APPENDIX

I

Selected Aviation Websites

Note: Some (in quotes) descriptions are extracted verbatim from each organization's web site. Web site addresses change from time to time and not all that follows may be current; however, the reader can use a search engine such as Google, Bing, or Yahoo to find any web site no longer current in this list. The library at Daniel Webster College generously provided some of these web sites; web searches located most of them.

1. Overview Sites

These sites contain many links to other sites.

Aviation Reference Desk

http://www.aviationreferencedesk.com/: This is a huge web site of many aviation related links including the following major heading areas: commercial transport, aviation industry news, other world news, business aviation, general aviation, key aviation organizations, weather and travel, aerospace suppliers, defense and space, engineering, and last but not least, aviation enthusiasts. It also has an aviation calendar.

Airweb

http://www.airweb.faa.gov/: This site contains a complete list of all regulatory materials from FAA.

2. FBO Related Sites

Professional Aviation Maintenance

http://www.pama.org/: Aviation maintenance technicians. "Our Mission: To enhance professionalism and recognition of the Aviation Maintenance Technician through communication, education, representation and support—for continuous improvement in aviation safety."

Aircraft Electronics Association

http://www.aea.net/: Its publication, *Avionics News,* may be found at **http://www.aea.net/avionicsnews/.** Its mission is "to be a worldwide self-sustaining organization committed to enhancing the profitability of its members by:

< Providing effective leadership to its members;

- < Facilitating the communications between members and with their various constituent groups;
- < Encouraging members to establish quality processes;
- < Furthering the education of members and their various constituent groups; and
- < Influencing the applicable legislative and regulatory processes."

Aviation Technician Education Council

http://www.atec-amt.org/: It is an organization of Federal Aviation Administration approved Aviation Maintenance Technician schools and supporting industries. ATEC was founded in 1961 to further the standing of FAA approved schools with education and industry, and to promote mutually beneficial relations with all industry and government agencies.

3. FBO Services

FBO Academy

http://www.FBOAcademy.com: The mission of the the FBO Academy is to anticipate and exceed the training needs of every FBO to provide them with the right opportunities that will help them be successful.

http://www.fboweb.com/: This site is an Internet-based tool for anyone interested in aviation. Pilots can access the web site to obtain information and plan their flights, and FBOs can use the site to track flights, attract aircraft to their facilities, and help manage their operations. Charter outfits can use the site to manage their fleet.

National Aircraft Appraisers Association (NAAA)

http://www.plane-values.com/: "This organization is the Trade Association for professional aircraft appraisers. Since 1980 the NAAA has been the Certification entity and has established the standards and Code of Ethics for professional aircraft appraisers in the United States and abroad . . . The NAAA's service is unique. The primary mission of NAAA members is to provide you with a prompt, accurate aircraft appraisal at a reasonable price. The Association's computer software application, extensive database, and standardized method of evaluation, enable our members to appraise your aircraft at its current market value, not the historical value."

Legal Issues

http://topics.law.cornell.edu/: This noncommercial web site covers all aspects of law, including employment law, and offers links to relevant statutes and case law.

4. Government Agencies—Executive Branch

Federal Aviation Administration

http://www.faa.gov/: The Federal Aviation Administration (FAA) is part of the United States Department of Transportation (USDOT) and supervises the operation of the nation's airports and airways, pilot licensing as well as certifying new aircraft production and aircraft maintenance. The site covers information on Aviation Rules and Regulations, Federal Aviation Regulations (FARs), Advisory Circulars, Notice of Proposed Rulemakings (NPRMs). It provides information on aviation safety, FAA organizations, and aviation careers.

http://www.faa.gov/library/: FAA publications including forecasts.

FAA Administrator's Factbook

http://www.faa.gov/about/office_org/headquarters_offices/aba/admin_factbook/: Current statistics on safety, air traffic, airports, airmen, and industry trends.

Federal Aviation Regulations (Title 14 of the Code of Federal Regulations (CFR))

http://www.faa.gov/regulations_policies/: Links to full text of the FARs and other regulatory material.

Transportation Security Administration (TSA)

http://www.tsa.gov/: On November 19, 2001, the President signed into law the Aviation and Transportation Security Act (ATSA), which among other things established a new Transportation Security Administration (TSA) within the Department of Transportation. This Act established a series of challenging but critically important milestones toward achieving a secure air travel system. More broadly however, the ATSA fundamentally changed the way transportation security will be performed and managed in the United States. The continued growth of commercial transportation, tourism, and the world economy depends upon effective transportation security measures being efficiently applied. However, the threat to transportation is not restricted solely to those motivated by political or social concerns. In addition to terrorism, TSA will also work to prevent other criminal acts, regardless of motivation.

> "The ATSA recognized the importance of security for all forms of transportation and related infrastructure elements. This cannot be accomplished by the TSA in isolation and requires strengthened partnerships among Federal, State, and local government officials, and the private sector to reduce vulnerabilities and adopt the best practices in use today. Infrastructure protection of critical assets such as pipelines and more than 10,000 FAA facilities is another key mission of the TSA. Along with rail and highway bridges, many other national assets are critical to our economic and national security and vital for the free and seamless movement of passengers and goods throughout the country."

U.S. Department of Transportation

http://www.dot.gov/: "As stewards of America's transportation system, the U.S. Department of Transportation (USDOT) must remain vigilant in the face of change, and visionary in planning for the future. As former Secretary Coleman said, "our national transportation system is too inextricably linked to external developments and too pervasive in our society to enable us to build for the future without fully evaluating the potential consequences of the decisions we make today." We recognize that the transportation system is about more than concrete, asphalt, and steel; it is about people and their daily lives. It is about their dreams and aspirations, their connection to the economy and to each other—transportation is the tie that binds. And we know that to be effective, it must be international in reach, intermodal in form, intelligent in character, and inclusive in service. As we take stock of the challenges we face, USDOT has embraced a decision making process that ensures the public's interests are served, and that the public is involved in the process. How is this process different than others before it? The key is a tenacious focus on outcomes—beyond inputs, activities, and outputs—and a commitment to measure our performance against the outcome goals we set."

National Aeronautics and Space Administration (NASA)

http://www.nasa.gov/: and **http://www.aeronautics.nasa.gov/events/chicago/gap.htm:** General aviation revolutionized the latent market for personal and travel early in the 21st century. The goal of Advanced General Aviation Transport Experiments (AGATE) project is to support the revitalization of U.S. general aviation, by developing technologies to improve the utility, safety, ease-of-use, reliability, environmental compatibility, and affordability of the next generation of general aviation. The primary focus is single-pilot,

light, fixed-wing personal transportation aircraft, business and commuter aircraft, and rotorcraft.

Through partnerships with industry and the states, the Small Aircraft Transportation System (SATS) project builds on the success of the AGATE and GAP projects, by developing technology that allows small aircraft unlimited access to the 18,000 total landing facilities that serve the vast numbers of communities in the U.S.

National Oceanographic and Atmospheric Administration

http://www.noaa.gov/: NOAA provides data of value to pilots about weather, climate, and related matters.

Bureau of Labor Statistics

http://www.bls.gov/iag/iaghome.htm: Provides national statistics and reports on labor, wage scale, accident and other employment data by industry.

Government Printing Office

http://www.access.gpo.gov/: The Government Printing Office (GPO) keeps America informed. For nearly 140 years, GPO has produced and distributed Federal Government information products. Whether providing public access to government information online, or producing and procuring printed publications, GPO combines conventional technology with state-of-the-art methods for supporting nearly all the information needs of the Congress, federal agencies, and the American public.

Bureau of Transportation Statistics

http://www.bts.gov/: The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) established the Bureau of Transportation Statistics (BTS) for data collection, analysis, and reporting and to ensure the most cost-effective use of transportation-monitoring resources. We strive to increase public awareness of the nation's transportation system and its implications and improve the transportation knowledge base of decision makers.

> "BTS supplements the data collection programs of other agencies and serves as the lead agency in developing and coordinating intermodal transportation statistics. We are unique in that we are the only federal agency to combine statistical analysis, mapping, and transportation analysis under one roof. We are committed to quality, accessibility, usability, and objectivity in transportation statistics and to respect for your privacy."

National Transportation Library:

http://ntl.bts.gov/: Full-text government documents from the U.S. Department of Transportation. Information is available on the following topics: Air Traffic Control, Airports and Facilities, Aviation Economics and Finance, Aviation Energy and Environment, Aviation Planning and Policy, Aviation Safety/Airworthiness, Aviation Laws and Regulations, Aviation Human Factors, Newsletters & Journals.

National Association of State Aviation Officials

http://www.nasao.org/: Founded in 1931, the National Association of State Aviation Officials (NASAO) is one of the most senior aviation organizations in the United States, predating even the Federal Aviation Administration's predecessor, the Civil Aeronautics Authority. The states first established NASAO to ensure uniformity of safety measures, to standardize airport regulations and develop a truly national air transportation system responsive to local, state, and regional needs. Since 1931, NASAO has been unique among aviation advocates. Unlike special interest groups, which speak for a single type of aeronautical activity or a narrow band of the rich spectrum of the American aviation community, NASAO represents the men and women in state government

aviation agencies, who serve the public interest in all 50 states, Guam and Puerto Rico. These highly skilled professionals are full partners with the federal government in the development and maintenance of the safest and most efficient aviation system in the world.

NASAO members organize, promote, and fund a wide variety of aviation programs across the nation. All states develop statewide aviation system plans and airport capital improvement plans. The states invest about $450 million annually in planning, operations, infrastructure development, maintenance, and navigational aids at ~5,000 airports across the country. Many states also build, own, and operate their own airports. Each year, state aviation officials conduct safety inspections at thousands of public-use airports. Countless aviation activities including statewide meetings, airport symposiums, pilot safety seminars, and aviation education forums are also organized annually by the states.

The role of state programs and the responsibilities of the state aviation agencies are expanding. In 1996, Congress made the state block grant program permanent. As a result, nine states are already fully responsible for directly administering federal Airport Improvement Program funds. In an era of declining federal budgets and downsized government programs, the states' involvement in aviation is growing.

Contains selected links to other sites.

International Civil Aviation Organization

http://www.icao.int/: ICAO, focused on the airlines, has the following aims:

- < Standardization of CNS/ATM
- < Regional planning
- < Facilitation
- < Economics
- < Technical co-operation for development
- < Law
- < Making your airline flight safer

IATA/ICAO Airport Codes Database

http://www.airlinecodes.co.uk/aptcode-search.asp: Searchable database of the International Air Transport Association (IATA) three-letter airport codes and the International Civil Aviation Organization (ICAO) four-letter airport codes and two-letter nationality codes.

5. Government Agencies—Legislative Branch

Government Accountability Office

http://www.gao.gov/: The Government Accountability Office is the investigative arm of Congress. GAO exists to support the Congress in meeting its Constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds, evaluates federal programs and activities, and provides analyses, options, recommendations, and other assistance to help the Congress make effective oversight, policy, and funding decisions.

In this context, GAO works to continuously improve the economy, efficiency, and effectiveness of the federal government through financial audits, program reviews and evaluations, analyses, legal opinions, investigations, and other services. GAO's activities are designed to ensure the executive branch's accountability to the Congress under the Constitution and the government's accountability to the American people. GAO is dedicated to good government through its commitment to the core values of accountability, integrity, and reliability.

National Transportation Safety Board

http://www.ntsb.gov/aviation/aviation.htm and **http://www.ntsb.gov/aviation/stats.htm:** The National Transportation Safety Board oversees safety in all modes of transportation and investigates serious accidents, including all with

fatalities. It makes reports of *probable cause* directly to Congress, issues advisory bulletins about prevention of future such accidents, and publishes accident statistics. See also:

National Transportation Safety Board Aviation Accident Database

http://www.ntsb.gov/ntsb/query.asp: Searchable database of NTSB aviation accident report summaries.

Congressional Committees

http://transportation.house.gov/: The Congressional transportation committees oversee policy and also work with the congressional appropriations committees (see below) to fund the aviation system. See also **http://www.house.gov/transportation/** and **http://appropriations.senate.gov/transportation.cfm.**

Funding for the following federal departments, agencies and programs is under the jurisdiction of the Subcommittee on Transportation. If a federal department, agency or program you're looking for isn't listed here, check the complete list to see which subcommittee has jurisdiction.

- < Amtrak
- < Architectural and Transportation Barriers Compliance Board
- < Bureau of Transportation Statistics
- < Federal Aviation Administration (Transportation)
- < Federal Highway Administration (Transportation)
- < Federal Railroad Administration (Transportation)
- < Federal Transit Administration (Transportation)
- < Interstate Commerce Commission
- < National Transportation Safety Board
- < Office of Commercial Space Transportation (Transportation)
- < Panama Canal Commission
- < Research and Special Programs Administration (Transportation)
- < St. Lawrence Seaway Development Corporation (Transportation)
- < Transportation, Department of (except Maritime Administration)
- < Washington Metropolitan Transit Authority

6. Industry Groups

Alaska Air Carriers Association

http://www.alaskaaircarriers.org/: AACA's mission is to provide safety and educational training and support to their members, and be a facilitator of aviation related information.

Aviation Insurance Association

http://www.aiaweb.org

National Air Transportation Association

http://www.nata.aero/: NATA is the national association of aviation business service providers. Its members provide on-demand air charter, fuel and ground services, aircraft maintenance and pilot training.

Florida Aviation Trades Association

http://www.fata.aero: FATA has been serving Florida's general aviation community since 1946.

General Aviation Manufacturers' Association

http://www.gama.aero/: This is the web site of GAMA, representing aircraft makers and lobbying for their interests.

National Business Aviation Association, Inc.

http://www.nbaa.org/: The NBAA, based in Washington, DC, is a not-for-profit, nonpartisan 501(c) 6 corporation dedicated to the success of the business aviation community. For over 60 years, NBAA has served this community through its leadership efforts at all levels of government and business, both in the United States and worldwide.

The Association represents the aviation interests of nearly 8,000 companies that own or operate general aviation aircraft as an aid to the conduct of their business, or are involved with some other aspect of business aviation. NBAA Member Companies earn annual revenues approaching $5 trillion dollars—a number that is about half the U.S. gross domestic product—and employ more than 19 million people worldwide.

Helicopter Association International

http://www.rotor.com/: The not-for-profit trade association for the civil helicopter industry. Its mission is "to provide our membership with services that directly benefit their operations and to advance the civil helicopter industry by providing programs to enhance safety, encourage professionalism, and promote the unique societal contributions made by the rotary flight industry."

American Association of Airport Executives

http://www.aaae.org/: AAAE is the largest professional organization for airport executives in the world, representing thousands of airport management personnel at public use airports nationwide. The American Association of Airport Executives' primary goal is to assist airport executives in fulfilling their responsibilities to the airports and the communities they serve.

AAAE membership is truly representative of airport management throughout the country. It places equal emphasis on large and small airport concerns, reflecting a membership comprised of executives from large and medium size airports, as well as hundreds of managers from smaller airports used exclusively by general aviation or commuter airlines.

AAAE was founded in 1928 to represent airport management throughout the United States. Each year since its founding, AAAE has held an annual meeting to bring airport managers together to discuss the latest problems and issues facing the industry. In 1954, the annual conference expanded to include exhibitors of airport services, products, and equipment.

The most important event for AAAE, however, was the formal adoption of a professional standards accreditation program in 1954. Since that time, no one has been awarded Accredited Airport Executive (A.A.E.) status without meeting the requirements established by the Board of Directors. Since 1954, AAAE has sponsored a professional Accreditation Program for airport executives, who are affiliate members of AAAE. The professional membership requirements consist of an original management paper on some phase of airport management, a comprehensive written test, and an oral examination on a level comparable to other professional certifications. Upon successful completion of these requirements, the Accredited Airport Executive is admitted to the membership as an executive member and may use the initials A.A.E. after his/her name.

AAAE has members at primary air carrier airports, which enplane 99% of the airline passengers across the nation, as well as at many of the smaller commercial service, reliever and general aviation airports.

National Agricultural Aviation Association

http://www.agaviation.org/: "As the voice of the aerial application industry, NAAA works to preserve aerial application's place in the protection and production of America's food and fiber supply. Aerial application is one of the safest, fastest, most efficient and economical ways to apply pesticides. It is also the most environmentally

friendly tool of modern agriculture. In addition to controlling insects, weeds and diseases that threaten crops, aerial applicators protect human health and our natural resources.

"Aerial applicators are highly trained professionals. Like all Americans, they are concerned with human health, the environment, and performing their job in a responsible manner. NAAA promotes high standards for the industry through flight safety and drift minimization. The Washington DC based National Agricultural Aviation Association, organized in 1967, has more than 1,500 members in the United States and internationally. Membership includes owners of aerial application businesses, pilots, manufacturers of airplanes, engines and equipment, and those in related businesses."

7. Pilot and Aircraft Owner Groups

Aircraft Owners' and Pilots' Association

http://www.aopa.org/: "With a membership base of more than 414,000, or half of all pilots in the United States, AOPA is the largest, most influential aviation association in the world. AOPA has achieved its prominent position through effective advocacy, enlightened leadership, technical competence, and hard work. Providing member services that range from representation at the federal, state, and local levels to legal services, advice, and other assistance, AOPA has built a service organization that far exceeds any other in the aviation community."

Experimental Aircraft Association

http://www.eaa.org/: The Experimental Aircraft Association is one of the largest aviation groups, representing innovative and homebuilt aircraft owners and organizing a national fly-in in Wisconsin as well as regional events at many other airports. **http://www.sportpilot.org/:** is the EAA's Sport pilot and light aircraft web page.

Let's Go Flying

http://www.aopa.org/letsgoflying/: Let's Go Flying! is an AOPA-sponsored program to increase understanding and knowledge about general aviation and to encourage people to learn to fly. Participating Let's Go Flying! flight schools offer introductory flights for a special low rate and Let's Go Flying! runs TV commercials, print ads and a media campaign to let people know about the flights and the reasons to learn to fly.

The Ninety-Nines

http://www.ninety-nines.org/: This international organization of women pilots was founded in 1929 by 99 charter members for "the mutual support and advancement of aviation." Their focus is on all aspects of the role of women in aviation: history, biographies of yesterday's and today's aviators, future prospects, flight instruction, grants and awards, events worldwide. Their Learn to Fly section lists the complete requirements for obtaining a private pilot's license, along with links to further resources.

Federation Aeronautiqe Internationale/ World Air Sports Federation

http://www.fai.org/: FAI, formed in 1905, organizes international record setting and competitions in aviation.

8. Other

Airliners

http://www.airliners.net/: This site claims to have the largest aviation photo database on the Internet. There are over 9,000 photos of commercial airliners, military aircraft, classic and historic airplanes, helicopters, accidents, airplane interiors, and airports. It is searchable by aircraft name, category, airline, and keyword. The site also has aviation statistics, history, and humor.

Air Traffic Control System Command Center (ATCSCC)

http://www.fly.faa.gov/: Displays major airport delays in real time. General departure and arrival delays are displayed as well as delays by destination. Severe weather delays and ground delays are included in this site. There is also a glossary of air traffic management terms and a tour of the offices of the Air Traffic Control System Command Center. Some pages require routing and airport codes to navigate.

AirDisaster

http://www.airdisaster.com/: This site provides information on aircraft accidents and safety. Included are photos, videos, chronologies, and eyewitness reports of air disasters, with links to official reports, a glossary of terms, and a search interface for the Aviation Accident Database of the National Transportation Safety Board (NTSB).

AirNav

http://www.airnav.com/: This site provides free, detailed, regularly updated aeronautical flight planning information for the pilot. It includes airport locations (public, private, and military) in the U.S., detailed runway information, technical and operational information about radio navigation aids and communication frequencies, aviation fuel prices, and a fuel stop planner.

The Aviation Home Page

http://www.avhome.com/: Site has a comprehensive index covering topics such as clubs and organizations, companies and businesses, and classified ads. There is a wealth of information for the aviation enthusiast. The links to art, photography, and poetry are a nice feature. The career and pilot training resources should be especially helpful for the student pilot.

Homebuilt Homepage

http://www.homebuilt.org/: Website for the hobbyist or sport aviator. Gives leads for plans, kits, vendors, and clubs.

Landings

http://www.landings.com/: This site offers everything for the aviation buff, including government links, supplies, services, career assistance, organizations, and companies, etc. Features include a directory for easy use.

NewsDirectory: Magazines: Aviation

http://www.newsdirectory.com/magazine.php?cat=13&sub=87: This is a linked list of aviation journals available online.

U.S. Air Force Factsheets

http://www.af.mil/information/factsheets/index.asp: Detailed fact sheets on individual U.S. Air Force aircraft, weapons, space programs, sub-organizations, and special topics. From the U.S. Air Force News Service.

United States Air Force Museum

http://www.nationalmuseum.af.mil/: A large searchable collection of historic information and photos about aircraft and missile from aviation's early years; WWII; Korean war; modern and space flight; presidential aircraft; engines; weapons; equipment; uniforms; and more. There are special archives and galleries; an index of manufacturers; related links; and trivia quizzes.

WASP: Women Airforce Service Pilots

http://www.wingsacrossamerica.us/: This site provides information about the 1,074 women who flew military planes during WWII. There are

official documents, records, and statistics, along with audio clips of speeches and many photographs. A special focus on Jacqueline Cochran, Nancy Harkness Love, and General Hap Arnold is included. Links to other sites and a bibliography of printed sources will help further research. Lesson plans, interactive quizzes, and an opportunity to e-mail or chat with a retired WASP make this site unique. Search engine included. Sponsored by Wings Across America.

Women in Aviation International

http://www.wiai.org: The organization's official site devoted to the advancement of women in the field of aviation.

Women In Aviation Resource Center (WIASC)

http://www.women-in-aviation.com: This site provides "educational, historical, and networking resources to empower women involved in all aspects of aviation." However, there are numerous gender-free links to information about weather, air museums, publications, employment, and NASA; live transmissions from the Air Traffic Controls of New York's JFK Airport and Chicago's O'Hare Airport (RealAudio is required); and Hubble Space Telescope's aviation and cyberspace images. The site's author is an aviation historian and writer.

9. Publications

Aero Magazine, Macro-Comm Corp., P.O. Box 38010, Los Angeles, CA 90038. **http://www.boeing.com/commercial/aeromagazine/**

Agricultural Aviation, National Agricultural Aviation Association, Suite 103, 115 D Street, Washington, D.C. 20003. **http://www.agaviation.org/agmag/**

Aircraft Maintenance Technology Magazine, 1233 Janesville Ave., Fort Atkinson, WI 53538. **http://www.amtonline.com/**

AOPA Pilot, 421 Aviation Way, Frederick, MD 21701. **http://www.aopa.org/pilot/**

The Aviation Consumer, P.O. Box 972, Farmingdale, NY 11737. **http://www.aviationconsumer.com/**

Aviation Safety, 1111 East Putnam Avenue, Riverside, CT 06878. **http://www.aviationsafetymagazine.com/**

Aviation Week and Space Technology, Mc-Graw Hill, 1221 Avenue of the Americas, NY, NY 10020. **http://aviationweek.com/**

AvWeb (online only) Publisher Tim Cole. **http://www.avweb.com/**

Flight Global, Reed Business Information, Quadrant House, The Quadrant, Sutton, Surrey, England, SM2 5AS. **http://www.flightglobal.com/**

Flight Training Magazine, 405 Main St., Parkville, MO 64152. **http://flighttraining.aopa.org/**

General Aviation News & Flyer, 5611 76th St., W., Tacoma, WA 98467. **http://www.generalaviationnews.com/**

In Flight USA, PO Box 620447, Woodside, CA 94062. **http://inflightusa.com/**

Pilot's Web, Pilot's Web editorial (631) 736–6643. **http://www.pilotsweb.com/**

Plane and Pilot, Werner & Werner Corp., Ventura Boulevard, Suite 201, Encino, CA 91436. **http://planeandpilotmag.com/**

Professional Pilot, West Building, Washington National Airport, Washington D.C. 20001. **http://www.propilotmag.com/**

Sport Aviation, Experimental Aircraft Association, Wittman Airfield, Oshkosh, WI 54903–2591. **http://www.eaa.org/sportaviation/**

Customer Service for the following publications can be reached via email at the addresses below:

Aviation Week and Space Technology:
avwcustserv@cdsfulfillment.com

Business and Commercial Aviation:
buccustserv@cdsfulfillment.com

Overhaul and Maintenance:
omtcustserv@cdsfulfillment.com

World Aerospace Database:
wadcustserv@cdsfulfillment.com

APPENDIX

11

Summary of Federal Aviation Regulations

Code of Federal Regulations 14 Parts 1 to 200, Aeronautics and Space

Introduction

Fixed base operators and their customers are generally very familiar with certain federal aviation regulations (FARs), such as Part 61, which deals with pilot licensing, and Part 135, which covers air taxi operations. However, some of those in aviation are unaware of the details of some of the other FARs, which number over 200 in all. The code of federal regulations is republished each year to reflect any updates and revisions. What follows here is a list of the FARs by title and number.

Subchapter A—Definitions

Part	
1	Definitions and abbreviations

Subchapter B—Procedural Rules

11	General rule-making procedures
13	Investigative and enforcement procedures

Subchapter C—Aircraft

21	Certification procedures for products and parts
Part	
23	Airworthiness standards: normal, utility, and acrobatic category airplanes
25	Airworthiness standards: transport category airplanes
27	Airworthiness standards: normal category rotorcraft
29	Airworthiness standards: transport category rotorcraft
31	Airworthiness standards: manned free balloons
33	Airworthiness standards: aircraft engines
35	Airworthiness standards: propellers
36	Noise standards: aircraft type and airworthiness certification
39	Airworthiness directives
43	Maintenance, preventive maintenance, rebuilding, and alteration
45	Identification and registration marking
47	Aircraft registration
49	Recording of aircraft titles and security documents
50–59	[Reserved]

Subchapter D—Airmen

60 [Reserved]
61 Certification: Pilots and flight instructors
63 Certification: Flight crew members other than pilots

Part

65 Certification: Airmen other than flight crew members
67 Medical standards and certification

Subchapter E—Airspace

71 Designation of Federal airways, area low routes, controlled airspace, and reporting points
73 Special use airspace
75 Establishment of jet routes and area high routes
77 Objects affecting navigable airspace

Chapter F—Air Traffic and General Operating Rules

91 General operating and flight rules
93 Special air traffic rules and airport traffic patterns
95 IFR altitudes
97 Standard instrument approach procedures
99 Security control of air traffic
101 Moored balloons, kites, unmanned rockets and unmanned free balloons
103 Ultralight vehicles
105 Parachute jumping
107 Airport security
108 Airplane operator security
109 Indirect air carrier security

Subchapter G—Air Carriers, Air Travel Clubs and Operators for Compensation or Hire: Certification and Operations

121 Certification and operations: Domestic, flag, and supplemental air carriers and commercial operators of large aircraft
125 Certification and operations: Airplanes having a seating capacity of 20 or more passengers or a maximum payload capacity of 6,000 pounds or more
127 Certification and operations of scheduled air carriers with helicopters
129 Operations of foreign air carriers
133 Rotorcraft external-load operations
135 Air taxi operators and commercial operators

Part

137 Agricultural aircraft operations
139 Certification and operations: Land airports serving CAB—certificated air carriers

Subchapter H—Schools and Other Certificated Agencies

141 Pilot schools
143 Ground instructors
145 Repair stations
147 Aviation maintenance technician schools
149 Parachute lofts

Subchapter I—Airports

150 Airport noise compatibility planning
151 Federal aid to airports
152 Airport aid program
153 Acquisition of U.S. land for public airports
154 Acquisition of U.S. land for public airports under the Airport and Airway Development Act of 1970
155 Release of airport property from surplus property disposal restrictions
157 Notice of construction, alteration, activation, and deactivation of airports
159 National capital airports
169 Expenditure of Federal funds for nonmilitary airports or air navigation facilities thereon

Subchapter J—Navigational Facilities

171 Non-federal navigation facilities

Subchapter K—Administrative Regulations

183 Representatives of the Administrator
185 Testimony by employees and production of records in legal proceedings, and service of legal process and pleadings
187 Fees
189 Use of Federal Aviation Administration communications system

Part
191 Withholding security information from disclosure under the Air Transportation Security Act of 1974

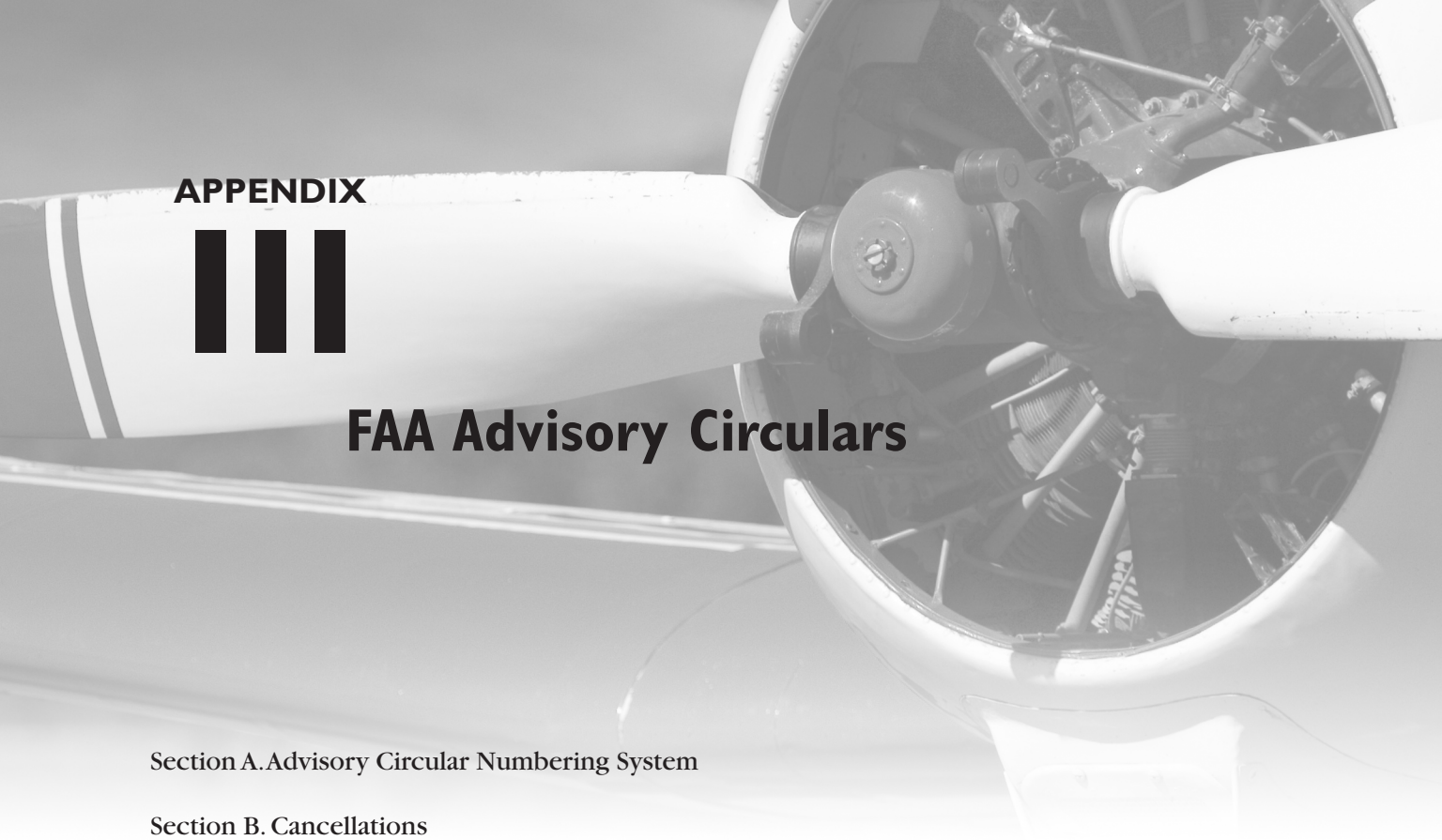
Subchapter L—M [Reserved]

Subchapter N—War Risk Insurance

Part
198 War risk insurance

Subchapter O—Aircraft Loan Guarantee Program

199 Aircraft loan guarantee program



APPENDIX

III

FAA Advisory Circulars

Section A. Advisory Circular Numbering System

Section B. Cancellations

Section C. Numerical Section

Section A
Advisory Circular Numbering System

The Circular Numbering System

1. General. The advisory circular numbers relate to the FAR subchapter titles and correspond to the Parts, and when appropriate, to the specific sections of the Federal Aviation Regulations.

2. General and specific subject numbers. The subject numbers and related subject areas are as follows:

General Subject Number(l)	Specific Subject Number(2)	Subject
00		**GENERAL**
	1	Definitions and Abbreviations
10		**PROCEDURAL RULES**
	11	General Rule-Making Procedures
	13	Investigation and Enforcement Procedures
20		**AIRCRAFT**
	21	Certification Procedures for Products and Parts
	23	Airworthiness Standards: Normal, Utility, and Acrobatic Category Airplanes
	25	Airworthiness Standards:Transport Category Airplanes
	27	Airworthiness Standards: Normal Category Rotorcraft
	29	Airworthiness Standards:Transport Category Rotorcraft
	31	Airworthiness Standards: Manned Free Balloons
	33	Airworthiness Standards:Aircraft Engines
	34	Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes
	35	Airworthiness Standards: Propellers
	36	Noise Standards:Aircraft Type and Airworthiness Certification
	39	Airworthiness Directives
	43	Maintenance, Preventive Maintenance, Rebuilding and Alteration
	45	Identification and Registration Marking
	47	Aircraft Registration
	49	Recording of Aircraft Titles and Security Documents
60		**AIRMEN**
	61	Certification: Pilots and Flight Instructors
	63	Certification: Flight Crewmembers Other Than Pilots
	65	Certification:Airmen Other Than Flight Crewmembers
	67	Medical Standards and Certification
70		**AIRSPACE**
	71	Designation of Federal Airways,Area Low Routes, Controlled Airspace, and Reporting Points
	73	Special Use Airspace
	75	Establishment of Jet Routes and Area High Routes
	77	Objects Affecting Navigable Air-space
90		**AIR TRAFFIC AND GENERAL OPERATING RULES**
	91	General Operating and Flight Rules
	93	Special Air Traffic Rules and Airport Traffic Patterns
	95	IFR Altitudes
	97	Standard Instrument Approach Procedures
	99	Security Control of Air Traffic
	101	Moored Balloons, Kites, Unmanned Rockets and Unmanned Free Balloons
	103	Ultralight Vehicles
	105	Parachute Jumping
	107	Airport Security
	108	Airplane Operators Security
	109	Indirect Air Carrier Security
119		**CERTIFICATION:AIR CARRIERS AND COMMERCIAL OPERATORS**
120		**AIR CARRIERS, AIR TRAVEL CLUBS, AND OPERATORS FOR COMPENSATION OR HIRE: CERTIFICATION AND OPERATIONS**
121		Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft
	125	Certification and Operations: Airplanes Having a Seating Capacity of 20 or More Passengers or a Maximum Payload Capacity of 6,000 Pounds or More

General Subject Number(1)	Specific Subject Number(2)	Subject
	127	Certification and Operations of Scheduled Air Carriers with Helicopters
	129	Operations of Foreign Air Carriers
	133	Rotorcraft External-Load Operations
	135	Air Taxi Operators and Commercial Operators
	137	Agricultural Aircraft Operations
	139	Certification and Operations: Land Airports Serving CAB-Certificated Air Carriers
140		**SCHOOLS AND OTHER CERTIFICATED AGENCIES**
	141	Pilot Schools
	143	Ground Instructors
	145	Repair Stations
	147	Aviation Maintenance Technician Schools
150		**AIRPORT NOISE COMPATIBILITY PLANNING**
	151	Federal Aid to Airports
	152	Airport Aid Program
	155	Release of Airport Properly from Surplus Property Disposal Restrictions
	156	State Block Grant Pilot Program
	157	Notice of Construction, Alteration, Activation, and Deactivation of Airports
	158	Passenger Facility Charges
	159	National Capital Airports
	159/10	Washington National Airport
	159/20	Dulles International Airport
	161	Notice and Approval of Airport Noise and Access Restrictions
	169	Expenditures of Federal Funds for Nonmilitary Airports or Air Navigational Facilities Thereon
170		**NAVIGATIONAL FACILITIES**
	170	Establishment and Discontinuance Criteria for Airport Traffic Control Tower Facilities
	171	Non-Federal Navigation Facilities
180		**ADMINISTRATIVE REGULATIONS**
	183	Representatives of the Administrator
	185	Testimony by Employees and Production of Records in Legal Proceedings
	187	Fees
	189	Use of Federal Aviation Administration Communication System.
190		**WITHHOLDING SECURITY INFORMATION**
	191	Withholding Security Information from Disclosure Under the Air Transportation Security Act of 1974
	198	Aviation Insurance Program
210		**FLIGHT INFORMATION**
	211	Aeronautical Charts and Flight Information Publications
	212	Publication Specification: Charts and Publications
400		**COMMERCIAL SPACE TRANSPORTATION**
	440	Financial Responsibility

1–Based on FAR Subchapter Titles (Excluding the 210 series).
2–Based on FAR Part Titles (Excluding the 210 series).

3. Within the General Subject Number Areas, specific selectivity in advisory circular mail lists is available corresponding to the applicable FAR Parts. For example: under the 60 general subject area, separate mail lists for advisory circulars issued in the 61, 63, 65, or 67 series are available. An AC numbered "60" goes to all numbers in the 60 series: 61, 63, 65, 67.

Breakdown of Subject Numbers

When the volume of circulars in a series warrants a subsubject breakdown, the general number is followed by a slash and a subsubject number. Material in the 150 series, Airports, is issued under the following subsubjects:

150/5000 Airport Planning.
150/5020 Noise Control and Compatibility Planning for Airports.
150/5100 Federal-aid Airport Program.
150/5150 Surplus Airport Property Conveyance Programs.
150/5190 Airport Compliance Program.
150/5200 Airport Safety–General.
150/5210 Airport Safety Operations (Recommended Training, Standards, Manning).
150/5220 Airport Safety Equipment and Facilities.
150/5230 Airport Ground Safety System.
150/5240 Civil Airports Emergency Preparedness.

150/5325	Influence of Aircraft Performance on Aircraft Design.
150/5335	Runway, Taxiway, and Apron Characteristics.
150/5340	Airport Visual Aids.
150/5345	Airport Lighting Equipment.
150/5360	Airport Buildings.
150/5370	Airport Construction.
150/5380	Airport Maintenance.
150/5390	Heliports.

4. Individual circular identification numbers. Each circular has a subject number followed either by a dash and a consecutive number (135-15) or a period with a specific FAR section number, followed by a dash and a consecutive number (135.169-2) identifying the individual circular. This consecutive number is not used again in the same subject series. Revised circulars have a letter A, B, C, etc., after the consecutive number to show complete revisions. Changes to circulars have Chg. 1, Chg. 2, Chg. 3, etc., after the identification number on pages that have been changed. The date on a revised page is changed to the date of the Change transmittal.

Section B
Cancellations

Cancellations are listed below. The suffix following an AC number indicates a revision to that AC and cancels the previous edition. For example, AC 00-6A replaces and cancels AC 00-6; AC 00-7D replaces and cancels AC 00-7C. ACs may also be canceled without replacement by the issuing office or by other ACs or publications.

20-5G Plane Sense (1998; AFS-630) by FAA-H-8083-19 Plane Sense—General Aviation Information (8/23/99; AFS-630)
21-39 Aircraft Certification Systems Evaluation Program (8/31/94; AIR-230) by AIR-230,6/7/00

The following 5 ACs are canceled by AC 23-16, Powerplant Guide for Certification of Part 23 Airplanes (9/21/99; ACE-111)
23.909-1 Installation of Turbochargers in Small Airplanes with Reciprocating Engines, 2/3/86
23.955-1 Substantiating Flow Rates and Pressures in Fuel Systems of Small Airplanes, 6/10/85
23.959-1 Unusable Fuel Test Procedures for Small Airplanes, 1/14/85
23.961-1 Procedures for Conducting Fuel System Hot Weather Operation Tests, 1/14/87
23.1011-1 Procedures for Determining Acceptable Fuel/Oil Ratio as Required by FAR 23.101 l(b).11/14/83

The following 10 ACs are canceled by AC 23-17, Systems and Equipment Guide for Certification of Part 23 Airplanes (4/25/00; ACE-111)
23.679-1 Control System Locks, 7/25/85
23.683-1 Control System Operations Test, 9/25/84
23.701-1 Flap Interconnection in Part 23 Airplanes, 11/13/92
23.729-1 Landing Gear Doors and Retraction Mechanism, 3/26/84
23.733-1 Tundra Tires, 10/10/96
23.807-2 Doors Between Pilot's Compartment and Passenger Cabin in Small Airplanes, 9/22/83
23.807-3 Emergency Exits Openable From Outside for Small Airplanes, 12/30/86
23.841-1 Cabin Pressurization Systems in Small Airplanes, 12/30/86
23.1305-1 Installation of Fuel Flowmeters in Small Airplanes with Continuous-Flow, Fuel-Injection, Reciprocating Engines, 12/21/84
23.1329-2 Automatic Pilot System Installation in Part 23 Airplanes, 3/4/91

25-14 High Lift and Drag Devices (5/4/88; ANM-112) by 25-22 Certification of Transport Category Airplane Mechanical Systems (3/14/00, ANM-112)
60-14 Aviation Instructor's Handbook (7/7/76; AFS-630) by FAA-H-8083-9 Aviation Instructor's Handbook (11/99; AFS-630)
60-23 Conversion to the Computer Based Airmen Knowledge Testing Program (6/17/94; AFS-630) by AFS-1, 2/8/00

60-25C Reference Materials and Subject Matter Knowledge Codes for Airman Knowledge Testing (8/23/99; AFS-630) by 60-25D, Reference Materials and Subject Matter Knowledge Codes for Airman Knowledge Testing (6/9/00; AFS-630)
60-26A Announcement of Availability: Flight Standards Service Airman Testing and Training Information (2/26/97; AFS-630) by 60-26B, Announcement of Availability: Flight Standards Service Training and Testing Information (6/8/00; AFS-630)
60-27 Announcement of Availability: Changes to Practical Test Standards (11/18/96; AFS-630) by 60-26B, Announcement of Availability: Flight Standards Service Airman Training and Testing Information (6/8/00; AFS-630)
61-12M Student Pilot Guide (7/27/94; AFS-630) by FAA-H-8083-27 Student Pilot Guide (6/15/99; AFS-630)
61-13B Basic Helicopter Handbook (1978; AFS-630) by FAA-H-8083-21 Rotorcraft Flying Handbook (2/10/00; AFS-630)
61-21A Flight Training Handbook (1980; AFS-630) by FAA-H-8083-3 Airplane Flying Handbook (8/23/99; AFS-630)
61-47A Use of Approach Slope Indicators for Pilot Training (3/26/79; AFS-840) by AFS-1, 11/17/98
61-101 Presolo Written Test (4/21/89; AFS-630) by FAA-H-8083-9 Aviation Instructor's Handbook (11/99; AFS-630)
61-103 Announcement of Availability: Industry-Developed Transition Training Guidelines for High Performance Aircraft (5/23/89; AFS-840) by AFS-1, 9/24/99
61-112 Flight and Ground Instructor Knowledge Test Guide (12/1/94; AFS-630) by FAA-G-8082-7 Flight and Ground Instructor Knowledge Test Guide (6/1/99; AFS-630)
61-113 Airline Transport Pilot, Aircraft Dispatcher, and Flight Navigator Knowledge Test Guide (2/9/94; AFS-630) by FAA-G-8082-1 Airline Transport Pilot, Aircraft Dispatcher, and Flight Navigator Knowledge Test Guide (6/1 /99; AFS-630)
61-114 Commercial Pilot Knowledge Test Guide (2/9/95; AFS-630) by FAA-G-8082-5 Commercial Pilot Knowledge Test Guide (6/1/99; AFS-630)
61-115 Positive Exchange of Flight Controls (3/10/95; AFS-630) by FAA-H-8083-9 Aviation Instructor's Handbook (11/99; AFS-630)
61-116A Announcement of Cancellation: FAA-S-8081-11, Flight Instructor-Lighter-Than-Air (Balloon/Airship) Practical Test Standards (1/27/97; AFS-630) by AFS-1, 2/8/00
61-117 Recreational Pilot and Private Pilot Knowledge Test Guide (5/3/95; AFS-630) by FAA-G-8082-17 Recreational Pilot and Private Pilot Knowledge Test Guide (6/1/99; AFS-630)
61-119 Instrument Rating Knowledge Test Guide (5/3/95; AFS-630) by FAA-G-8082-13 Instrument Rating Knowledge Test Guide (6/1/99; AFS-630)
63-1 Flight Engineer Knowledge Test Guide (6/8/95) by FAA-G-8082-9 Flight Engineer Knowledge Test Guide (6/1/99; AFS-630)
65-19G Inspection Authorization Knowledge Test Guide (8/14/96; AFS-630) by FAA-G-8082-11 Inspection Authorization Knowledge Test Guide (7/13/99; AFS-630)
65-27 Parachute Rigger Knowledge Test Guide (6/16/95; AFS-630) by FAA-G-8082-15 Parachute Rigger Knowledge Test Guide (7/28/99; AFS-630)

65-28 Aviation Mechanic General, Powerplant, and Airframe Knowledge Test Guide (8/3/95; AFS-630) by FAA-G-8082-3 Aviation Mechanic General, Airframe, and Powerplant Knowledge Test Guide (8/23/99; AFS-630)
65-29 Conversion of the Inspection Authorization Knowledge Tests to the Computer Based Airmen Knowledge Testing Program (10/29/96; AFS-630) by AFS-1, 2/8/00
67-1 Medical Information for Air Ambulance Operators (3/4/74; AAM-620) by AAM-1, 9/3/99
91-23A Pilot's Weight and Balance Handbook (6/9/77; AFS-630) by FAA-H-8083-1 Aircraft Weight and Balance Handbook (8/23/99; AFS-630)
150/5000-3T Address List for Regional Airports Divisions and Airports District/Field Offices (9/12/97; ARP-10) by ARP-10 10,22/99 (Internet access)
1 50/5000-4B Announcement of Availability: Airport Research and Technical Reports (2/11/85; AAS-100) byAAS-100,7/15/99

Additions
Additions to this checklist appear in Section C. The airplane symbol preceding an AC number identifies new or revised ACs issued since the last edition of this checklist. Revised ACs are identified by a letter of the alphabet following the AC number.

Section C
Numerical List of Advisory Circulars

Important Notice

This Advisory Circular Checklist, AC 00-2, is no longer sent automatically to addresses on free advisory circular mailing lists. Persons not now receiving AC 00-2 but who wish to receive it must specifically request to be placed on the AC 00-2 mailing list (see para. 5 for ordering information). Up to ten copies may be sent to any one address. Persons receiving this edition of AC 00-2 need not request AC 00-2 mailing list service as they have already been transferred to the new list.

General

Subject No. 00

00-1.1
Government Aircraft Operations
(4/19/95) (AFS-220)
Provides guidance on whether particular government aircraft operations are public aircraft or civil aircraft operations under the new statutory definition of "public aircraft." This AC contains FAA's intended application of key terms in the new statutory definition. For operations that have lost public aircraft status under the new law, information is provided on bringing those operations into compliance with FAA safety regulations for civil aircraft and provides information on applying for an exemption.

00-2.13
Advisory Circular Checklist
(6/15/00) (APF-100)
Transmits the revised checklist of current FAA advisory circulars as of June 15, 2000.

00-6A
Aviation Weather
(3/3/75) (AFS-400)
Provides an up-to-date and expanded text for pilots and other flight operations personnel whose interest in meteorology is primarily in its application to flying.
SN 050-007-00283-1.
$8.50 Supt. Docs.

00-7D
State and Regional Disaster Airlift (SARDA) Planning
(9/15/98) (ADA-20)
Provides officials with guidance to access and utilize a broad range of aviation resources within the state, when needed to support civil emergency operations.

00-24B
Thunderstorms
(1/20/83) (AFS-400)
Describes the hazards of thunderstorms to aviation and offers guidance to help prevent accidents caused by thunderstorms.

00-25
Forming and Operating a Flying Club
(3/24/69) (AFS-800)
Provides preliminary information that will assist anyone or any group of people interested in forming and operating a flying club.

00-30B
Atmospheric Turbulence Avoidance
9/9/97 (AFS-400)
Describes to pilots, aircrew members, dispatchers, and other operations personnel the various types of clear air turbulence (CAT) and some of the weather patterns associated with it. Also included are "Rules of Thumb" for avoiding or minimizing CAT encounters.

00-31A
United States (US). National Aviation Standard for the VOR/DME/TAC Systems
(9/20/82) (ANN-130)
Informs the aviation community of the establishment and content of the United States (US). National Aviation Standard for the Very High Frequency Omnidirectional Radio Range (VOR)/Distance Measuring Equipment(DME)/Tactical Air Navigation (TACAN) Systems.

00-33B
Nickel-Cadmium Battery Operational, Maintenance, and Overhaul Practices (7/9/97) (AFS-400)
Provides guidelines for more reliable nickel-cadmium battery operation through proper operational and maintenance practices, and has been reissued to include reconditioning information.

00-34A
Aircraft Ground Handling and Servicing (7/29/74) (AFS-340)
Contains information and guidance for the servicing and ground handling of aircraft.

00-41B
FAA Quality Control System Certification Program (10/10/89) (ASU-430)
Describes the Federal Aviation Administration (FAA) Quality Control System Certification Program and the mechanics of implementation. It is intended for guidance and information only.

00-44II
Status of the Federal Aviation Regulations (4/97) (AGC-200)
This circular sets forth the current publication status of Federal Aviation Regulations (FARs), any Changes issued to date, and provides a price list, and ordering instructions.

00-45D
Aviation Weather Services (2/7/95) (AFS-400)
Supplements AC 00-6A, Aviation Weather, in that it explains the weather service in general and the use and interpretation of reports, forecasts, weather maps, and prognostic charts in detail.
SN 050-007-01082-6
$12.00 Supt. Docs.

00-46D
Aviation Safety Reporting Program (2/26/97) (ASY-300)
Describes the Federal Aviation Administration's Aviation Safety Reporting program which utilizes the National Aeronautics and Space Administration (NASA) as a third party to receive and analyze Aviation Safety Reports. This cooperative safety reporting program invites users of the National Aviation System to report to NASA actual or potential discrepancies and deficiencies involving the safety of aviation operations.

00-54
Pilot Windshear Guide (11/25/88) (AFS-200)
Communicates key windshear information relevant to flightcrews. Appendix 1 of this advisory circular is the Pilot Windshear Guide, which is only one section of the two-volume Windshear Training Aid.

00-55
Announcement of availability: FAA Order 8130.21A, Procedures for Completion and Use of FAA Form 8130, Airworthiness Approval Tag (1/19/94) (AIR-200)
Announces availability of subject order.

00-56
Voluntary Industry Distributor Accreditation Program (9/5/96) (AFS-350)
Describes a system for the voluntary accreditation of civil aircraft parts distributors on the basis of voluntary industry oversight and provides information that may be used for developing accreditation programs. The FAA believes such programs will assist in alleviating lack of documentation and will improve traceability.

00-57
Hazardous Mountain Winds and Their Visual Indicators (9/10/97) (AND-720)
Assists pilots involved in aviation operations to diagnose the potential for severe wind events in the vicinity of mountainous areas. It provides information on preflight planning techniques and on in-flight evaluation strategies for avoiding destructive turbulence and loss of aircraft control. Pilots, dispatchers, air traffic controllers, and other who must deal with weather

phenomena and the routing of aircraft will benefit from the information contained in this advisory circular.

00-58
Voluntary Disclosure Reporting Program
(5/4/98)(AFS-350)
Replaces AC 120-56. Provides information and guidance that may be used by certificate holders, production approval holders, indirect air carriers, and foreign air carriers disclosing apparent violations to the FAA of regulations in 14 CFR parts 21, 107,108, 109, 121,125, 129 (security program violations only), 133, 135, 137, 141, 142, 145, & 147 under the self-disclosure program.The procedures outlined in this AC can be applied to all of the above.The procedures and practices outlined in this AC cannot be applied to those who are required to report failures, malfunctions and defects under 14 CFR part 21.3 and do not make those reports in the timeframe required by the regulation.

00-59
Integrating Helicopter and Tiltrotor Assets Into Disaster Relief Planning
(11/98) (AND-710)
Provides guidance to state and local emergency relief planners on integrating helicopters and tilt-rotor aircraft into disaster relief planning efforts.

00-60
North American Free Trade Agreement and Specialty AIR Services Operations
(11/9/99) AFS-805)
Provides information for aircraft operators from the United States who plan to conduct specialty air services (SAS) operations in Canada or Mexico in accordance with the North American Free Trade Agreement. It also provides information for aircraft operators from Canada or Mexico who plan to conduct SAS operations in the U.S.
SN 050-007-01281-1
$2.50 Supt. Docs.

Procedural

Subject No. 10

11-2A
Notice of Proposed Rulemaking Distribution System
(7/26/84) (ABC-100)
Provides the public with information relative to participation in the FAA rulemaking process and explains the availability of the Notices.

13-1
Aviation Safety Inspector Work Site Access
(12/28/95) (AFS-120/AFS-300)
Explains the requirement and use of FAA Form 8000-39,Aviation Safety Inspector Identification Card, and its relation to the Aviation Safety Credential, FAA Form 110A.This AC is issued primarily to acquaint airport authorities and the airport security personnel with the FAA Form 8000-39 and the aviation safety inspector's need to be in restricted areas of the airport to perform official FAA business.

Aircraft

Subject No. 20

20-18A
Qualification Testing of Turbo-jet Engine Thrust Reversers
(3/16/66) (ANE-100)
Discusses the requirements for the qualification of thrust reversers and sets forth an acceptable means of compliance with the tests prescribed in Federal Aviation Regulations, Part 33, then run under nonstandard ambient air conditions.

20-24B
Qualification of Fuels, Lubricants, and Additives
(12/20/85) (ANE-110)
Provides acceptable procedures for approving the qualification of fuels, lubricants, and additives for use in certificated aircraft engines.

20-27D
Certification and Operation of Amateur-Built Aircraft
(6/22/90) (AIR-230)
Provides guidance and information relative to the airworthiness certification and operation of amateur-built aircraft.

20-29B
Use of Aircraft Fuel Anti-icing Additives
(1/18/72) (ANE-100)
Provides information on the use of anti-icing additives PFA-55MB and Mil-I-27686 as an acceptable means of compliance with the FARs that require assurance of continuous fuel flow under conditions where ice may occur in turbine aircraft fuel systems.

20-30B
Aircraft Position Light and Anti-collision Light Installation
(7/20/81) (AIR-120)
Sets forth acceptable means, but not the only means, of showing compliance with the Federal Aviation Regulations (FAR) applicable to installed position lights and anti-collision lights.

20-32B
Carbon Monoxide (CO) Contamination in Aircraft—Detection and Prevention
(11/24/72) (ACE-110)
Provides information on the potential dangers of carbon monoxide contamination from faulty engine exhaust systems or cabin heaters of the exhaust gas heat exchanger type.

20-33B
Technical Information Regarding Civil Aeronautics Manuals 1, 3, 4a,4b, 5, 6, 7, 8, 9, 13 and 14
(5/1/75) (AIR-100)
Advises the public that policy information contained in the subject Civil Aeronautics Manuals may be used in conjunction with specific sections of the Federal Aviation Regulations.

20-34D
Prevention of Retractable Landing Gear Failures
(8/8/80) (AFS-340)
Updates statistical information related to landing accidents involving aircraft with retractable landing gear and suggests procedures to minimize those accidents.

20-35C
Tie-Down Sense
(7/12/83) (AFS-340)
Provides updated information of general use on aircraft tie-down techniques and procedures.

20-36S
Index of Articles (Materials, Parts, Processes and Appliances) Certified Under the Technical Standard Order System (AFS-610)
AC canceled 11/99. Available in Access database as TSOA listing at **http://av-info.faa.gov**

20-37D
Aircraft Metal Propeller Maintenance
(8/15/89) (AFS-340)
Provides information and suggested procedures to increase service life and to minimize blade failures of metal propellers.

20-38A
Measurement of Cabin Interior Emergency Illumination in Transport Airplanes
(2/8/66) (ANM-100)
Outlines acceptable methods, but not the only methods, for measuring cabin interior emergency illumination on transport airplanes, and provides information as to suitable measuring instruments.

20-40
Placards for Battery-Excited Alternators Installed in Light Aircraft
(8/11/65) (ACE-100)
Sets forth an acceptable means of complying with placarding rules in Federal Aviation Regulations 23 and 27 with respect to battery excited alternator installations.

20-41A
Substitute Technical Standard Order (TSO) Aircraft Equipment
(4/5/77) (AIR- 120)
Sets forth an acceptable means for complying with rules governing aircraft equipment installations in cases involving the substitution of technical standard order equipment for functionally similar TSO approved equipment.

20-42C
Hand Fire Extinguishers for use in Aircraft
(3/7/84) (ACE-110)
Provides methods acceptable to the Administrator for showing

compliance with the hand fire extinguisher provisions in Parts 25, 29, 91, 121, 125, 127, and 135 of the FAR and provides updated general information.

20-43C
Aircraft Fuel Control
(10/20/76) (AFS-340)
Alerts the aviation community to the potential hazards of inadvertent mixing or contamination of turbine and piston fuels, and provides recommended fuel control and servicing procedures.

20-44
Glass Fiber Fabric for Aircraft Covering
(9/3/65) (ACE-100)
Provides a means, but not the sole means, for acceptance of glass fiber fabric for external covering of aircraft structures.

20-45
Safetying of Turnbuckles on Civil Aircraft
(9/17/65) (ACE-100)
Provides information on turnbuckle safety methods that have been found acceptable by the FAA during past aircraft type certification programs.

20-47
Exterior Colored Band Around Exits on Transport Airplanes
(2/8/66) (ANM-100)
Sets forth an acceptable means, but not the only means, of complying with the requirement for a 2-inch colored band outlining exits required to be operable from the outside on transport airplanes.

20-48
Practice Guide for Decontaminating Aircraft
(5/5/66) (AFS-330)
The title is self-explanatory.

20-52
Maintenance Inspection Notes for Douglas DC-6/7 Series Aircraft (Consolidated Reprint. Includes Change 1).
(8/24/67) (AFS-310)
Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of DC-6/7 series aircraft.

20-53A
Protection of Aircraft Fuel Systems Against Fuel Vapor Ignition Due to Lightning
(4/12/85) (ACE-111)
Provides information and guidance concerning an acceptable means, but not the only means, of compliance with Parts 23 or 25 of the Federal Aviation Regulations (FAR) applicable to preventing ignition of fuel vapors due to lightning.

20-56A
Marking of TSO-C72b Individual Flotation Devices
(4/1/75) (AIR-120)
Outlines acceptable methods for marking individual flotation devices which also serve as seat cushions.

20-57A
Automatic Landing Systems (ALS)
(1/12/71) (ANM-110)
Sets forth an acceptable means of compliance, but not the only means, for the installation approval of automatic landing systems in transport category aircraft which may be used initially in Category II operations. Approval of these aircraft for use under such conditions will permit the accumulation of data for systems which may be approved for Category IIIa in the future.

20-59
Maintenance Inspection Notes for Convair 240, 340/440, 240T, and 340T Series Aircraft
(2/19/69) (AFS-330)
Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of Convair 240, 340/440, 240T, and 340T series aircraft.

20-59, Chg.1
(8/24/72)
Provides additional material for Convair Models 240 and 600/240D; Models 340/440 and 640/340D/440D series aircraft maintenance inspection programs.

20-60
Accessibility to Excess Emergency Exits
(7/18/68) (ANM-110A)
Sets forth acceptable means of compliance with the "readily accessible" revisions in the Federal Aviation Regulations dealing with excess emergency exits.

20-62D
Eligibility, Quality, and Identification of Aeronautical Replacement Parts
(5/24/96) (AFS-340)
Provides information and guidance for use in determining the quality, eligibility and traceability of aeronautical parts and materials intended for installation on U.S. type-certificated products and to enable compliance with the applicable regulations.

20-64
Maintenance Inspection Notes for Lockheed L-188 Series Aircraft
(8/1/69) (AIR-3)
Describes maintenance inspection notes which can be used for the maintenance support of certain structural parts of Lockheed L-188 series aircraft.

20-64, Chg.1
(10/26/73)
20-65
U.S. Airworthiness Certificates and Authorizations for Operation of Domestic and Foreign Aircraft
(8/11/69) (AIR-200)
Provides general information and guidance concerning issuance of airworthiness certificates for U.S. registered aircraft, and issuance of special flight authorizations for operation in the United States of foreign aircraft not having standard airworthiness certificates issued by the country of registry.

APPENDIX

IV

Aviation Business Marketing Suggestions

Tailor your marketing efforts to the specific needs of your customers. Doctors, farmers, businesspeople, college students, and homemakers all have different interests.

Stress aviation's value to the community: total payroll, total taxes paid, unusual services performed.

50 Marketing Suggestions

1. Series of interviews (newspaper, radio, TV) with local prominent citizen/flyers on "Why I Fly."
2. Interesting vacation or family trips taken by local aviators could be publicized.
3. "Create" news from the preparation efforts for an open house. Examples: painting or refurbishing your buildings (How many gallons of paint? How many worker hours? Who is doing the painting?); polishing up your planes for display; your staff meeting to discuss plans, and so on. Hire a photographer to take photos.
4. Identify local newspeople/pilots and involve them in developing aviation promotions.
5. Schedule a cross-country competitive flight—a round-robin course, fuel stop and touch down points. The winner determined on the basis of time and fuel economy.
6. Fly your mayor to visit the mayor of an adjacent town to invite him or her to an aviation activity on your airport. Take along a newspaper or TV representative.
7. Provide free flight instruction to a local radio celebrity or public figure.
8. Erect a banner or streamer across a busy intersection in the downtown area or neighborhood shopping center for your open house.
9. Arrange a helicopter rescue demonstration in cooperation with your local hospital.
10. Plan a day honoring the oldest active pilot in your city, county, or state.
11. Working through a local supply source, arrange to "fly in" the refreshments for your (or some other) aviation activity.
12. Consider a planned group flight. Dawn patrols, breakfast flights, fly-ins have all been used successfully.

13. Plan a "March on the Shopping Center" where you supply posters, banners, pennants to turn the whole center into a promotion.
14. Get employees involved in the program by talking to their outside professional and social groups.
15. Join other operators in selecting a "Ms. or Mr. Aviation" from among local pilots. After he or she is selected, go after newspaper and broadcast publicity—"Head Table Guest" appearances at local business luncheons, dinners, and so forth.
16. Consider displaying a new aircraft in a bank lobby, shopping mall, department store, city park, or parking lot. (Arrange for security and salespeople).
17. Offer a special price on a flight instruction program given as a high school or college graduation present.
18. Don't forget the traditional "penny-a-pound rides" as a means of getting people to an open house.
19. Offer free flight instruction to the high school student who submits the best essay on "Why I'd like to learn to fly"; publicize the contest and winner.
20. Hold a weekday open house just for women. Get any local 99's or local women pilots to hostess and give demonstration rides. Announce through women's clubs, garden clubs, church groups, and so on; invite the media.
21. When distributing invitations to aviation activities, distribute them where people are: downtown on a busy street corner, outside a local movie as it lets out, at drive-ins, at restaurants, at other types of activities.
22. Consider a "teaser" advertising program on billboards and newspapers. Give part of the message initially, and build upon it later.
23. Share the proceeds of contests and programs with charity or public service groups in order to get them working with you, promoting aviation activities.
24. Tourist or traveler guide published in the area? "What's going on" column in the newspaper? Be sure to get your dates listed with them.
25. Develop an "adult education course" on aviation and offer through a local school.
26. Get a senior high school class, a Boy Scout Troop, or other organization to sell tickets in advance of a promotion in return for a share in the proceeds.
27. If you have a local resort with a landing strip and a good restaurant, arrange a "Fly to Lunch" special. You sell special meal tickets that cover the cost of transportation and meal. Both you and the resort owner promote and benefit.
28. Place your advertisements in a different place—try the society page, the financial page, or maybe even next to the obituary column.
29. Contact local Air National Guard, Air Reserve, and Naval Air Reserve regarding static military aircraft displays and fly-bys. Include opportunity for recruiting booths.
30. Free shuttle bus to your special event from some large shopping center or congregation points.
31. Consider special interest groups. Special activities for doctors, undertakers, salespeople, executives.
32. Get a radio or TV personality to do a remote broadcast from your lounge or line.
33. Try weeknight aviation activities. Consider "Moonlight Air Rides" to see the lights.
34. Get a local women's store or department store to conduct a fashion show in your hangar. Arrange a backdrop of cleaned and polished planes. Consider a drawing for free air rides.
35. For open houses and large crowds, identify everything in your facility with signs and explanation cards. Consider a mimeographed "Guide to a Walking Tour" so visitors can know what they should see.

36. A winter time (bad weather) activity: a series of movies on flying to keep interest up. May use a school facility or a restaurant's private dining room. Should consider light refreshments.
37. For public activities make your premises attractive: clean up, paint as needed, wear uniforms and jackets, have floral arrangements in office and lounge.
38. Hire a high school or veterans' band or drum and bugle corps for music at special programs.
39. Get a youth group to offer $1.00 car washes on your ramp while people visit the facility; publicize in advance.
40. Try ten-minute simulator "rides" for twenty-five cents.
41. At various professional programs and meetings display pilot aids and accessories. Have someone available to explain their use.
42. Make your lounge or ready room available to bridge groups.
43. Arrange for or provide babysitting service for flying parents.
44. Sponsor a photo contest—your airport, aircraft, or facility is the subject. Winner receives a number of free flying lessons.
45. Introductory business flights to the businessperson who has to travel during the week. He or she feels the convenience and discovers how easy it would be to learn to fly.
46. Consider a special program for flying farmers. Suggest that they each bring a non-flyer.
47. Develop a "trial order" package to promote air cargo shipments. Invite shipping agent or traffic manager to "ride the trip" with you.
48. Work with hospitals and doctors in developing an air ambulance service. Demonstrate with a trial run.
49. Get involved in an air education program with the local high school or junior college.
50. Develop a package of ideas to keep graduates of your flight schools in touch and proud of the association they have with you.

Additional Tips

- Host regular meetings with films or slides to spark interest.
- Produce brochures and mail-outs to provide a regular source of information.
- Obtain periodic special speakers on key aviation topics to speak at your FBO.

APPENDIX

V

Aviation Management Audit

Aviation Management Audit

A Comprehensive Organizational Audit

Management Audit For Aviation Organizations

A systematic comprehensive organization review to be used by aviation managers in analyzing, evaluating and developing their business

Developed by:
John D. Richardson, Ph.D.

Introduction

The management audit is a systematic, checklist approach to the analysis of your organization, its functions, operations, and decisions. The audit reviews your whole business, as well as the separate components.

Just as a healthy person will go to his or her physician for a periodic check-up, managers can use the audit as a means of determining the condition of their business. It becomes the means for conducting a systematic, critical and unbiased review and appraisal. The main purpose is to help the manager better the position of his or her company; to improve the overall health of the organization.

There are three major steps in this audit:

1. The compilation of your business data, and the completion of the checklist.
2. The critical review, analysis, and evaluation of all information obtained by the audit.
3. Determining future action required to improve the health and position of the company.

The benefit derived from conducting an audit is directly related to the attitude of the participant. In order to maximize this benefit, you are encouraged to:

1. Consider each item in the audit seriously, thoughtfully, and with a view to the future.
2. Accept that every item may not apply 100 percent to your situation, but look for the value in each topic.
3. Make the audit a useful self-appraisal tool, sharing ideas and views when appropriate.

In order to make the audit a valuable part of your plan for the future, you are encouraged to use the following procedure in completing this booklet:

1. Complete the entire management audit, answering each question with as much objectivity as possible.
2. Next, start at the beginning and review your answers. Assign a plus (+) or minus (-) for each item you feel is a major strength or deficiency in your organization.
3. Complete the summary and evaluation sheet, list those areas in which you would like to initiate some action, and assign priorities to accomplish selected goals.
4. Establish future dates for reviewing the audit and determining your progress.
5. Follow through with additional audits on an annual basis.

It should be remembered that while the audit is comprehensive, it is only suggestive. The audit will not do the thinking for you. It compares your organization relative to a standard or to other organizations. You must then evaluate your findings and determine your action.

Can You??

- Set aside time to review the audit
- Have someone else take those incoming calls
- Review each item carefully and deliberately
- Remember, it's your business and your future you are evaluating

Contents

Part I—Management Functions Audit

Major concern should be focused upon the top-level managerial guidance provided the organization. Are the key management functions of planning, organizing, directing, and controlling being carried out? What is the status of long-range plans?

Management Functions

A. Planning

	Circle Answer	Evaluation (+) (–)
1. Do you regularly set aside time for planning?	**Yes / No**	**(+) / (–)**
2. Have you made a specific effort to set objectives for your organization?	**Yes / No**	**(+) / (–)**
3. List your current objectives:		
_____		
_____		
_____		
_____		
_____		
_____		
_____		
4. Are your objectives:		
a. definite	**Yes / No**	**(+) / (–)**
b. clear-cut	**Yes / No**	**(+) / (–)**
c. written	**Yes / No**	**(+) / (–)**
d. attainable	**Yes / No**	**(+) / (–)**
5. Are objectives understood by those involved in their attainment?	**Yes / No**	**(+) / (–)**
6. Are objectives accepted by those involved in their attainment?	**Yes / No**	**(+) / (–)**
7. Are your objectives current?	**Yes / No**	**(+) / (–)**
a. What is the date you last devoted time to listing objectives in writing?	_____	
b. Are your objectives responsive to change?	**Yes / No**	**(+) / (–)**
8. Do you make a specific effort to forecast future conditions?	**Yes / No**	**(+) / (–)**

Part II—Operations Audit

This portion of the audit is concerned with those activities primarily operational in nature.

Line Operations

Includes that portion of the business aimed at the incoming customer: the meeting, parking, and services of the aircraft.

	Circle Answer	Evaluation (+) (–)
1. Is your flight line visible and identified to incoming aircraft?	**Yes / No**	**(+) / (–)**
2. Is your flight line operational (easy to understand by the transient)?	**Yes / No**	**(+) / (–)**
3. Do tower personnel know the services offered by your business?	**Yes / No**	**(+) / (–)**
4. Can the tower direct the transient to your place of business?	**Yes / No**	**(+) / (–)**
5. Do you use radio assistance?		
a. for incoming planes?	**Yes / No**	**(+) / (–)**
b. for line personnel?	**Yes / No**	**(+) / (–)**
6. Do you use vehicles to assist incoming aircraft?	**Yes / No**	**(+) / (–)**
7. Do you provide training to line personnel on:		
a. aircraft servicing	**Yes / No**	**(+) / (–)**
b. appearance	**Yes / No**	**(+) / (–)**
c. attitude	**Yes / No**	**(+) / (–)**
d. local services	**Yes / No**	**(+) / (–)**
e. sales	**Yes / No**	**(+) / (–)**
8. Have you planned for line maintenance?	**Yes / No**	**(+) / (–)**
9. What courtesy services are available?		
a. line vehicle	**Yes / No**	**(+) / (–)**
b. luggage cart	**Yes / No**	**(+) / (–)**
c. courtesy car	**Yes / No**	**(+) / (–)**
d. refreshments	**Yes / No**	**(+) / (–)**

Part III—Facility Audit

The land, physical facilities, and major equipment.

Facilities

	Circle Answer	Evaluation (+) (–)
1. Are your facilities:		
a. self-owned?	**Yes / No**	**(+) / (–)**
b. leased?	**Yes / No**	**(+) / (–)**
2. Is your lease for:		
a. one year?	**Yes / No**	**(+) / (–)**
b. two years?	**Yes / No**	**(+) / (–)**
c. five years?	**Yes / No**	**(+) / (–)**
d. ten years?	**Yes / No**	**(+) / (–)**
e. fifteen years?	**Yes / No**	**(+) / (–)**
f. twenty or more years?	**Yes / No**	**(+) / (–)**
3. Is your lease with:		
a. airport commission?	**Yes / No**	**(+) / (–)**
b. city board?	**Yes / No**	**(+) / (–)**
c. county supervisors?	**Yes / No**	**(+) / (–)**
d. private owner?	**Yes / No**	**(+) / (–)**
e. other _____		
4. You obtained assistance during lease negotiation from:		
a. lease manual	**Yes / No**	**(+) / (–)**
b. lawyer	**Yes / No**	**(+) / (–)**
c. aviation consultant	**Yes / No**	**(+) / (–)**
d. none	**Yes / No**	**(+) / (–)**
e. other _____		
5. Your lease payments are:		
a. annual cash payments?	**Yes / No**	**(+) / (–)**

Part IV—Marketing Audit

This part deals with the many activities involved in the total marketing effort of the organization.

Market Facts

That necessary information required for the planning and development of an aggressive marketing program.

	Circle Answer	Evaluation (+) (–)
1. Do you have an overall plan for collecting market facts?	**Yes / No**	**(+) / (–)**
2. Is this plan in writing?	**Yes / No**	**(+) / (–)**
3. Was a proper market survey made when the business started?	**Yes / No**	**(+) / (–)**
4. If not, should a market survey be made now?	**Yes / No**	**(+) / (–)**
5. Have the basic sources of market survey data been studied?	**Yes / No**	**(+) / (–)**
6. Does the population growth, new competition, or change in competitor methods justify new ways of serving the market?	**Yes / No**	**(+) / (–)**
7. Is the major problem of your business a lack of sales?	**Yes / No**	**(+) / (–)**
8. What has been the trend in your sales in recent years?		
a. rapid rise	**Yes / No**	**(+) / (–)**
b. steady increase	**Yes / No**	**(+) / (–)**
c. about level	**Yes / No**	**(+) / (–)**
d. declining	**Yes / No**	**(+) / (–)**
9. What factors have been determined as responsible for the trend in sales?		
10. Have you identified your trading area?	**Yes / No**	**(+) / (–)**
11. Has the character of the population in your trading area changed (aside from growth or decline)?	**Yes / No**	**(+) / (–)**
12. Has this change affected sales?	**Yes / No**	**(+) / (–)**
13. Does the future for your company, in your market, look:		
a. excellent	**Yes / No**	**(+) / (–)**
b. good	**Yes / No**	**(+) / (–)**

Part V—Human Resources Audit

The personnel in an organization should be considered its greatest asset. As such, the various programs dealing with personnel management become most important.

Staffing

The process of identifying human resource needs and providing for the steady flow of qualified personnel.

	Circle Answer	Evaluation (+) (–)
1. Do you have a firm procedure to follow in identifying human resource needs?	**Yes / No**	**(+) / (–)**
2. Do you have a personnel plan that is derived from the overall business plan?	**Yes / No**	**(+) / (–)**
3. Do you use a budget as part of your personnel planning process?	**Yes / No**	**(+) / (–)**
4. For the majority of employee positions:		
a. do you use job descriptions?	**Yes / No**	**(+) / (–)**
b. do you utilize employee specifications?	**Yes / No**	**(+) / (–)**
5. List the recruiting techniques you use:		
_____		
_____		
_____		
6. Do you use:		
a. application blanks	**Yes / No**	**(+) / (–)**
b. weighted application blanks	**Yes / No**	**(+) / (–)**
c. interviewer's checklist	**Yes / No**	**(+) / (–)**
d. employment history form	**Yes / No**	**(+) / (–)**
e. education history form	**Yes / No**	**(+) / (–)**
f. military service form	**Yes / No**	**(+) / (–)**
g. request for information from references	**Yes / No**	**(+) / (–)**
h. request for medical examination	**Yes / No**	**(+) / (–)**
i. test score profile	**Yes / No**	**(+) / (–)**
j. contract of employment	**Yes / No**	**(+) / (–)**

Part VI—Administration Audit

Administration includes many key areas and becomes the focal point for most organizational activities.

Insurance

Every business is faced with many risks, ranging from minor to catastrophic. Managing these risks calls for an understanding of insurance principles and the selection of desired coverage.

	Circle Answer	Evaluation (+) (–)
1. Has management truly analyzed all the major risks to which the company is exposed?	**Yes / No**	**(+) / (–)**

2. What protection (risk reduction or risk transfer) has been provided against each of the risks?

Risk	Protection
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. Is self-insurance appropriate for your business?	**Yes / No**	**(+) / (–)**

4. What risks are being absorbed?

a. _____

b. _____

c. _____

5. Why?

a. _____

b. _____

c. _____

6. Are there any recommendations for reducing risks or getting protection more economically?	**Yes / No**	**(+) / (–)**

Part VII—Information Systems

The manager needs a continuous flow of data to advise him or her of the organization's progress and to enable him or her to control its direction toward desired objectives.

Organization

A key element is the recognition of the need for the organization of information.

	Circle Answer	Evaluation (+) (–)
1. Have you systematically organized the information flow on your business activity?	**Yes / No**	**(+) / (–)**
2. Does your information system cover:		
a. money?	**Yes / No**	**(+) / (–)**
b. personnel?	**Yes / No**	**(+) / (–)**
c. material?	**Yes / No**	**(+) / (–)**
3. Does your information system:		
a. provide an accurate, thorough picture of operating results?	**Yes / No**	**(+) / (–)**
b. permit quick comparison of current data with budgeted goals?	**Yes / No**	**(+) / (–)**
c. provide a quick comparison of current data with prior years' operating results?	**Yes / No**	**(+) / (–)**
d. reveal all possible employee frauds, thefts, waste, and record-keeping errors?	**Yes / No**	**(+) / (–)**
e. provide the necessary data for the prompt filing of required reports?	**Yes / No**	**(+) / (–)**
f. identify the contribution of each department to the overall organization?	**Yes / No**	**(+) / (–)**
g. provide suitable financial statements for use by management and prospective creditors?	**Yes / No**	**(+) / (–)**
4. Do you periodically review all procedures, records, forms, and reports that are part of your information system?	**Yes / No**	**(+) / (–)**
5. Are your procedures, records, forms, and reports producing the required information at the lowest cost?	**Yes / No**	**(+) / (–)**

Money

The information system should cover the movement of money into and out of the business, the reason for its movement and its availability.

6. Do you have a complete accounting system in operation?	**Yes / No**	**(+) / (–)**

Part VIII—Finance Audit

Financial skill technically plays a major part in the operation and development of a business. A sound information system is a prerequisite to developing a high level of financial activity.

Financing the Business

A businessperson may obtain money from many sources to finance his or her business. He or she will need to answer questions of how? where? how much? when? why? and cost?

	Circle Answer	Evaluation (+) (–)
1. In financing your business do you use:		
a. equity financing	**Yes / No**	**(+) / (–)**
b. loans	**Yes / No**	**(+) / (–)**
c. trade credit	**Yes / No**	**(+) / (–)**
d. business profits	**Yes / No**	**(+) / (–)**

2. To what sources do you turn for financing?

a. aircraft _____

_____

b. building expansion _____

_____

c. new shop equipment _____

_____

d. receivables _____

_____

_____

3. Are you setting aside adequate reserves for the replacement of depreciating or obsolescent assets?	**Yes / No**	**(+) / (–)**

Financial Analysis

The manager must determine the tools needed for financial analysis, ensure that they are available in his organization and intelligently use them on a regular basis.

4. Have you determined the financial tools you need for the analysis of your business?	**Yes / No**	**(+) / (–)**

APPENDIX

VI

Typical Data Inputs Used as Source Documents for Financial Management

This illustrates some typical business forms and source documents available for use by aviation businesses. For convenience of presentation, they are grouped into three areas; those for operational control purposes, those for marketing purposes, and those for financial purposes. The following pages suggest how these source documents may be organized.

Operational Control Purposes

> Aircraft scheduling books
> Line service slips
> Pilot check-out cards
> Plane cost records
> Applications for training
> Applications for employment
> Aircraft summary sheets
> Unicom log sheets
> Student pilot summary sheet
> Used aircraft appraisal report
> Instructor activity reports
> Contract forms (aerial applicator)
> Aircraft "squawk" card
> Air taxi reports; I, II, III
> Crew data sheets
> Repair tags
> Hangar lease agreement
> Tie-down lease agreement
> Student appointment form
> Flight reports (air taxi)
> Preflight and run-up checks

Marketing Purposes

> Advertising aids
> Student certificates
> Navigation worksheets
> Weather reporting forms
> Stickers and decals
> Aircraft sales calculation sheet
> Guest register
> Prospect worksheet and survey
> Sales department checklist
> Application for credit

Financial Purposes

> Aircraft revenue invoice
> Aircraft rental form
> Time and job ticket
> Time sheet
> Service order form
> Daily summary of shop time
> Invoice (aerial applicator)
> Lease forms

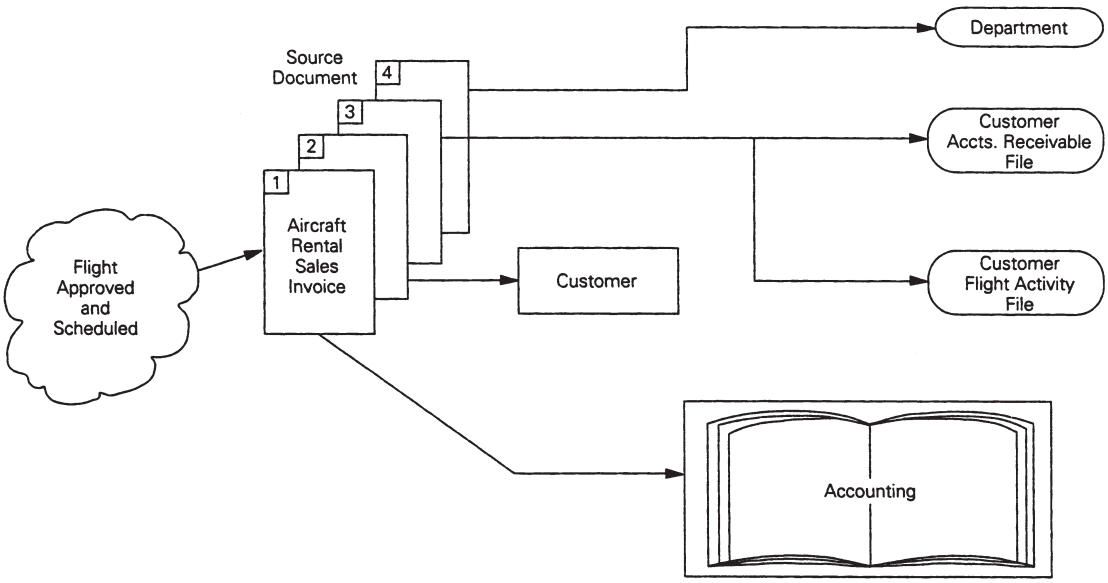
> Charter invoice
> Check forms
> Cash receipts
> Aircraft rental and invoice
> Tach sheets
> Supporting aircraft inventory schedule
> Daily line sales report
> Monthly aircraft report
> Aircraft depreciation record
> Aircraft summary
> Line service invoice
> Aircraft sales invoice
> Parts invoice
> Customer statement
> Bookkeeping system

Financial data of the business information system should move through the organization structure in a logical and efficient manner. The accounting system should receive information on all of the transactions that affect the company resources; and all individuals, both in and out of the organization, should understand the transaction so they can take appropriate action.The following pages contain activity flow charts for the overall system and the basic source documents used in aviation businesses:

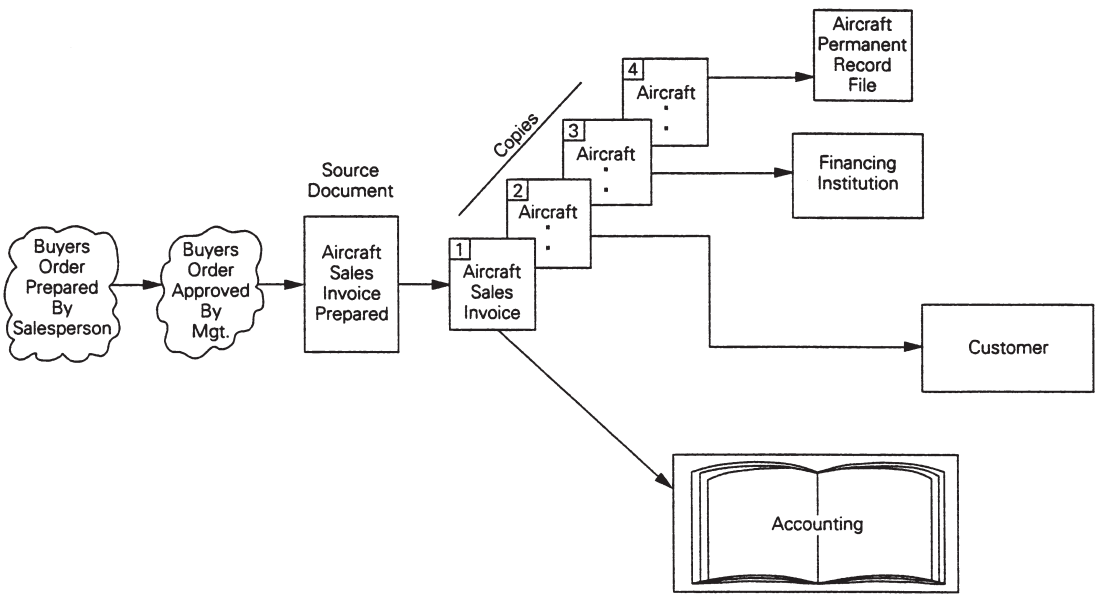
> Aircraft rental and flight instruction
> Aircraft sales
> Aircraft charter
> Line sales
> Parts sales
> Service sales
> Payroll
> Cash disbursements and purchases
> Cash receipts

The flow chart graphically depicts the processing of data regarding each of the principal business activities. Individual organizations will vary, but the same basic steps should be followed.

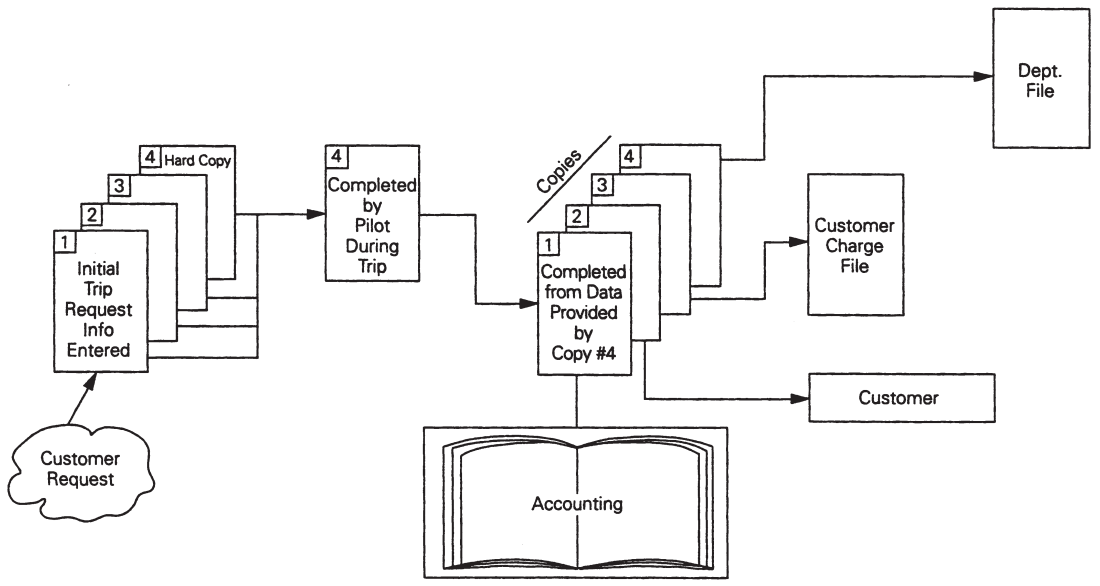
Information System Activity Flow Chart **Aircraft Rental and Flight Instruction**

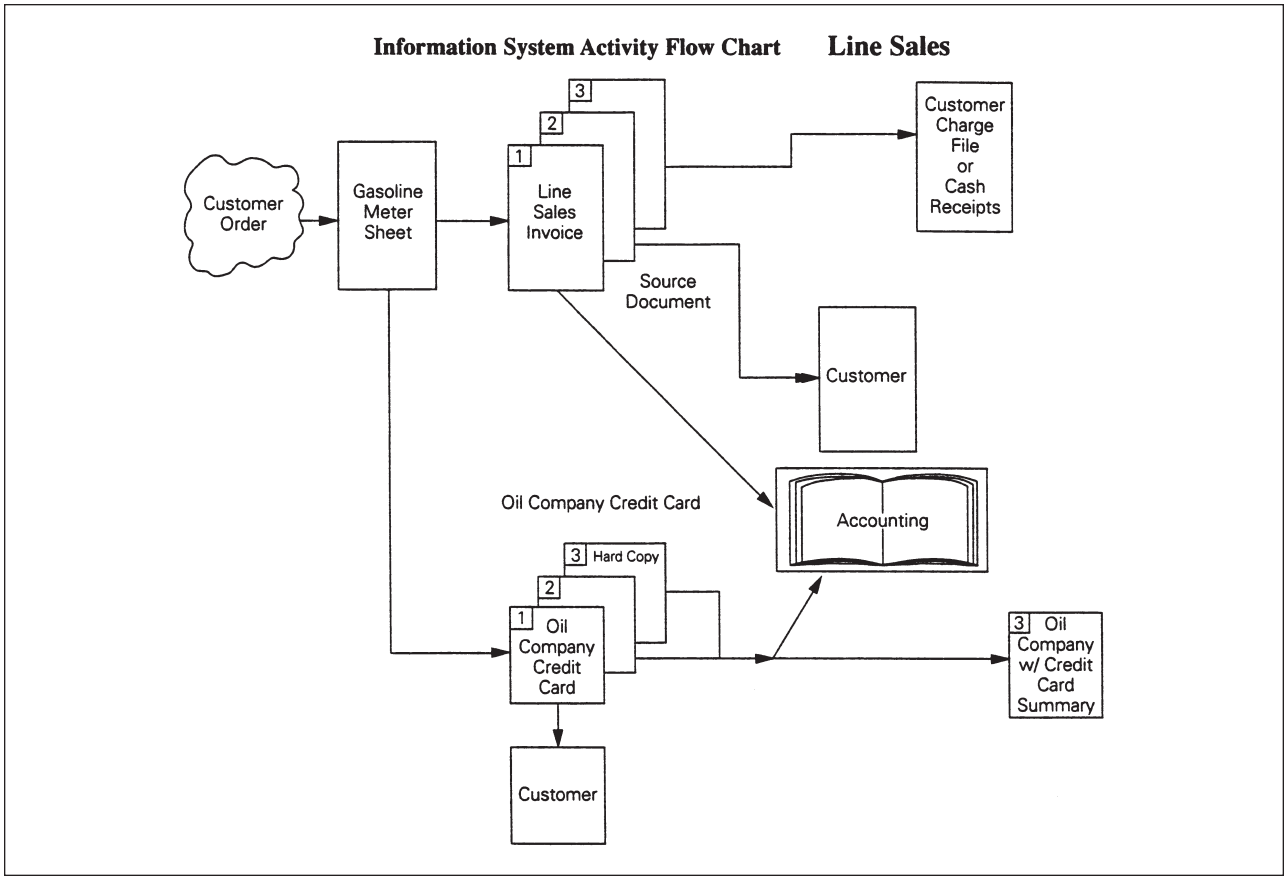


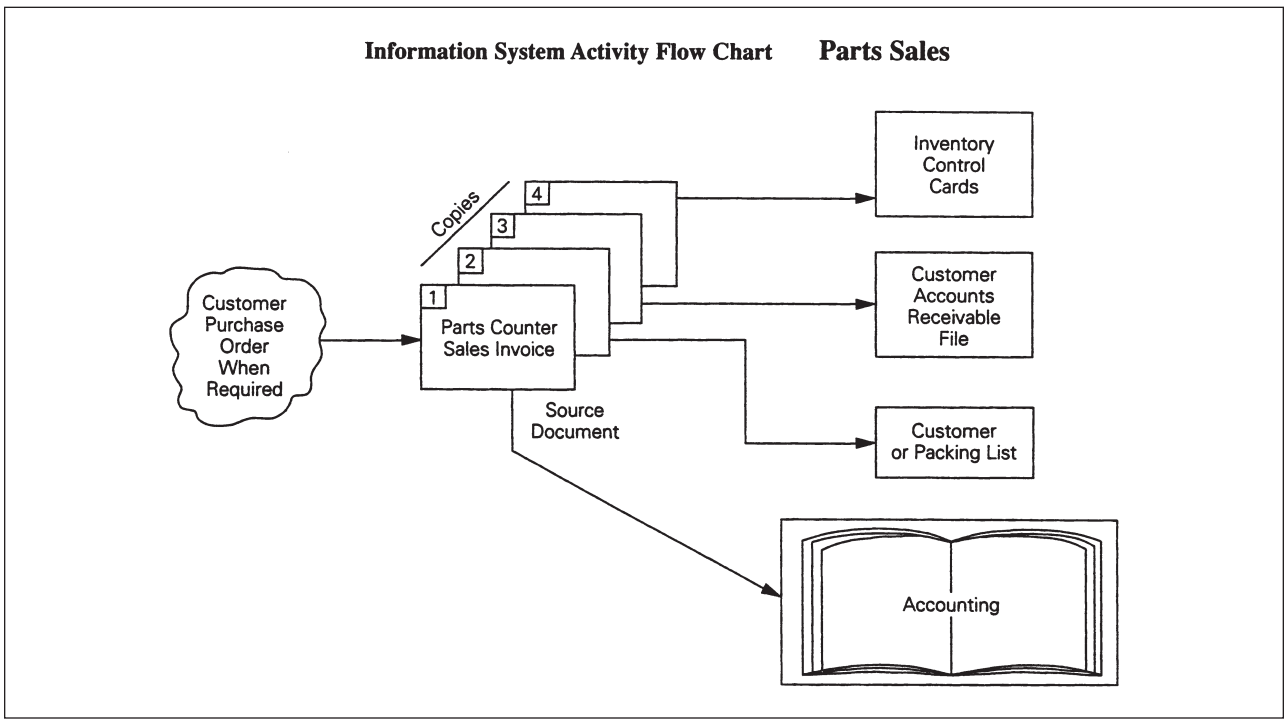
Information System Activity Flow Chart **Aircraft Sales**



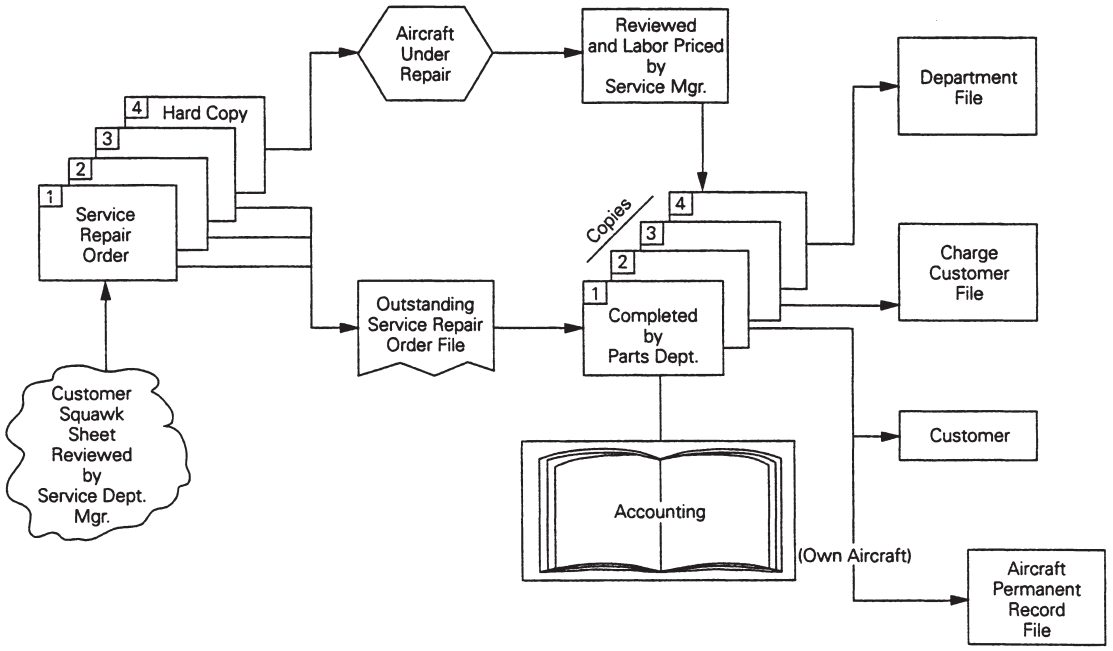
Information System Activity Flow Chart **Aircraft Charter**



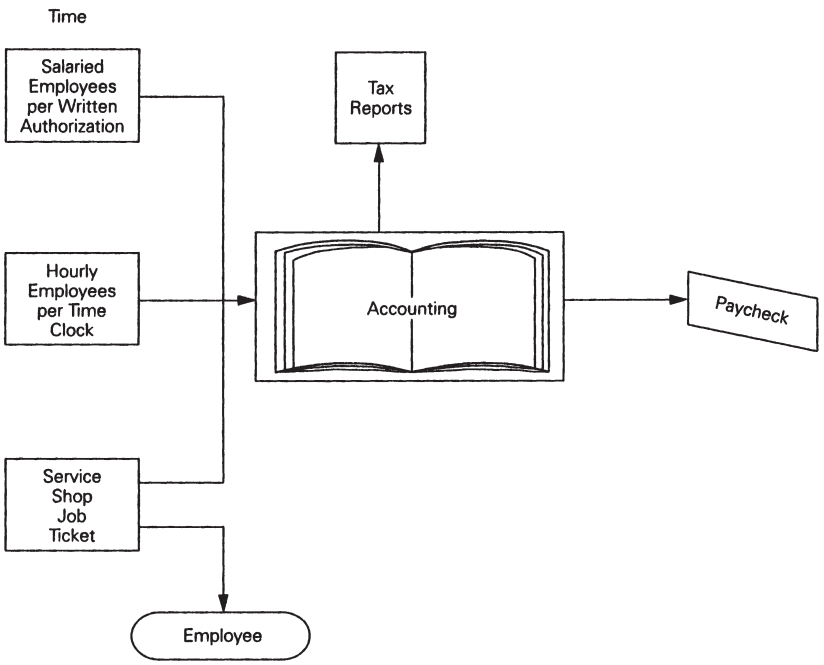




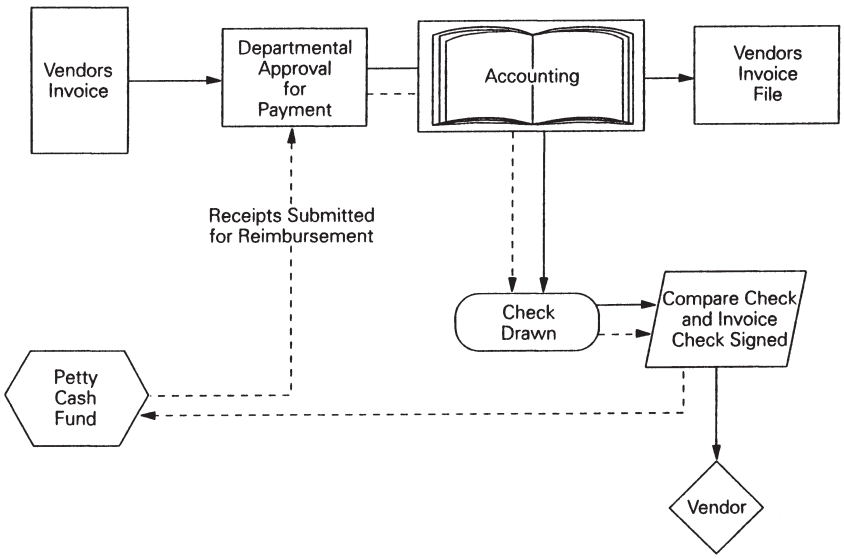
Information System Activity Flow Chart **Service Sales**



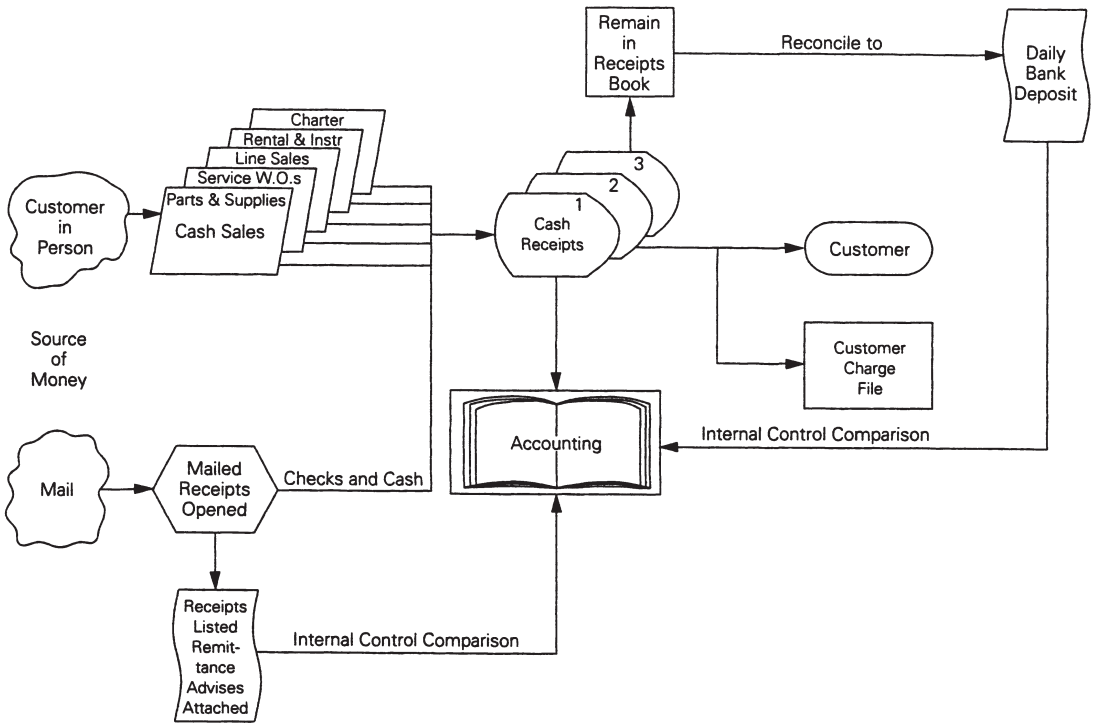
Information System Activity Flow Chart **Payroll**



Information System Activity Flow Chart
Cash Disbursements and Purchases



Information System Activity Flow Chart **Cash Receipts**



APPENDIX

VII

Front Desk Procedures Manual

Philosophy of Operation

The reception desk is the "front window" of an aviation business. As such, it represents the organization to the public, to the customer, and to the employees. The basic philosophy of the front desk should be to demonstrate to customers that everything possible will be done to give the best aviation service in the area. The reception desk is the hub for all business conducted by the company and is the public relations center. The primary goal is to see that the customer receives the most efficient and courteous service possible. The secondary goal is to ensure that all company procedures and guidelines are followed in achieving a successful front-desk operation.

Daily Operating Schedule

> 0000–0600 Reduced operations
> Limited services available to early customers
> Representatives for each department on hand
> 0800–1200 All departments and functions staffed at normal capacity
> 1200–1300 Lunch period
> 1300–1700 All departments and functions staffed at normal capacity
> 1700–2000 Limited services available, clean up, and prepare daily reports
> 2000–2400 Reduced operations

(The specific activity scheduled for each period of the day will be considerably more detailed and with specific activities and individuals indicated for the guidance of desk personnel.)

Customer Reception

The customer may approach the business by foot, by ground vehicle, or by aircraft. The front desk should regard all contacts, from any source, as customers and prepare to treat them in a courteous and efficient manner. Full recognition should be made of the fact that personnel staffing the desk, in the eyes of the customer, are "the company." In order to properly deal with the customer, it is mandatory that the contents of this manual be thoroughly understood and that the organization structure, activities, and personnel be known.

The physical aspects of the front office should be designed to be as attractive as possible and should be kept clean and operational at all times.

By permission, Montgomery Aviation Corporation, Montgomery, Alabama.

All personnel should be trained in greeting and dealing with customers. Every effort should be made to ensure that a pleasant, courteous, and efficient image is projected at all times.

Information and materials shall be kept readily available for customers on:

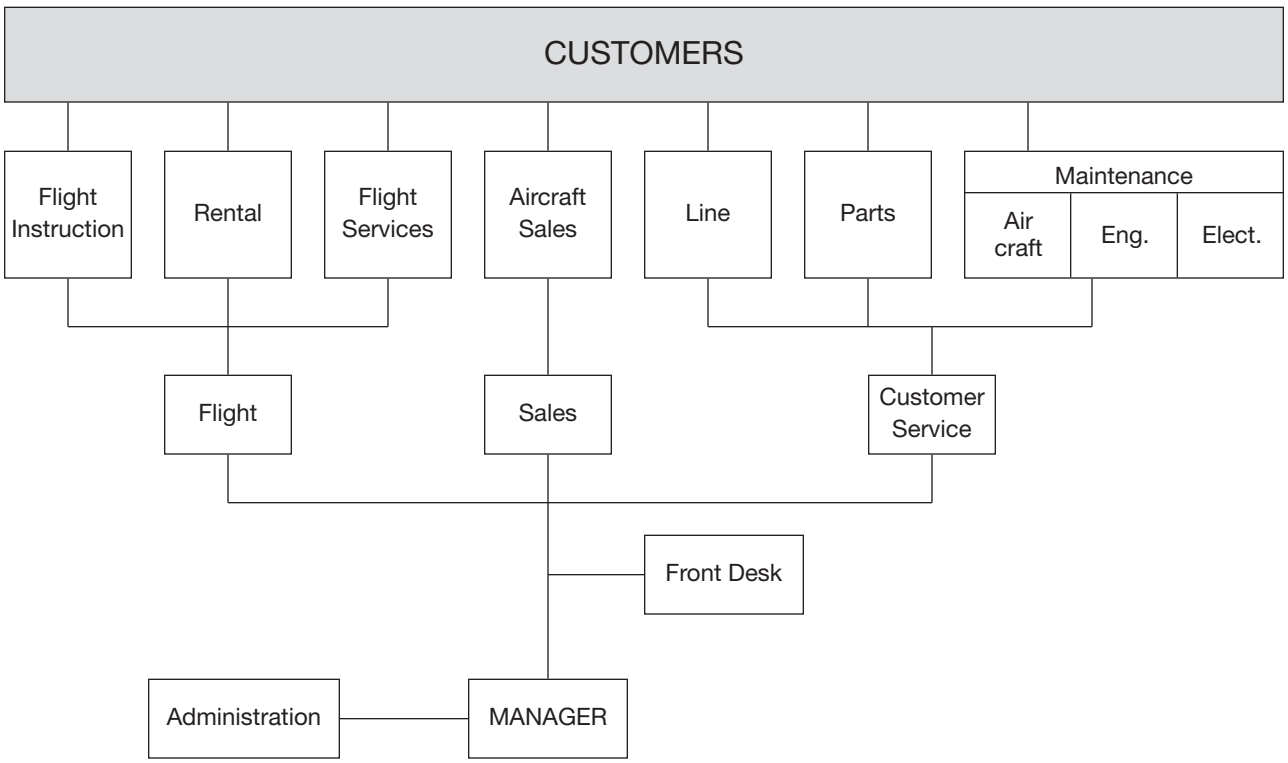
> Services provided by the company
> Basic price information for materials and services offered
> Key organization personnel—telephone numbers and addresses
> City and local maps
> Motel and hotel accommodations
> Local restaurants, entertainment, and points of interest
> Local transportation services
> Aviation facilities
> Recreation facilities

Departmental Relationships and Responsibilities

In a very real sense the front desk is a representative of and a spokesperson for all the departments in the organization. As such, the front-desk personnel should be very cognizant of the personnel, capabilities, and responsibilities of the departments. The organizational relationships between various departments and the key personnel are depicted in the chart at the bottom of the page.

The assigned responsibilities of each of the departments includes the following:

1. *Administrative.* Personnel records and services, accounting, internal records.
2. *Customer services.* Line service, engine and aircraft service, parts, inventory.



3. *Instruction.* Syllabus, records, schedules, course sales.
4. *Flight service.* Rental, charter, special mission, air taxi.
5. *Sales.* New and used aircraft sales, avionics, and related equipment sales.

Information System Requirements

The internal information system has been designed and developed to provide management with the financial and operational data required for the efficient operation of the business. The front desk is instrumental in the initiation, collection and routing of much of the required data. In addition, front-desk personnel can do much to ensure that departmental data are accurate and timely.

Front-desk personnel will, in the course of work, come in contact with many forms and records. Familiarity with these forms is essential to the successful operation of the front desk.

Following are the forms and records most likely used:

> Gasoline credit cards
> Aircraft rental agreements
> Aircraft schedule sheets
> Aircraft record sheets
> Pilot licenses
> Automobile rental forms
> Cash sales tickets
> Cash drawer forms
> Accident reports
> Approved credit file
> Application for FCC license

Accounting System Information

Many of the forms handled by front-desk personnel must be completed using accounting system numbers and terminology. It is imperative that this be done consistently and accurately. The information system includes a chart of accounts, with assigned numbers, to be used in recording transactions and keeping the necessary records. The most frequently used account numbers for front desk personnel are:

No.	Description of Account	Form or Record	Departmental Codes
707	Pilot supplies	Cash sales	C—Aircraft sales
706	Tie down	Cash sales	D—Parts
701	Gas and oil—internal	Charge customers	E—Service
609	Flight service—internal	Gas sales summary	F—Flight
			G—Line
			Z—General and administration

Interdepartmental Billing

Many products and services normally billed to customers are also used by departments for internal consumption or use. It is necessary that this utilization be clearly identified and the proper billing procedure followed. Typical transactions might include:

Aviation fuel:
> Flight training activity
> Rented aircraft
> Air-taxi operations
> Aircraft sales
> Power line, forest patrol
> Charter
> Air ambulance

Vehicle fuel:
> Fuel trucks
> Line vehicles
> Courtesy car
> Rental car

Service activity:
> Washing aircraft
> Maintenance work
> Telephone charges

It is the responsibility of front desk personnel to ensure that proper action is taken to bill the correct department for each transaction, using the proper forms and the correct account number.

Company Policies and Procedures

The following company policies and procedures should be adhered to by all front-desk personnel:

1. Our company feels that the customer should receive the best aviation service in the area, and a major effort should be exerted to see that this is achieved.
2. Safety, in all aspects of the business, is of primary concern to the company. Safety of all employees, customers, and the public shall be regarded as the standard of operation for all departments.
3. The accident checklist shall be completed as expeditiously as possible for all accidents involving company personnel or equipment.
4. Credit can be extended only to those customers who have established an account with the company. Customers desiring to establish such an account must make application with the management. A list of established credit accounts will be maintained for the guidance of front-desk personnel and all departments.
5. Aircraft can be rented only to pilots who have been approved by a company check pilot. This approval must be based upon:
   a. Demonstration of knowledge of operational features and systems of aircraft (may require oral and written examination of specific aircraft)
   b. Flight check out in the aircraft for the specific type flight activity
6. Prior to each rental period, the individual at the front desk must check to see that the pre-rental requirements have been complied with and the checklist completed. The post-rental checklist will be completed when the aircraft returns.

Emergency Procedures

As the hub of the activity for the organization, the front desk will undoubtedly observe or be notified quickly of emergencies involving company equipment or personnel. Possible emergency situations include:

1. Fire in buildings, equipment, or aircraft
2. Aircraft accidents involving customers, company aircraft, or personnel on the field or away from the field
3. Accidents involving company equipment, vehicles, and personnel
4. Impending hazardous weather situations
5. Loss of power or other utilities affecting business operations

In the event that an emergency situation is reported or observed, front-desk personnel will immediately take the action outlined in the Operational Checklist for the type of situation existing.

Company Personnel Guidelines

The company, in an effort to maintain the image of an efficient, professional activity and to provide individual employees with the opportunity to reach a high level of personal satisfaction, has developed personnel guidelines, procedures, and programs. The front desk has the specific responsibility for understanding and complying with these directives in the operation of front-desk activities and, as the center of activity for the overall organization, to monitor general compliance with the directives. Major emphasis should be given to the following checklists, job descriptions, and personnel programs:

> Handling incoming aircraft customers
> Servicing transient and local aircraft
> Front-desk manager job description
> Flight-line hostess job description
> Line-crew job description
> Front-desk operator job description
> Organization personnel assignments
> Departmental working schedules
> Employee personnel programs

Operational Checklist

To assist front-desk personnel in conducting an efficient and professional operation, the following

Operational Checklists are provided. All personnel are encouraged to review these lists periodically and ensure that they are followed when conducting activities in either a normal situation or in an emergency:

A. Aircraft accident procedures
B. General accident procedures
   1. Equipment
   2. Personnel
C. Fire procedures
D. Hazardous weather procedures
E. Procedures for loss of power or other utilities
F. Cash handling procedures
G. Credit handling procedures
H. Renting automobiles
I. Interdepartmental billings
J. Transient pilot services
K. Detailed desk operating checklists:
   1. Cash check out
   2. Closing checklist for afternoon shift
   3. Checklist for night shift
   4. Checklist for early shift
L. Dealing with:
   1. Holdups
   2. Intoxicated persons
   3. Unhappy people
   4. Stolen aircraft

(Specific checklists for individual businesses should be added, similar to the following.)

A. Aircraft Accident Procedures

Accidents occur infrequently, but when they happen, events move rapidly, time is extremely important, and involved personnel can become very emotional. In order to ensure that all required and desirable action is taken as expeditiously as possible, the following steps should be taken:

1. Ensure that all personnel physically involved in the accident are provided immediate medical attention.
   Crash crew
   Telephone Number _____
   Ambulance
   Telephone Number _____
   Doctor
   Telephone Number _____
   Fire
   Telephone Number _____
2. Notify manager with pertinent details.
   What?
   Where?
   Who?
3. Initiate the following action if requested by manager. If unable to contact manager, complete as much as possible and advise manager later.
   a. Provide for physical security of damaged aircraft. Post guards as necessary. Notify nearest FAA GADO office.
   b. Develop a list of all personnel concerned. List eyewitnesses and observers. Obtain statements from witnesses.
   c. Have pertinent photographs taken.
   d. Notify insurance carrier
      Telephone Number _____
   e. Notify company counsel
   f. Refer any requests for information from news media to FAA and/or to the manager. Maintain good relations.
   g. Cooperate with airport management, FAA, and NTSB in all matters related to accident.

B. General Accident Procedures

The organization is concerned with two categories of accidents: (1) those involving equipment and (2) those involving only personnel, such as personal injury due to falling, and so on. The procedures follow essentially the same guidelines:

1. Ensure that all personnel physically involved in the accident are provided immediate attention.
   First Aid
   Telephone Number _____
   Doctor
   Telephone Number _____
   Ambulance
   Telephone Number _____

2. Notify the manager with pertinent details:
   What?
   Where?
   Who?
3. Initiate the following action if requested by manager. If unable to contact manager, complete as much as possible and advise manager later.
   a. Develop a list of all personnel concerned. List eyewitnesses and observers. Obtain statements from witnesses.
   b. Have photographs taken of equipment involved and the damage.
   c. Provide for security of equipment and for movement if required.
   d. Notify insurance carrier.
   e. Notify workmen's compensation agent.

C. Fire Procedures

In the event fire is noted, reported, or suspected in any of the company facilities, equipment, or spaces, comply with the following procedures:

1. Sound fire alarm. Report fire to manager and appropriate department.
2. Report fire to fire station.
   Telephone Number _____
3. Assure that personnel on the scene are fighting or containing the fire using local equipment.
4. Provide for security of nearby equipment or material, moving if necessary.
5. Maintain constant vigilance for safety of personnel. Provide medical attention to all individuals requiring assistance.
6. After fire is under control, develop a list of all personnel involved, including eyewitnesses and observers—obtain statements from each.
7. Take photographs as needed to record pertinent information.

D. Hazardous Weather Procedures

Company operations, equipment, and personnel are influenced by weather factors, subjecting them to dangers of physical and personal damage. This includes high winds, freezing rain, snow, low visibility, flood, and blowing sand. The front desk, as part of the daily routine, should check the weather situation and remain cognizant of the trends as they might affect aircraft, equipment, buildings, and personnel. The following general procedures shall be used as a guide along with specific activities related to the particular type of weather.

1. Upon receipt of the notice that hazardous weather conditions are coming, alert all departments of the threat and advise the manager of this action.
2. Caution pilots flying or about to fly of the impending threat.
3. Check to see if student activity is being monitored by the flight department.
4. Tour ramp, hangar, and other areas to see if necessary precautionary action has been taken. Aircraft should be secured or stored, doors closed, loose articles or equipment secured or stored. Advise departments on recommendations.
5. Review rental aircraft activity and schedule. Consider canceling as necessary.
6. During period of hazardous weather, monitor the condition of aircraft and facilities to ensure that all possible action is being taken to properly maintain all company property.
7. Notify aircraft owners.

E. Loss of Utilities

The modern aviation activity as a sophisticated business depends heavily upon the uninterrupted supply of all utilities: electricity, water, oil, gas, or telephone. In the event of a utility loss, scheduled

or otherwise, it is necessary that action be taken to minimize the effect of the disruption. The following guidelines should be reviewed and appropriate action taken:

1. Review the loss situation and determine the potential threats. For example:
   Loss of water—fire protection, restrooms, water fountains, washing aircraft, and so forth
   Loss of electricity—no lights, no refrigeration, no electric machines or test equipment, no power for doors, no air conditioning, and so on
   Loss of radio—effect on communication, traffic control
   Loss of oil, gas—effect on heat, air conditioning
   Loss of telephone—effect on scheduling, customers
   Loss of alarm systems—fire, security, and so on
2. Take action appropriate to type of loss.
   a. Advise all departments—time and duration, if anticipated.
   b. Alert customers if warning of loss is provided. Provide signs and notices for facilities not operating. Call appropriate utility service department if loss is unscheduled. Notify, request assistance, and attempt to determine time involved.

APPENDIX

VIII

Job Functions for Various Ratings

(a) An applicant for a Class 1, 2, 3, or 4 airframe rating must provide equipment and material necessary for efficiently performing the following job functions:

(1) **Steel structural components**

Repair or replace steel tubes and fittings, using the proper welding techniques when appropriate
Anti-corrosion treatment of the interior and exterior of steel parts
Metal plating or anodizing*
Simple machine operations such as making bushings, bolts, etc.
Complex machine operations involving the use of planers, shapers, milling machines, etc.*
Fabricate steel fittings
Abrasive air blasting and chemical cleaning operations*
Heat treatment*
Magnetic inspection*
Repair or rebuild metal tanks*

(2) **Wood structure**

Splice wood spars
Repair ribs and spars (wood)
Fabricate wood spars*
Repair or replace metal ribs
Interior alignment of wings
Repair or replace plywood skin
Treatment against wood decay

(3) **Alloy skin and structural components**

Repair and replace metal skin, using power tools and equipment
Repair, replace and fabricate alloy members and components such as tubes, channels, cowling, fittings, attach angles, etc.
Alignment of components, using jigs or fixtures as in the case of joining fuselage sections or other similar operations

Make up wooden forming blocks or dies
Fluorescent inspection of alloy components*
Fabricate alloy members and components such as tubes, channels, cowlings, fittings and attach angles etc.

(4) **Fabric covering**
Repairs to fabric surfaces
Recovering and refinishing of components and entire aircraft*

(5) **Control systems**
Renewing control cables, using swaging and splicing techniques
Rigging complete control system
Renewing or repairing all control system hinge point components such as pins, bushings, etc.
Install control system units and components

(6) **Landing gear systems**
Renew or repair all landing gear hinge point components and attachments such as bolts, bushings, fittings, etc.
Overhaul and repair elastic shock absorber units
Overhaul and repair hydraulic-pneumatic shock absorber units*
Overhaul and repair brake system components*
Conduct retraction cycle tests
Overhaul and repair electrical circuits
Overhaul and repair hydraulic system components*
Repair or fabricate hydraulic lines

(7) **Electric wiring systems**
Diagnose malfunctions
Repair or replace wiring
Installation of electrical equipment
Bench check electrical components (this check is not to be confused with the more complex functional test after overhaul)

(8) **Assembly operations**
Assembly of airframe component parts such as landing gear, wings, controls, etc.
Rigging and alignment of airframe components, including the complete aircraft and control system
Installation of power plants
Installation of instruments and accessories
Assembly and fitting of cowling, fairings, etc.
Repair and assembly of plastic components such as windshields, windows, etc.
Jack or hoist complete aircraft
Conduct aircraft weight and balance operations (this function will be conducted in draft-free area)*
Balance control surfaces

(b) An applicant for any class of power plant rating must provide equipment and material necessary for efficiently performing the following job functions appropriate to the class of rating applied for:

(1) **Classes 1 and 2**

(i) **Maintain and alter power plants, including replacement of parts**
Chemical and mechanical cleaning
Disassembly operations

Replacement of valve guides and seats*
Replacement of bushings, bearings, pins, inserts, etc.
Plating operations (copper, silver, cadmium, etc.)*
Heating operations (involving the use of recommended techniques requiring controlled heating facilities)
Chilling or shrinking operations
Removal and replacement of studs
Inscribing or affixing identification information
Painting of power plants and components
Anticorrosion treatment for parts
Replacement and repair of power plant alloy sheet metal and steel components such as baffles, fittings, etc.*

(ii) **Inspect all parts, using appropriate inspection aids**

Magnetic, fluorescent and other acceptable inspection aids*
Precise determination of clearances and tolerances of all parts
Inspection for alignment of connecting rods, crankshafts, impeller shafts, etc.
Balancing of parts, including crankshafts, impellers, etc.*
Inspection of valve springs

(iii) **Accomplish routine machine work**

Precision grinding, honing and lapping operations (includes crankshaft, cylinder barrels, etc.)*
Precision drilling, tapping, boring, milling and cutting operations
Reaming of inserts, bushings, bearings and other similar components
Refacing of valves

(iv) **Perform assembly operations**

Valve and ignition timing operations
Fabricate and test ignition harnesses
Fabricate and test rigid and flexible fluid lines
Prepare engines for long- or short-term storage
Functional check power plant accessories (this check is not to be confused with the more complex performance test of overhaul)*
Hoist engines by mechanical means
Install engines in aircraft*
Align and adjust engine controls*
Installation of engines in aircraft and alignment and adjustment of engine controls, when completed, must be inspected by either an appropriately rated certificated mechanic or certificated repairman.
Persons supervising or inspecting these functions must thoroughly understand the pertinent installation details involved.

(v) **Test overhauled power plants in compliance with manufacturers' recommendations**

The test equipment will be the same as recommended by the manufacturers of the particular engines undergoing test or equivalent equipment that will accomplish the same purpose. The testing function may be performed by the repair station itself, or may be contracted to an outside agency. In either case the repair station will be responsible for the final acceptance of the tested engine.

(2) **Class 3**

Functional and equipment requirements for turbine engines will be governed entirely by the recommendations of the manufacturer, including techniques, inspection methods, and tests.

(c) An applicant for any class of propeller rating must provide equipment and material necessary for efficiently performing the following job functions appropriate to the class of rating applied for:

(1) **Class 1**

(i) **Maintain and alter propellers, including installation and replacement of parts**

Replace blade tipping
Refinish wood propellers
Make wood inlays
Refinish plastic blades
Straighten bent blades within repairable tolerances
Modify blade diameter and profile
Polish and buff
Painting operations
Remove from and reinstall on power plants

(ii) **Inspect components, using appropriate inspection aids**

Inspect propellers for conformity with manufacturer's drawings and specifications,
Inspect hubs and blades for failures and defects, using magnetic or fluorescent inspection devices*
Inspect hubs and blades for failures and defects, using all visual aids, including the etching of parts
Inspect hubs for wear of splines or keyways or any other defect

(iii) **Repair or replace components**

(Not applicable to this class.)

(iv) **Balance propellers**

Test for proper track on aircraft
Test for horizontal and vertical unbalance (this test will be accomplished with the use of precision equipment)

(v) **Test propeller pitch-changing mechanisms**

(Not applicable to this class.)

(2) **Class 2**

(i) **Maintain and alter propellers, including installation and replacement of parts**

All functions listed under paragraph (c) (1) (i) of this appendix when applicable to the make and model propeller for which a rating is sought
Properly lubricate moving parts
Assemble complete propeller and sub-assemblies, using special tools when required

(ii) **Inspect components, using appropriate inspection aids**

All functions listed under paragraph (c) (1) (ii) of this appendix when applicable to the make and model propeller for which a rating is sought.

(iii) **Repair or replace component parts**

Replace blades, hubs, or any of their components
Repair or replace anti-icing devices
Remove nicks or scratches from metal blades
Repair or replace electrical propeller components

(iv) **Balance propellers**

All functions listed under paragraph (c) (1) (iv) of this appendix when applicable to the make and model propeller for which a rating is sought

(v) **Test propeller pitch-changing mechanism**

Test hydraulically, propellers and components

Test electrically operated propellers and components

Test of constant speed devices*

(d) An applicant for a radio rating must provide equipment and materials as follows:

(1) For a Class 1 (Communications) radio rating, the equipment and materials necessary for efficiently performing the job functions listed in sub-paragraph (4) and the following job functions:

The testing and repair of headsets, speakers, and microphones

The measuring of radio transmitter power output

(2) For a Class 2 (Navigation) radio rating, the equipment and materials necessary for efficiently performing the job functions listed in sub-paragraph (4) and the following job functions:

The testing and repair of headsets

The testing of speakers

The repair of speakers*

The measuring of loop antenna sensitivity by appropriate methods

The determination and compensation for quadrantal error in aircraft direction finder radio equipment

The calibration of any radio navigational equipment, en route and approach aids, or similar equipment, appropriate to this rating to approved performance standards

(3) For a Class 3 (Radar) radio rating, the equipment and materials necessary for efficiently performing the job functions listed in subparagraph (4) and the following job functions:

The measuring of radio transmitter power output

The metal plating of transmission lines, wave guides, and similar equipment in accordance with appropriate specifications*

The pressurization of appropriate radar equipment with dry air, nitrogen, or other specified gases

(4) For all classes of radio ratings, the equipment and materials necessary for efficiently performing the following job functions:

Perform physical inspection of radio systems and components by visual and mechanical methods

Perform electrical inspection of radio systems and components by means of appropriate electrical and/or electronic test instruments

Check aircraft wiring, antennas, connectors, relays, and other associated radio components to detect installation faults.

Check engine ignition systems and aircraft accessories to determine sources of electrical interference

Check aircraft power supplies for adequacy and proper functioning

Test radio instruments*

Overhaul, test, and check dynamotors, inverters, and other radio electrical apparatus*

Paint and refinish equipment containers*

Accomplish appropriate methods of marking calibrations, or other information on radio control panels and other components, as required*

Make and reproduce drawings, wiring diagrams, and other similar material required to record alterations and/or modifications to radio (photographs may be used in lieu of drawings when they will serve as an equivalent or better means of recording)*
Fabricate tuning shaft assemblies, brackets, cable assemblies and other similar components used in radios or aircraft radio installations*
Align tuned circuits (RF and IF)
Install and repair aircraft antennas
Install complete radio systems in aircraft and prepare weight and balance reports*
(That phase of radio installation requiring alterations to the aircraft structure must be performed, supervised, and inspected by qualified personnel)
Measure modulation values, noise, and distortion in radios
Measure audio and radio frequencies to appropriate tolerances and perform calibration necessary for the proper operation of radios
Measure radio component values (inductance, capacitance, resistance, etc.)
Measure radiofrequency transmission line attenuation
Determine wave forms and phase in radios when applicable
Determine proper aircraft radio antenna, lead-in and transmission line characteristics and locations for type of radio equipment to which connected
Determine operational condition of radio equipment installed in aircraft by using appropriate portable test apparatus
Determine proper location for radio antennas on aircraft
Test all types of electronic tubes, transistors, or similar devices in equipment appropriate to the rating

(e) An applicant for any class of instrument rating must provide equipment and material necessary for efficiently performing the following job functions, in accordance with pertinent specifications and manufacturers' recommendations, appropriate to the class of rating applied for:

(1) **Class 1**

(i) **Diagnose instrument malfunctions**

Diagnose malfunctioning of the following instruments:
Rate of climb indicators
Altimeters
Air speed indicators
Vacuum indicators
Oil pressure gauges
Fuel pressure gauges
Hydraulic pressure gauges
De-icing pressure gauges
Pitot-static tube
Direct indicating compasses
Accelerometer
Direct indicating tachometers
Direct reading fuel quantity gauges
Optical (sextants, drift sights, etc.)*

(ii) **Maintain and alter instruments, including installation and replacement of parts**

Perform these functions on instruments listed under paragraph (e) (1) (i) of this appendix.

The function of installation includes fabrication of instrument panels and other installation structural components

The repair station should be equipped to perform this function.

However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) **Inspect, test and calibrate instruments**

Perform these functions on instruments listed under paragraph (e) (1) (i) of this appendix, on and off the aircraft, when appropriate.

(2) **Class 2**

(i) **Diagnose instrument malfunctions**

Diagnose malfunctioning of the following instruments:

Tachometers

Synchroscope

Electric temperature indicators

Electric resistance type indicators

Moving magnet type indicators

Resistance type fuel indicators

Warning units (oil-fuel)

Selsyn systems and indicators

Self-synchronous systems and indicators

Remote indicating compasses

Fuel quantity indicators

Oil quantity indicators

Radio indicators

Ammeters

Voltmeters

(ii) **Maintain and alter instruments, including installation and the replacement of parts**

Perform these functions on instruments listed under paragraph (e) (2) (i) of this appendix.

The function of installation includes fabrication of instrument panels and other installation structural components.

The repair station should be equipped to perform this function.

However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) **Inspect, test and calibrate instruments**

Perform these functions on instruments listed under paragraph (e) (2) (i) of this appendix, on and off the aircraft, when appropriate.

(3) **Class 3**

(i) **Diagnose instrument malfunctions**

Diagnose malfunctioning of the following instruments:

Turn and bank indicators

Directional gyros

Horizon gyros

Autopilot control units and components*

Remote reading direction indicators*

(ii) **Maintaining and alter instruments, including installation and replacement of parts**

Perform these functions on instruments listed under (e) (3) (i) of this appendix.
The function of installation includes fabrication of instrument panels and other installation structural components.
The repair station should be equipped to perform this function.
However, it may be contracted to a competent outside agency equipped to perform the function.

(iii) **Inspect, test and calibrate instruments**

Perform these functions on instruments listed under paragraph (e) (3) (i) of this appendix, on and off the aircraft, when appropriate.

(4) **Class 4**

(i) **Diagnose instrument malfunctions**

Diagnose malfunctioning of the following instruments:
Capacitance type quantity gauge
Other electronic instruments
Engine analyzers

(ii) **Maintain and alter instruments, including installation and replacement of parts**

Perform these functions on instruments listed under paragraph (e) (4) (i) of this appendix.
The function of installation includes fabrication of instrument panels and other installation structural components.
The repair station should be equipped to perform this function.
However, it may be contracted to a competent outside agency equipped to perform this function.

(iii) **Inspect, test and calibrate instruments**

Perform these functions on instruments listed under paragraph (e) (4) (i) of this appendix, on and off the aircraft, when appropriate.

(f) An applicant for a Class 1, 2, or 3 accessory rating must provide equipment and material necessary for efficiently performing the following job functions, in accordance with pertinent specifications and the manufacturers' recommendations:

(1) Diagnose accessory malfunctions.
(2) Maintain and alter accessories, including installation and the replacement of the parts.
(3) Inspect, test, and, where necessary, calibrate accessories.

[Doc. No. 1157, 27 FR 11693, Nov. 28, 1962, as amended by Amdt. 145-14, 35 FR 19349, Dec. 22, 1970; Amdt. 145-19, 47 FR 33391, Aug. 2, 1982]

Note: When an asterisk (*) is shown after any job function listed in this appendix it indicates that the applicant need not have the equipment and material on the premises for performing this job function provided he or she contracts that particular type work to an outside agency having such equipment and material.

APPENDIX

X

FAA's "Guidelines for Leases or Agreements"

Guidelines for Leases or Agreements Granting Commercial Franchise Privileges for Aeronautical/Non-aeronautical Activities at Public Airports Affected by Federal Agreements

1. Background
   a. The federal interest in promoting civil aviation and the FAA responsibility related thereto has been established and augmented by various legislative actions which authorize programs for granting funds, property, and other assistance to local communities for the development of airport facilities. In each instance, the recipient public agency assumes certain obligations, either by contract or by restrictive covenants in deeds, pledging it to maintain and operate its airport facilities safely and efficiently and in accordance with specified conditions.
   b. The legal obligations and conditions assumed by airport owners in consideration of the federal benefits arise through the following:
      (1) Grant agreements issued under the Federal Airport Act of 1946 or the Airport and Airway Development Act of 1970.
      (2) Surplus airport property instruments of transfer, issued pursuant to Section 13g of the Surplus Property Act of 1944, as amended by Pl. 80–289 in 1947. [Surplus airport property conveyances prior to 1947 were handled by WAA (now GSA) as prescribed in Regulation 16, generally referred to as WAA—Reg. 16.]
      (3) Deeds of conveyance issued under Section 16 of the Federal Airport Act of 1946 or under Section 23 of the Airport and Airway Development Act of 1970 (nonsurplus federal land).
      (4) AP-4 Agreements and Section 308a of the Federal Aviation Act of 1958 (exclusive rights).
2. General
   a. The prime obligation of the owner of a federally assisted airport is to operate the airport for the use and benefit of the public. Coincidental with that obligation are the legal obligations of the

Source: FAA, Airports Division NW/Mountain Region. Seattle, WA 1985

agreements imposed by the federal government. The sponsor, through these agreements, provides, among other assurances, that with regard to leases or other agreements at the airport.

(1) The airport will be available for public use on fair and reasonable terms and without unjust discrimination.

(2) Airport users will be charged for facilities and services under a fee and rental structure which will make the airport as self-sustaining as possible under the circumstances.

(3) No exclusive right will be granted or permitted which is prohibited by Section 308(a) of the Federal Aviation Act of 1958 and its successors.

(4) The airport will be bound by the assurances contained in Title VI of the Civil Rights Act of 1964, as implemented by Part 21 of the Regulations of the Office of the Secretary of Transportation.

(5) All revenue derived from the use of the obligated airport property will be used for the operation, maintenance, or development of the airport. Fair market rental values must be charged for the use of federal surplus property.

b. The sponsor's responsibility for operation is to make available to the public the landing areas, taxiways, parking areas, and other public areas. There is, however, no requirement that the use of the airport be provided free of charge. A cost or fee may be imposed on users in order to recover the costs of providing these facilities. The charge may be a landing fee (which is similar to the toll charge on a highway, bridge, or tunnel) or an indirect charge. Quite frequently the airport owner recovers this use charge indirectly as part of the consideration received from commercial tenant operators who provide direct services to users of the public areas. It may, for example, take the form of a gallonage fee, in which case fuel consumption is regarded as a measure of relative usage or benefit derived from the availability of the public landing area. It may also take the form of a monthly flat charge or a variable charge using the volume of business—rather than fuel gallonage—as the yardstick of benefit derived by patrons from the availability of the public landing areas.

   In addition to those charges usually sought to be recovered from a user and/or tenant, there is normally an intent to recover some element of rent for the occupancy of specific premises granted by the airport owner to a private enterprise by lease, license, permit, or other contract.

3. Agreements for leasing airport property

   a. The type of document, form of lease, or other written instrument used to grant airport privileges is the sole responsibility of the airport owner. Because of the variety of state laws affecting this type of agreement and because of possible infringement upon the realm of authority of the legal profession, the FAA has not deemed it wise to attempt to prepare and publish a model form of lease. Also, it is quite likely that the provisions required in any one particular lease may be of little value or concern in a lease at another location for various reasons. However, it has been found through experience that generally a lease for a fixed-base operation and other commercial activities on an airport should adequately cover certain points.

   b. Typically, any document for the leasing of airport land or facilities should include the following elements:

      (1) Airport property to be leased

         (a) The lease agreement should adequately describe the specific portion of the airport property leased. (The leased premises should consist of only that portion of the airport property necessary for the lessee's business operation, such as a hangar, shop, office, and gasoline storage space and must *not* include landing, taxiing, or other common use facilities.)

(b) Aeronautical leases should provide the lessee the right to ingress and egress to and from the leased area.

(2) Rights and privileges granted to aeronautical lessees include, among others:

(a) For FBOs, the non-exclusive right to conduct certain specified aeronautical activities at the airport.

(b) The non-exclusive right to use, in common with others, all public airport facilities and improvements of a public nature which are now, or may hereafter be, connected with or appurtenant to landing, taxiing, parking areas, and other common use facilities.

(c) The right to construct facilities such as hangars, ramps, office, shop, buildings, improvements, and so on required in connection with the services to be provided.

(3) Obligations assumed by lessee include, among others:

(a) To operate the premises leased for the use and benefit of the public, and

1) To furnish said service on a fair, equal, and not unjustly discriminatory basis to all users thereof[1]

2) To charge fair, reasonable, and not unjustly discriminatory prices for each unit or service, provided that lessee may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other types of price reductions to volume purchasers

(b) The (grantee, licensee, lessee, or permittee, as appropriate) for himself, his heirs, personal representatives, successors in interest, and assigns, as part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add "as a covenant running with the land") that in the event facilities are constructed, maintained, or otherwise operated on said property described in this (deed, license, lease, permit, as appropriate) for a purpose for which a DOT program or activity is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, permittee) shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to 49 CFR Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation, and as said Regulations may be amended.

The lessee, for himself, his personal representatives, successors in interest, and assigns, as 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, or national origin shall be excluded from participating in, be denied benefits of, or otherwise be subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land and the furnishing of services thereon, no person on the grounds of race, color, or national origin shall be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination, (3) that the lessee shall use the premises in compliance with all other requirements imposed or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.[2]

That in the event of breach of any of these nondiscrimination covenants, _____ *(Name of Sponsor)* shall have the right to terminate the license, lease, permit, etc., and to re-enter and repossess said land and facilities thereon, and hold the same as if said lease had never been made or issued; provided, however, that the (licensee, lessee,

permitee) allegedly in breach shall have the right to contest said alleged breach under applicable Federal Aviation Administration procedures, and any sanctions under or termination of (license, lease, permit), shall be withheld pending completion of such procedures.

(c) To provide and maintain sufficient fixtures and equipment to meet public demand for services offered.

(d) To provide and maintain an adequate staff of employees with skills, licenses, and certificates appropriate to the activities conducted.

(e) To maintain accurate and acceptable records which are to be made available for examination by the lessor.

(f) To operate during specified minimum hours and to conform to all rules, regulations, fixed-base operator's standards and ordinances adopted by the lessor or other applicable government bodies including, but not limited to, safety, health, and sanitary codes.

(g) To demonstrate evidence of financial stability and good credit rating.

(h) To meet indemnity and insurance minimums.

(4) Rights and privileges reserved to the lessor include, among others:

(a) For FBO leases, the right to further develop or improve the landing area of the airport as the lessor sees fits, regardless of the desires or view of the lessee, and without interference or hindrance.

(b) The right, but not the obligation, to maintain and keep in repair the landing area of the airport and all publicly owned facilities of the airport, together with the right to direct and control all activities of lessee in this regard.

(c) The right to take any action the lessor considers necessary to protect the aerial approaches of the airport against obstruction, together with the right to prevent the lessee from erecting, or permitting to be erected, any building or other structure on the airport which, in the opinion of the lessor, would limit the usefulness of the airport and constitute a hazard to aircraft.

(d) The right to temporarily close the airport or any of the facilities thereon for maintenance, improvement, or for the safety of the public.

(e) The right to approve or deny any sub lease of the premises leased.

(5) Other rights and obligations of the lessee and lessor to be ascertained include:

(a) Who is to provide maintenance of leased area.

(b) Who is to provide utilities (such as heat, electricity, and water) to the leased area and who is to pay charges therefor.

(c) The disposition of structures and improvements erected by the lessee. (Is title to pass to lessor at some future time?)

(d) The period of the lease and whether options for renewal are to be granted. Typically, lease periods should not exceed five years unless substantial capital investments are involved.

(e) The amount of the rent to be charged and the method of computation: monthly, yearly, or percentage of lessee's gross net sales.

(f) Frequency of review and basis of adjustment of rental amount.

(g) Provisions for termination and surrender of lease, including:
  1) Grounds on which lease may be terminated.
  2) Rights and obligations of parties upon termination.
  3) Obligation of lessee to surrender premises upon termination.
  4) Right of lessor to re-enter premises upon termination.

(h) Provisions for breach of covenants, including:
  1) Procedure by which either party is to give other party notice of breach.
  2) Length of time allowed to rectify breach.
  3) Method for settling dispute as to whether breach has occurred.

(i) Provisions covering fire damages to premises, including:
  1) Responsibility for restoration and/or repair of damaged premises.
  2) Time allowed for restoration and repair.
  3) Abatement of rent if premises rendered untenantable.

(6) Other provisions to be included in lease agreements for aeronautical use:

(a) It is clearly understood by the lessee that no right or privilege has been granted which would operate to prevent any person, firm, or corporation operating aircraft on the airport from performing any service on its own aircraft with its own regular employees (including, but not limited to, maintenance and repair) that it may choose to perform.[1]

(b) It is understood and agreed that nothing herein contained shall be construed to grant or authorize the granting of an exclusive right forbidden by Section 308 of the Federal Aviation Act of 1958 or for aeronautical activities, such as, but not limited to:[2]
  1) Charter operations
  2) Pilot training
  3) Aircraft rental
  4) Aerial photography
  5) Crop dusting
  6) Sale of aviation petroleum products
  7) Air carrier operations
  8) Aircraft sales and services incidental thereto
  9) Any other activity which, because of direct relationship to the operation of aircraft, can be regarded as an aeronautical activity.

(c) During the time of war or national emergency, lessor shall have the right to lease the landing area or any part thereof to the United States Government for miliary or naval use and, if such lease is executed, the provisions of this instrument insofar as they are inconsistent with the provisions of the lease to the government, shall be suspended.[3]

(d) This lease shall be subordinate to the provisions of any existing or future agreement between the lessor and the United States relative to the operation or maintenance of the airport, the execution of which has been or may be required as a condition precedent to the expenditure of federal funds for development of the airport. Failure of the lessee or any occupant to comply with the requirements of any existing or future agreement between the lessor and the United States, which failure shall continue after reasonable

notice to make appropriate corrections, shall be cause for immediate termination of lessee's rights hereunder.[4]

(7) Other considerations

(a) Airport manager and/or related duties should not be incorporated in FBO lease agreements. The airport should establish standard rental/lease rates and apply them equally to all and handle the airport manager duties by separate contract. This allows the airport owner to change airport managers or his duties without affecting the basic lease rates.

(b) Provisions not specifically NOTED in b. of "agreements for leasing airport property" are not mandatory, but are strongly recommended as being in the best interests of the airport and the sponsor.

(c) Leases not containing the required provisions 1, 2, 3, or 4, should be amended at the first opportunity.

4. Through-the-fence-operations

a. There are instances when the owner of a public airport proposes to enter into an agreement which permits access to the public landing area by aircraft based on land adjacent to, but not part of, the airport property. This type of an arrangement has frequently been referred to as a "through-the-fence-operation," even though the perimeter fence may be an imaginary one.

The obligation to make an airport available for the use nd benefit of the public does not impose any requirement to permit access by aircraft from adjacent property. On the contrary, the existence of such an arrangement has been recognized as an encumbrance upon the airport property itself. Orders governing administration of ADAP indicate that a sponsor's title to airport land so encumbered does not meet the land interest requirement for a federal aid project unless the sponsor retains the legal right to, and in fact does, require the off-site property owner or occupant to conform in all respects to the requirements of any existing or proposed grant agreement.

b. The owner of a public airport is entitled to seek recovery of his initial and continuing costs of providing a public use landing area. Historically, he has been urged—in the interests of promoting general aviation—to refrain from direct assessment of user charges except for those engaged as common carriers for hire. Since enactment of the Airport and Airway Development Act of 1970, the owners of airports receiving federal funds have been required to establish a fee and rental structure designed to make the airport as self-sustaining as possible. Most public airports seek to recover a substantial part of airfield operating costs indirectly, through various arrangements relating to commercial activities. The development of aeronautical enterprises on land uncontrolled by the owner of the public airport cannot but result in a competitive advantage to the detriment of on-base operators on whom the airport owner relies for service to the flying public. To equalize this imbalance, the airport owner should attempt to obtain from any off-base enterprise a fair return for its use of the landing area.

c. Arrangements that permit aircraft to gain access to a public landing area from off-site properties introduce safety considerations with additional hazards, and complicate the control of vehicular and aircraft traffic. The construction of additional taxiways, the protection of additional intersections along airport perimeter roads, and frequently the basic airport layout itself, when designed to accommodate landing area access from multiple perimeter locations, presents a substantial and continuing burden for the sole benefit and convenience of such landholding neighbors. Depending on the volume and type of flight activity, the hazards of such an arrangement may well result in severe curtailment of the user potential of the airport.

d. The FAA, almost without exception, discourages and opposes any agreements which grant access to the public landing areas by aircraft normally stored and serviced on adjacent property.

   Typically, exceptions are considered in the following circumstances:

   (1) Where a bona fide airport tenant has already leased a site from the airport owner and has negotiated airfield use privileges, but also desires to move aircraft to and from a hangar or manufacturing plant on adjacent off-airport property. In this case, actual access will be gained through the area provided by the airport.

   (2) Where an individual or corporation actually residing or doing business on an adjacent land tract proposes to gain access to the landing area solely for aircraft used incidental to such residence or business without offering any aeronautical services to the public, provided that the airport owner is prepared to accommodate the normal expansion of aeronautical services to the public on publicly owned areas of the airport. This situation is commonly encountered where an industrial airpark is developed in conjunction with the airport.

   (3) Where there is insufficient land for further development of aeronautical activities.

e. Any agreement for a "through-the-fence-operation," in addition to the normal lease provisions above, must include a provision making the lease and such operations subject to the same obligations (present and future agreements with the federal government, rules, regulations, and so on) as tenants on airport property (see (6)(d) above).

   (1) Provision must also be made to assure that the lessee contributes his or her fair share toward the cost of operation, maintenance, and improvement of the airport, and that no benefits accrue to the lessee which would give him or her an advantage over an on-airport operator.

   One method of determining a fair return to the airport from off-airport use would be to utilize a percentage of the on-airport tiedown rate, if no other equitable method is available, such as percentage of gross sales, etc. This type of arrangement has the advantage of an automatic inflation factor that would keep off-airport charges in line with on-airport charges.

   (2) It is suggested that on all airports having or anticipating agreements with the federal government, any such proposal be submitted to the FAA for review and comment prior to its finalization.

   (3) A suggested permit is included as Exhibit A.

Notes

1. Required in leases/agreements for aeronautical services at airports subject to continuing obligations under FAAP/AIP agreements.

2. Required in all leases/agreements involving federal agreements executed after July 2, 1964.

3. Only required leases/agreements at airports acquired in whole or in part under a Federal Surplus Property Transfer (unless the National Emergency Use Provision of the Surplus Transfer document has been specifically released by the FAA).

4. Required in leases in aeronautical operations from adjoining non-airport property ("through-the-fence-operations").

Language provided in [2], [3], and [4], should be used verbatim.

Exhibit A

INGRESS AND EGRESS PERMIT

_____ AIRPORT

The (Grantor) for the consideration hereinafter specified, grants to _____, (Grantee) the right of ingress and egress into and upon a portion of the _____ Airport in _____ County, _____, from property owned or occupied by Grantee which adjoins said Airport on the _____ side near the _____ end. The boundaries of said Airport are described in _____ recorded in Volume _____ of Deed Records for _____ County _____, at Page _____ thereof. Ingress and egress hereunder shall be limited to a _____ foot portion of the _____ Airport boundary, as shown on drawing attached hereto marked Exhibit A.

This permit shall be for a term of _____ ( ) years commencing on the _____ day of _____, 19 _____ , and terminating on the _____ day of _____, 19 _____. As part of the consideration for granting this permit, Grantee agrees to pay Grantor [_____ (_____¢) per gallon for all aviation fuel sold or used by Grantee]. [The sum of $_____ per month] or [$_____] or [other basis]. Payment shall be made on or before the _____ of each month. Grantee agrees to permit Grantor to audit books and records at any reasonable time and place for the purpose of verifying the amount due the Grantor.

Grantee agrees to comply with all airport rules and regulations adopted by the Grantor relative to the _____ Airport.

Grantee shall save and hold Grantor harmless from any claim or liability arising out of its activities, and shall procure and continue in effect public liability and property damage insurance in minimum amounts as follows:

(a) $_____ when the claim is one for damage to or destruction of property and $_____ to any claimant in any other case.

(b) $_____ for any number of claims arising out of a single occurrence.

Certificate evidencing such insurance and bearing endorsements requiring _____ days' written notice to Grantor prior to any change, cancellation, or expiration shall be furnished to Grantor prior to exercise by Grantee of its right of entry hereunder. However, Grantee assumes no tort liability either to Grantor or to any other party for damages or injury other than through its own negligence or lack of due care.

Grantee agrees to observe all applicable federal and state statutes and rules and regulations in its operations upon the property abutting said _____ Airport and in any operation carried on by Grantee or under its supervision or direction upon the airport. Grantee further agrees and covenants to at all times maintain its abutting property, and the improvements thereon, and to conduct its operation, both on and off the Airport, in a reasonably neat and clean fashion, and not to permit the accumulation of rubbish or junk airplane or automobile parts or other material in an unsightly manner. Grantee agrees that if it fails to so maintain its abutting property, Grantor shall have the right, after _____ days' written notice, to come upon the property of Grantee and cause the same to comply with this provision, and to charge the expense thereof to Grantee, or, at the option of the Grantor, to terminate the rights of Grantee hereunder.

Grantee further agrees not to use any portion of the Airport property for the permanent storage of aircraft or other personal property of Grantee, or of personal property for which Grantee is acting as bailee, and Grantee agrees that if Grantor shall at any time demand the removal of personal property located upon the Airport, which personal property is under the control of Grantee and grantee shall fail to remove the same within a period of _____ ( ) hours after such demand, then Grantor may remove the same and charge the cost of such removal to Grantee.

This permit shall not be sold, assigned, or otherwise transferred by operation of law or otherwise by Grantee to any other person, corporation, association, partnership, municipal corporation or body politic, and this permit shall not pass with any sale, lease, or other disposal of land abutting upon said _____ Airport, and shall automatically terminate in the event of the bankruptcy or dissolution of Grantee, or in the event Grantee shall dispose of its interest in said lands abutting upon the _____ Airport, provided, however, the Grantor may by its express written approval permit the assignment hereof.

Grantee agrees to conduct its operation, both on Airport and on adjoining premises, for the use and benefit of the public, and particularly[a]:

a. To furnish good, prompt, and efficient services adequate to meet all the demands for its serve at the Airport;
b. To furnish said service on a fair, equal, and nondiscriminatory to all users thereof; and
c. To charge fair, reasonable, and nondiscriminatory prices for each unit of sale or service, provided that the Grantee may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.

The Grantee, for himself, his personal representatives, successors in interest, and assigns, as part of the consideration hereof, does hereby covenant and agree, as covenant running with the land, that (1) no person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land and the furnishing of services thereon, no person on the grounds of race, color, or national origin shall be excluded from participation in, denied benefits of, or otherwise subjected to discrimination, (3) that the lessee shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended. That in the event of breach of any of the preceding nondiscrimination covenants, _____ *(Name of Sponsor)* _____ shall have the right to terminate the license, lease, permit, etc., and to reenter and repossess said land and the facilities thereon, and hold the same as if said lease had never been made or issued.

It is clearly understood by the Grantee that no right or privilege has been granted which would operate to prevent any person, firm, or corporation operating aircraft on the Airport from performing any services on its own aircraft with its own regular employees (including, but not limited to, maintenance and repair) that it may choose to perform.

It is understood and agreed that nothing herein contained shall be construed to grant or authorize the granting of an exclusive right forbidden by Section 308 of the Federal Aviation Act of 1958 or for aeronautical activities such as, but not limited to:

a. Charter operations
b. Pilot training
c. Aircraft rental
d. Aerial photography
e. Crop dusting
f. Sale of aviation petroleum products
g. Air carrier operations
h. Aircraft sales and service incidental thereto
i. Any other activity which, because of its direct relationship to the operation of aircraft, can be regarded as an aeronautical activity

Grantor reserves the right to further develop or improve the landing area of the Airport as it sees fit, regardless of the desires or view of the Grantee, and without interference or hindrance.

Grantor reserves the right, but shall not be obligated to Grantee, to maintain and keep in repair the landing area of the Airport and all publicly-owned facilities of the Airport, together with the right to direct and control all activities of Grantee in this regard.

During the time of war or national emergency, Grantor shall have the right to lease the landing area or any part thereof to the United States Government for military or naval use and, if such lease is executed, the provisions of this instrument insofar as they are inconsistent with the provisions of the lease to the Government, shall be suspended[b].

Grantor reserves the right to take any action it considers necessary to protect the aerial approaches of the Airport against obstruction, together with the right to prevent Grantee from erecting, or permitting to be erected, any building or other structure on or adjacent to the Airport which, in the opinion of the Grantor, would limit the usefulness of the Airport or constitute a hazard to aircraft.

This permit shall be subordinate to the provisions of any existing or future agreement between Grantor and the United States, relative to the operation or maintenance of the Airport, the execution of which has been or may be required as a condition precedent to the expenditure of Federal funds for the development existing or future agreement between Grantor and the United States, which failure shall continue after reasonable notice to make appropriate corrections, shall be cause for immediate termination to Grantee's rights hereunder.

IN WITNESS WHEREOF the parties hereto set their hands and seals this _____ day of _____, 19 ____.

GRANTOR:

_____

_____

GRANTEE:

by _____

[a] Required where aeronautical services are to be provided.

[b] Required where airport was acquired in whole or in part under Federal Surplus Property Transfer (unless National Emergency Use Provision has been specifically released by the FAA).