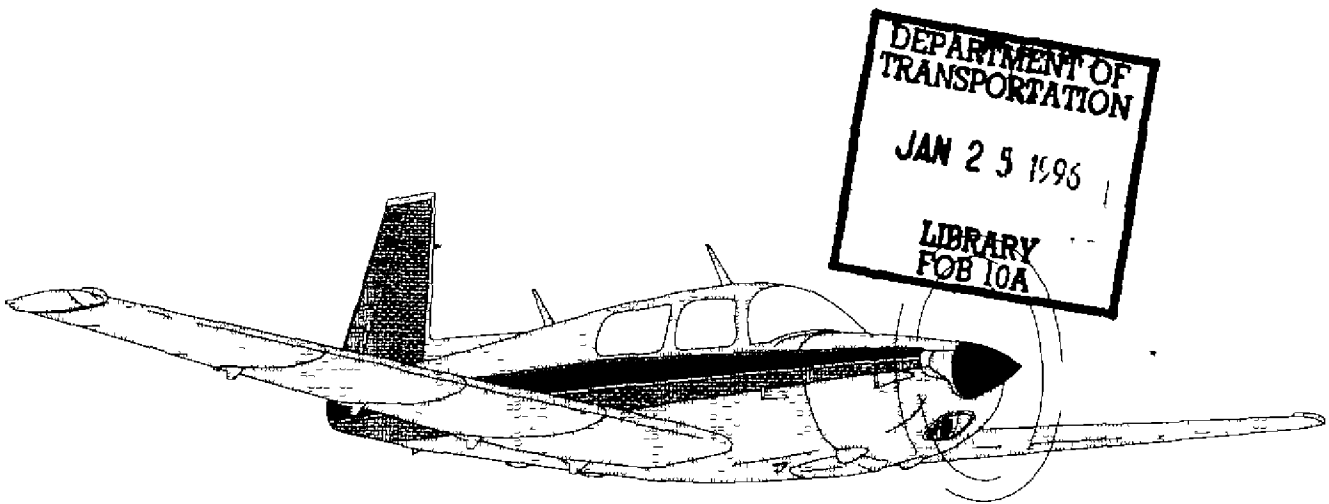


PLANE SENSE

General Aviation Information



**THIS PUBLICATION HAS BEEN
SUPERSEDED BY FAA-H-80834 9
PLANE SENSE:GENERAL AVIATION
INFORMATION**



U S Department of Transportation
Federal Aviation Administration

PLANE SENSE

General Aviation Information

1995

U S DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Flight Standards Service

PREFACE

The **Flight Standards Service** of the **Federal Aviation Administration (FAA)** has published **Plane Sense**, to acquaint the owner or prospective owner with some fundamental information on the requirements of owning and operating a private airplane

Anyone who is an aircraft owner, or seriously thinking of becoming one, should become familiar with **Title 14, Code of Federal Regulations**, referred to in this document as **Federal Aviation Regulations (FAR's)** Since the aviation picture is constantly changing, it is suggested that you contact your nearest **FAA Flight Standards District Office (FSDO)**, where the personnel will be pleased to assist you with the latest requirements of private ownership

Service Difficulty Reports, General Aviation Airworthiness Alerts, Airworthiness Directives, and Federal Aviation Regulations may be obtained by computer modem from **FedWorld** at (703) 321-3339 This bulletin board service is provided by the U S Department of Commerce, 24 hours a day, 7 days per week For technical assistance regarding computer software and modem requirements for this service, contact the **FedWorld** help desk at (703) 487-4608 from 7 30 am to 5 p m EST, Monday through Friday

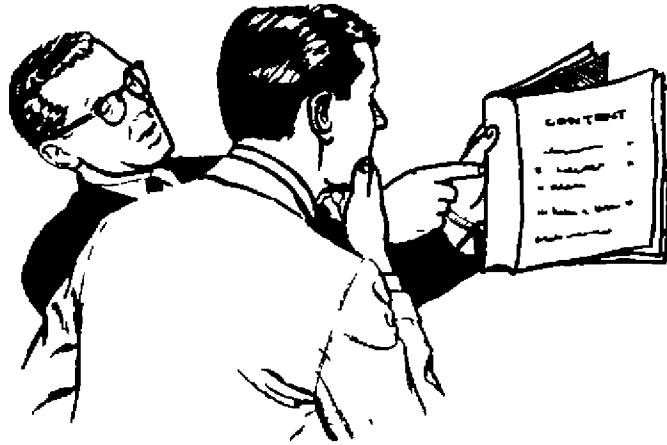
This publication may be obtained free of charge from

U S Department of Transportation
Property Use and Storage Section, M-483 7
Washington, DC 20590

Comments regarding this publication should be sent to

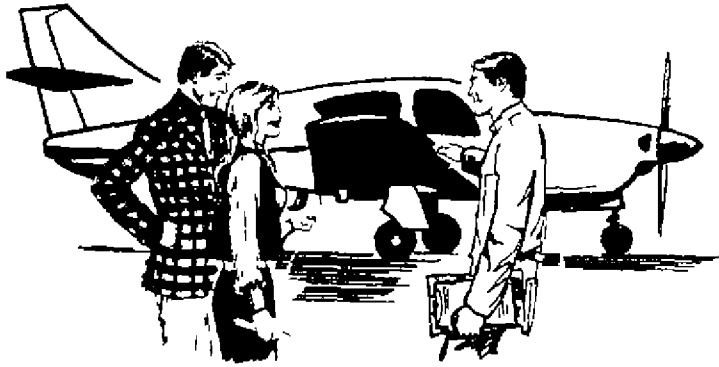
Federal Aviation Administration
Operations Support Branch, AFS-630
P O Box 25082
Oklahoma City, OK 73125

This advisory circular supersedes AC 20-5F, dated 1986



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BUYING AN AIRCRAFT

When buying a used aircraft, it is wise to have the selected aircraft inspected by a qualified person or facility before you buy. The condition of the aircraft and the state of its maintenance records can be determined by persons familiar with the particular make and model. These should include an FAA certificated airframe and powerplant mechanic (A&P) or an approved repair station.

Questions Most Frequently Asked

1. Q What is meant by a clear title?

- A. A clear *title* is a term commonly used by aircraft title search companies to indicate there are no liens (chattel mortgage, security agreement, tax lien, artisan lien, etc.) in the FAA aircraft records. The Civil Aviation Registry does not perform title searches for the aviation public; however, the aircraft records contain all of the ownership and security documents that have been filed with the FAA.

The Civil Aviation Registry records acceptable security instruments. In addition, some states authorize artisan liens (mechanic liens) and these may also be recorded. Check your state's statutes. Federal liens against an owner (drug repossession, etc.) may not show at all. Know your seller!

2. Q How can I be sure that the aircraft has a clear title?

- A. Either search the aircraft records yourself, or have it done by an attorney or qualified aircraft title search company. A list of title search companies qualified in aircraft title and records search can be found on AC Form 8050-55, Title Search Companies, available from the Civil Aviation Registry.

You wouldn't think of purchasing a house until you have the records examined. You should do the same when purchasing an aircraft, which also represents a substantial investment. Even though you are planning to purchase the aircraft from an established dealer, it makes good sense to determine the true status of the aircraft records before you buy. CAUTION: FAA registration cannot be used in any civil proceeding to establish proof of ownership!

There is no substitute for examining the aircraft records to secure a history of the ownership of the aircraft and to determine if there are any outstanding liens or mortgages. This procedure should help avoid a delay in registering an aircraft and the headaches many have suffered because they failed to take this one important step before purchasing their aircraft.

3. Q **Where do I go to search the records?**

A. Aircraft records maintained by the FAA are on file at the Mike Monroney Aeronautical Center, Registry Building, Oklahoma City, OK. Microfiche copies of aircraft records may be requested for review. For more information on how to order and costs, contact the Civil Aviation Registry at (405) 954-3116. There may be other records filed at federal, state, or local level that are not recorded with the FAA.

4. Q **What documents may I expect to receive with my new or used aircraft?**

- A.
- (1) Bill of sale or conditional sales contract
 - (2) Either FAA Form 8100-2, Standard Airworthiness Certificate, or FAA Form 8130-7, Special Airworthiness Certificate
 - (3) Maintenance records containing the following information:
 - (a) The total time in service of the airframe, each engine, and each propeller,
 - (b) The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance(s),
 - (c) The time since last overhaul of all items installed on the aircraft that are required to be overhauled on a specified time basis,
 - (d) The identification of the current inspection status of the aircraft, including the times since the last inspections required by the inspection program under which the aircraft and its appliances are maintained,
 - (e) The current status of applicable Airworthiness Directives (AD) including for each, the method of compliance, the AD number, and revision date. If the AD involves recurring action, the time and date when the next action is required, and
 - (f) A copy of current major alterations to each airframe, engine, propeller, rotor, and appliance
 - (4) Equipment list, and weight and balance data
 - (5) Airplane Flight Manual or Operating Limitations

5. Q. What manuals should I receive with the aircraft?

A. The manufacturers produce owner's manuals, maintenance manuals, service letters and bulletins, and other technical data pertaining to their aircraft. These may be available from the previous owner, but are not required to be transferred to a new owner. If the service manuals are not available from the previous owner, they usually may be obtained from the aircraft manufacturer.

6. Q. What is the meaning of *airworthy*?

A. Two conditions must be met for a standard category aircraft to be considered *airworthy*. These conditions are:

- (1) The aircraft conforms to its type design (type certificate). Conformity to type design is considered attained when the required and proper components are installed and they are consistent with the drawings, specifications, and other data that are a part of the type certificate. Conformity would include applicable supplemental type certificates and field-approved alterations.
- (2) The aircraft is in condition for safe operation. This refers to the condition of the aircraft with relation to wear and deterioration.

7. Q. Does a current 100-hour or annual inspection mean that the aircraft is in *first class condition*?

A. No. It indicates only that the aircraft was found to be in airworthy condition at the time of inspection.

8. Q. Who is responsible for my aircraft's maintenance?

A. FAR Section 91.403 makes the owner/operator primarily responsible for maintaining the aircraft in a airworthy condition including compliance with Airworthiness Directives. The owner/operator is also responsible for ensuring that maintenance personnel make appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service. It is the responsibility of the owner and operator to have maintenance performed which may be required between scheduled inspections. Inoperative instruments or equipment that can be deferred under FAR Section 91.213(d)(2) shall be placarded and maintenance recorded in accordance with FAR Section 43.9.

9. Q. What should I look for before buying an amateur-built aircraft?

A. (1) Examine the Airworthiness Certificate and its Operating Limitations. The Airworthiness Certificate shall be a Special Airworthiness Certificate, which is used for all aircraft that fall under experimental status, and states for what purpose it was issued (Refer to figure 7, page 19). The Operating Limitations specify any operating restrictions that may apply to the aircraft.

- (2) Check the aircraft maintenance records of the airframe, engine, propeller, and accessories Under FAR Sections 91.319(b) and 91.305, all initial flight operations of experimental aircraft may be limited to an assigned flight test area. This is called Phase I. The aircraft is flown in this designated area until it is shown to be controllable throughout its normal range of speeds and all maneuvers to be executed, and has not displayed any hazardous operating characteristics or design features. The required flight time may vary for each type of aircraft and is covered in the Operating Limitations.

After the flight time requirements are met, the owner/operator endorses the aircraft logbook with a statement certifying that the prescribed flight hours are completed and the aircraft complies with FAR Section 91.319(b). Phase I records are retained for the life of the aircraft. This concludes Phase I.

- (3) In Phase II, the FAA may prescribe Operating Limitations for an unlimited duration, as appropriate.
- (4) Before taking delivery of the aircraft, make a final pre-purchase inspection. Make sure the Airworthiness Certificate, Operating Limitations, Aircraft Data Plate, Weight and Balance Papers, Aircraft Maintenance Records and any other required documents are with the aircraft. If the Airworthiness Certificate, Operating Limitations, and Aircraft Data Plate are surrendered to the FAA, by the original builder, you may not be able to recertify the aircraft because you are not the builder.

It would be advisable to have someone familiar with the type of aircraft you are interested in, check the aircraft for workmanship, general construction integrity, and compliance with applicable FAR's. Contact the Manufacturing Inspection District Office (MIDO) or Flight Standards District Office (FSDO) serving your locale and ask to speak to an airworthiness inspector who can explain the requirements for experimental certification.

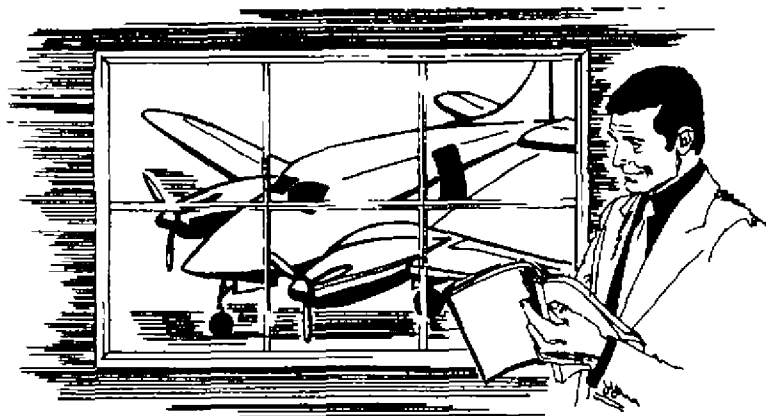
10. Q. Does a 100-hour or annual inspection requirement apply to an amateur-built aircraft?

A. No. Amateur-built aircraft require a condition inspection within the previous 12 calendar months. This inspection requirement and those who are eligible to work on the aircraft are addressed in the Operating Limitations of that particular aircraft.

11. Q. What should I consider when buying a surplus military aircraft?

A. Certain surplus military aircraft are not eligible for FAA certification in the STANDARD, RESTRICTED, or LIMITED classifications. Since no civil aircraft may be flown unless certificated, you should discuss this with the local Aviation Safety Inspector (ASI), who can advise you of eligible aircraft and certification procedures.

An additional source for advice on amateur-built and surplus military aircraft is the Experimental Aircraft Association (EAA), located in Oshkosh, Wisconsin, (414) 426-4800.



AIRCRAFT OWNER RESPONSIBILITIES

You, as an **aircraft** owner, are **assuming responsibilities** similar to those you have if you own an automobile. **Owning an automobile** usually means that you must **register** it in your state of **residence** and obtain license plates. As the **registered** owner of an **aircraft**, you are **responsible** for

- 1 **Having a current Airworthiness Certificate and Certificate of Aircraft Registration in your aircraft**
- 2 **Maintaining your aircraft in an airworthy condition including compliance with all applicable AD's**
- 3 **Assuring that maintenance is properly recorded**
- 4 **Keeping abreast of current regulations concerning the operation and maintenance of your aircraft**
- 5 **Notifying the Civil Aviation Registry immediately of any change of permanent mailing address, of the sale or export of your aircraft, or of the loss of your eligibility to register an aircraft (Refer to FAR Section 47.41)**
- 6 **Having a current FCC Radio Station License, if equipped with radios including an Emergency Locator Transmitter (ELT)**

Some states **require** that your **automobile** be **inspected** periodically to assure that it is in **safe operating condition**. Your **aircraft** shall be **inspected** in accordance with an **annual inspection** or **with** one of the **inspection programs** outlined in FAR Section 91.409, in order to **maintain** a current **Airworthiness Certificate**.

Some similarities between automobile and aircraft responsibilities are shown in the following chart

Automobile/Airplane Comparison Chart

Responsibility	Automobile	Aircraft
Registration	Yes	Yes
Inspection	Yes	Yes
Compulsory insurance (most states)	Yes	NO
Reporting of accidents	Yes	Yes
Required maintenance records	NO	Yes
Maximum speed restrictions	Yes	Yes
Controlled maintenance	NO	Yes

Accidents involving your aircraft must be reported to the National Transportation Safety Board (NTSB) as required by Title 49, Code of Federal Regulations, Part 830

How to Report A Stolen Aircraft or Aircraft Equipment

- 1 Immediately notify the law enforcement agency having jurisdiction at the site of the theft giving all available information. Request that such information be entered into the computer system of the National Crime Information Center of the FBI, and have the law officer taking the report notify the nearest FAA Flight Service Station (FSS). The Flight Service Station then issues a nationwide stolen aircraft alert. NOTE: Flight Service Stations are prohibited from issuing stolen aircraft alerts based solely on notification of theft by the owner — the report must be made by the law enforcement officer handling the case.
- 2 Notify the Aviation Crime Prevention Institute (ACPI), P O Box 30, Hagerstown, MD 21741, telephone 1-800-969-5473, fax (301) 791-9791, giving all available information. ACPI will send notices of the theft to appropriate industry contacts and embassies if applicable.
- 3 Notify your insurance company or agent, as appropriate. Additionally, owners/operators are encouraged to keep separate records of serial numbers for powerplants, avionics, and other installed items. Report these serial numbers at the same time the aircraft is reported stolen.

How to Report An Aircraft Accident

- 1 By the most expeditious means available, notify the nearest NTSB field office. NTSB field offices are listed in the telephone directories of major cities under U S Government.
- 2 Within 10 days after an accident, you should file a report with the NTSB on NTSB Form 6120-1 or NTSB Form 7120-2.
- 3 Flight Service Stations are also available to take accident information and forward it to the NTSB.



AIRCRAFT REGISTRATION

Eligible Registrants

An aircraft is eligible for registration in the United States only if it is owned by

- 1 A U S citizen A U S citizen by definition of FAR Section 47.2 can be an individual, or partnership where each individual is a U S citizen, or a corporation organized under the laws of the United States, State, Territory or possession of the United States of which the president and two-thirds of the board of directors are U S citizens and 75 percent of the voting interest is owned or controlled by U S citizens,
- 2 A resident alien,
- 3 A corporation (other than classified as a U S citizen), lawfully organized and doing business under the laws of the United States or of any state thereof, if the aircraft is based and used primarily in the United States, or
- 4 A government entity (federal, state, or local)

The aircraft may not be registered in a foreign country during the period it is registered in the United States

If you purchase an aircraft, you must apply for a Certificate of Aircraft Registration from the Civil Aviation Registry before it may be operated. Do not depend on a bank, loan company, aircraft dealer, or anyone else to submit the application for registration. Do it yourself (in the name of the owner, not in the name of the bank or other mortgage holder)

You can help make sure your aircraft is properly registered by verifying that the aircraft description entered on the Aircraft Registration Application and Aircraft Bill of Sale (or equivalent) is identical to the data inscribed on the aircraft manufacturer's data plate. The data plate is permanently affixed to the aircraft fuselage by the manufacturer. This quick and simple check should help avoid delays in the issuance of the AC Form 8050-3, Certificate of Aircraft Registration.

Aircraft Previously Registered in the United States

You should immediately submit evidence of ownership, an Aircraft Registration Application, and a \$5 registration fee to the Federal Aviation Administration, Civil Aviation Registry, AFS-750, Mike Monroney Aeronautical Center, P O Box 25504, Oklahoma City, OK 73125. Fees required for aircraft registration may be paid by check or money order made payable to the Treasury of the United States.

A bill of sale form that meets the FAA's requirements for evidence of ownership is AC Form 8050-2, Aircraft Bill of Sale, which may be obtained from the nearest FSDO. The form includes an information and instruction sheet. If a conditional sales contract is the evidence of ownership, an additional \$5 fee is required for recording. For FAA registration, the bill of sale need not be notarized (Refer to figure 1, page 9).

The Aircraft Registration Application includes an information and instruction sheet. Submit the white and green copies to the Civil Aviation Registry, keep the pink copy in your aircraft as evidence of application for registration until you receive your Certificate of Aircraft Registration. The pink copy is good for 90 days and is only legal in the United States. If you plan to operate the aircraft out of the United States, you need to contact Civil Aviation Registry (405 954-3 116) and obtain by fax a temporary authority. Registration certificates are issued to the person whose name is on the application (Refer to figure 2, page 10).

If there is a break in the chain of ownership of the aircraft, i.e., if it is not being purchased from the last registered owner, you are required to submit conveyances to complete the chain of ownership, through all intervening owners, including yourself, to the Civil Aviation Registry.

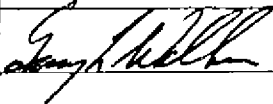

UNITED STATES OF AMERICA U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		FORM APPROVED OMB NO. 2120-0042	
AIRCRAFT BILL OF SALE			
FOR AND IN CONSIDERATION OF \$ 1.00 THE UNDERSIGNED OWNER(S) OF THE FULL LEGAL AND BENEFICIAL TITLE OF THE AIRCRAFT DES CRIBED AS FOLLOWS			
UNITED STATES REGISTRATION NUMBER N2033D			
AIRCRAFT MANUFACTURER & MODEL BEECH C-35			
AIRCRAFT SERIAL No D-3384			
DOES THIS 20 DAY OF SEPT 1992 HEREBY SELL, GRANT TRANSFER AND DELIVER ALL RIGHTS, TITLE AND INTERESTS IN AND TO SUCH AIRCRAFT UNTO			
Do Not Write In This Block FOR FAA USE ONLY			
PURCHASER	NAME AND ADDRESS <small>(IF INDIVIDUAL(S) GIVE LAST NAME FIRST NAME, AND MIDDLE INITIAL)</small>		
	Kruse, Robert L. 1000 Beechcraft Rd Oklahoma City, OK 73100		
DEALER CERTIFICATE NUMBER			
AND TO HIS EXECUTORS ADMINISTRATORS AND ASSIGNS TO HAVE AND TO HOLD SINGULARLY THE SAID AIRCRAFT FOREVER AND WARRANTS THE TITLE THEREOF			
IN TESTIMONY WHEREOF I HAVE SET MY HAND AND SEAL THIS 20 DAY OF SEPT 1992			
SELLER	NAME (S) OF SELLER <small>(TYPED OR PRINTED)</small>	SIGNATURE (S) <small>(IN INK) (IF EXECUTED FOR CO-OWNERSHIP ALL MUST SIGN)</small>	TITLE <small>(TYPED OR PRINTED)</small>
	Gary L Walker		Owner
ACKNOWLEDGMENT (NOT REQUIRED FOR PURPOSES OF FAA RECORDING HOWEVER MAY BE REQUIRED BY LOCAL LAW FOR VALIDITY OF THE INSTRUMENT)			
ORIGINAL TO FAA			
<small>AC Form 8050-2 (9-92) (MSN 0052-00-829-0003) Supersedes Previous Edition</small>			

FIGURE 1 —AC Form 8050-2, Aircraft Bill of Sale

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION-REGISTRATION AERONAUTICAL CENTER AIRCRAFT REGISTRATION APPLICATION			CERT ISSUE DATE
UNITED STATES REGISTRATION NUMBER N2631A			FOR FAA USE ONLY
AIRCRAFT MANUFACTURER & MODEL PIPER PA-22-135			
AIRCRAFT SERIAL No 22-903			
TYPE OF REGISTRATION (Check one box)			
<input checked="" type="checkbox"/> 1 Individual <input type="checkbox"/> 2 Partnership <input type="checkbox"/> 3 Corporation <input type="checkbox"/> 4 Co-owner <input type="checkbox"/> 5 Gov't <input type="checkbox"/> 6 Non-Citizen Corporation			
NAME OF APPLICANT (Person(s) shown on evidence of ownership. If individual, give last name, first name, and middle initial)			
WEAVER, MARTIN E.			
TELEPHONE NUMBER (405) 555-6471			
ADDRESS (Permanent mailing address for first applicant listed)			
Number and street			
Rural Route: Rt 3 Box 17 P.O. Box			
CITY Tuttle	STATE OK	ZIP CODE 73088	
<input type="checkbox"/> CHECK HERE IF YOU ARE ONLY REPORTING A CHANGE OF ADDRESS ATTENTION! Read the following statement before signing this application This portion MUST be completed A false or dishonest answer to any question in this application may be grounds for punishment by fine and/or imprisonment. (15 U.S. Code Title 18, Sec. 1001)			
<u>CERTIFICATION</u>			
I/WE CERTIFY:			
(1) That the above aircraft is owned by the undersigned applicant, who is a citizen (including corporations) of the United States.			
(For voting trust, give name of trustee _____) or			
<u>CHECK ONE AS APPROPRIATE:</u>			
a <input type="checkbox"/> A resident alien with alien registration (Form 1 151 or Form 1 551) No _____			
b <input type="checkbox"/> A non-citizen corporation organized and doing business under the laws of (state) _____ and said aircraft is based and primarily used in the United States. Records or flight hours are available for inspection at _____			
(2) That the aircraft is not registered under the laws of any foreign country and			
(3) That legal evidence of ownership is attached or has been filed with the Federal Aviation Administration			
NOTE: If executed for co-ownership all applicants must sign. Use reverse side if necessary.			
TYPE OR PRINT NAME BELOW SIGNATURE			
EACH PART OF THIS APPLICATION MUST BE SIGNED IN INK	SIGNATURE 	TITLE Owner	DATE 04-02-93
	SIGNATURE	TITLE	DATE
	SIGNATURE	TITLE	DATE
NOTE: Pending receipt of the Certificate of Aircraft Registration, the aircraft may be operated for a period not in excess of 90 days during which time the PINK copy of this application must be carried in the aircraft.			

AC Form 8050-1 (12/90) (0052-00-528-9007) Supersedes Previous Edition

FIGURE 2 —AC Form 8050-1, Aircraft Registration Application

The **Aircraft Registration Application** may also be used to report a change of address by the **aircraft** owner The FAA issues a **revised certificate** at no charge If the **certificate** is lost, destroyed, or mutilated, a replacement **certificate** may be **obtained** at the **written** request of the holder Send **the** request and \$2 (check or money order payable to the Treasury of the **United States**) to

Federal Aviation Administration
Civil Aviation Registry, AFS-750
P O Box 25504
Oklahoma City, OK 73 125

The request should describe the **aircraft** by make, model, **serial** number, and **registration** number If **operation** of the **aircraft** is necessary before **receipt** of the **duplicate certificate**, the Civil Aviation Registry may, if requested, send temporary **authority** by fax Include **in** your request your full address, fax number, and a telephone number where you can be reached

Aircraft Previously Registered in a Foreign Country

If you are **contemplating** purchasing an aircraft registered in a **foreign** country, contact **the** local FSDO for **certification** assistance and the Civil Aviation Registry at (405) 954-3116 for registration assistance

Certificate of Aircraft Registration

A Certificate of Aircraft Registration should be in the **aircraft** before an **Airworthiness** Certificate can be issued (Refer to figure 3, page 12) The **Certificate of Aircraft Registration** becomes **invalid**, as described in FAR Section 47.41 when

- 1 The **aircraft** becomes **registered** under the laws of a **foreign** country,
- 2 The **registration** of the **aircraft** is canceled at the **written** request of the holder of the **certificate**,
- 3 The **aircraft** is totally destroyed or scrapped,
- 4 The holder of **the certificate** loses his or her U S citizenship or status as an **alien** without becoming a U S citizen,
- 5 The **ownership** of the **aircraft** is transferred, or
- 6 **Thirty** days have elapsed **since** the death of the holder of **the certificate**

REGISTRATION NOT TRANSFERABLE			
UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF AIRCRAFT REGISTRATION		This certificate must be in the aircraft when operated	
NATIONALITY AND REGISTRATION MARKS N488B		AIRCRAFT SERIAL NO 9411	
MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT PITTS SIS CAO Aircraft Address Code 51363722			
ISSUED TO	JACOBS JANE M 520 BIPLANE LANE TECUMSEH, MI 49286		This certificate is issued for registration purposes only and is not a record of title. The Federal Aviation Administration does not determine rights of ownership as between private parties.
	It is certified that the above described aircraft is, in accordance with the Commission on International Civil Aviation Act of 1944, and with the Federal Aviation Act of 1958, and regulations thereunder.		U.S. Department of Transportation Federal Aviation Administration
	DATE OF ISSUE JUNE 3 1995		AC Form 8050-3 (11/82) Successor previous editions
<p style="text-align: center;">EFFECT OF REGISTRATION</p> <p>Section 5010 of the Federal Aviation Act of 1958 (49 U.S.C. 1401) provides: Registration shall not be evidence of ownership of aircraft in any proceeding in which such ownership by a particular person is in dispute. THIS CERTIFICATE MUST BE SIGNED AND RETURNED BY THE REGISTERED OWNER WITHIN 90 DAYS WHEN IT IS NO LONGER IN EFFECT FOR ANY REASON UNDER 14 C.F.R. 47.41(a)(1) THROUGH (b).</p>			
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>a. <input type="checkbox"/> Registration is cancelled at the request of the owner (Also check under complete block b, c, d, e, or f)</p> <p>b. <input type="checkbox"/> The aircraft is totally destroyed or scrapped</p> <p>c. <input type="checkbox"/> United States citizenship has been lost or the owner is alien or a resident alien has changed (unless changed to that of a U.S. citizen)</p> <p>d. <input type="checkbox"/> Thirty days have elapsed since the death of the registered owner (retain representative name)</p> </div> <div style="width: 45%;"> <p>e. <input type="checkbox"/> The aircraft is to be registered in the name of a foreign country</p> <p>f. <input type="checkbox"/> The ownership of the aircraft is transferred to:</p> <p>NAME _____</p> <p>TAXIDTES _____</p> <p>CITY STATE ZIP _____</p> </div> </div>			
SIGNATURE _____		TITLE _____ DATE _____	
This certificate must be returned to: AIRCRAFT REGISTRATION BRANCH, P.O. BOX 25004, OKLAHOMA CITY, OKLAHOMA 73125-0504			

U.S. Department of Transportation
Federal Aviation Administration

Office of Aviation System Statistics
P.O. Box 25004
Oklahoma City, OK 73125-0504

Official Business
Penalty for Private Use \$300

AC Form 8050-3 (11/82) Successor previous editions

TO:
JANE M. JACOBS
520 BIPLANE LANE
TECUMSEH, MI 49286

RETAIN THIS INFORMATION FOR FUTURE REFERENCE

CHANGE OF ADDRESS

Federal Aviation Regulations require that the registered owner of the aircraft shall report in writing within 90 days any change in permanent mailing address. A revised Certificate of Registration will be issued without charge. The Application for Transfer of AC Form 8050-3 is used to report a change of address.

REPLACEMENT OF CERTIFICATE

If this certificate is lost, destroyed, or mutilated a replacement may be obtained at the written request of the holder. Send your request and \$1.00 (check or money order made payable to United States Treasury) to:

Aircraft Registration Branch
P.O. Box 25004
Oklahoma City, Oklahoma 73125-0504

NOTE: All fee responses should include the registration "N" number, manufacturer model, and serial number of the aircraft.

FIGURE 3 -AC Form 8050-3, Certificate of Aircraft Registration

When an **aircraft** is destroyed, scrapped, or sold, the owner shall **notify** the FAA by **filling in** the back of the **Certificate of Aircraft Registration** and **mailing** it to

Federal Aviation Administration
Civil Aviation Registry, AFS-750
P O Box 25504
Oklahoma City, OK 73 125

The U S **registration** and **nationality marking** should be removed from an **aircraft** before it is **delivered** to a purchaser who is not **eligible** to register it in the United States The endorsed **Certificate of Aircraft Registration** should be forwarded to the **Civil Aviation Registry**

A dealer's **aircraft registration certificate** is another form of **registration** It is **valid** only for **flights within** the United States by the manufacturer or a dealer for **flight testing** or **demonstration** for sale It should be removed by the dealer when the **aircraft** is sold

The **certificate of registration** serves as **conclusive evidence** of **nationality** but is not a **title** and is not **evidence of ownership** in any **proceeding in which ownership** is at issue

Special Registration Number (N-Number)

A U S **identification** number of your **choice** may be reserved, if **available** This number may not exceed five characters in **addition** to the **prefix** letter "N " All of the five characters may be numbers (N11 111) or four numbers and one **suffix** letter (N1 000A) or one to three numbers and two **suffi** letters (N100AA) may be used

In your **written** request, **list** up to five numbers in order of preference in the event the first **choice** is not **available**, also **include** a \$10 fee If your request is approved, you **are notified** that the number has been reserved for 1 year You are also **informed** that this **reservation** may be extended on a yearly **basis** for a \$10 renewal fee

When you are ready to place the number on your **aircraft**, you should request **permission** by forwarding a complete **description** of the **aircraft** to the Civil Aviation Registry **Permission** to place the **special** number on your **aircraft** is given on AC Form 8050-64, **Assignment of Special Registration Numbers** When the number is placed on your **aircraft**, **sign** and return the original to the **Civil Aviation Registry** within 5 days (Refer to figure 4, page 15)

The **duplicate** of AC Form 8050-64, together with your **Airworthiness Certificate**, should be presented to an **Aviation Safety Inspector** within 10 days from placing the new **registration** number on your **aircraft** The Inspector will **issue** a **revised Airworthiness Certificate** showing the new **registration** number The old **registration certificate** and the **duplicate** AC Form 8050-64 should be **carried in** the aircraft until the new **registration certificate** is **received** (Refer to FAR Section 9 1 203(a)(1))

Registration of Amateur-Built Aircraft

AC Form 8050-88, Identification Number Assignment and Registration of Amateur-Built Aircraft, is used by the Civil Aviation Registry to notify you of action taken on your application for registration of amateur-built aircraft. The reverse side of AC Form 8050-88 is an Affidavit of Ownership for an amateur-built aircraft. Complete the reverse side of AC Form 8050-88 when applying for registration of an amateur-built aircraft. You may designate an aircraft serial number of your choice at this time. This becomes the official aircraft serial number. (Refer to figure 5, page 16.) Submit AC Form 8050-88 along with AC Form 8050-1 to register your aircraft. If you have not reserved a special N number, the Civil Aviation Registry assigns a number at this time.

Additional Information

FAR Part 47 specifies the requirement for registering aircraft. For information concerning FAR Part 47 or any circumstances not discussed herein, contact the Federal Aviation Administration, Civil Aviation Registry, AFS-750, P O Box 25504, Oklahoma City, OK 73125. Telephone (405) 954-3116 for registration information and (405) 954-4206 for N-Number information.

State registration of aircraft is required in approximately 60 percent of the states. Check for your state's requirement.

AFFIDAVIT OF OWNERSHIP FOR AMATEUR-BUILT AIRCRAFT

U.S. Identification Number N48SB

Builder's Name MARK W JACOBS

Model PITTS S1S

Serial Number (required) 9411

Class (airplane, rotorcraft, glider, etc) AIRPLANE

Type of Engine Installed (reciprocating, turbopropeller, etc)
RECIPROCATING

Number of Engines Installed ONE

Manufacturer, Model, and Serial Number of each Engine Installed
LYCOMING, IO-360-C1C, L-13154-51A

Built for Land or Water operation LAND


Number of Seats ONE

The above described aircraft was built from parts and I am the owner

Address 520 BIPLANE LANE

City TECUMSEH state MI Zip Code 49286

Telephone: Home (517) 555-9847 Work (517) 555-2827



(Signature of Owner)

State of MICHIGAN

County of LENAWEE

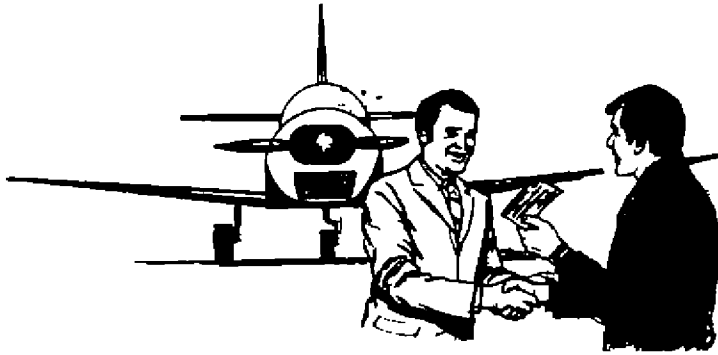
Subscribed and sworn to before ☐ e this 1st day of APRIL, 1995

My commission expires 12-31-95


ROBERT J DIPPI
(Signature of Notary Public)

AC Form 8050-88 (6-87) (0052-00-559-0003) Supersedes previous edition

FIGURE 5 -AC Form 8050-88, (reverse side) Affidavit of Ownership for Amateur-Built Aircraft



AIRWORTHINESS CERTIFICATE

An Airworthiness Certificate is issued by a representative of the FAA after the aircraft has been inspected, is found to meet the requirements of the FAR's, and is in condition for safe operation. The certificate must be displayed in the aircraft so that it is legible to passengers or crew whenever the aircraft is operated. The Airworthiness Certificate is transferred with the aircraft, except when it is sold to a foreign purchaser.

FAA Form 8100-2, Standard Airworthiness Certificate, is issued for aircraft type certificated in the normal, utility, acrobatic, commuter and transport categories, or for manned free balloons. An explanation of each term in the certificate follows (Refer to figure 6, page 19.)

- Item 1 Nationality — The "N" indicates the aircraft is of U S registry. Registration Marks — the number, in this case 2631A, is the registration number assigned to the aircraft.
- Item 2 Indicates the manufacturer, make and model of the aircraft.
- Item 3 Indicates the manufacturer's serial number assigned to the aircraft, as noted on the aircraft data plate.
- Item 4 Indicates that the aircraft, in this case, shall be operated in accordance with the limitations specified for the NORMAL category.
- Item 5 Indicates the aircraft has been found to conform to its type certificate and is considered in condition for safe operation at the time of inspection and issuance of the certificate. Any exemptions from the applicable airworthiness standards are briefly noted here and the exemption number given. The word "NONE" is entered if no exemption exists.
- Item 6 Indicates the Airworthiness Certificate is in effect indefinitely, if the aircraft is maintained in accordance with FAR Parts 21, 43, and 91, and the aircraft is registered in the United States. Also included are the date the certificate was issued, the signature of the FAA representative, and his or her office identification.

A Standard **Airworthiness Certificate** remains in effect as long as the aircraft receives the required maintenance and is properly registered in the United States. Flight safety relies, in part, on the condition of the aircraft, which may be determined on inspection by mechanics, approved repair stations, or manufacturers who meet specific requirements of FAR Part 43.

The FAA Form 8130-7, **Special Airworthiness Certificate**, is issued for all aircraft certificated in other than the Standard classifications such as Experimental, Restricted, Limited, and Provisional.

An explanation of each term in the certificate follows as issued for an **Experimental Amateur-Built Aircraft** (Refer to figure 7, page 19.)

Item **A—Category/Designation** — In this case, the category is **Experimental**
Purpose—The purpose for issuing the certificate, in this case, “Operating Amateur-Built Aircraft.”

Item **B—Manufacturer** does not apply in this case.

Item **C—Flight** does not apply in this case.

Item **D—Indicates** the “N” number, builder, serial number, and model of the aircraft when certificated.

Item **E—Indicates** when the date of final inspection was completed and is considered in condition for safe operation and issuance of the certificate. Also shows when the Operating Limitations were issued, if they expire, and the signature of the FAA representative, and his or her office identification.

If you are interested in purchasing an aircraft classed as other than Standard, it is suggested that you contact the local FAA Manufacturing Inspection District Office (MIDO) or FSDO for an explanation of airworthiness requirements and the limitations of such a certificate.

An additional source for advice in such matters is the **Experimental Aircraft Association (EAA)**, located in Oshkosh, Wisconsin, (414) 426-4800.

In summary, the FAA initially determines that your aircraft is in condition for safe operation and conforms to type design, then issues an **Airworthiness Certificate**.

Advisory Circular 21-12, Application for U.S. Airworthiness Certificate, and **Advisory Circular 20-27, Certification and Operation of Amateur-Built Aircraft**, provide additional information.

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION STANDARD AIRWORTHINESS CERTIFICATE			
1 NATIONALITY AND REGISTRATION MARKS N2631A	2 MANUFACTURER AND MODEL PIPER PA-22-135	3 AIRCRAFT SERIAL NUMBER 22-903	4 CATEGORY NORMAL
5 AUTHORITY AND BASIS FOR ISSUANCE This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein. Exceptions NONE			
6 TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE 08-10-95	FAA REPRESENTATIVE <i>Marion W. Williams</i> MARION W. WILLIAMS	DESIGNATION NUMBER SW-FSDO-OKC	
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000 or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.			
FAA Form 8100-2 (8-82)		GPO 892 804	

FIGURE 6 -FAA Form 8100-2, Standard Airworthiness Certificate

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION SPECIAL AIRWORTHINESS CERTIFICATE		
A	CATEGORY/DESIGNATION EXPERIMENTAL	
	PURPOSE OPERATING AMERICAN BUILT AIRCRAFT	
B	MANUFACTURER NAME N/A	
	ADDRESS N/A	
C	FLIGHT FROM N/A	
	TO N/A	
D	tail 48 SB	SERIAL NO 9411
	BUILDER MARK W. JACOBS	MODEL PITTS S1S
E	DATE OF ISSUANCE 04-01-95	EXPIRY UNLIMITED
	OPERATING LIMITATIONS DATED 04-01-95 ARE A PART OF THIS CERTIFICATE	
	SIGNATURE OF FAA REPRESENTATIVE <i>Dannel A. Freeman</i>	DESIGNATION OR OFFICE NO OKC-MIDO-41
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000 or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.		
FAA FORM 8130-7 (18/82)		SEE REVERSE SIDE

FIGURE 7 -FAA Form 8130-7, Special Airworthiness Certificate (pmk)



AIRCRAFT MAINTENANCE

Maintenance means the **preservation**, inspection, overhaul, and **repair** of **aircraft**, including the replacement of parts. A PROPERLY MAINTAINED AIRCRAFT IS A SAFE AIRCRAFT.

The purpose of maintenance is to ensure that the **aircraft remains airworthy** throughout its **operational life**.

Although maintenance **requirements** vary for **different** types of aircraft, **experience** shows that most **aircraft** need some type of **preventive** maintenance every 25 hours or less of flying time, and **minor** maintenance at least every 100 hours. This is influenced by the kind of operation, climatic conditions, storage facilities, age, and construction of the **aircraft**. Maintenance manuals are **available** from **aircraft** manufacturers or **commercial** vendors with **revisions** for maintaining your **aircraft**.

Inspections

FAR Section 91.403 places **primary responsibility** on the owner or operator for maintaining an **aircraft in an airworthy condition**. Certain inspections shall be performed on your **aircraft**, and you must **maintain** the **airworthiness** of the aircraft between **required inspections** by **having** any defects corrected.

FAR 91 Subpart E **requires** the inspection of all **civil aircraft** at **specific intervals** to **determine** the overall **condition**. The **interval** depends generally upon the type of **operations** in which the **aircraft** is engaged. Some **aircraft** need to be inspected at least once every 12 calendar months, while inspection is **required** for others after each 100 hours of **operation**. In other **instances**, an **aircraft** may be **inspected** in accordance with an inspection system set up to **provide** for total inspection of the **aircraft** on the **basis** of calendar time, **time in service**, number of system **operations**, or any combination of these.

All **inspections** shall follow the Manufacturer Maintenance Manual including the **Instructions** for **Continued Airworthiness** concerning inspection **intervals**, parts replacement, and **life-limited items** as applicable to your **aircraft**.

To **determine** the specific **inspection requirements** and rules for the performance of **inspections**, refer to FAR 91 Subpart E which **prescribes** the **requirements** for various types of **operations**.

Annual Inspection Any reciprocating-engine powered or single-engine-turbojet/turbo propeller powered small aircraft (12,500 pounds and under) flown for business or pleasure is required to be inspected at least annually by an FAA certificated A&P mechanic holding an Inspection Authorization (IA), or an FAA certificated repair station that is appropriately rated, or the manufacturer of the aircraft. The aircraft may not be operated unless the annual inspection has been performed within the preceding 12 calendar months. A period of 12 calendar months extends from any day of a month to the last day of the same month the following year. However, an aircraft with the annual inspection overdue may be operated under a special flight permit issued by the FAA for the purpose of flying the aircraft to a location where the annual inspection can be performed.

ZOO-Hour Inspection. Reciprocating-engine powered and single-engine-turboprop/turbojet powered aircraft (12,500 pounds and under) used to carry passengers for hire or used for flight instruction, shall be inspected within each 100 hours of time in service by an FAA certificated A&P mechanic, an FAA certificated repair station that is appropriately rated, or the aircraft manufacturer. An annual inspection is acceptable as a 100-hour inspection, but the reverse is not true.

Other Inspection Programs. The annual and 100-hour inspection requirements do not apply to large (over 12,500 pounds) airplanes, turbojet, or turbopropeller-powered multiengine airplanes, or to airplanes for which the owner or operator complies with the progressive inspection requirements. Details of these requirements may be determined by reference to FAR Section 43.11, FAR 91 Subpart E, and by inquiry at the local FSDO.

Altimeter System Inspection FAR Section 91.411 requires that the altimeter, encoding altimeter, and related system be tested and inspected in the preceding 24 months before operated in controlled airspace under IFR.

Transponder Inspection. FAR Section 91.413 requires that before a transponder can be used under FAR Section 91.215(a), it shall be tested and inspected within the preceding 24 months.

Preflight Inspection The FAR's require a pilot to conduct a thorough preflight inspection before every flight to ensure that the aircraft is safe for flight.

Preventive Maintenance

The FAR's list approximately two dozen relatively uncomplicated repairs and procedures defined as preventive maintenance. Certificated pilots, excluding student and recreational pilots, may perform preventive maintenance on any aircraft owned or operated by them that are not used in air carrier service. These preventive maintenance operations are listed in FAR Part 43, Appendix A, under Major Alterations, Major Repair, and Preventive Maintenance. FAR Part 43 also contains other rules to be followed in the maintenance of aircraft.

Repairs and Alterations

All repairs and alterations of standard airworthiness certificated aircraft are classed as either major or minor FAR Part 43, Appendix A, describes the alterations and repairs considered major. Major repairs or major alterations shall be approved for return to service on FAA Form 337, Major Repairs and Major Alterations, by an appropriately rated certificated repair station, an FAA certificated A&P mechanic holding an Inspection Authorization, or a representative of the Administrator. Minor repairs and minor alterations may be approved for return to service with a proper entry in the maintenance records by an FAA certificated A&P mechanic or an appropriately certificated repair station.

Modifications of experimental aircraft require the notification of your local FSDO.



AIRCRAFT MAINTENANCE RECORDS

(FAR Sections 91.405, 91.409, 91.417)

An aircraft owner is required to keep aircraft maintenance records on the airframe, engine, prop, and accessories which contain a description of the work performed on the aircraft, the date the work was completed, the signature, kind of FAA certificate, and certificate number of the person approving the aircraft for return to service. The owner of an aircraft shall also ensure that maintenance personnel make appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service. The owner's aircraft records shall also contain the inspections required pursuant to FAR Section 91.409.

Proper management of aircraft operations begins with a good system of maintenance records. A properly completed maintenance record provides the information needed by the owner/operator and maintenance personnel to determine when scheduled inspections and maintenance are to be performed.

1. There shall be records of maintenance and of 100-hour, annual, progressive, and other required or approved inspections for each aircraft, including the airframe, each engine, propeller, rotor, and appliance. These records may be discarded when the work is repeated or superseded by other work, or 1 year after the work is performed.
2. There shall also be records of
 - a. The total time in service of the airframe, each engine, and each propeller,
 - b. The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance,
 - c. The time since the last overhaul of all items installed on the aircraft which are required to be overhauled on a specified time basis,

- d The **identification** of the current **inspection** status of the **aircraft**, including the **time** since the last **inspection** required by the **inspection** program under which the **aircraft** and its **appliances** are **maintained**,
- e The current status of **applicable** AD's including, for each, the method of **compliance**, the AD number, and **revision** date. If the AD involves **recurring** action, the time and date when the next **action** is **required**, and
- f A copy of the current **major** alterations to each **airframe**, engine, propeller, and **appliance**

These records are **retained** by the owner/operator and transferred **with** the **aircraft** when it is sold

Keep in mind that as a result of **repairs** or **alterations**, such as **replacing** radios and installing speed **kits**, amendments may be necessary to the **weight** and balance report, **equipment list**, flight manual, etc

Entries into the Aircraft Maintenance Records

1 FAR Section 43.9 entries

Any person who **maintains**, **rebuilds**, or **alters** an **aircraft**, an **airframe**, **aircraft** engine, propeller, or **appliance** shall make an entry **containing**

- a A **description** of the work, or some reference to data acceptable to the FAA,
- b The date the work was completed,
- c The name of the person who performed the work, and
- d If the work is approved for **return** to **service**, the **signature**, **certificate** number, and kind of **certificate** held by the person **approving** the **aircraft** for **return** to **service**

2 FAR Section 43.11 entries

When a **mechanic** approves or **disapproves** an **aircraft** for **return** to **service** for an annual, **100-hour**, or **progressive inspection**, an entry shall be made including

- a **Aircraft** time in **service**,
- b The type of **inspection**,
- c The date of **inspection**,
- d The **signature**, **certificate** number, and kind of **certificate** held by the person **approving** or **disapproving** the **aircraft** for **return** to **service**, and
- e A **signed** and dated **listing** of **discrepancies** and **unairworthy** items

3 FAR Section 91 409(e) — Airplanes

Inspection entries for FAR Section 91 409(e) Airplanes — those over 12,500 pounds, turbojet, or turbopropeller-powered multiengine airplanes are made according to FAR Section 43 9 and they shall include

- a The kind of inspection performed,
- b A statement by the mechanic that it was performed in accordance with the instructions and the procedures for the kind of inspection program selected by the owner, and
- c A statement that a signed and dated list of any defects found during the inspection was given to the owner, if the aircraft is not approved for return to service


4 FAA Form 337, Major Repairs and Major Alterations

A mechanic who performs a major repair or major alteration shall record it on FAA Form 337 and have the work inspected and approved by a mechanic who holds an Inspection Authorization. A signed copy shall be given to the owner and another copy sent to the local FSDO within 48 hours after the aircraft has been approved for return to service. However, when a major repair is done by a certificated repair station, the customer's work order may be used and a release given as outlined in Appendix B of FAR Part 43 (Refer to figure 8, page 28)

5 FAR Section 91 411 - Altimeter and Static Tests

FAR Section 91 411 requires that every airplane or helicopter operated in controlled airspace under IFR conditions have each static pressure system, each altimeter, and each automatic pressure altitude reporting system tested and inspected every 24 calendar months. The mechanic shall enter into the records

- a A description of the work,
- b The maximum altitude to which the altimeter was tested, and
- c The date and signature of the person approving the aircraft for return to service

 U.S. Department of Transportation Federal Aviation Administration		MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)		Form Approved OMB No. 2120-0020 For FAA Use Only Office Identification	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).					
1. Aircraft	Make		Model		
	Serial No.		Nationality and Registration Mark		
2. Owner	Name (As shown on registration certificate)		Address (As shown on registration certificate)		
3. For FAA Use Only					
4. Unit Identification					
Unit	Make	Model	Serial No.	5. Type	
				Repair	Alteration
AIRFRAME	~~~~~ (As described in item 1 above) ~~~~~				
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				
6. Conformity Statement					
A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.	
		U.S. Certified Mechanic			
		Foreign Certified Mechanic			
		Certificated Repair Station			
		Manufacturer			
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
Date		Signature of Authorized Individual			
7. Approval for Return To Service					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is: <input type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA Fit Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)	
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection		Certificate or Designation No.	Signature of Authorized Individual		

FAA Form 337 (12-88)

FIGURE 8 -FAA Form 337, Major Repair and Alteration Description of work accomplished on reverse side

6 FAR Sectmn 91 413 - Transponder Tests

FAR Sectmn 91 413 requires that anyone operating an Air Traffic Control (ATC) transponder specified in FAR Sectmn 91 215(a) have it tested and inspected every 24 calendar months The mechanic shall enter into the records

(a) A description of the work

(b) The date and signature of the person approving the airplane for return to service

7 FAR Sectmn 91 207 - Emergency Locator Transmitters (ELT)

FAR Section 91 207 requires that no person may operate a US registered civil airplane unless there is attached to the airplane a personal type or an automatic type emergency locator transmitter that is in operable condition and meets applicable requirements of TSO-C91 New ELT installations after June 21, 1995, must meet TSO C90A

Batteries used in the emergency locator transmitters shall be replaced when

(a) The transmitter has been in use for more than 1 cumulative hour or,

(b) 50 percent of their useful life has expired

Expiration date for replacing the battery shall be legibly marked on the outside of the transmitter and entered in the aircraft maintenance records

Additional Information on Aircraft Maintenance Records

Additional information relating to aircraft maintenance records can be obtained from

FAR Part 39 Airworthiness Directives

FAR Part 43 Mamtenance, Preventive Mamtenance, and Alteration

FAR Part 91 General Operating and Flight Rules

Advisory Circular 43-9 Maintenance Records General Aviation Aircraft

These publications are available from US Government Printing Office bookstores located throughout the United States For more information on ordering these publications, refer to the section titled "Obtaining FAA Publications and Records" on page 41 They also are available from commercial venders Your local FSW can help you establish your aircraft maintenance program and the necessary maintenance records

Maintenance and record keeping similarities between type certificated aircraft and amateur-built aircraft are shown in the following chart

Type Certificated/Amateur-Built Airplane Comparison Chart

Responsibility	Type Certificated Aircraft	Amateur-Built Aircraft
Registration	Yes	Yes
Annual inspection	Yes	Yes ¹
100-hour inspection	Yes ²	No ³
Compulsory insurance (most states)	NO	NO
Required maintenance records	Yes	Yes
Altimeter and static tests (IFR controlled airspace)	Yes	Yes
Transponder tests (if required by FAR's)	Yes	Yes
Emergency locator transmitter (ELT) (Except single seat aircraft)	Yes	Yes
Reporting of accidents	Yes	Yes

All record keeping is primarily the responsibility of the aircraft owner or operator. The A&P mechanic is responsible for the work.

¹ Condition Inspection for Amateur-Built Aircraft

² Only when aircraft is used for commercial operations

³ 100-Hour Inspection same as Condition Inspection



SPECIAL FLIGHT PERMITS

(FAR Section 2 1 197)

A **special flight permit** is a **Special Airworthiness Certificate** issued for an aircraft that may not currently meet **applicable airworthiness requirements** but is safe for a **specific flight** (Refer to figure 9, page 32) Before the permit is issued, an **FAA inspector** may personally inspect the aircraft or **require** it to be inspected by an **FAA certificated A&P mechanic** or **repair station** to **determine** its safety for the **intended flight** The inspection is then recorded in the aircraft records

Special flight permits are issued to allow the aircraft to be flown to a base where **repairs, alterations, or maintenance** can be performed, for **delivering or exporting** the aircraft, or for **evacuating** an aircraft from an area of **impending danger** They may also be **issued** to allow the **operation** of an **overweight aircraft** for flight beyond its normal range over water or land areas where adequate **landing facilities** or fuel are not **available**

Should you have an **occasion** to need a **special flight permit**, **assistance** and the necessary forms can be **obtained** from the local **FSDO** Refer to figure 10, page 33 for a sample of the **special flight permit application** form, the **reverse side** of **FAA Form 8130-6, Application for Airworthiness Certificate**

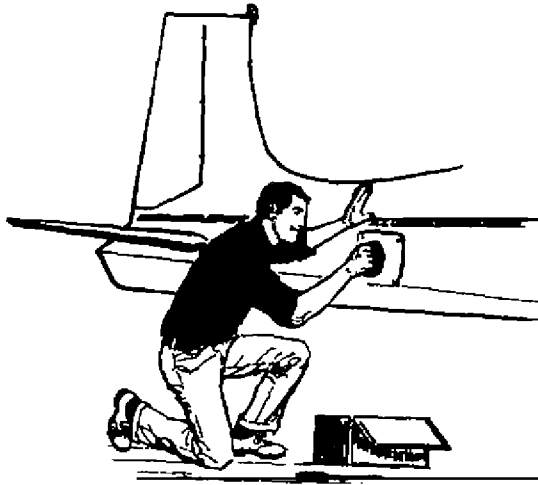
VI. PRODUCTION FLIGHT TESTING	A. MANUFACTURER	
	NAME	ADDRESS
	B. PRODUCTION BASIS (Check applicable item)	
	<input type="checkbox"/> PRODUCTION CERTIFICATE (Give production certificate number) <input type="checkbox"/> TYPE CERTIFICATE ONLY <input type="checkbox"/> APPROVED PRODUCTION INSPECTION SYSTEM	
C. GIVE QUANTITY OF CERTIFICATES REQUIRED FOR OPERATING NEEDS _____		
DATE OF APPLICATION	NAME AND TITLE (Print or type)	SIGNATURE
A. DESCRIPTION OF AIRCRAFT		
REGISTERED OWNER	ADDRESS	
JOHNNY W MALONE	1012 CESSNA AVE , SHAWNEE, OKLAHOMA 74852	
BUILDER (Make)	MODEL	
CESSNA	C-182L	
SERIAL NUMBER	REGISTRATION MARK	
182-582672	N42565	
B. DESCRIPTION OF FLIGHT CUSTOMER DEMONSTRATION FLIGHTS <input type="checkbox"/> (Check if applicable)		
FROM	TO	
SHAWNEE, OKLAHOMA	DOWNTOWN AIRPARK, OKLAHOMA CITY, OKLAHOMA	
VIA	DEPARTURE DATE	DURATION
DIRECT	03-22-95	10 DAYS
C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT		
<input checked="" type="checkbox"/> PILOT	<input type="checkbox"/> CO-PILOT	<input type="checkbox"/> NAVIGATOR
<input type="checkbox"/> OTHER (Specify)		
D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS		
ANNUAL INSPECTION		
E. THE FOLLOWING RESTRICTIONS ARE CONSIDERED NECESSARY FOR SAFE OPERATION (Use attachment if necessary)		
AIRCRAFT INSPECTION AND LOGBOOK ENTRY		
F. CERTIFICATION — I hereby certify that I am the registered owner (or his agent) of the aircraft described above, that the aircraft is registered in accordance with Section 501 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations, and that the aircraft has been inspected and is airworthy for the flight intended.		
DATE	NAME AND TITLE (Print or type)	
03-22-95	JOHNNY W MALONE	
		SIGNATURE
		<i>Johnny W Malone</i>
VII. AIRCRAFT INSPECTION DOCUMENTATION (FAA use only)	A. Operating Limitations and Markings in Compliance with FAR 91.21 as Applicable	
	B. Current Operating Limitations Attached	
	C. Data, Drawings, Photographs, etc. (Attach when required)	
	D. Current Weight and Balance Information Available in Aircraft	
	E. Major Repair and Alteration, FAA Form 337 (Attach when required)	
	F. This Inspection Recorded in Aircraft Records	
G. Statement of Conformity, FAA Form 8130-9 (Attach when required)		
H. Foreign Airworthiness Certification for Import Aircraft (Attach when required)		
I. Previous Airworthiness Certificate Issued in Accordance with FAR _____ CAR _____ (Original Attached)		
J. Current Airworthiness Certificate Issued in Accordance with FAR _____ (Copy attached)		

FIGURE 9 -FAA Form 81304, Application for Airworthiness Certificate, (reverse side)
Application for Special Flight Permit

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION SPECIAL AIRWORTHINESS CERTIFICATE	
A	CATEGORY/DESIGNATION SPECIAL FLIGHT PERMIT
	PURPOSE MAINTENANCE
B	MANU-FACTURER NAME N/A
	ADDRESS N/A
C	FLIGHT FROM SHAWNEE, OKLAHOMA
	TO DOWNTOWN AIRPARK, OKLAHOMA CITY, OK
D	N- 42565 SERIAL NO 182-582672
	BUILDER CESSNA MODEL C-182L
E	DATE OF ISSUANCE 03-22-95 EXPIRY 04-01-95
	OPERATING LIMITATIONS DATED 03-22-95 ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE T.A. HOLLARS <i>[Signature]</i> DESIGNATION OR OFFICE NO SW-FSDO-OKC
Any alteration reproduction or misuse of this certificate may be punishable by a fine not exceeding \$1 000 or imprisonment not exceeding 3 years or both THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS	

FAA FORM 8130-7 (10/82) SEE REVERSE SIDE

FIGURE 10 -FAA Form 8130-7, Special Airworthiness Certificate, Special Flight Permit (pink)



AIRWORTHINESS DIRECTIVES

(FAR Part 39)

A primary safety function of the FAA is to require correction of unsafe conditions found in an aircraft, aircraft engine, propeller, or appliance when such conditions exist or are likely to exist or develop in other products of the same design. The unsafe conditions can exist because of a design defect, maintenance, or other causes. FAR Part 39, Airworthiness Directives, (AD) defines the authority and responsibility of the Administrator for requiring the necessary corrective action. AD's are used to notify aircraft owners and other interested persons of unsafe conditions and to specify the conditions under which the product may continue to be operated.

AD's may be divided into two categories:

- 1 Those of an emergency nature requiring immediate compliance prior to further flight, and
- 2 Those of a less urgent nature requiring compliance within a relatively longer period of time.

AD's are FAR's and shall be complied with, unless specific exemption is granted. It is the aircraft owner's or operator's responsibility to ensure compliance with all pertinent AD's. This includes those AD's that require recurrent or continuing action. For example, an AD may require a repetitive inspection each 50 hours of operation, meaning the particular inspection shall be accomplished and recorded every 50 hours of time in service. Owner/operators are reminded there is no provision to overfly the maximum hour requirement of an AD unless it is specifically written into the AD. To help you determine if an AD applies to an amateur-built aircraft, contact your local FSDO.

FAR Section 91.417 requires a record to be maintained that shows the current status of applicable AD's, including the method of compliance, the AD number and revision date, if recurring, the time and date when due again, the signature, kind of certificate, and certificate number of the repair station or mechanic who performed the work. For ready reference, many aircraft owners have a chronological listing of the pertinent AD's in the back of their aircraft and engine records (Refer to figure 11, page 36.)

The Summary of Airworthiness Directives contains all the valid AD's previously published. The current AD's are published in a biweekly supplement. The AD's are divided into two books: Book One is the Rotorcraft and Small Aircraft under 12,500 pounds maximum certificated takeoff weight, and Book Two is the Large Aircraft over 12,500 pounds. These books and the biweekly supplement are available for purchase in paper copy, microfiche, or electronic format.

Advisory Circular 39-7, Airworthiness Directives, provides additional guidance and information for owners and operators of their responsibilities for complying with and recording AD's.

To order AD's from the FAA, contact the Manufacturing Standards Section, AFS-613, in Oklahoma City, OK, telephone (405) 954-4103 or fax (405) 954-4104.

AIRWORTHINESS DIRECTIVE COMPLIANCE RECORD							
AIRCRAFT <u>PA-22-135</u>		<u>N 2631A</u>		<u>S/N 22-903</u>			
ENGINE <u>Lycoming O-290-D2</u>				<u>S/N 4563-21</u>			
PROPELLER <u>Sensenich M 76AM2</u>				<u>SIN6662</u>			
AD NUM & MEND NUM	REV NUM & DATE	SUBJECT	DATE/HOURS AT COMP	METHOD OF COMP	O N E C U T R I M I N G	COMP DUE DATE/HRS	AUTHORIZEE SIGNATURE & NUMBER
6-07-12 39-3024	R-1 8-30-77	Bendix ignition switch	11-11-94 1800TT	Operational check and inspection	X	1900TT	<i>Phil Lomax A&I</i> 00000000
13-18-03 39-8688	Original 10-29-93	One-piece venturi	3-17-95 1850TT	Installed one-piece venturi Carb S/N BR-549	X		<i>Phil Lomax A&I</i> 00000000

FIGURE 11 —Airworthiness Directive Compliance Record (suggested format)



THE SERVICE DIFFICULTY PROGRAM

The Service Difficulty Program provides for the exchange of service experience with aircraft and aircraft products to aid in the detection of mechanical problems. The incentive for early detection is to get a jump on corrective actions and ultimate solutions, thereby minimizing the impact of equipment failure on safety.

Aircraft owners, pilots, and mechanics are urged to report promptly all service problems, using FAA Form X010-4, **Malfunction or Defect Report**, or any other form or format. Copies of these forms may be obtained free from any FSDO. No postage is required (Refer to figures 12 and 13, page 38).

Each problem reported contributes to the improvement of aviation safety through the identification of a potential problem area and the alerting of other persons to it. This focusing of attention on a problem has led to improvements in the design and maintainability of aircraft and aircraft products.

How does reporting a problem help you? By pooling everyone's knowledge about a situation, we can detect mechanical problems early enough to correct them before they might possibly result in accidents/incidents. This should make flying safer, more enjoyable, and certainly less expensive.

Advisory Circular 20-109, Service Difficulty Program (General Aviation), contains additional information on this program.

CMB No 2120-0003

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		OPER Control No.		8 Comments: (Describe the malfunction or defect and the circumstances under which it occurred. State probable cause and recommendations to prevent recurrence.) During a local flight, a fuel odor was apparent. Flight was terminated at the local airport with a normal landing. After engine shutdown and exiting the aircraft the pilot observed fuel leaking from the lower engine cowl. Investigation revealed an aluminum fuel pressure gage line cracked at the B nut where it attached to a carburetor fitting (see attached drawing). Line appears to be original (40+yrs). A combination of age and vibration may have caused the crack. Recommend checking line every 100 hrs and replace as necessary.														
Malfunction or Defect Report		ATA Code																
		1 A/C Reg No. N- 2033D																
Enter pertinent data	MANUFACTURER	MODEL/SERIES	SERIAL NUMBER	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">DISTRICT OFFICE</td> <td style="width: 20%;">OPERATOR</td> </tr> <tr> <td style="width: 20%;">OTHER</td> <td style="width: 20%;">DEFERRED</td> </tr> <tr> <td style="width: 20%;">FAA</td> <td style="width: 20%;">COUNTRY</td> </tr> <tr> <td style="width: 20%;">REG</td> <td style="width: 20%;">REG NO</td> </tr> <tr> <td style="width: 20%;">MFG</td> <td style="width: 20%;">MFG NO</td> </tr> <tr> <td style="width: 20%;">OPER</td> <td style="width: 20%;">OPER NO</td> </tr> <tr> <td style="width: 20%;">SUB</td> <td style="width: 20%;">SUB NO</td> </tr> </table> SUBMITTED BY: Robert Kruse TELEPHONE NUMBER: (405) 555 - 6275	DISTRICT OFFICE	OPERATOR	OTHER	DEFERRED	FAA	COUNTRY	REG	REG NO	MFG	MFG NO	OPER	OPER NO	SUB	SUB NO
DISTRICT OFFICE	OPERATOR																	
OTHER	DEFERRED																	
FAA	COUNTRY																	
REG	REG NO																	
MFG	MFG NO																	
OPER	OPER NO																	
SUB	SUB NO																	
2 AIRCRAFT	Beechcraft	C-35	D-3384															
3 POWERPLANT	Continental	E-225	30904															
4 PROPELLER	Hartzell	HCA2U20 4A1	AK-710															
5 SPECIFIC PART (or components) CAUSING TROUBLE																		
Part Name	MFG, Model or Part No.	Serial No.	Part Defect Location															
Tube-fuel pressure	35-924126	N/A	B-nut carb end															
6 APPLIANCE COMPONENT (Assembly that includes part)																		
Comp. Appl Name	Manufacturer	Model or Part No.	Serial Number															
N/A	N/A	N/A	N/A															
Part TT	Part TSO	Part Condition	7 Date Recd.															
4100	N/A	Cracked	12-12-94															
Optional Information: Check a box below if this report is related to an aircraft: <input type="checkbox"/> Accident Date: ____ - ____ - ____ <input type="checkbox"/> Incident Date: ____ - ____ - ____																		

FAA Form 8010-4 (12-82) SUPERSEDES PREVIOUS EDITIONS

FIGURE 12 —FAA Form 8010-4, Malfunction or Defect Report

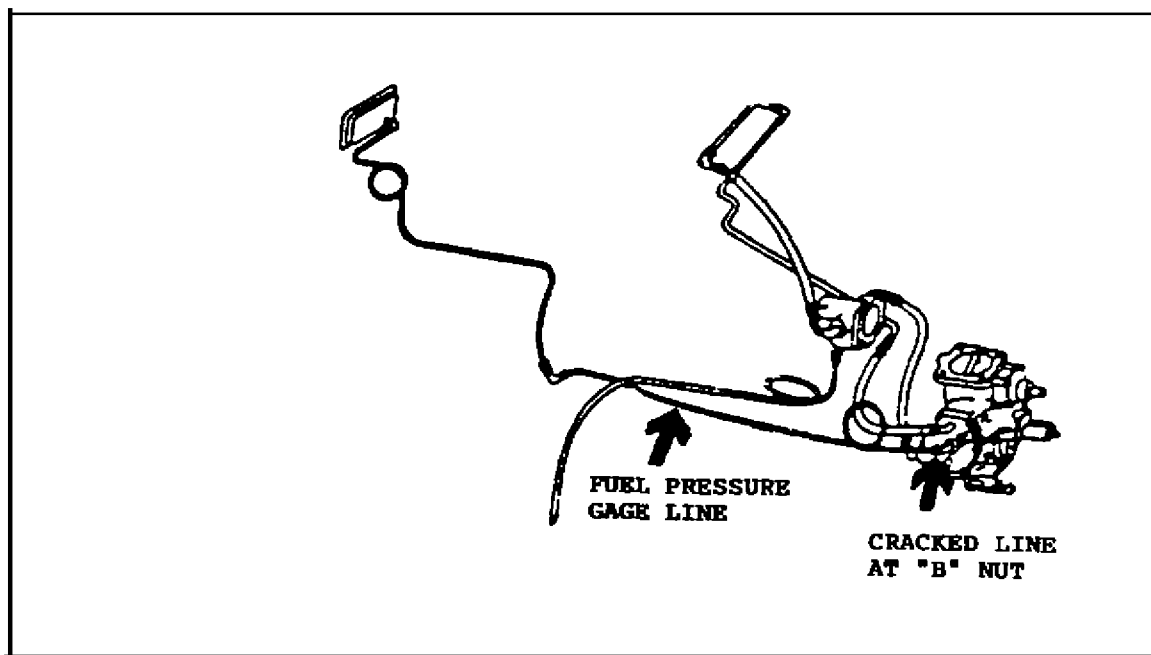
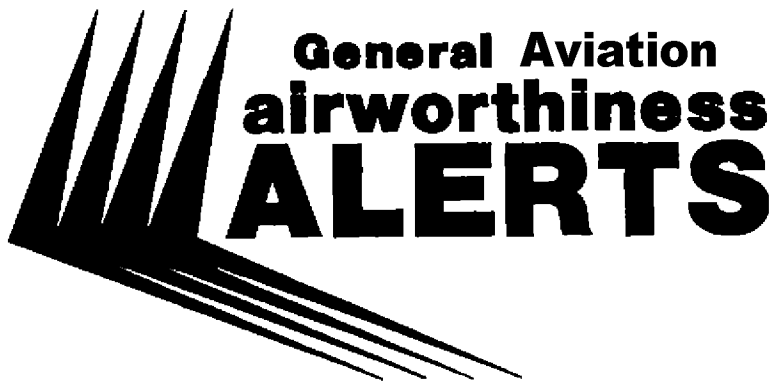


FIGURE 13 -Attachment FAA Form 8010-4, Malfunction or Defect Report



AIRWORTHINESS ALERTS

The FAA publishes Advisory Circular 43-16, General Aviation Airworthiness Alerts, monthly to provide the aviation community with a means for interchanging service difficulty information. The articles contained in the Alerts are derived from the Malfunction or Defect Reports submitted by aircraft owners, pilots, mechanics, repair stations, and air taxi operators.

Maintenance specialists review the reports and select pertinent items for publication in the Alerts. The information is brief and advisory; compliance is not mandatory. It is, however, intended to alert you to service experience and, when pertinent, direct your attention to the manufacturer's recommended corrective action.

The Alerts are distributed free of charge on a subscription basis. To subscribe, fill out the order form on page 40 and mail to the address indicated on the form. Copies of the Alerts are also available at your local FSDO.

SUBSCRIPTION FORM
ADVISORY CIRCULAR (AC) 43-16, GENERAL AVIATION AIRWORTHINESS
ALERTS

Please use this form to subscribe to AC 43-16 or to change your address if you are presently on the mailing list. Once your name has been entered, you will continue to receive this publication until you request your name be removed or a copy is returned because of a bad address

Because this mailing list is independent of other FAA mailing lists, it is necessary that you notify us when your address changes (Our address is on the following form) If you are presently receiving this publication it is **NOT** necessary to send another form. The following form may be duplicated, as necessary Telephone requests will also be accepted, and our number is (405) 954-6487.

AC 43-16 SUBSCRIPTION FORM If you would like to BEGIN receiving AC 43-16, or CHANGE your address, please complete the following: PLEASE PRINT INFORMATION LEGIBLY AND INCLUDE YOUR ZIP CODE. NAME: _____ ADDRESS: _____ _____ _____ _____ _____ DATE: _____ <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 60%; text-align: center;"><div style="background-color: black; height: 15px; width: 100%; margin-bottom: 10px;"></div><div style="display: flex; justify-content: space-around;"><div>1. This is a NEW SUBSCRIPTION</div><div>2. This is an ADDRESS CHANGE.</div></div></div> <div style="border: 1px dashed black; padding: 10px; margin: 10px auto; width: 60%; text-align: center;">SEND ONLY ONE FORM TO THE FOLLOWING ADDRESS: FAA ATTN: Safety Data Analysis Section (AFS-648) P O Box 25082 Oklahoma city, OK 73125-5029</div> If you require more than one copy of AC 43-16, it may be reproduced

FIGURE 14 -Alerts Order Form

OBTAINING FAA PUBLICATIONS AND RECORDS

Advisory Circulars

Advisory circulars are issued by the FAA to inform the aviation public, in a systematic way, of nonregulatory material of interest. The contents of advisory circulars are not binding on the public unless incorporated into a regulation by reference.

Advisory Circular 00-2, Advisory Circular Checklist, contains a list of current FAA advisory circulars and provides detailed instructions on how to obtain them. It also contains a list of U.S. Government Printing Office bookstores located throughout the United States which stock many Government publications. This advisory circular may be obtained free upon request from the U.S. Department of Transportation, Property Use and Storage Section, M-483.7, Washington, DC 20590, or fax 202-366-2795.

Federal Aviation Regulations

The following regulations are those you may be most interested in reading. They pertain primarily to the operation and maintenance of the aircraft and to obtaining a pilot's certificate or an A&P mechanic certificate.

- Part 1 Definitions and Abbreviations
- Part 21 Certification Procedures for Products and Parts
- Part 23 Airworthiness Standards Normal, Utility, and Acrobatic Category Aircraft and Commuter Category Airplanes
- Part 33 Airworthiness Standards Aircraft Engines
- Part 35 Airworthiness Standards Propellers
- Part 39 Airworthiness Directives
- Part 43 Maintenance, Preventive Maintenance, Rebuilding, and Alteration
- Part 45 Identification and Registration Marking
- Part 47 Aircraft Registration
- Part 49 Recording of Aircraft Titles and Security Documents
- Part 61 Certification Pilots and Flight Instructors
- Part 65 Certification Airmen Other Than Flight Crewmembers
- Part 91 General Operating and Flight Rules

Advisory Circular 00-44, Status of Federal Aviation Regulations, contains the current status of the FAR's including changes issued, price list, and ordering instructions. This advisory circular may be obtained free upon request from the U S Department of Transportation, Property Use and Storage Section, M-483 7, Washington, DC 20590, or fax 202-366-2795

Records

If you become an aircraft owner, pilot, or certificated mechanic, you may, at some time, need to obtain copies of documents pertaining to your aircraft, airman, or medical certification

Documents pertaining to aircraft can be requested from

**Federal Aviation Administration
Civil Aviation Registry, AFS-750
P O Box 25504
Oklahoma City, OK 73 125
(405) 954-3116**

If your pilot certificate is lost, destroyed or mutilated, a replacement certificate may be obtained by sending a written request with your name, permanent mailing address, social security number, date and place of birth, and any additional information such as grade and certificate number with a check or money order for \$2 to

**Federal Aviation Administration
Civil Aviation Registry, AFS-760
P O Box 25082
Oklahoma City, OK 73125**

If it becomes necessary to fly before a replacement certificate arrives, you may obtain a fax confirming your pilot status, which is valid for up to 60 days, from the Airman Certification Branch at (405) 954-3261

Medical records are available at

**Federal Aviation Administration
Aeromedical Certification Branch, AAM-33 1
P O Box 26080
Oklahoma City, OK 73126-5063**

If your medical certificate is lost, destroyed or mutilated, a replacement certificate may be obtained by sending a written request with your signature, birth date, and social security number with a check or money order for \$2 to

**Federal Aviation Administration
AMZ-320
P O Box 25770
Oklahoma City, OK 73 125-4915**

If it becomes necessary to fly before a replacement **certificate arrives**, you may **obtain** a fax **confirming** your **medical status**, **which** is **valid** for up to 60 days, from the **Aeromedical Certification Branch** at (405) 954-4821

Fees for **furnishing copies** of paper records are \$2 for search, \$0.25 for copy of **first page**, \$0 OS for second and each **additional page**, \$0.15 for each **microfiche** for **microfiched records**, \$3 for **certification of copies** as **duplicates** of the **original records**, \$2 for **duplicate aircraft registration** or **airman certification** or **medical certificate**, and \$5 for **certification** for a **diligent search** of all possible sources of information

Fees, **which** are **subject** to change, may be **paid** by check, **draft**, or postal money order, payable to the Treasury of the United States. Send your request to the proper branch.

If a **prospective owner** has reason to **believe** that an **aircraft** has been **previously destroyed** or **demolished** and has been **rebuilt** or restored, the **Civil Aviation Registry**, AFS-750, P O Box 25504, Oklahoma City, OK 73125, may have **documentation** if the **aircraft** was reported to the FAA as destroyed or **demolished**. The **aircraft** records may be requested for **review** at the above address.

FSDO's are **listed** by state **wherein** their area of **responsibility is assigned**. Any contacts **with a district office** should be made to the **office** nearest your **residence**. If the **responsibility** for your locality is not with that **office**, you **will be advised** **which office** to contact.

For the current phone number of the FSDO in your area, check your local telephone **directory** under the **section** of United States Government Offices, Department of **Transportation - Federal Aviation Administration - Flight Standards District Office**.

US Department
of Transportation

**Federal Aviation
Administration**

800 Independence Ave. S.W.
Washington, D.C. 20591

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Penalty for Private Use \$300

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