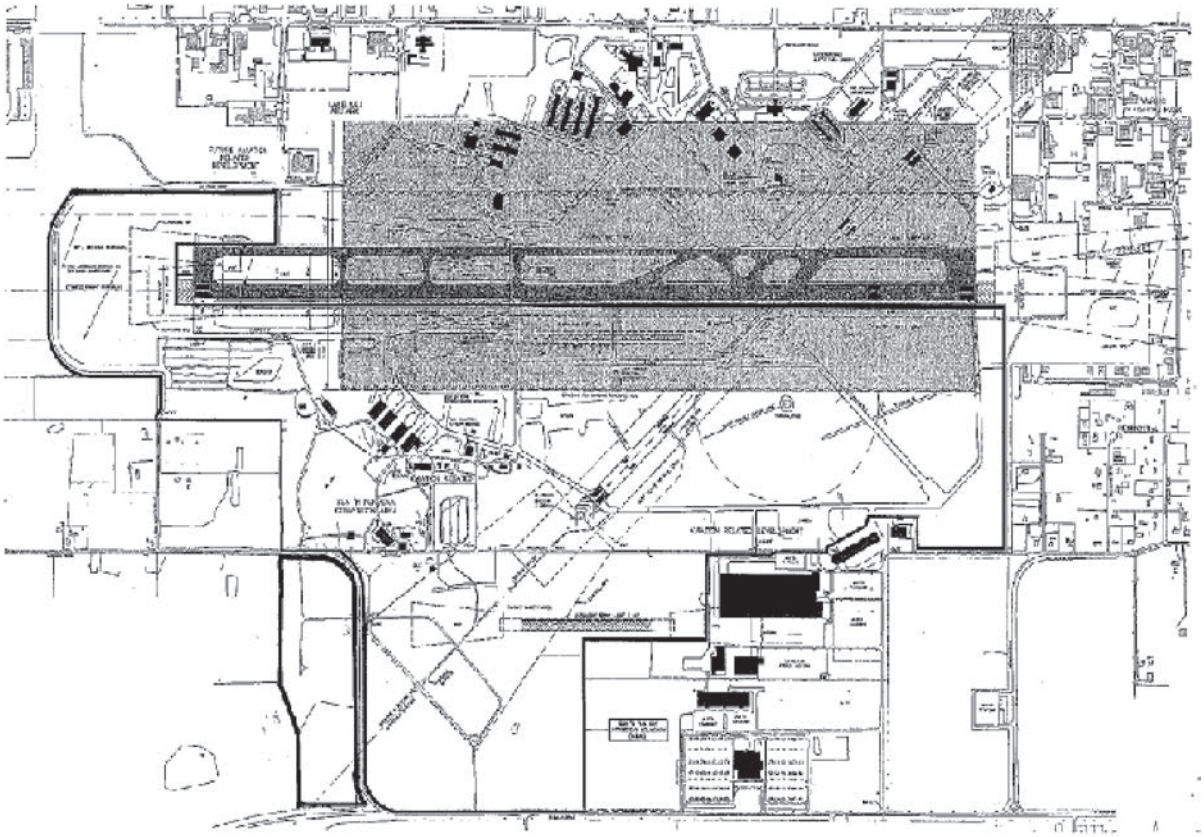


Exhibit A
Sun n' Fun Use Agreement

EXHIBIT "A-1"
ADDITIONAL AREAS
HANGAR, V.I.P. AREA, RENTAL CAR STAGING, AND FIREWORKS AREA

APPENDIX F

Blue Angels Support Manual Topics

Source: Department of Defense, 2012

1. Introduction
   a. Pre-Show Planning and Coordination
   b. Squadron Contact Information
   c. General Information
2. Preseason Checklist
   a. General Information
   b. Logistics
   c. Operations
   d. Mandatory Attendees for Preseason Visit
3. Personnel Support
   a. Hotel Accommodations
   b. Transportation
   c. Medical
   d. Athletic
   e. Sustenance
   f. Blue Angel Friends and Family Seating
   g. Blue Angel Friends and Family Passes
4. Maintenance
   a. Maintenance Requirements
5. Operations
   a. Civilian Demonstration Fees
   b. Surface Composition
   c. Show Line/Spectator Area/Show Parking
   d. Remote and Over Water Demonstrations
   e. Brief Room
   f. Aircraft Security
   g. Spectator Security
   h. Performance Security
   i. Aircraft Parking Plan
   j. Civilian Police Escort
   k. Crash Crew—Search and Rescue Capability
   l. Arresting Gear
   m. Pyrotechnic Demonstrations
   n. Narration Stand
   o. Narrator's Brief
6. C-130 Demonstration
   a. The Performance
   b. Logistics
7. Federal Aviation Administration Waiver
   a. General
   b. Congested Area
   c. NOTAMs
   d. Air Traffic Control Tower
   e. Noise Complaints
   f. Automatic Terminal Information Service (ATIS)
8. Recruiting
   a. Recruiting Support
   b. High School and Children's Hospital Visits
9. Publicity
   a. Public Affairs Contact Information
   b. Media Kit
   c. Arrival Media Availability
   d. Crowd Line Autographs With Handouts
   e. Social Commitment
   f. Special Needs Children
   g. Circle Maneuvers and Practice Show
   h. Public Address System
   i. Radio Simulcast of Narration
   j. Personalized Lithographs
   k. Thank-You List
   l. Key Influencer Flights
   m. Fat Albert Flights
   n. Trademark Program Compliance
10. Sample Schedule
11. Showlines
12. Aerobatic Box

APPENDIX G

Safety Guidelines

Source: Oregon International Air Show

ADMISSIONS

1. All gate personnel will be trained prior to the event on what items are and are not contraband (i.e., types of knives, weapons, tents, large coolers).
2. Inspection of bags at the gate must be thorough.
   a. Signage posted at gates denotes items not allowed. Admissions will reject contraband items and entrant may dispose of item or leave the property and return without contraband.
   b. Signage posted at gates define OIA policy (i.e., not responsible for lost, damaged or stolen property).
   c. No weapons are allowed—except for valid Concealed Weapon Permits.
   d. No coolers are allowed except for small coolers for infant or medical needs. Special tags are to be attached to coolers allowed.
   e. No tents allowed; general sized shade umbrellas are ok.
   f. No bicycles allowed with the exception of Public Safety officials.
   g. No pets; unless the animal is a designated service animal.
3. Monitors will be placed at the front and back doors of the terminal building to ensure spectators are directed to the proper gates for admission.
4. Volunteers will be held to the same guidelines as the general public.
5. Airport tenants and guests will be required to have appropriate credentials/tickets ("Safety from the Ground Up" 2011, pp. 5–6).

COMMUNICATION/RADIOS

1. No profanity or inappropriate language is to be transmitted. Only Air Show business is allowed on Air Show radios.
2. Use simple language when communicating.
3. Communication should include identification of sender, receiver and issue.
4. If information is confidential, move away from the threat or from those that should not be aware of incident before transmitting.
5. If an emergency arises, volunteers should contact their supervisor first if possible. If the supervisor is not readily available, the volunteer should contact the closest person with access to an air show radio.
6. All emergencies or safety concerns should be communicated to air show radio not to 911 ("Safety from the Ground Up" 2011, p. 6).

CONCESSIONS/FOOD COURT

1. All alcohol service shall cease 30 minutes prior to the end of the show.
2. Food Booths are required to be inspected by the Washington County Health Department and the Hillsboro Fire Department.
3. When using cooking or heating equipment, a 10' clearance from exits and combustible materials is required. Cooking and heating activities require prior approval from the fire department. Fire Department personnel will be on field throughout Air Show weekend.
4. Every concession stand is required to maintain a minimum 2A:10B: C rated fire extinguisher in a readily accessible location.
5. Where cooking is conducted, the fire extinguisher must be upgraded to a 4A:40 B: C rated fire extinguisher. If the cooking requires vegetable or animal oils and fats; or any cooking that produces grease-laden vapors, a "K" rated fire extinguisher will also be required.
6. Extension cords must consist of a three-wire conductor, each conductor shall be #14 gauge or greater size. No two-wire cords are allowed. Multi-plug power strips with circuit breakers are allowed. Multi-plug power strips and extension cords must be plugged directly into a permanent electrical receptacle or approved temporary power tap. Extension cords cannot be plugged into the multi-power strips and all wiring must be protected from physical damage.
7. LPG tanks must be located outside of the concession stand and at least 10' from cooking devices. LPG tanks must be secured from falling and may be secured to an upright member (pole or structure) of the stand with chains or be nested together in no less than three bottles. The pressure relief valve should be pointed away from concession stand.
8. Paper or fabric decorations must be made of a fire resistive material or treated with a fire retardant.
9. Volunteers are required to follow all applicable Oregon Food Handler Requirements. Every food booth must have two volunteers with Food Handler licenses.
10. Canopies must be secured by appropriate tie downs or disassembled to withstand wind gusts from one day to the next. Canopies and tents are required to be nonflammable per requirements by Fire Marshal ("Safety from the Ground Up" 2011, pp. 6–7).

ELECTRICAL

1. All power cords that cross walking paths will be marked and secured.
2. All spider boxes will be monitored and will only allow limited access by vendors.
3. Vendors must not exceed limits of electrical outlet usage as agreed upon in booth contracts. Ground Ops will audit via meter reading of electrical consumption at each vendor's operation during the Air Show. If electrical consumption exceeds contracted amperage, the vendor will either reduce electrical consumption immediately (unplug appliances) or be charged for the next level of power if it is available. If extra power cannot be accessed, vendor will be required to reduce consumption.
4. All electrical equipment shall be listed or labeled and used in accordance with the listing or labeling instructions from

the manufacture. Examples of listing labels: ETL, UL, CSA(us), NRTL, ...
5. Electrical wiring, devices, appliances and other equipment shall be ONLY used if in serviceable condition. Modified or damaged equipment shall NOT be used.
6. Open junction boxes and open-wiring splices shall be PROHIBITED. Approved covers shall be provided for all switch and electrical outlet boxes.
7. Electrical wiring (including extension cords and flexible cords), devices, appliances and other equipment used outside or in a potentially hazardous environment (water, dust, hay . . .) shall be listed for that use.
8. Outdoor public spaces or potentially wet environments shall have Ground Fault Circuit Interrupters (GFCI) installed in permanent wiring circuits. When NO GFCI is installed on permanent wiring circuits, removable GFCI cords or GFCI power taps shall be used.
9. A minimum working space of 30 inches wide by 36 inches deep and 78 inches high shall be provided in front of all electrical service equipment (electrical panels). NO storage of any material shall be located within the working space.
10. Electrical appliances and fixtures shall be tested, listed and installed in accordance with all instructions included as part of such listing. Household listed appliances shall NOT be used for commercial purposes.
11. Extension cords shall NOT be a substitute for permanent wiring.
    a. Extension cords shall be used ONLY with portable appliances, except when considered temporary wiring.
    b. Extension cords shall be plugged directly into an approved receptacle, power tap or multi-plug adapter shall serve only ONE device or appliance, except for approved multi-plug extension cords.
    c. Physical protection is required in public areas with foot traffic. Extension cords used inside or under tent/canopies may be attached in a manner (i.e. plastic wire ties, tape) not to create damage (pinch point) to the cord.
    d. The ampacity of the extension cords shall NOT be less than the rated capacity of the portable appliance supplied by the cord. The minimum required rating is 15 amps.
    e. Extension cords must be 3-conductor, 14 gauge minimum with polarized or grounded plug and receptacle.
    f. Multi-plug adaptors, such as cube adaptors shall be approved and listed. Adapters without visible listing or marking will NOT be allowed.
12. OIA will have available a limited number of extension cords available for vendor purchase in the event that the vendor has not or cannot procure the appropriate extension cord required for the specific use.
13. Power taps (strips) shall be listed with over-current protection (circuit breaker) integrated into the tap.
    a. Power tap cords and receptacles shall be polarized or grounded type.
    b. Power taps shall be directly connected to a permanently installed receptacle or other approved receptacle (temporary wiring).
    c. Power taps CANNOT be connected to each other creating a chain of power taps.
14. Power tap cords shall NOT extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage.
15. Temporary wiring (other than extension cords)
    a. All temporary wiring requires an electrical permit, except for cord and plug installations.
    b. Temporary wiring for electrical power and lighting installations is allowed for a period NOT to exceed 90 days. Temporary wiring methods shall meet the applicable provisions of the National Electrical Code (NEC) Article 590.
    c. Temporary wiring attached to a structure shall be attached in an approved manner per NEC ("Safety from the Ground Up" 2011, pp. 7–9).

FINANCE

1. The transportation of money during the Air Show event requires the escort of a security or police officer. This includes the following transactions:
    a. Transfers between Air Show office and/or Finance Trailer and the bank
    b. Transfers between the Finance Trailer and the ATM machines.
2. A security or police officer will be posted outside the Finance Trailer at all times during Air Show hours.
3. If personnel are confronted with a robbery attempt, they are to give up the money to minimize risk to their personal safety.
4. In case of a threat on the Air Show grounds or emergency situation where personal safety is at risk, personnel at ticket booths and the Finance Trailer shall lock up the booth/trailer with the money inside and stay close to the facility if possible.
5. Transportation of change from vendor booths to Finance Trailer shall be transported in a discrete container or bag so as not to draw attention to its transport ("Safety from the Ground Up" 2011, p. 9).

GENERAL AVIATION AND RUNWAY SAFETY

1. When gates are open to the public (~ 08:00–18:00) there will be no running engines in any areas where spectators are allowed. It is the responsibility of security/safety personnel and Port of Portland to enforce this by prohibiting escorts of "live" airplanes and providing marshals if airplanes are crossing taxiways from the West T Hangar.
2. Tie-down areas will be clearly marked with cones and/or other cautionary devices to minimize potential trip hazards.
3. All private aircraft shall be removed from the tie-down area before the Air show event. Any private aircraft not associated with the Air show that remains in the tie-down area shall be clearly delineated by cones and/or other cautionary devices to separate the aircraft from pedestrians.
4. The Air show shall supply volunteers and/or security/safety personnel to monitor taxi ways and tie-down areas.
5. During night show events, additional light sources (i.e. light carts) and volunteers shall be placed along pedestrian pathways to gates and in areas such as tie-downs to minimize trip hazards.
6. Adequate lighting must be in place along the back access road during the night/evening shows if the corridor will be used for pedestrian access.
7. The T-Hangars will be cordoned off and not accessible during the night/evening show unless lighting is provided ("Safety from the Ground Up," 2011, pp. 9–10).

GROUND OPS AND NONAIRCRAFT REFUELING

1. All scissor lifts and light towers must have barricades separating spectators.

2. Generators and other internal combustion power sources will be kept at least 20 feet away from tents, canopies, and other membrane structures and will be protected from public contact.
3. Smoking is NOT allowed in tents/canopies. "No Smoking" signs will be posted in conspicuous locations.
4. Ground Operations will define and set up three "smoking areas" on the field and ensure those areas are well marked and meet placement guidelines.
5. Unleaded gasoline (UL gas) and diesel fuel will be staged and stored in the equipment logistic compound.
6. UL gas and diesel in 55 gallon drums should be placed on wooden pallets to facilitate movement and storage.
7. A refueling station will be set up with a canopy placed over the drums to provide shade for the refueling station. The station must be at least 50 feet away from any other structure.
8. Refueling will be done by experienced personnel only as deemed by a ground operations VP.
9. A 2A:10BC fire extinguisher will be staged in the refueling station.
10. All open UL gas drums in use will be grounded as well as the equipment being refueled ("Safety from the Ground Up" 2011, p. 10).

HOT PIT

1. Hot Pit access is restricted to Hot Pit crew, performers and their necessary crew wearing an Air Show issued Hot Pit wristband. It is the responsibility of the Hot Pit team to keep unauthorized people out of the Hot Pit.
2. Hot Pit passes will be issued by the OIA office prior to the Air Show. During the Air show event, the Air OP's VP will control and issue any additional Hot Pit passes.
3. The Air Ops VP may make limited access exceptions as needed.
4. All Hot Pit personnel must wear an orange safety vest when in Hot Pit area.
5. Friends/family of military Hot Pit personnel may enter the Military Hot Pit before or after gate times if accompanied by military member. Access to friends/family is not allowed during gate times.
6. All Hot Pits must have adequate number of security monitors at the entrances of the Hot Pit such that members may rotate throughout the day if necessary. Hot Pit personnel will be responsible to contact Security if monitors are not in place before gates open.
7. Stanchions, barriers and guards between Hot Pit fence and Fire Station must be in place when gates open and until all visitors have left.
8. DANGER, DO NOT ENTER signs shall be placed at access points on the Hot Pit fence
9. Following the show, should a performer wish to allow spectator access to their aircraft, that aircraft should be pushed outside the Hot Pit and into the Static area and the following is required:
   a. At no time will these aircraft run their engines while outside the Hot Pit or Flight Line.
   b. Notify the performer, that they will be responsible for the safety of spectators and the aircraft.
   c. Ground Ops will provide stanchions and barrier tape should the performer wish to restrict close approach by spectators.
10. To minimize prop wash or jet exhaust into spectator area, aircraft should be parked so that prop wash or exhaust is directed away from spectators.
11. At the beginning of each air show day, Hot Pit personnel will walk the Hot Pit area and remove as much loose material as practical and repeat periodically throughout the day.
12. Hot Pit personnel will supervise all start-up, taxiing, parking and engine shutdown of all performance aircraft. A MINIMUM OF 50 FEET BETWEEN SPECTATORS AND AN OPERATING AIRCRAFT is required and must include crowd control monitors or barriers.
13. Hot Pit personnel will wing-walk [push] and perform any necessary safety services as needed by performer's ground-crew personnel.
   a. Hot Pit personnel will only push aircraft as directed by the pilot or mechanic
   b. Hot Pit personnel will avoid pushing on control surfaces or other areas when damage to the aircraft or personal injury is possible.
14. All fuel and smoke oil will be handled by qualified/trained personnel (pilot/Fixed Based Operation (FBO) personnel). If a pilot or mechanic insists on fueling their own plane they will do so under the supervision of the FBO fuel personnel
15. Care will be taken by Hot Pit personnel while filling smoke oil tanks. The pilot or mechanics should be involved in filling since they know how well the tank fills
16. The Air Ops VP will ensure fire extinguishers are on site and staffed when fueling or taking on smoke oil. One Hot Pit person will stand by with a large fire extinguisher when fuel or smoke oil is being dispensed and when any aircraft is being started.
17. Tugs and forklifts will always be driven by a qualified/trained operator who is at least 18 years of age. Lookouts will be used to ensure the safety of personnel and to avoid damage to aircraft.
18. Personal vehicles may only be used with permission of Air Ops VP and must be approved prior to weekend by Air Show ("Safety from the Ground Up" 2011, pp. 10–12).

MOTORIZED VEHICLES

1. No one under 18 is allowed to drive golf carts, forklifts, gators or any other motorized vehicle.
2. All golf carts and gators shall be marked "No one under 18 may drive this cart."
3. A valid license must be shown before check out of a golf cart, forklift or gator.
4. All drivers must review and agree to abide to OIA Golf Cart Rules and Regulations. Violation of rules and regulations may result in forfeiture of golf cart if directed by public safety authorities or OIA Safety/Security personnel.
5. Golf carts, forklifts and gators operated after dark are required to have high intensity lights—driver is responsible to ensure light on vehicle. Vehicles not equipped with lights must be parked at logistics compound at sunset.
6. Golf carts and gators must maintain a slow, cautious speed (5 MPH limit) while maneuvering through crowds. A 15 MPH limit is posted for perimeter roads. Emergency vehicles are the only exception to speed postings.
7. Golf carts and gators will not be allowed in crowded areas (except in emergencies or for handicap shuttles) such as the reserved seating section. Separate paths will be created for carts and gators that are required to service the chalet or food booths in the reserved section.
8. Pedestrians have the right of way. Golf carts and gators shall stop for pedestrian traffic crossing its path.

9. Vehicles shall not block pedestrian pathways including entry and exit gates unless specifically directed to do so by Safety/Security personnel.
10. Golf carts and gators are not to be overloaded with passengers. Golf carts and gators are to be used as designed by manufacturer.
11. Golf carts used by Safety and Security personnel shall be clearly marked as such.
12. Only emergency vehicles are allowed to travel on active taxi or runways and are required to have emergency warning lights activated to ensure visibility by Tower and others.
13. Motorized vehicles are not allowed on the static display roads or entertainment area during open gate hours (except public safety vehicles). Vehicles that are "not on display" will be removed to the ramp pass area prior to gate opening. Failure to remove the vehicle upon notification may result in the vehicle being towed at the owner's expense ("Safety from the Ground Up," 2011, p. 12).

PARKING

1. Parking attendants are required to have flashlights and/or glow sticks after dark.
2. All parking attendants are required to have orange vests.
3. Parking attendants must be 16 years of age or older and attend required training session.
4. Police presence is required at the following locations:
   a. 25th from Griffin Oaks to Orange Gate
   b. 34th and Cornell
   c. 25th and Griffin Oaks
5. Drinking water is accessible at central parking areas for volunteers.
6. Portable and disability restrooms for volunteers are required within central parking areas.
7. Monitor(s) shall be assigned to the Disability Parking area to direct traffic during the opening and closing of the Air Show to ensure the safe movement of vehicles and pedestrians ("Safety from the Ground Up" 2011, p. 13).

PERFORMER REQUIREMENTS

1. Timely arrival and departure. Performers will arrive before show begins; depart after show ends according to schedule. Fly friendly procedures will be given to all participants. The goal is to minimize traffic over residential areas.
2. Attendance at required Air Show briefings. These briefings will cover optimal flight paths and safe, emergency landing locations and other pertinent information. Briefing "Sign In" will be required.
3. Cooperation during periodic Air Show checks around aircraft parking to assure no fuel leakage or safety hazards.

In addition, all Air Show performers will:

1. Have aircraft inspected by FAA Inspector upon arrival at Air Show.
2. All civilian aerobatic performers will be sanctioned by the International Council of Air Shows and their ACE (Aerobatic Competence Evaluation) card is current and valid ("Safety from the Ground Up" 2011, pp. 13–14).

UNATTENDED PROPERTY

1. Unattended property should generally be handled as found property and reported to Air Show Radio.
2. If for any reason the property appears suspicious, Air Show radio is to be immediately notified for police response. It should not be handled and is to be quarantined by cordoning off the area until the item is determined safe by public safety personnel.
3. Public Safety and Portland Police Bomb Squad personnel will be on site to respond to reports of suspicious property ("Safety from the Ground Up" 2011, p. 14).

SEATING

1. No standing allowed on folding chairs. Reserved Area to have clear signage posted.
2. Folding chairs orientated in rows must be secured in groups of three or four with tie wraps connecting chair legs to provide greater stability.
3. To allow adequate egress, aisle ways shall be no less than 4 feet wide. Rows will not be less than 14 inches apart.
4. A designated stroller area is to be implemented for storage of strollers in the reserved seating section to prevent trip and egress hazards within the seating rows ("Safety from the Ground Up," 2011, p. 14).

STATIC DISPLAY REQUIREMENTS

1. Parking for experimental and classic static display aircraft will be on the itinerant aircraft parking ramp across from the fueling mushroom. The tower will have a list of the registered static display aircraft, and will provide taxi clearance to static display parking for those who have pre-registered. Non- pre-registered aircraft will be instructed to taxi to temporary itinerant parking adjacent to the NETs and will not be part of the Experimental Static Display. Incoming pre-registered experimental or classic aircraft may ask the tower for taxi instructions to "experimental static display". The aircraft will shut down on the taxiway east of the display area unless a ramp volunteer guides the craft to a parking space.
2. Aircraft are not allowed to operate their engines in the Static Display area after the gates are open.
3. Static display aircraft may arrive before gates open and may depart after gates close as long as the field is clear of spectators. Aircraft must be pushed or towed to the taxiway east of the static display area where spectators are not allowed. There will be volunteers to help push static display aircraft.
4. When moving aircraft from or to the static display area, a minimum of 3 personnel shall marshal the plane, one at each wing and one at the tail
5. Minimal movement of aircraft in or out of the Static Display area between gate open and gate closure will be allowed. Movement of aircraft during this time must be approved by Ground Ops, Air Ops, and Security leaders in advance.
6. Utilize heavy stanchions to separate aircraft from spectators.
7. If an aircraft has a fluid leak (such as fuel, motor oil or hydraulic fluid), stanchions and barriers must be in place to separate crowds from exposure to leakage. Proper collection methods must be used, such as buckets, drip pans, etc.
8. Apply "DO NOT ENTER" barrier tape between stanchions. "Caution" or Authorized Personnel Only" tape is not as effective and should not be used in this situation.

9. Assign appropriate number of volunteers to patrol the Static Area to enforce crowd safety
10. Any aircraft in the Static Display area that needs to start an engine to move for a performance or fly-by should be placed as close as possible to the Hot Pit entrance ("Safety from the Ground Up" 2011, pp. 15–16).

All Air Show Static Display participants will:

1. Meet all FAA guidelines. Pilot and aircraft must be in compliance with FARs and be able to show documentation if necessary.
2. Provide proof of the following prior to the Air Show weekend:
   a. Completed Air Show registration form
   b. Pilot license
   c. Airworthiness certificate & Aircraft Registration
   d. Medical certificate
   e. Signed Aircraft Maintenance Records form
   f. Insurance certificate showing $1 million coverage.
3. Arrive before show begins and depart after show ends according to schedule.
4. Attend required orientation.
5. Cooperate with Air show personnel and periodic safety checks through the show.

STERILE CORRIDOR/AEROBATIC BOX

1. It is imperative that a strong on-going positive relationship be established with residents, tenants and businesses located in the Sterile Corridor and that communication continue year round with these residents, tenants and businesses. It is critical to treat them with respect and to keep in perspective that this is their home/daily work area and that the Air Show is a guest.
2. All documents required by the FAA must be signed by residents and businesses living in the Sterile Corridor prior to the Air Show. It is suggested that this approval be done very early in the planning stage. For example, for an August Air Show, approval forms should be sent out in January or as soon as the line-up of the Air Show is established.
3. The OIA president and designated personnel shall initiate early and frequent meetings with FAA representatives for planning purposes.
4. A designated monitor will be assigned to physically check all homes in the sterile corridor to ensure they are vacated/clear in time for jet team flights (both practice and actual shows). This monitor must call the Air boss for release of jet teams.
5. All streets in sterile corridor must be closed prior to jet team flights. Assigned security must cover all areas and keep people from encroaching upon the Sterile Corridor during practices and performances of jet teams.
6. Street closure and opening times must be published in advance and security must be available to close and open streets according to that schedule.
7. Clear communication with the public via road signage, newspaper notices and letters to businesses/residents near the airport is required prior to the Air Show.
8. During jet team performance years, if a sterile corridor area/delineation is required within the spectator area, the following layout and/or communication is required:
   a. Port-a-potties and water sources shall be located such that they are available through the entire event.
   b. Contracts with vendors or sponsors shall clearly state times of closure if required.
   c. FAA, Port of Portland and OIA shall review and clearly define operation details such as number of spectators allowed in or traveling through the 'sterile' area.
   d. Clear publication/posters to communicate to public safety personnel, monitors and spectators which areas will be affected by closures.
   e. Clear announcement to public safety personnel, monitors and spectators effected areas, closures and re-opening
   f. Communication to tenants regarding field requirements and closures needed for jet team practice days before the Air show. Monitors shall ensure tenants/field is in compliance with requirements during practice days.
9. All hangar tenants must be informed of Air Show schedule and of any impacts to them prior to Air Show. Clear communication will include road signage and letters to individual tenants prior to the Air Show.
10. Hangars will be included in the area monitored by police throughout the Air Show.
11. All tenants are expected to adhere to requirements required by a sterile box including restricting the movement of personnel during stated times for the sterile corridor and aerobatic box.
12. Street closure and opening times must be published in advance.
13. On-field Public Safety will be located along the Crowd Line to ensure no encroachment from the crowd into either the Aerobatic or Sterile Corridor ("Safety from the Ground Up," 2011, pp. 16–17).

WEATHER, INSECTS, AND OTHER NATURAL ENVIRONMENTAL CONCERNS

1. Potable water stations and locations of those stations should have prominent signage.
2. Bee and yellow jacket traps and/or spray should be applied near the food court and reserved seating before and during the event.
3. In the case of a bee/wasp sting, the person should be taken to the nearest first aid station ("Safety from the Ground Up" 2011, p. 17).

APPENDIX H

Vendor Policies and Guidelines

2011 KINGMAN AIR SHOW VENDOR POLICIES AND GUIDELINES

1. Valid proof of insurance is required prior to the show (1,000,000GL). Kingman Air Show Inc. must be listed as additional insured.
2. Flyers or other promotional materials may be distributed ONLY from the confines of the booth space and NEVER on the grounds (including parking lots).
3. Raffles are not permitted under any circumstances.
4. All items for sale must be approved in advance.
5. All items offered must be in good taste and are subject to Kingman Air Show staff approval.
6. Storage space is not available other than within the booth.
7. Smoking is prohibited in all booths.
8. Voice amplification is not permitted.
9. All booths must be kept clean and orderly at all times. Rubbish must be placed in refuse containers (centrally located).
10. Vendor is responsible for collecting and paying all applicable state sales taxes.
11. Electricity and water can be provided for an additional fee ($25 each per booth). Generators are not permitted.
12. It is recommended that all merchandise be stored above ground level (i.e., on pallets).
13. Labor for loading/unloading and set-up must be provided for by vendor.
14. All vehicles and supplies will be inspected upon entering the flight line area by security personnel. All personnel must have a valid photo ID with them at all times (i.e., Arizona driver's license), and valid vehicle insurance is mandatory for every vehicle entering the grounds.
15. Vendors will not use the words "Air Show T-Shirts," "Kingman Air Show," "Official," or any combination of these words on any items sold.
16. Signage is to be provided by the vendor and is limited to two (2) 4' x 8' signs or banners. Signage may not extend higher than the roof of the tent. Only items being sold may be advertised. All signage is subject to approval by Kingman Air Show Staff. No balloons or blimps are allowed.
17. Copies of Business License, Food Handling Certificate (for food vendors), and insurance paperwork must be provided no later than September 9, 2011.
18. There will be no penetration of the pavement. Vendors must bring suitable water barrels or the like to anchor all tents, tables, etc. In consideration of being accepted as a vendor, I hereby assume full and complete responsibility for any personal injury or injury to my employees and/or property damage that I sustain or cause during my participation as a vendor.

I hereby release, hold harmless, and covenant not to file suit against Kingman Air Show Inc., its board members, sponsors, volunteers, and successors from any loss, liability or claim arising from the Kingman Air Show.

_____ _____

Signature Date

Vendor Name: _____

APPENDIX I

Prospective Sponsor Letter, Lyon County, Nevada, Fly-in

The Lyon County Fly-In, a nonprofit 501(c)(3) organization, has made the leap from spring to fall and will hold its annual event at the Silver Springs/Lyon County Regional Airport in Silver Springs, Nevada on October 6 & 7, 2012.

Sponsorship is a great "fit" for your community-oriented and promotional-minded company. You can get your message out, publicize your product and services, and boost name recognition while supporting this popular and well-attended event.

The Fly-In event is held to introduce aviation to the general public and the public to get up close and personal with pilots who build and fly their own airplanes.

The 2011 event was a huge success. The Fly-In and the Experimental Aircraft Association, Chapter 403, flew 200 Young Eagles. The Fly-In's Young Eagles program provides an opportunity for kids to experience the world of aviation and experience the thrill of flying. We can design a sponsor package with your company to be the **Naming Sponsor** for this premier Fly-In activity or any others that may fit your needs.

Our Goals include:

- Promote aviation and education through support of the "Young Eagles" program;
- Support our armed services by giving them a chance to interact positively with our attendees;
- Offer an opportunity to showcase Lyon County and attract visitors to the area;
- Provide a setting for businesses to showcase themselves, their products and all that they contribute to the community;
- Offer a forum for nonprofit organizations in Lyon County to earn funds for their many worthwhile projects;
- Create a weekend of family fun for the residents and visitors of Lyon County.

We would appreciate having your support for the 2012 Lyon County Fly-In through a sponsorship and/or donation. You can sponsor a specific item or event at the Fly-In, such as the pilot breakfast, VIP chalet, children's games, raffle, generator, registration tent, etc. Any contribution of $350 or more will allow your organization the option to exhibit at the Fly-In. The Lyon County Fly-In is a 501(c)(3) nonprofit organization incorporated in Nevada. All contributions and sponsorships are fully tax-deductible.

Take a few minutes to visit our web site www.LyonCountyFlyIn.com.

The Arlington Group can work with you to customize a sponsorship program tailored specifically for your company. For further sponsor options, please contact Fred or Maxine at info@EventsNevada.com or call 775.887.1294. Contact the Lyon County Fly-In at LyonCountyFlyIn@yahoo.com for further information.

Come and see for yourself what a growing number of businesses in northern Nevada have discovered. By partnering with this successful event, you can boost your company profile through support and advertising with the Lyon County Fly-In.

Sincerely,
Lyon County Fly-In Committee

Lyon County Fly-In needs sponsorship for these specific areas. You can become a **Naming Sponsor** or contribute to making sure we are able to hold all these activities.

- **Fuel for Young Eagles Pilots**—these pilots donate their time and their plane to make this the largest Young Eagles fly-in in the state.
- **Children's Area and Activities**—coloring books, Styrofoam planes, face painting, safety fingerprinting, rocket building, bounce house and more to keep the kids active and happy.
- **Pilot Welcoming Committee**—youngsters from the Boys & Girls Club greet arriving pilots, making their first impression a warm and smiling experience.
- **Pilot and VIP Lounge**—a comfortable spot for pilots to relax after landing and before taking off; sponsors can talk to pilots in this relaxed atmosphere and share a beverage and a snack.
- **Pilot Breakfast**—the Fly-In hosts each pilot to a great pancake breakfast, including sausage, juice and coffee.
- **Goodie Bags**—each arriving pilot gets a "Goodie Bag" filled with merchandise, flyers, a certificate, and coupons from our sponsors.
- **Flight Operations**—crew members keep a sharp eye on the runways, taxiways and apron to assure maximum safety, using radios and other high-tech gear, as well as Public Announcements.
- **Entertainment**—a great variety of music, singing and playing, to keep the atmosphere lively all day long.
- **Port-a-johns**—along with hand washing stations, a MUST at any community event.
- **Logistics**—Handling outside equipment and supplies, set-up including parking layout, tear down of tents, trash cans, and the parking area.

The Arlington Group can work with you to customize a sponsorship program tailored specifically for your company. For all sponsor options, please contact Fred or Maxine at info@EventsNevada.com or call 775.887.1294.

LYON COUNTY FLY-IN
OCTOBER 6 & 7, 2012
SILVER SPRINGS AIRPORT

SPONSOR CONTRACT/OPTION

Thank you for supporting this great event.

The 2012 Lyon County Fly-In is a family event celebrating the youth, airplanes, and all things aviation.

APPLICANT NAME: _____ DAY TEL: _____.

BUSINESS NAME: _____ EVE TEL: _____.

ADDRESS: _____ FAX: _____.

CITY: _____ CELL: _____.

ST: _____ZIP: _____ E-MAIL: _____.

Sponsorship Amount: $ _____

Please indicate a contact for your advertising copy— NAME: _____

_____ PHONE: _____

E-MAIL: _____

Are you interested in a booth (10 × 10 Space) ? Yes _____ No _____

If YES : δ 10 × 10 space. You may give away any promotional or informational items at your booth. It must be staffed both days of the event.

Make check payable to the **LYON COUNTY FLY-IN**

Return full payment and form to:

Lyon County Fly-In
P.O. Box 186
Silver Springs, NV 89429

For further information, call 775.887.1294 or fax: 775.887.1896 or e-mail: info@EventsNevada.com or visit www.LyonCountyFlyIn.com

APPENDIX J

Considerations for Comprehensive Air Show Emergency Response Plan

- Put it into writing.
- Look at the Airport Emergency Plan (AEP) as a foundation.
- Include answers to the toughest questions/scenarios.
- Identify the role of all major and minor players in the event of an accident.
- Clearly identify the person/people in charge in the event of an accident.
- Designate a press spokesperson.
- Paint a clear picture of the accident/incident chain of command.
- Do not limit the CASERP to addressing only events that may occur during the air show waiver.
- Acknowledge that incidents/accidents behind the crowd line are much more likely to occur than an aircraft accident.
- Address crowd control.
- Consider the staging of crash/fire/rescue vehicles to ensure timely response.
- Involve crash/fire/rescue personnel in every pilot briefing.
- Ensure adequate water is available for spectator and performers.
- Include nontraditional air show performers.
- Include fires—brush, grease, pyro.
- Include kidnappings, bomb scares, and terrorist incidents.
- Include responses to aircraft accidents both within and outside the aerobatic box, in front of the crowd and in the crowd, on airport property and off airport property, non-fatal and fatal, single fatalities and multiple fatalities, with and without property damage, etc.
- Make plans for the cancellation of the show and under what circumstances.
- Include contingencies as a result of the weather.
- Include doctors, paramedic and nurses. Plan for one doctor for every 30,000 spectators and two paramedics or Advanced Life Support (ALS) nurses for every 10,000 spectators.
- Coordinate a Disaster Mobile Assistance Team.
- Provide directions on the amount of emergency supplies that will be available at the show.
- Include location of first aid stations and how these will be identified by spectators.
- Include a system for quickly identifying each part of the air show spectator area.
- Specify how many ambulances and/or helicopters need to be available to transport patients to nearby hospitals or trauma centers.
- Include plans for communicating in the event of an accident, realizing that cell phone signals may become overburdened in the event of an accident because of spectators making phone calls (Cudahy 2005, pp. 25–31).

APPENDIX K

Survey Results

ACRP Aeronautical Event Survey of Airport Operators

SurveyMonkey

1. Please choose one of the following aeronautical special events that has been recently held at your airport and about which you will answer survey questions.

	Response Percent	Response Count
Airshow	**29.4%**	**10**
Community appreciation event with aircraft	5.9%	2
Fly-in	20.6%	7
Open house with aircraft	11.8%	4
Safety/Pilot seminars/courses/talks	2.9%	1
Static aircraft display	2.9%	1
EAA Young Eagles or Eagle Flight event	11.8%	4
None of the above	2.9%	1
Other (please specify)	11.8%	4
	answered question	**34**
	skipped question	**0**

2. For which of the following reasons did the airport hold the airshow? [Check all that apply.]

	Response Percent	Response Count
Revenue for the airport	22.2%	2
Revenue for charity	22.2%	2
Economic impact to the community	44.4%	4
Community relations	**77.8%**	**7**
Enhance interest in aviation	55.6%	5
Other (please specify)	11.1%	1
	answered question	**9**
	skipped question	**25**

3. Which of the following committees were established in preparation for the airshow? [Check all that apply.]

	Response Percent	Response Count
Accomodations	33.3%	3
Admission	33.3%	3
Concessions & Displays	55.6%	5
Emergency Response	66.7%	6
Finance	66.7%	6
Marketing	66.7%	6
Parking/Traffic	**77.8%**	**7**
Performers	66.7%	6
Safety	55.6%	5
Schedules	44.4%	4
Sponsorships	55.6%	5
Security	66.7%	6
Sound Systems	44.4%	4
Waste management	55.6%	5
None of the above	0.0%	0
Other (please specify)	33.3%	3
	answered question	**9**
	skipped question	**25**

4. Please specify which individual served as the Executive Director/Chairman of the airshow and whether they were paid for their services.

	Paid	Un-paid	Response Count
Airport Director	33.3% (1)	**66.7% (2)**	3
Other airport staff	**50.0% (2)**	**50.0% (2)**	4
State aviation/aeronautics division official	0.0% (0)	**100.0% (1)**	1
Volunteer	33.3% (1)	**66.7% (2)**	3
Local elected official	0.0% (0)	**100.0% (2)**	2
Other	**50.0% (2)**	**50.0% (2)**	4
		answered question	**9**
		skipped question	**25**

5. Was the airshow governed by a Board of Directors?

		Response Percent	Response Count
Yes		**66.7%**	**6**
No		33.3%	3
		answered question	**9**
		skipped question	**25**

6. How many individuals were involved with planning the airshow in the months prior to the event?

	Response Percent	Response Count
Less than 5	0.0%	0
6-10	11.1%	1
11-15	**33.3%**	**3**
16-20	11.1%	1
21-25	0.0%	0
26-30	11.1%	1
31-35	0.0%	0
36-40	0.0%	0
41-45	0.0%	0
46-50	0.0%	0
50-100	22.2%	2
More than 100	11.1%	1
	answered question	**9**
	skipped question	**25**

7. How many volunteers were utilized during the airshow?

	Response Percent	Response Count
Less than 50	11.1%	1
50-100	22.2%	2
101-200	22.2%	2
201-300	0.0%	0
301-400	0.0%	0
401-500	11.1%	1
501-600	0.0%	0
601-700	0.0%	0
701-800	0.0%	0
801-900	0.0%	0
901-1,000	0.0%	0
More than 1,000	**33.3%**	**3**
	answered question	**9**
	skipped question	**25**

8. Which of the following organizations provided volunteers for the airshow? [Check all that apply.]

	Response Percent	Response Count
Airport tenants	77.8%	7
Businesses	66.7%	6
Community groups	**88.9%**	**8**
City/County staff	44.4%	4
EAA Chapter	77.8%	7
Flying clubs	33.3%	3
Individuals	66.7%	6
Schools/Universities	55.6%	5
State aviation/aeronautics division	11.1%	1
None of the above	0.0%	0
Other (please specify)	33.3%	3
answered question		**9**
skipped question		**25**

9. Was demographic information collected on attendees?

	Response Percent	Response Count
Yes	**55.6%**	**5**
No	44.4%	4
answered question		**9**
skipped question		**25**

10. From what geographic radius around the airport did most of the attendees come?

	Response Percent	Response Count
Within 10 mile radius	0.0%	0
Within 20 mile radius	11.1%	1
Within 30 mile radius	22.2%	2
Within 40 mile radius	11.1%	1
Within 50 mile radius	11.1%	1
Within 60 mile radius	11.1%	1
Within 70 mile radius	0.0%	0
Within 80 mile radius	0.0%	0
More than 80 miles away	**33.3%**	**3**
Don't know	0.0%	0
	answered question	**9**
	skipped question	**25**

11. If possible, please describe the average attendee (age, income level, children, etc.).

	Response Count
	8
	answered question **8**
	skipped question **26**

12. Were surveys of attendees conducted to determine what they liked or didn't like about the airshow?

	Response Percent	Response Count
Yes	**66.7%**	**6**
No	33.3%	3
answered question		**9**
skipped question		**25**

13. What have been the most common complaints of attendees of the airshow?

	Response Count
	9
answered question	**9**
skipped question	**25**

14. What action(s) have been taken in the past to increase attendance at the airshow?

	Response Count
	7
answered question	**7**
skipped question	**27**

15. What was the size of the airshow, based on number of attendees?

	Response Percent	Response Count
0-5,000	11.1%	1
5,001-10,000	11.1%	1
10,001-20,000	22.2%	2
20,001-35,000	11.1%	1
35,001-50,000	0.0%	0
More than 50,000	**44.4%**	**4**
	answered question	**9**
	skipped question	**25**

16. How were the following aspects of the airshow handled?

	In-house	Contract organization	Community group/volunteer org/non-profit	N/A	Response Count
Air/Ground operations	**77.8% (7)**	44.4% (4)	11.1% (1)	0.0% (0)	9
Business/Management	**88.9% (8)**	11.1% (1)	11.1% (1)	0.0% (0)	9
Concessions and displays	**55.6% (5)**	**55.6% (5)**	22.2% (2)	0.0% (0)	9
Logistics (incl parking and admissions)	**55.6% (5)**	22.2% (2)	44.4% (4)	0.0% (0)	9
Marketing	**77.8% (7)**	44.4% (4)	11.1% (1)	0.0% (0)	9
Performers	**55.6% (5)**	**55.6% (5)**	0.0% (0)	0.0% (0)	9
Sponsorships	**77.8% (7)**	22.2% (2)	22.2% (2)	0.0% (0)	9
				answered question	**9**
				skipped question	**25**

17. What method is used to secure any contract services?

	Direct negotiation	Solicitation process	N/A	Response Count
Air/Ground operations	**75.0% (6)**	0.0% (0)	25.0% (2)	8
Business/Management	**50.0% (4)**	0.0% (0)	**50.0% (4)**	8
Concessions and displays	**55.6% (5)**	22.2% (2)	22.2% (2)	9
Logistics (incl parking and admissions)	**62.5% (5)**	0.0% (0)	37.5% (3)	8
Marketing	**62.5% (5)**	12.5% (1)	25.0% (2)	8
Performers	**100.0% (8)**	0.0% (0)	0.0% (0)	8
Sponsorships	**50.0% (4)**	25.0% (2)	25.0% (2)	8
			answered question	**9**
			skipped question	**25**

18. Was the airshow promoted as being child/family-friendly?

		Response Percent	Response Count
Yes		**100.0%**	**9**
No		0.0%	0
		answered question	**9**
		skipped question	**25**

19. Which of the following attractions were provided for children at the airshow? [Check all that apply.]

	Response Percent	Response Count
Carnival/amusement rides	22.2%	2
Circus	0.0%	0
Face painting	33.3%	3
Games	44.4%	4
Inflatables	**66.7%**	**6**
Laser tag	0.0%	0
Moonwalk	0.0%	0
Rock climbing	44.4%	4
Sandbox	0.0%	0
None of the above	22.2%	2
Other (please specify)	11.1%	1
	answered question	**9**
	skipped question	**25**

20. What percent were each of the following types of acts in the airshow?

	0%	1-20%	21-40%	41-60%	61-80%	81-99%	100%	Response Count
Jet aerobatics	22.2% (2)	**44.4% (4)**	22.2% (2)	0.0% (0)	11.1% (1)	0.0% (0)	0.0% (0)	9
Piston aerobatics	0.0% (0)	**37.5% (3)**	**37.5% (3)**	12.5% (1)	0.0% (0)	12.5% (1)	0.0% (0)	8
Balloons	**66.7% (4)**	16.7% (1)	16.7% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	6
Comedy	28.6% (2)	**57.1% (4)**	14.3% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	7
Formation flight	0.0% (0)	**50.0% (4)**	37.5% (3)	12.5% (1)	0.0% (0)	0.0% (0)	0.0% (0)	8
Helicopters	14.3% (1)	**71.4% (5)**	14.3% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	7
Military acts	12.5% (1)	**37.5% (3)**	**37.5% (3)**	12.5% (1)	0.0% (0)	0.0% (0)	0.0% (0)	8
Parachutists	11.1% (1)	**77.8% (7)**	11.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	9
Sailplane aerobatics	**42.9% (3)**	**42.9% (3)**	14.3% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	7
Skywriting	**42.9% (3)**	**42.9% (3)**	14.3% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	7
Wingwalking	**42.9% (3)**	**42.9% (3)**	14.3% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	7
Other	25.0% (1)	**50.0% (2)**	25.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	4
						answered question		**9**
						skipped question		**25**

21. Was a priority placed on getting a jet team (military or civilian) to perform at the airshow?

	Response Percent	Response Count
Yes	44.4%	4
No	**55.6%**	**5**
	answered question	**9**
	skipped question	**25**

22. What was the one most popular non-aeronautical attraction at the airshow?

	Response Percent	Response Count
Carnival	0.0%	0
Carshow	11.1%	1
Children's play area	11.1%	1
Circus	0.0%	0
Concert	11.1%	1
Fun-run (5K, 10K, etc.)	11.1%	1
Medical services (cholesterol screening, massage, etc.)	0.0%	0
Military equipment	**22.2%**	**2**
Motorcycle show	0.0%	0
Simulators	0.0%	0
None of the above	**22.2%**	**2**
Other (please specify)	11.1%	1
	answered question	**9**
	skipped question	**25**

23. Was an emergency plan specific to the airshow developed?

	Response Percent	Response Count
Yes	**100.0%**	**9**
No	0.0%	0
	answered question	**9**
	skipped question	**25**

24. Was a strategy/plan developed for handling the media during a crisis?

	Response Percent	Response Count
Yes	**88.9%**	**8**
No	11.1%	1
	answered question	**9**
	skipped question	**25**

25. Was a parking/ground access plan developed?

	Response Percent	Response Count
Yes	**100.0%**	**9**
No	0.0%	0
	answered question	**9**
	skipped question	**25**

26. Which of the following requirements were in place to manage parking during the airshow? [Check all that apply.]

	Response Percent	Response Count
Paid parking personnel	55.6%	5
Two-way roads turned into one-way	66.7%	6
Uniformed officers directing traffic	66.7%	6
Signage	**100.0%**	**9**
None of the above	0.0%	0
Other (please specify)	33.3%	3
	answered question	**9**
	skipped question	**25**

27. How does the airport determine the number of vehicles to expect during the airshow, as well as the amount of space needed for these vehicles?

	Response Count
	8
answered question	**8**
skipped question	**26**

28. Was a professional airboss hired for the airshow?

	Response Percent	Response Count
Yes	**77.8%**	**7**
No	22.2%	2
	answered question	**9**
	skipped question	**25**

29. Was a Safety/Security Plan developed for the airshow?

	Response Percent	Response Count
Yes	**100.0%**	**9**
No	0.0%	0
	answered question	**9**
	skipped question	**25**

30. Which one individual was directly responsible for aircraft safety at the airshow?

	Response Percent	Response Count
Air boss	**100.0%**	**9**
Individual performing pilot	0.0%	0
Responsible person who signs waiver	0.0%	0
FAA inspector	0.0%	0
None of the above	0.0%	0
Other (please specify)	0.0%	0
answered question		**9**
skipped question		**25**

31. Was a website specifically developed to market/promote the airshow?

	Response Percent	Response Count
Yes	**88.9%**	**8**
No	11.1%	1
answered question		**9**
skipped question		**25**

32. Which of the following types of sponsors are typically secured in support of the airshow? [Check all that apply.]

	Response Percent	Response Count
Car dealers	66.7%	6
Newspaper	44.4%	4
Other retailers	**88.9%**	**8**
Radio	66.7%	6
Television	66.7%	6
None of the above	0.0%	0
Other (please specify)	55.6%	5
	answered question	**9**
	skipped question	**25**

33. For which of the following attractions/services are sponsors typically secured? [Check all that apply.]

	Response Percent	Response Count
Children's play/activity area	44.4%	4
Entertainment	55.6%	5
Fuel	55.6%	5
Flight operations	33.3%	3
Goodie bags	33.3%	3
Logistics	22.2%	2
Pilot welcome	33.3%	3
Pilot & VIP lounge	**66.7%**	**6**
Pilot breakfast	44.4%	4
Portable toilets	44.4%	4
None of the above	0.0%	0
Other (please specify)	44.4%	4
	answered question	**9**
	skipped question	**25**

34. Which of the following are typically part of the sponsorship program? [Check all that apply.]

	Response Percent	Response Count
Admission passes/tickets	77.8%	7
Banner placements	**100.0%**	**9**
Brochure ads	**100.0%**	**9**
Exhibit space	55.6%	5
PA announcements	88.9%	8
Parking passes	66.7%	6
Performer rides	55.6%	5
Poster ads	55.6%	5
Program ads	55.6%	5
Website presence	88.9%	8
None of the above	0.0%	0
Other (please specify)	0.0%	0
	answered question	**9**
	skipped question	**25**

35. Which of the following is typically included in the sponsorship proposal? [Check all that apply.]

	Response Percent	Response Count
Audience demographics	88.9%	8
Attendee demographics	88.9%	8
Basic facts	**100.0%**	**9**
Contact information	**100.0%**	**9**
Examples of marketing materials	77.8%	7
Photographs	88.9%	8
Scheduled performers	44.4%	4
Site map	66.7%	6
Sponsorship package pricing	88.9%	8
None of the above	0.0%	0
Other (please specify)	11.1%	1
	answered question	**9**
	skipped question	**25**

36. Which of the following benefits are typically provided to enhance the value of a chalet (corporate hospitality) experience at the airshow?

	Response Percent	Response Count
Food and beverages	66.7%	6
Entertainment (live music/television)	22.2%	2
Meet and greets	55.6%	5
Photograph/Autograph sessions	44.4%	4
Plush furniture	11.1%	1
Privacy	**77.8%**	**7**
None of the above	22.2%	2
Other (please specify)	11.1%	1
	answered question	**9**
	skipped question	**25**

37. If an admission fee was charged, what dollar amounts were charged for each of the following

Advance Purchase

	0	$5 or less	$5.01 to $10	$10.01 to $15.00	$15.01 to 20.00	$20.01 to 25.00
Adult	**50.0% (4)**	12.5% (1)	12.5% (1)	12.5% (1)	0.0% (0)	12.5%
Senior	**50.0% (4)**	12.5% (1)	25.0% (2)	0.0% (0)	0.0% (0)	12.5%
Child	**62.5% (5)**	37.5% (3)	0.0% (0)	0.0% (0)	0.0% (0)	0.0%

On-Site

	0	$5 or less	$5.01 to $10	$10.01 to $15.00	$15.01 to 20.00	$20.01 to 25.00
Adult	**50.0% (3)**	0.0% (0)	0.0% (0)	0.0% (0)	33.3% (2)	0.0%
Senior	**50.0% (3)**	0.0% (0)	0.0% (0)	16.7% (1)	16.7% (1)	0.0%
Child	**66.7% (4)**	16.7% (1)	16.7% (1)	0.0% (0)	0.0% (0)	0.0%

38. In what ways were revenues measured? [Check all that apply.]

	Response Percent	Response Count
By the hour	11.1%	1
By the day	**55.6%**	**5**
By the event	44.4%	4
None of the above	11.1%	1
	answered question	**9**
	skipped question	**25**

39. What amount of net revenues did the airshow generate?

	Response Percent	Response Count
Loss	**25.0%**	**2**
Break-even	**25.0%**	**2**
$1-5,000	0.0%	0
$5,001-10,000	12.5%	1
$10,001-15,000	0.0%	0
$15,001-20,000	0.0%	0
$20,001-25,000	0.0%	0
$25,001-30,000	0.0%	0
$30,001-35,000	12.5%	1
$35,001-40,000	0.0%	0
$40,001-45,000	0.0%	0
$45,001-50,000	12.5%	1
$50,001-100,000	0.0%	0
More than $100,000	12.5%	1
	answered question	**8**
	skipped question	**26**

40. How were net profits from the airshow allocated?

	Response Percent	Response Count
Fully retained in-house	37.5%	3
Fully donated	12.5%	1
Partially donated	12.5%	1
Other (please specify)	**62.5%**	**5**
	answered question	**8**
	skipped question	**26**

41. Was the economic impact of the airshow to the comunity determined?

	Response Percent	Response Count
Yes	44.4%	4
No	**55.6%**	**5**
	answered question	**9**
	skipped question	**25**

42. What methods are used to limit expenses for the airshow?

	Response Percent	Response Count
Hold event every other year, rather than annually	11.1%	1
Decrease non-aeronautical attractions	0.0%	0
Decrease aeronautical attractions	22.2%	2
Rely on volunteers	44.4%	4
Trade tickets/passes for goods/services	33.3%	3
None of the above	11.1%	1
Other (please specify)	**55.6%**	**5**
	answered question	**9**
	skipped question	**25**

43. What methods are used to increase revenues for the airshow?

	Response Percent	Response Count
Increase non-aeronautical attractions	**55.6%**	**5**
Increase aeronautical attractions	44.4%	4
Increase food/beverage concessions	44.4%	4
Increase retail goods concessions	44.4%	4
Secure a jet team	44.4%	4
Trade tickets/passes for goods/services	33.3%	3
None of the above	11.1%	1
Other (please specify)	33.3%	3
	answered question	**9**
	skipped question	**25**

44. Which of the following grants were received to help fund the event?

	Response Percent	Response Count
Federal	0.0%	0
State	11.1%	1
Local	11.1%	1
Community	0.0%	0
No grants were received	**77.8%**	**7**
Other (please specify)	0.0%	0
	answered question	**9**
	skipped question	**25**

45. How much of the airshow (time and budget) was devoted to aeronautical and non-aeronautical event?

Percent of Time

	0%	1%-10%	11%-25%	26%-50%	51%-75%	76%-99.9%
Aeronautical	0.0% (0)	0.0% (0)	12.5% (1)	25.0% (2)	25.0% (2)	**37.5%**
Non-aeronautical	0.0% (0)	**25.0% (2)**	**25.0% (2)**	**25.0% (2)**	**25.0% (2)**	0.0%

Percent of Budget

	0%	1%-10%	11%-25%	26%-50%	51%-75%	76%-99.9%
Aeronautical	0.0% (0)	0.0% (0)	**33.3% (2)**	16.7% (1)	**33.3% (2)**	16.7%
Non-aeronautical	0.0% (0)	16.7% (1)	16.7% (1)	**50.0% (3)**	16.7% (1)	0.0%

46. What "lessons learned" would you be willing to share, especially to an airport considering holding their first airshow?

	Response Count
	8
answered question	**8**
skipped question	**26**

47. For which of the following reasons did your airport hold an aeronautical special event? [Check all that apply.]

	Response Percent	Response Count
Revenue for the airport	9.1%	2
Revenue for charity	22.7%	5
Economic impact to the community	13.6%	3
Community relations	54.5%	12
Enhance interest in aviation	**72.7%**	**16**
None of the above	0.0%	0
Other (please specify)	13.6%	3
answered question		**22**
skipped question		**12**

48. Which of the following committees were established in preparation for the event? [Check all that apply.]

	Response Percent	Response Count
Accomodations	8.7%	2
Admission	17.4%	4
Concessions & Displays	34.8%	8
Emergency Response	34.8%	8
Finance	34.8%	8
Marketing	43.5%	10
Parking/Traffic	52.2%	12
Performers	0.0%	0
Safety	**56.5%**	**13**
Schedules	34.8%	8
Sponsorships	43.5%	10
Security	30.4%	7
Sound Systems	26.1%	6
Waste management	30.4%	7
None of the above	13.0%	3
Other (please specify)	17.4%	4
	answered question	**23**
	skipped question	**11**

49. Please specify which individual served as the Executive Director/Chairman of the event and whether they were paid for their services.

	Paid	Un-paid	Response Count
Airport Director	0.0% (0)	**100.0% (6)**	6
Other airport staff	25.0% (1)	**75.0% (3)**	4
State aviation/aeronautics division official	0.0% (0)	**100.0% (1)**	1
Volunteer	0.0% (0)	**100.0% (21)**	21
Local elected official	0.0% (0)	**100.0% (1)**	1
Other	0.0% (0)	**100.0% (2)**	2
		answered question	**23**
		skipped question	**11**

50. Was the event governed by a Board of Directors?

		Response Percent	Response Count
Yes		**52.2%**	**12**
No		47.8%	11
		answered question	**23**
		skipped question	**11**

51. How many individuals were involved with planning the event in the months prior to the event?

	Response Percent	Response Count
Less than 5	34.8%	8
6-10	**43.5%**	**10**
11-15	13.0%	3
16-20	4.3%	1
21-25	0.0%	0
26-30	0.0%	0
31-35	0.0%	0
36-40	4.3%	1
41-45	0.0%	0
46-50	0.0%	0
50-100	0.0%	0
More than 100	0.0%	0
	answered question	**23**
	skipped question	**11**

52. How many volunteers were utilized during the event?

	Response Percent	Response Count
Less than 50	**73.9%**	**17**
50-100	13.0%	3
101-200	8.7%	2
201-300	4.3%	1
301-400	0.0%	0
401-500	0.0%	0
501-600	0.0%	0
601-700	0.0%	0
701-800	0.0%	0
801-900	0.0%	0
901-1,000	0.0%	0
More than 1,000	0.0%	0
	answered question	**23**
	skipped question	**11**

53. Which of the following organizations provided volunteers for the event? [Check all that apply.]

	Response Percent	Response Count
Airport tenants	60.9%	14
Businesses	30.4%	7
Community groups	43.5%	10
City/County staff	21.7%	5
EAA Chapter	69.6%	16
Flying clubs	21.7%	5
Individuals	**73.9%**	**17**
Schools/Universities	17.4%	4
State aviation/aeronautics division	8.7%	2
None of the above	0.0%	0
Other (please specify)	30.4%	7
	answered question	**23**
	skipped question	**11**

54. Was demographic information collected on attendees?

	Response Percent	Response Count
Yes	26.1%	6
No	**73.9%**	**17**
	answered question	**23**
	skipped question	**11**

55. From what geographic radius around the airport did most of the attendees come?

	Response Percent	Response Count
Within 10 mile radius	4.3%	1
Within 20 mile radius	8.7%	2
Within 30 mile radius	**30.4%**	**7**
Within 40 mile radius	0.0%	0
Within 50 mile radius	17.4%	4
Within 60 mile radius	8.7%	2
Within 70 mile radius	0.0%	0
Within 80 mile radius	4.3%	1
More than 80 miles away	8.7%	2
Don't know	17.4%	4
	answered question	**23**
	skipped question	**11**

56. If possible, please describe the average attendee (age, income level, children, etc.).

	Response Count
	19
	answered question **19**
	skipped question **15**

57. Were surveys of attendees conducted to determine what they liked or didn't like about the event?

	Response Percent	Response Count
Yes	13.0%	3
No	**87.0%**	**20**
	answered question	**23**
	skipped question	**11**

58. What have been the most common complaints of attendees of the event?

	Response Count
	19
	answered question **19**
	skipped question **15**

59. What action(s) have been taken in the past to increase attendance at the event?

	Response Count
	21
	answered question **21**
	skipped question **13**

60. Was an emergency plan specific to the event developed?

	Response Percent	Response Count
Yes	47.8%	11
No	**52.2%**	**12**
	answered question	**23**
	skipped question	**11**

61. Was a strategy/plan developed for handling the media during a crisis?

	Response Percent	Response Count
Yes	26.1%	6
No	**73.9%**	**17**
	answered question	**23**
	skipped question	**11**

62. Was a parking/ground access plan developed?

	Response Percent	Response Count
Yes	**69.6%**	**16**
No	30.4%	7
	answered question	**23**
	skipped question	**11**

63. Which of the following requirements were in place to manage parking during the event? [Check all that apply.]

	Response Percent	Response Count
Paid parking personnel	4.3%	1
Two-way roads turned into one-way	8.7%	2
Uniformed officers directing traffic	30.4%	7
Signage	**60.9%**	**14**
None of the above	17.4%	4
Other (please specify)	39.1%	9
answered question		**23**
skipped question		**11**

64. How does the airport determine the number of vehicles to expect during the event, as well as the amount of space needed for these vehicles?

	Response Count
	20
answered question	**20**
skipped question	**14**

65. What was the size of the event, based on number of attendees?

	Response Percent	Response Count
0-5,000	**82.6%**	**19**
5,001-10,000	8.7%	2
10,001-20,000	4.3%	1
20,001-35,000	0.0%	0
35,001-50,000	0.0%	0
More than 50,000	4.3%	1
answered question		**23**
skipped question		**11**

66. How were the following aspects of the event handled?

	In-house	Contract organization	Community group/volunteer org/non-profit	N/A	Response Count
Air/Ground operations	39.1% (9)	0.0% (0)	**56.5% (13)**	4.3% (1)	23
Business/Management	31.8% (7)	0.0% (0)	**59.1% (13)**	13.6% (3)	22
Concessions and displays	21.7% (5)	13.0% (3)	**60.9% (14)**	13.0% (3)	23
Logistics (incl parking and admissions)	30.4% (7)	4.3% (1)	**69.6% (16)**	4.3% (1)	23
Marketing	30.4% (7)	0.0% (0)	**69.6% (16)**	4.3% (1)	23
Performers	22.7% (5)	0.0% (0)	27.3% (6)	**54.5% (12)**	22
Sponsorships	26.1% (6)	0.0% (0)	**56.5% (13)**	17.4% (4)	23
answered question					**23**
skipped question					**11**

67. Was the event promoted as being child/family-friendly?

	Response Percent	Response Count
Yes	**91.3%**	**21**
No	8.7%	2
	answered question	**23**
	skipped question	**11**

68. Which of the following attractions were provided for children at the event? [Check all that apply.]

	Response Percent	Response Count
Carnival/amusement rides	4.3%	1
Circus	0.0%	0
Face painting	17.4%	4
Laser tag	0.0%	0
Moonwalk	8.7%	2
Rock climbing	4.3%	1
Sandbox	0.0%	0
None of the above	**47.8%**	**11**
Other (please specify)	**47.8%**	**11**
	answered question	**23**
	skipped question	**11**

69. What was the one most popular non-aeronautical attraction at the event?

	Response Percent	Response Count
Carnival	0.0%	0
Carshow	13.0%	3
Children's play area	8.7%	2
Circus	0.0%	0
Concert	4.3%	1
Fun-run (5K, 10K, etc.)	0.0%	0
Medical services (cholesterol screening, massage, etc.)	0.0%	0
Military equipment	4.3%	1
Motorcycle show	0.0%	0
Simulators	8.7%	2
None of the above	**47.8%**	**11**
Other (please specify)	13.0%	3
	answered question	**23**
	skipped question	**11**

70. Was a Safety/Security Plan developed for the event?

	Response Percent	Response Count
Yes	**69.6%**	**16**
No	30.4%	7
	answered question	**23**
	skipped question	**11**

71. Was a website specifically developed to market/promote the event?

	Response Percent	Response Count
Yes	39.1%	9
No	**60.9%**	**14**
	answered question	**23**
	skipped question	**11**

72. Which of the following types of sponsors are typically secured in support of the event? [Check all that apply.]

	Response Percent	Response Count
Car dealers	31.8%	7
Newspaper	36.4%	8
Other retailers	40.9%	9
Radio	18.2%	4
Television	13.6%	3
Overall show	4.5%	1
None of the above	18.2%	4
Other (please specify)	**50.0%**	**11**
	answered question	**22**
	skipped question	**12**

73. For which of the following attractions/services are sponsors typically secured? [Check all that apply.]

	Response Percent	Response Count
Children's play/activity area	18.2%	4
Entertainment	18.2%	4
Fuel	**40.9%**	**9**
Flight operations	13.6%	3
Goodie bags	13.6%	3
Logistics	18.2%	4
Pilot welcome	9.1%	2
Pilot & VIP lounge	4.5%	1
Pilot breakfast	13.6%	3
Portable toilets	27.3%	6
None of the above	22.7%	5
Other (please specify)	31.8%	7
	answered question	**22**
	skipped question	**12**

74. Which of the following are typically part of the sponsorship program? [Check all that apply.]

	Response Percent	Response Count
Admission passes/tickets	19.0%	4
Banner placements	**47.6%**	**10**
Brochure ads	33.3%	7
Exhibit space	38.1%	8
PA announcements	38.1%	8
Parking passes	14.3%	3
Performer rides	4.8%	1
Poster ads	33.3%	7
Program ads	28.6%	6
Website presence	19.0%	4
None of the above	23.8%	5
Other (please specify)	14.3%	3
	answered question	**21**
	skipped question	**13**

75. Which of the following is typically included in the sponsorship proposal? [Check all that apply.]

	Response Percent	Response Count
Audience demographics	18.2%	4
Attendee demographics	27.3%	6
Basic facts	**54.5%**	**12**
Contact information	**54.5%**	**12**
Examples of marketing materials	22.7%	5
Photographs	27.3%	6
Scheduled performers	22.7%	5
Site map	18.2%	4
Sponsorship package pricing	31.8%	7
None of the above	36.4%	8
Other (please specify)	4.5%	1
	answered question	**22**
	skipped question	**12**

76. If an admission fee was charged, what dollar amounts were charged for each of the following

Advance Purchase

	0	$5 or less	$5.01 to $10	$10.01 to $15.00	$15.01 to 20.00	$20.01 to 25.00
Adult	**75.0% (3)**	0.0% (0)	0.0% (0)	25.0% (1)	0.0% (0)	0.0%
Senior	**75.0% (3)**	0.0% (0)	25.0% (1)	0.0% (0)	0.0% (0)	0.0%
Child	**75.0% (3)**	0.0% (0)	25.0% (1)	0.0% (0)	0.0% (0)	0.0%

On-Site

	0	$5 or less	$5.01 to $10	$10.01 to $15.00	$15.01 to 20.00	$20.01 to 25.00
Adult	**75.0% (6)**	0.0% (0)	0.0% (0)	0.0% (0)	12.5% (1)	0.0%
Senior	**75.0% (6)**	0.0% (0)	12.5% (1)	0.0% (0)	0.0% (0)	0.0%
Child	**85.7% (6)**	0.0% (0)	14.3% (1)	0.0% (0)	0.0% (0)	0.0%

77. In what ways were revenues measured? [Check all that apply.]

	Response Percent	Response Count
By the hour	0.0%	0
By the day	5.0%	1
By the event	**50.0%**	**10**
None of the above	45.0%	9
	answered question	**20**
	skipped question	**14**

78. What amount of net revenues did the event generate?

	Response Percent	Response Count
Loss	9.5%	2
Break-even	38.1%	8
$1-5,000	**42.9%**	**9**
$5,001-10,000	0.0%	0
$10,001-15,000	0.0%	0
$15,001-20,000	0.0%	0
$20,001-25,000	0.0%	0
$25,001-30,000	0.0%	0
$30,001-35,000	4.8%	1
$35,001-40,000	0.0%	0
$40,001-45,000	0.0%	0
$45,001-50,000	0.0%	0
$50,001-100,000	4.8%	1
More than $100,000	0.0%	0
	answered question	**21**
	skipped question	**13**

79. How were net profits from the event allocated?

	Response Percent	Response Count
Fully retained in-house	31.6%	6
Fully donated	15.8%	3
Partially donated	15.8%	3
Other (please specify)	**42.1%**	**8**
	answered question	**19**
	skipped question	**15**

80. Was the economic impact of the event to the community determined?

	Response Percent	Response Count
Yes	13.6%	3
No	**86.4%**	**19**
	answered question	**22**
	skipped question	**12**

81. What methods are used to limit expenses for the event?

	Response Percent	Response Count
Hold event every other year, rather than annually	4.5%	1
Rely on volunteers	**95.5%**	**21**
Decrease aeronautical attractions	0.0%	0
Decrease non-aeronutical attractions	0.0%	0
Trade tickets/passes for goods/services	22.7%	5
None of the above	0.0%	0
Other (please specify)	13.6%	3
	answered question	**22**
	skipped question	**12**

82. What methods are used to increase revenues for the event?

	Response Percent	Response Count
Increase non-aeronautical attractions	25.0%	5
Increase aeronautical attractions	30.0%	6
Increase food/beverage concessions	25.0%	5
Increase retail goods concessions	10.0%	2
Trade tickets/passes for goods/services	15.0%	3
None of the above	**35.0%**	**7**
Other (please specify)	15.0%	3
	answered question	**20**
	skipped question	**14**

83. Which of the following grants did you receive to help fund the event?

	Response Percent	Response Count
Federal	4.5%	1
State	0.0%	0
Local	4.5%	1
Community	4.5%	1
No grants were received	**86.4%**	**19**
Other (please specify)	4.5%	1
	answered question	**22**
	skipped question	**12**

84. How much of the event (time and budget) was devoted to aeronautical and non-aeronautical activities?

Percent of Time

	0%	1%-10%	11%-25%	26%-50%	51%-75%	76%-100%
Aeronautical	0.0% (0)	0.0% (0)	0.0% (0)	**36.8% (7)**	10.5% (2)	15.8% (3)
Non-aeronautical	21.4% (3)	14.3% (2)	14.3% (2)	**42.9% (6)**	0.0% (0)	7.1% (1)

Percent of Budget

	0%	1%-10%	11%-25%	26%-50%	51%-75%	76%-100%
Aeronautical	0.0% (0)	6.3% (1)	12.5% (2)	12.5% (2)	12.5% (2)	25.0% (4)
Non-aeronautical	9.1% (1)	**36.4% (4)**	9.1% (1)	18.2% (2)	18.2% (2)	9.1% (1)

85. What "lessons learned" would you be willing to share, especially to an airport considering holding their first aeronautical special event?

	Response Count
	17
answered question	**17**
skipped question	**17**

Abbreviations used without definitions in TRB publications:

A4A	Airlines for America
AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI–NA	Airports Council International–North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
MAP-21	Moving Ahead for Progress in the 21st Century Act (2012)
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials Safety Administration
RITA	Research and Innovative Technology Administration
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation