

# MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Appr OMB No	roved
OMB No	2120-0020

For FAA Use Only

Office Identification

	ONS: Print or type all entries. See FAR 43.9 ion of this form. This report is required by lath violation (Section 901 Federal Aviation A		, and AC 43,9-1 Failure to report	(or subsequent I can result in a	revision th civil penal	hereaf) for in ty noi 10 exc	structions eed \$1,000	
	Make		Model	<del></del> -				
	Piper							
1. Aircraft	Serial No.	<u>PA-22-135</u>						
	1		Nationality a	ind Registration	n Mark			
—— <del></del> -	22-1646	<del></del>		83A			_	
	Name (As shown on registration certifica	( <del>1</del> )	Address (As	shown on regis	stration ce	rriticate)		
2 Owner	Frank Sperandeo III			41 Pear C		2704		
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}		4. Unit Identifie	ation			5. Type		
- Cor	Make	Model		Senal No		Repair	Alteration	
A'RFRAME	(As de	scribed in Item 1 at	pove)					
POWERPLANT				_			×	
PHOPELLER							— -	
APPL ANCE	Түре	<u> </u>					<del></del> .—-	
	Manufacturer		ļ					
		6. Conformity State	lement				<u>-</u>	
A Agency s N	ame and Address	B. Kind of Ager	<del></del>	· <del></del>	<del></del>	<del></del>		
Robert De					C Certif	icate No		
14693 W11		U.S. Certifica						
	(11e, AR 72704	1 1	dicated Mechanic		1/			
,,	12104	1 1	Pepair Station		1625	28784		
Dilicertify in have been lurnished	hal the repair and/or alteration made to the on made in accordance with the requirement therein is true and correct to the best of m	y knowledge	tem 4 above and U.S. Federal Ava	alion Regulatio	pereverse ons and th	or altachme at the inform	nis hereto nation	
	. Sept 00	Signature of Au	y orizeging who	rai				
·-· ·		pproval for Return	To Service					
· т—	The authority given persons specified betor of the Federal Aviation Administration and	ow, the unit identified is APPROV	led in item 4 w. /ED ☐ REJE	as inspected in	the man	ner prescrib	ed by Inc	
	Fil Standards Manufacturer	Inspection Author	rization (	Other (Specify)	— .	<b>—</b> —		
<u> </u>	Designee Repair Station	Person Approved Canada Airworthi	ness Group	_				
Date of Approv	Designation No	Signature of Aut	norizato in bividu	ial				
	01 MAN 528784 II	1 M	112_					

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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

escription more spa	of Work Accomplished ice is required, altach additional sheets, identify with arroraft nationality and registration mark and date work completed.
ì. Re	move existing Chrysler alternator as installed by 337 dated 4-3-96. (See attached referenced
Sh	eet 1&2)
	· · ·
2. Ins	talled B & C alternator Pt # L-60 in accordance with previously approved 337 dated 2-19-
93,	on aircraft N1221A (Sheet 3&4) and previously approved 337 dated 1-18-93 on aircraft
N6	888B. (Sheet 5&6)
a)e	ngine is of like make and model
b)e	ingine type is physically identical differing in horsepower only. Ref. aircraft model number
	PA-18A-150
3 Sec	current service instructions in Piper maintenance manuals for instructions for continuing
air	worthiness inspection criteria.
4. No	significant change of existing weight and balance.
	***************************************



MAJOR REPAIR AND ALTERATION

Form Approved OMB No 2120-0020

For FAA Use Only (Airframe, Powerplant, Propeller, or Appliance) Office Identification

A. Long delter (100) INSTRUCTIONS Print or type attentries. See FAR 43.9, FAR 43 Appendix 8, 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. (421), 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) Model Make PA-22-135 1, Aircraft Nationality and Registration Mark Serial No. 22-1646 N3383A Address (As shown on registration cartificate) Name (As shown on registration certificate) 15841 Pear Cir. 2 Owner Frank P. Sperandeo III Fayetteville, AR 72704 3. For FAA Use Only INSIS REGULARENTS AND IN APPROVED ON THE RECYCLOSE SHEED ARCHIOLIST SUBJECT TO CONFORMITY DEPLET IN BY A REASON AUTHORIZED IN S. Type Unit Identification Serial No. Repair Alteration Model Unit Make ----- (As described in Hem 1 above) -----AIRFRAME Х POWERPLANT PROPELLER APPLIANCE Manulacturer 6. Conformily Statement C. Certificate No. A Agency's Name and Address B. Kind of Agency X U.S. Certificated Mechanic K. V. Turney Foreign Corsificated Mechanic 17654 Marshall St. 1464298 Cartificated Repair Station Garfield, AR 72732 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. Signature of Authorized Individual Date 25. March 1996 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 D REJECTED APPROVED Other (Specify) FAA FIL Slandards (pspection Authorization Manufacturer Inspector BY Person Approved by Transport FAA Designee Repair Station Canada Airworthiness Group

Signature of Authorized Individual

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Date of Approval or Rejection

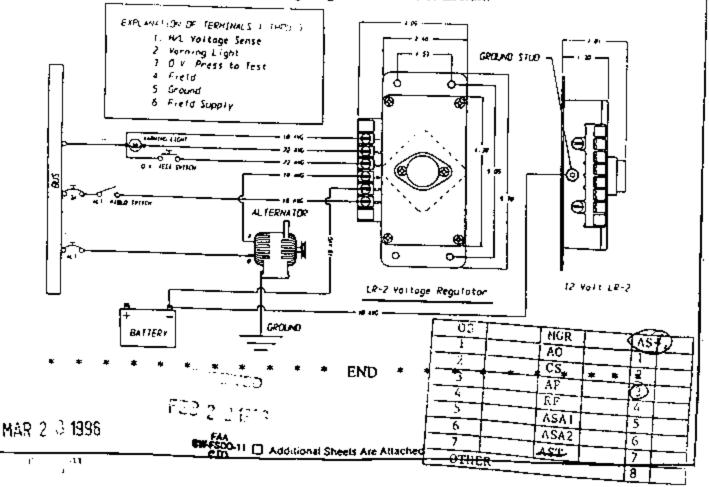
Certificate or Designation No.

#### NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable aircraft enverthiness requirements.

## 6. Description of Work Accomplished (If more space is required, attach additional sheets, identity with aircraft nationality and registration mark and data work completed.)

- Removed existing 6 volt Delco-Remy generator, and output wiring.
- Installed Chrysler alternator #2642997 (12V), 60 AMPS, which was removed from an 0-320 Lycoming engine..
- Original flywheel replaced with late style flywheel with narrow belt pulley for alternator drive.
- Alternator bracket was used with an additional steel spacer to facilitate alignment with engine pulley. All adjustments brackets are safety wired.
- Installed Gates 3VX375 drive belt for alternator. Replacement of this belt should be with the same or like belt.
- Installed 60 AMP circuit breaker, Potter-Brumfield P/N W23X1A1G60.
- Installed #8 wire MIL-W-5086 from alternator to circuit breaker. Wrapped wire bundle forward of firewall with fiberglass tubular shielding.
- All wiring up-graded and installed in accordance with AC 43.13-1A SEC 3 FIG 11-7.
- No significant change of existing weight and balance of aircraft.



US Department of homograpion

#### MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

SHEET 3

	For FAA Use	Only	
Office	Identification		_

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	9 - 93				Signature of Author		grohe			· <b>.</b>
Pursuant to Administrato	the authority grant the Federal	iven person Aviation Ad	s specified Iministration	7. Ap belov	proval for Return To:  the unit identified  APPROVED	in item 4	was inspected i	n the man	ner prescrit	oed by rne
FAA	Fit Standards ector	Manulac		X	Inspection Authorizat		Other (Specify)			- <u>-</u>
	Designee all or Rejection	Repair S		_	Person Approved by 1 Canada Airworthines:	Group				
2-22		_	ate or High No 7 7 8// 7	72	Signature of Authori		dual			

NOTICE

SHEET 4

Weight and belance or operating limitation changes shall be entered in the appropriate eircraft record. An attention must be compatible with all previous attentions to assure continued conformity with the applicable eirworthiness requirements.

1. Description of Work Accomplished

(If more space is required, attach additional sheets, identify with aircraft nationality and registration mark and date work completed.)

Removed Delco Remy 12V generator and regulator. Installed B&C Specialty Products Alternator, part number L40, in accordance with "L-40 Installation Instructions" dated 3/92. Installed B&C Specialty Products Regulator part number LR-2, in accordance with "Installation of LR-2 Voltage Regulator" dated 7/92. Installed with new AN hardware and electrical wiring. All work done in compliance with AC 43-13-14 Chapter 11, Sections 2 and 3. Revised weight and balance.

END

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	erialt	Serial No.		Piper 18-5706	# to		France	Mrefel National	PA18A-150	<del></del>	0//	
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January 20,1993

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#### NOTICE

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•	Description of Work Accomplished
	Ill more space is required, attach additional streets. Identity with aircraft nationality and ragistration may and date work completed.)
	A 160 Hp lengine was installed LA.W STC #SA682AL with the following exceptions:
	<ol> <li>An 0-320 B2C engine was used instead of the 0-320 B2B called for in the \$TC.</li> </ol>

- -2. A lightweight B & C starter was installed in place of original starter.
- A lightweight B&C Model L-40, 40 Amp alternator and linear regulator Model B&C LR-2 were installed in place of the original 20 Amp generator and regulator.
- 4. The original Sensenich M74DM-0-56 propeller was retained.

	or grant bensemen wi/41,0M-0-56 propeller was retained.	٠,
The o	equipment list and weight and balance data reflect this change.	
	END	•



#### U.S. Department of Transportation

### Federal Aviation Administration

## INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ('For Field Approvals-FAA Form 337)

A/C Make Piper Revision:	Model: <u>PA22-1L0</u> Date: <u>/2 Septo0</u>	S/N: 22-1646	Reg. #: A/3383A
This sixtage item about the	THE REPUTE		

This sixteen item checklist are Instructions for Continued Airworthiness (ICA), to comply with FAA Handbook Bulletin for Airworthiness (HBAW 98-18 Dated October 7, 1998), are applicable to the aircraft listed above when the following equipment is installed:

SYSTEM:

ITEM	
	CHECKLIST INFORMATION
l.	Introduction: This section briefly describes the aircraft, engine, propeller, or component that has been altered. Include any other information on the content, scope, purpose, arrangement, applicability, definitions, abbreviations, precautions, units of measurement, referenced publications, and distribution of the ICA as applicable.  Comments: Aircraft Alternator charge to fast Number 4-60 made by 396 specially Description: Of the major alteration its function.
2.	Comments: replaces of solete generator with motors affection ensteams, if any,
<u></u>	Control: Operation information: Or special procedures, if any.  Comments: operation /s identical to original equipment
	Comments: 606 has types of fluids used, servicing points, and location of access panels, as appropriate.
_	Maintenance Instructions: Such as recommended inspection/maintenance periods in which each of the major alteration components are inspected, cleaned, lubricated, adjusted, tested, including applicable wear tolerances and work recommended at each scheduled maintenance period. This section refers to the manufacturers' instructions for the equipment installed where appropriate (e.g., functional checks, repairs, inspections.) It should also include any special notes, cautions, or warnings, as applicable.  Comments:
6.	Trouble shooting information: Information describing possible maifunctions, how to recognize those malfunctions, and the remedial actions to be taken.  Comments: Trouble Shooting Breadure Constitute with reductions Shoulder described to the strength of Albertain System forting and report.

7.	Removal and replacement information: This section describes the order and method of removing and replacing products, parts and any necessary precautions. This section should also describe or refer to manufacturer's instructions to make required tests, trim checks, alignment, calibrations, center of gravity changes, lilting or shoring, etc., if any.
	Diagrams: Of access plates and information, if needed, to gain access for inspection.
	Special inspection requirements: Such as X-ray, ultrasonic testing, or magnetic particle inspection, if required.
	Application of protective treatments: To the affected area after inspection and/or maintenance, if any.
	Data: Relative to structural fasteners such as type, torque, and installation requirements, if any.  Comments: AC 43-13-18 should be consulted for Standard forque in Last of special tools: Special tools that are required if any.
	Comments: D/A
13.	For commuter category aircraft: The following additional information must be furnished, as applicable:  A. Electrical loads  B. Methods of balancing flight controls  C. Identification of Prime and
	C. Identification of Primary and secondary structures  D. Special repair methods applicable to the airplane.  Comments:
	Recommended overhaul periods: Are required to be noted on the ICA when an overhaul period has been set by the manufacturer of a component, or equipment. If there is no overhaul period, the ICA should state for item 14: No additional overhaul time limitations.  Comments:   **Recommended overhaul periods has been set by the manufacturer of a component time limitation.

15. Airworthiness Limitation Section: Include any "approved" airworthiness limitations identified by the manufacturer or FAA Type Certificate Holding Office (e.g., An STC incorporated in a larger field approved major alteration may have an airworthiness limitation.) The FAA inspector should not establish, alter, or cancel airworthiness limitations without coordinating with the appropriate FAA Type Certificate Holding Office. If there are no changes to the airworthiness limitations, the ICA should state for item IS: "No additional airworthiness limitations" or 'Not Applicable."
16. Revision: This section should include information on how to revise the ICA. For example, a letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ) for the above aircraft or component major alteration have been accepted by the FAA, maintenance record entry will be made, identifying the revision, its location, date of the Form 337.

#### Note:

# Implementation and Record Keeping: For major alterations performed in accordance with FAA Field Approval policy, the owner/ operator operating under part 91 is responsible for ensuring that the ICA

is made part of the applicable section 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 5/28/98) along with a statement that the ICA is now part of the aircraft's inspection/maintenance requirements.

For major alterations performed in accordance with a field approval on air carrier aircraft, the air carrier operator is

Responsible for ensuring that the ICA is made part of the applicable inspection/maintenance program for their aircraft. If a procedure is not currently included in the operator's manual to incorporate ICA, this process will need to be appropriately addressed (i.e. the operator submits a revision to its maintenance program to the applicable certificate-holding district office (CHUDO). For aircraft inspected under an Approved Aircraft Inspection Program (AAIP), the operator will submit a change to the CHDO in accordance with section 135.419 b).

For aircraft inspected under an Approved Aircraft Inspection Program (AAIP), the operator will submit a change to the CHDO in accordance with section 135.419 b). For air carrier aircraft inspected using an annual/IO0 hour inspection program, a reference to the new ICA will be made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., ICA is located/attached to Block 8 of FAA Form 337, dated 5/28/98). In addition, the operator will request a revision to the operator's Operations Specifications, additional maintenance requirements, which incorporates the ICA into the inspection program.