AIRCRAFT MAINTENANCE RESPONSIBILITIES

Owner

Pilot

Mechanic

Inspector

Prepared by Denny Pollard

Revised 09/11/2021

Index

General Aviation
Aircraft Maintenance Responsibilities

Introduction

For optimum safety and freedom in aviation every airman should know the regulations pertaining to his individual responsibilities. In addition, every airman should be familiar with certain overlapping and relative rules that require cooperative efforts of operations and maintenance to properly discharge the shared responsibility of maintaining aircraft airworthiness.

This is a collective review of Federal Aviation Regulations relating to the individual and cooperative responsibilities of aircraft owners, operators, pilots, mechanics, inspectors, and repair stations for maintaining the airworthiness of general aviation aircraft.

We hope that this effort to "rightly divide" The CFRs by collecting applicable sections from CFRs 43, 65, 91, and 145 and "putting them all together" will accomplish a three fold objective.

1. Establish a more knowledgeable rapport between operations and maintenance airmen and agencies.
2. Prevent violations of the Federal Aviation Regulations pertaining to aircraft maintenance.
3. Prevent aircraft accidents in which lack of maintenance or improper maintenance may be a factor.

(The brief comments that follow each CFR reference do not con-stitute a legal interpretation of the regulation, they are simply a paraphrased rendition of the primary content of that section.)

CFR 91 General Operating and Flight Rules

91.1 "Applicability" -Governs **operation** of aircraft.
91.7 (a) Aircraft must be airworthy to be operated.
91.7 (b) Flight to be discontinued if unairworthy Condition occurs.

Definitions

CFR 1 "Person" – An individual or company, corporation, etc.

CFR 1 "Operate" – Use for the purpose of air navigation.

CFR 1 "Maintenance" – includes, inspection, repair etc., **BUT NOT PREVENTIVE MAINTENANCE**

CFR 1 "Preventive Maintenance" – Simple, or minor preservation operations or replacement of small standard parts not involving complex assembly operations.

Airworthiness. US Code Title 49 spt. 44704 and CFR Sections 21.183(a), (b), and (c) all relate to the two conditions necessary for issuance of an airworthiness certificate. The statutory language establishes the two conditions as: (1) The aircraft must conform to the type design (certificate); and (2) it is in a condition for safe operation. The above conditions are further reflected as terms and conditions appearing upon the front of the Standard Airworthiness Certificate, FAA Form 8100-2.

Discussion. a. <u>The aircraft must conform to its type design (certificate).</u> 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 is a part of the type certificate. Conformity would include applicable supplemental type certificates and field approved alterations.

b. <u>The aircraft must be in condition for safe operation.</u> This refers to the condition of the aircraft with relation to wear and deterioration. Such conditions could be skin corrosion, window delamination/crazing, fluid leaks, tire wear, etc.

Conclusion. An aircraft can be considered to be airworthy when the Administrator finds it conforms to the specifications of its type certificate, and it is in a condition for safe operation. If one or both of these conditions are not met, the aircraft would be unairworthy.

CFR 91 – Subpart C – Primary Responsibility for Airworthiness

91.401 Aircraft must be maintained "within or without" the U.S.

91.403 (a) Owner or operator is primarily responsible for maintaining airworthiness, including A.D. compliance.

91.403 (b) Prescribed maintenance and persons authorized to perform it.

39.3 Operate in accordance with A.D.

CFR 43 – Maintenance, Preventive Maintenance, Rebuilding and Alteration

43.1 Applicable to all certificated aircraft except experimental aircraft that have never been issued any other kind of certificate.

43.3 Persons authorized and work they are authorized to perform.

*Preventive maintenance items are listed in app. "A"

43.3 (b) Certificated mechanics may perform as prescribed in CFR 65.

43.3 (c) Certificated repairman may perform as prescribed in CFR 65.

CFR 65 Certification: Airman Other Than Flight Crew Members

65.81 (a) Mechanic – General privileges and limitations.

* Mechanics may not perform major repair or major alteration of propellers and any repair or alteration to instruments.

* Must have satisfactorily performed or shown his ability to perform before supervising or approving for return to service.

65.81 (b) Mechanics must understand current instructions on how to do a specific job before it is attempted.

65.83 At least 6 months in the preceding 24 months or otherwise qualified by the FAA. Recent experience required.

65.85 Airframe rating: Additional privileges, 100 hour inspection.

65.87 Powerplant rating: Additional privileges, 100 hour inspection.

65.89 Certificate is to be kept where the mechanic normally works.

PRIVILEGES OF CERTIFICATE

65.95 (a) Inspection authorization: Privileges and Limitations

* Inspect and approve for return to service major maintenance if done in accordance with approved data.

* Perform annual inspections.

*Perform or supervise progressive inspections.

65.95 (b) Authorization to be kept available for inspection by aircraft owner or mechanic.

65.103 (a) Repairman Certificate: Privileges and limitations - may perform or supervise the specific job for which he is employed and certificated in a Repair Station.

65.104 Repairman Certificate: Experimental Aircraft Builder may perform Maintenance and Condition inspection on an aircraft he has built.

43.3 (d) Persons working under the supervision of certificated mechanic or repairman.

*Supervisor personally observes to the extent necessary to ensure that the work is done properly.

*Supervisor is readily available in person for consultation.

*100 hour and annual inspections may not be supervised.

43.3 (e) Repair stations may perform as provided in CFR 145.

43.3 (f) & (g) Large air carrier and commercial operators.

43.3 (g) Pilot may perform preventive maintenance on aircraft owned or operated by him, not used in air taxi service.

145.51 Privileges of certificate. (Repair Station)

145.51 (a) Maintain or alter items for which it is rated.

145.51 (b) Approve for return to service after maintaining and altering.

145.51 (c) Airframe rated Stations may perform 100 hours, annual and progressive inspections and return aircraft to service.

145.51 (d) Maintain or alter articles for which rated at other places under certain conditions.
** May not approve for return to service any major repair or alteration unless work is done in accordance with technical data approved by the FAA.*

145.53 May not maintain or alter an article if it requires special technical data, equipment, or facilities that are not available to it.

145.55 Must provide personnel, facilities, equipment equal to current standards for issuance of certificate.

145.57 (a) Perform its operations in accordance to the standards of CFR 43.
* Preventive maintenance items are listed in CFR 43 Appendix "A", Para. (c).

CFR 91 Maintenance Required

91.405 This is the general aviation "maintenance program".
-Three distinct owner operator responsibilities to ensure continual aircraft airworthiness.

1. Owner or operator shall have aircraft inspected.

2. Owner or operator shall have defects repaired between inspections.

3. Owner or operator shall insure that maintenance personnel make appropriate entries in Maintenance Records.

AIRCRAFT INSPECTIONS

91.409 (a)(1) Annual inspection within the preceding 12 calendar months.

* 100 hour inspection may not be substituted for an annual unless performed by authorized person and recorded as an annual.

91.409 (b) 100 hour inspection required to carry persons for hire or give flight instruction for hire.

*10 excess time allowed, if necessary. Any excess time must be included in next 100 hour cycle.

WARNING This allowance does not apply to ADs.

91.409 (c) Annual or 100 hour inspection not applicable if owner or operator complies with progressive or continuous inspection under paragraphs (d) and (e) or aircraft inspected under CFR123, 125 or 135.

43.15 (a) Performance rules for inspections.
*To determine whether aircraft meets all applicable airworthiness requirements, (including A.D. compliance).

43.15 (b) Rotorcraft inspected in accordance with manufactures maintenance manual.

43.15 (c)(1) For 100 hours and annual inspections an inspection checklist that covers the scope and detail of CFR 43, Appendix "D" shall be used.

43.15 (c)(2) Person approving for return to service shall determine satisfactory "run up" performance.

43.16 Each person performing an inspection or other maintenance specified in an airworthiness limitations section of the manufacturer's maintenance manual must do it in accordance with that manual.

91.403 (c) "Airworthiness" must be complied with if the aircraft is to be operated. (Parts replacement times, inspection intervals etc.)

Other Aircraft Maintenance

43.13 (a) Maintenance performance rules (general)
*Use methods, techniques and practices acceptable to the FAA.

*Use tools, equipment and test apparatus to assure that work is done according to acceptable industry practices.

Use special test equipment recommended by manufacturer or the equivalent acceptable to the FAA.

43.13 (b) The work done and materials used must be of such quality that the condition of the aircraft is equal to its original or properly altered condition.

Maintenance Records

91.417 Registered owner or operator shall keep the records in item #1 below until the **work is repeated, superceded, or for one year**.
(1.) Records of maintenance, alterations, required or approved inspections, as appropriate, for each aircraft, engine, propeller, rotor, and appliance must include:

(i) A description of the work.
(ii) The date of the work.
(iii) Signature and certificate number of person approving work for return to service (Including the pilot owner/operator for preventive maintenance).

(The foregoing record entries must be made by the person performing the work- 43.9)

(2) The following records must be retained and transferred with the aircraft when sold.

i. Airframe total line in service.
ii. Current status of life limited parts.
iii. Time since overhaul on items required to be overhauled.
iv. Current status of Airworthiness Directives including method of compliance and if repetitive the next due date and/or time.
v. List of current major alterations.

91.417 (c) The owner or operator must make the maintenance records available for inspection by the FAA or NTSB.

91.419 "Transfer of Maintenance Records".

(The records in item #2 above must be transferred to the new owner and those specified in item #1 must be transferred also unless arrangements are made with the seller to make them available to the FAA or NTSB on request.)

43.9 (a) **<u>The person who does the work shall make an entry in the maintenance records containing:</u>**

(1) A description of the work performed (or reference to a 337 or work order is applicable).

(2) Date of completion of the work.

(3) The name of person performing the work.

(4) If approved for return to service the signature and certificate number of person who approved it.

* In addition, major repair and major alterations are to be entered on a separate form.

145.59 (a) A qualified inspector inspects before approval for return to service; the repair station certifies airworthiness and approves for return to service.

145.61 Repair Station maintains adequate records of work it does, naming the person that does the work and the inspector of the work.

43.11 Content, and form of record entry for inspections conducted under 91,123,125,135.411 (a)(1), 135.419.

*The person approving or disapproving for return to service makes entry in the permanent maintenance record including the following information.

1) Type of inspection (annual, progressive, manufacturers recommended, owners approved, etc.).
2) The date and aircraft time in service.
3) The signature, kind of certificate number held by the person approving or disapproving the work.
4) Statement certifying airworthiness if approved (See Figure 3, Page 13)
5) Statement certifying un-airworthiness if not approved (if not approved owner must be given a list of discrepancies).

APPROVED FOR RETURN TO SERVICE VS RETURN TO SERVICE

43.7 (a) Persons authorized to approve for return for service as provided in CFR 65, 145, etc.

43.5 (a) No person may return to service an aircraft or article that has undergone maintenance unless:

(1) It has been approved for return to service.

(2) Permanent maintenance record entries have been made. (Including preventive maintenance)

(3) The major repair or alteration form has been executed.

(4) Any change in operating limitations or flight data is revised and set forth as prescribed in CFR 91.9.

91.9 (a) Operating limitations shall be complied with during operation.

91.9 (b) Operating limitations (aircraft flight manual, placards, listings, W&B markings, etc.) must be current and available in the aircraft during operation, including:

(1) Powerplant markings and placards.

(2) Airspeed markings and placards.

(3) Aircraft weight and balance information and other...

* Approval for return to service is a maintenance record entry by an authorized individual.

** Return to service is any action by any person to put an aircraft or article into an operational status after it has been maintained or altered.

LOGBOOK MAINTENANCE RECORDS

The FAA is responsible for the regulation and promotion of civil aviation in such a manner as to best foster its development and safety.

FAA aircraft maintenance responsibilities are accomplished by the general aviation maintenance inspector in his day-to-day activities of certification and surveillance of aircraft, maintenance airman and agencies. He is also charged with the investigation and reporting of aircraft accidents, incidents, malfunctions, defects, and violations of the Federal Aviation Regulations. **Of our many interesting job functions, the least desirable ones are accident investigation and violation investigation. We hope that this "aircraft maintenance responsibilities" program will help prevent your involvement in either accident or violation.**

Responsible aircraft maintenance requires a cooperative effort on the part of all of us who have aircraft maintenance responsibilities.

SAMPLE LOGBOOK/ MAINTENANCE RECORD ENTRIES

August 02, 2017. **Total time** 435 Hours. Complied with AD 64-27-2 by installing new rubber float, and new bowl cover screws. Inspected solder on float valve bracket and found **satisfactory/serviceable** at this time. Stamped - 64 on nameplate.

Stache Air **A&P/IA 272182**

Figure 1.
Typical entry for compliance with an Airworthiness Directive with a one- time compliance.

August 02, 2020. Total time 352 hours. Complied with AD 61-23-01 paragraphs a(1) and a(2) by tapping and magnifying glass. No cracks found. Void on top of blade #2, B2- 248-53A, S/N 123, is 2" long and extends from 25" to 27" outboard of blade butt rib.
Next inspection due at 377 hours.

Stache Air **A&P/IA272182**

Figure 2

Typical entry for compliance with an Airworthiness Directive with recurring inspection.

SAMPLE LOGBOOK/ MAINTENANCE RECORDED ENTRIES

August 02, 2020. Total aircraft time 853.00 hours. Tach reading 420.80 Replaced right main wheel bearing, P/N 19844, upper bushing in right and left landing gear frames, both brake hoses, P/N 34052, and bled brakes in accordance with Cessna 100 Service Manual revision dated 08/02/2017 chapter 3. I certify that this aircraft has been inspected in accordance with an **annual** inspection Cessna 150 Series Service Manual Section 2 and was determined to be in airworthy condition.

Stache Air **IA**272182

Figure 3

Sample logbook entry for a typical annual inspection when the aircraft is found to be "airworthy". Note that the date, aircraft total time, and tach or recorder reading are included. The tach or recorder reading should not be confused with the total time and should only be shown **IN ADDITION** to the total time entry. The mechanic has indicated he holds an Inspection Authorization by prefixing his certificate number with the letters "IA".

09/02/2021.Total time 853.00 hours Tach reading 420.80 I certify that this aircraft has been inspected in accordance with an **annual** inspection Cessna 150 Series Service Manual Rev. 3 Section 2 and a list of discrepancies and unairworthy items dated (insert date) has been provided for the aircraft owner or leasee.

Stache Air **IA**272182

Figure 4

Required entry for Annual inspection when aircraft is found to be "unairworthy" the date, total time and tach reading are included. This is a manufacture's program.

09/02/2021, Total time 853.00 hours Tach reading 420.80 I certify that this aircraft has been inspected in accordance with an annual in accordance with Appendix D of part 43 and a list of discrepancies and unairworthy items dated (insert date) has been provided for the aircraft owner or leasee.

Stache Air **IA**272182

Figure 4A

Required entry for Annual inspection when aircraft is found to be "unairworthy" the date, total time and tach reading are included. This is Appendix D of part 43 program.

09/02/2021, Total time 853.00 hours, Tach reading 420.80 changed oil and oil filter and cleaned spark plugs in accordance with current manufactures maintenance manual Part Number #23344 Rev. XX. I certify that this aircraft has been inspected in accordance with an annual inspection Cessna 150 Series Service Manual Section 2 and a list of discrepancies and unairworthy items dated (insert date) has been provided for the aircraft owner or leasee.

Stache Air **IA**272182

Figure 5

Typical entry for pilot owner/operator accomplished preventive maintenance.

Note: The engine compression tests are recorded in the engine record not in the aircraft airframe records. The engine inspection on an annual inspection can be signed off either as a 100-hour inspector and now acceptable as Annual inspection either one is acceptable. If you are performing a 100-hour inspection the word "100-hour inspection" must be used. Any engine maintenance will also be included in the engine records included reference to the engine service manual for the description of work performed.

NOTE: Part 43 section 43.9 maintenance record entry does NOT require "total time". However, it is a good practice to include it. On your FAA oral and practical test the date is NOT required.

Discrepancy list to be provided to an aircraft owner when reporting an aircraft with unairworthy items after completing a 100-hour or annual inspection.

Figure 5

Stache Air
AMTS Hangar
Nut Tree Airport
Vacaville, CA 95688

Mr. Morris McCall
1400 W. Solano Avenue
Vacaville, CA 95688

Mr. McCall:
This is to certify that on April 07, 2020, I completed a 100-hour inspection on your aircraft, Total Aircraft Time 3,202.5 hours, for Condor 191B, S/N 3945, N1234, and found the following unairworthy items:

1. Compression in No. 3 cylinder read 30 over 80, which is below the manufacturer's recommended limits.
2. The muffler on the left side has a broken baffle plate which is blocking the engine exhaust outlet.
3. There is a 6-inch crack on bottom of the left wing just aft of the main landing gear attach point at station number 60.

Stache Air
A&P 123456789

NOTE: Always date the report to match the aircraft record entry above, you can include total time on your discrepancy list if you would like I do. You can list individual part numbers if you desire to I don't as they may change.

NOTE: This is an example of a record entry for an annual inspection determining the aircraft to be in "airworthy" condition. The date, aircraft total time, and tach or recorder reading are included. The tach or recorder readings should not be confused with the total time and should only be shown in addition to the total time entry. The mechanic's certificate number is suffixed by the letters "IA" indicating that the mechanic is the holder of an inspection authorization. Maintenance done in conjunction with the inspection should be entered as a separate entry.

WEIGHT AND BALANCE

Weight and balance data is not required on the FAA Form 337. However, it is imperative that weight and balance checks be made very carefully. Since aircraft manufacturers use varying methods of weight and balance control, it not feasible to provide a universally adaptable method. The example provided in appendix 1, figure 10, of this guide is general in nature and can be modified to suit the aircraft involved. When revising weight and balance data, the following general guidelines should be used:

1. The weight and balance data should be kept together in the aircraft records.
2. When making revisions, use a permanent, easily identified method with full-size sheets of paper large enough to contain complete computations and to minimize the possibility of becoming detached or lost.
3. Each page should be identified with the aircraft by make, model, serial number, and registration number.
4. The pages should be signed and dated by the person making the revision.
5. The nature of the weight change should be described.
6. The old weight and balance data should be marked “superseded” and dated.
7. A new page should show the date of the old figures it supersedes.
8. Appropriate fore and/or aft extreme loading conditions should be investigated and the computations shown.
9. Example loading computations may be helpful.
10. On large aircraft, be careful to distinguish between empty weight and operating weights that may include commissary supplies, spare parts, lavatory water, etc.
11. On small aircraft, it is often convenient to post a placard in the aircraft indicating the empty weight, useful load, empty CG, and example loadings or general instructions to cover the most likely loading conditions. (Refer to 14 CFR § 91.9(b)(2).) AC 120-27 (as revised), Aircraft Weight and Balance Control, and FAA-H-8083-1 (as revised), Aircraft Weight and Balance Handbook, contain useful information applicable to the functions performed by the holder of an IA on general aviation aircraft.

Negligible Weight Change is any change of one pound or less for aircraft whose weight empty is less than 5,000 pounds; two pounds or less for aircraft whose weight empty is more than 5,000 and 50,000 pounds; and five pounds or less for aircraft whose weight empty is more than 50,000 pounds. Negligible c. g. change is any change of less than 0.05% MAC for fixed wing aircraft, 0.2 percent of the maximum allowable c. g. range for rotary wing aircraft.

Weight and Balance Revision **Date: 05/06/20XX**

N44933 Cessna 182L

Serial Number 18234329

Supersedes Computations found on FAA Form 337, dated 10/22/20XX.

Removed the following equipment:	Weight	Arm	Moment
1. Turn coordinator P/N C661003-0211	2.50 lb	15.0	37.50
2. Directional gyro P/N 0760099	+3.12	13.5	+42.12
Total	5.62		79.62
	1,709.60	35.26	60,282.20
	−5.62		−79.62
Aircraft after removal	1,703.98	35.20	60,202.58

Installed the following equipment:	Weight	Arm	Moment
1. Vector2 Autopilot system including turn coordinator and directional gyro.	13.0 lb	32.7	425.13
	1,703.98		60,202.20
	+13.00		+425.13
***REVISED LICENSED EMPTY WEIGHT**	**1,716.98**		**60,627.71**

***NEW USEFUL LOAD: 1,083.02**

Forward Limit Check (Limit +38.4)				Rearward Limit Check (Limit +47.4)			
	Wt	Arm	Moment		Wt	Arm	Moment
A/C Empty	1,716.98	35.31	60,627.21	A/C Empty	1,716.98	35.31	60,627.21
Fwd Seats	170.00	36.00	6,120.00	Fwd Seats	170.00	36.00	6,120.00
Aft Seats				Aft Seats	340.00	71.00	24,140.00
Fuel (min.)	115.00	48.00	5,520.00	Fuel (max.)	360.00	48.00	17,280.00
Oil	22.00	−15.00	−330.00	Oil	22.00	−15.00	−330.00
Baggage				Baggage	120.00	97.00	11,640.00
	2,023.98	35.50	71,937.71		2,728.98	43.78	119,477.71

Joseph P Kline

Joseph P Kline
A&P 123456789 IA

NOTE: Computations are shown. Form is signed, dated, and identifies the computations or figures it supersedes. It is recommended that the manufacturer's weight and balance data forms be used for specific aircraft.

Figure 10. Weight and balance revision for a typical light, single-engine aircraft.

A-11

Figure 6

Weight and Balance Record Entry

NOTE: On Civil Aeronautics Regulations (CAR-3) Certified Aircraft, the weight of the oil was subtracted mathematically to get the empty weight. In 14 CFR, part 23 aircraft, the weight of the oil is included in the empty weight.

Date: 04/08/2020

Revised weight and balance report because of removal of turn coordinator and directional gyro. Installed Vector autopilot system. See revised equipment list and weight and balance report dated 05/06/20XX signed by A&P Joseph Kline

Signature *Stache Air*
Stache Air (Name) A&P/IA (rating) and 272182 (Certificate Number)

Figure 7 Weight and Balance Maintenance Record Entry

EMERGENCY LOCATOR
TRANS- MITTERS (ELT). The ELT must be evaluated in accordance with TSO-C91a, TSO-C126 for 406 MHz ELT's, or later TSO's issued for ELT's.

Verify that All Switches are Properly Labeled and Positioned. Record the inspection in the aircraft maintenance records according to 14 CFR part 43, section 43.9. The FAA suggests the following:

Date: 04/08/2020

I inspected the Make/Model _____ ELT system in this aircraft according to applicable Aircraft and ELT manufacturer's instructions and applicable FAA guidance and found that it meets the requirements of section 91.207(d).

Signature Stache Air
Stache Air (Name) A&P/IA (rating) and 272182 (Certificate Number)

Figure 8 ELT Record Entry

NOTE: This is not a measured check; it only indicates that the G-switch is working

Date: 03/19/2021

Install Bracket Air Filter Supplemental Type Certificate STC SA693CE engine filter assemble kit. See STC document 1-194 for Instruction for Continued Airworthiness (ICA) attached to FAA Form 337 dated 01/19/2021.

See revised equipment list report dated 03/19/2021 signed by A&P Stache Air. Weight and Balance revision not applicable.

Signature **Stache Air**
Stache Air (Name) A&P/IA (rating) and 1234567 (Certificate Number)

Figure 9 FAA Form 337 Major Repair and Alteration Record Entry

NOTE: Major repairs and alterations are a Title 14 CFR part 43.9 maintenance record entry. Total Time is note required. However, it is good practice to include it for tracking purposes such as the above STC has a 100-hour and/or annual replacement requirement in the ICA. For FAA testing requirements total time is not required for maintenance entries.

Advisory Circulars

Explanation of AC system. The FAA issues advisory circulars to inform the aviation public in a systematic way of nonregulatory material of interest. Unless incorporated into a regulation by reference, the contents of an advisory circular are not binding on the public. Advisory circulars are issued in a numbered subject system corresponding to the subject areas of the Federal Aviation Regulations (CFR's) (Title 14, Code of Federal Regulations, Chapter 1, Federal Aviation Administration). An AC is issued to provide guidance and information in its designated subject area or to show a method acceptable to the Administrator for complying with a related Federal Aviation Regulation.

The Advisory Circular Checklist AC 00-2.XX or subsequent issues contain instructions on how to obtain the desired advisory circulars.

FAA Web Server Access Information

The Federal Aviation Administration's main server is available at http://www.faa.gov. It hosts information from various FAA Organizations. The advisory circular checklist is available at:

http:www.faa.gov/agc/ac-chlst/actoc.htm.

MALFUNCTION OR DEFECT REPORT

Your help is needed to reduce the growing loss of valuable Malfunction or Defect information now occurring in the Service Difficulty Report and the General Aviation Airworthiness Alerts program. A number of the reports (approximately 15 percent) received each day are on aeronautical products that cannot be directly associated with a specific aircraft, powerplant, or propeller. As a result, there is no way to bring the problem to the attention of the manufacturer having prime interest in the reliable operation of that component, accessory, or appliance.

Aeronautical products in the component, accessory, and appliance categories are numerous in just about every certificated aircraft currently in operation. Further, a high percentage are not individually approved by the Federal Aviation Administration. Their acceptance is, in most cases, based on having been installed on the aircraft or power plant at he time of type certification or subsequent supplemental type certification. Under this arrangement, compliance with applicable regulations are the responsibility of the type certificate holder. For this reason, it is very important that the Malfunction and Defect report contains the identity of the aircraft or power plant on which the aeronautical product is installed.

Advisory Circular AC 20-109 contains an explanation of this program.

Advisory Circular AC 43-16A Publishes General Aviation Airworthiness Alerts.
It is available at the AFS-600 Home Page address;

http://www.mmac.jccbi.gov/afs/afs600

AIRWORTHINESS DIRECTIVE COMPLIANCE RECORD

Make Piper **Model** PA28-161 **S/N** 28-7410669

AD Number	Subject	Date and Hours of Compliance	Method of Compliance	One time	Recurring	Next Comp. Due.	Authorized Signature
62-19-03 08-28-62	Prop Bolt failure	1044.8 12-01-77	N/A by S/N	X			George B. Jones AP 272182 IA
64-06-06 04-06-64	Control Wheel failure	1044.8 12-01-77	N/A by S/N	X			George B. Jones AP 272182 IA
67-20-04 09-27-67	Main landing gear torque link failure	1044.8 12-01-77	N/A by Torque links not drilled for lube fittings	X			George B. Jones AP 272182 IA
67-26-02 05-22-68	Various Modifications	1044.8 12-01-77	N/A by S/N	X			George B. Jones AP 272182 IA
77-23-03 11-14-77	Control Rod Binding	1044.8 12-01-77	C/W by installing new style rod end	X			George B. Jones AP 272182 IA
79-02-05 01-29-79	Fuel Flow Interruption	1308.7 12-30-79	N/A by S/N	X			George B. Jones AP 272182 IA
79-13-03 06-08-79	Prevent Potential Fire Hazard	1352.2 01-05-80	N/A by S/N	X			George B. Jones AP 272182 IA
79-22-02 10-26-79	Prevent Possible Fuel Leakage and Fire Haz.	1352.6 01-05-80	N/A by S/N	X			George B. Jones AP 272182 IA
80-14-03 07-01-80	Disruption of Radio Communication	1422.3 01-05-81	N/A by S/N	X			George B. Jones AP 272182 IA
81-23-05 03-08-82	Prevent In-Flight Fire	1615.4 05-25-82	C/W by inspection and by installing Piper kit P/N 764-303V	X			George B. Jones AP 272182 IA
95-26-13 02-05-96	Oil Cooler Hose Failure	2589.2 03-28-96	C/W by installing new hoses		X	3589.2 03-28-04	George B. Jones AP 272182 IA
96-10-03 06-14-96	To Prevent Flap Handle Bolt Failure	2596.9 07-15-96	C/W By Inspection and by installing new bolt & bushing	X			George B. Jones AP 272182 IA

AIRWORTHINESS DIRECTIVE COMPLIANCE RECORD

Make _____ Model _____
S/N_____

AD Number	Subject	Date and Hours of Compliance	Method of Compliance	One time	Recurring	Next Comp. Due.	Authorized Signature