

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

Form Approved OMB No. 2120-0020	Electronic Tracking Number

For FAA Use Only

Federal Aviat Administrati	1001i	Alfifalfie, P	owerplant, Pro	peller,	or Appliance	")	1			
instructions	and dispos	t or type all entries sition of this form. S. C. §46301(a))	s. See Title 14 CFR §4: This report is required I	3.9, Part 4: by law (49	3 Appendix B, and A U.S.C. §44701). Fa	AC 43.9-1 (or salure to report	subseque can res	ent revision th ult in a civil pe	ereof) for enalty for each	
<u>-</u>	Nationality Unite	and Registration Mar d States	nk N6771E	Serial No. 56271						
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80631 U					cated Maintenance		2.021.0	,		
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EAA Form	·	<u></u>			- /					

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 airworthiness requirements.

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Memorandum

Date:

MAR - 2 2016

To:

See Distribution List

From:

Margaret Gilligan, Associate Administrator for Aviation affecty, AVS-1

THRU: John S. Duncan, Director, Flight Standards Service, AFS-1 3

FOR THRU: Dorenda Baker, Director, Aircraft Certification, AIR-1

Prepared by:

James Marks, ADS-B Focus Team Lead, AFS-360, (202) 267-1707

Subject:

Installation Approval for ADS-B OUT Systems

The purpose of this memorandum is to explain the Federal Aviation Administration's (FAA's) policy regarding installation of Automatic Dependent Surveillance-Broadcast (ADS-B) OUT systems into civil aircraft certificated under Title 14, Code of Federal Regulations (14 CFR) Parts 23, 25, 27, 29, and their predecessor regulations, for compliance of section 91.225 and section 91.227. This memorandum replaces the memo dated October 10, 2012 on the same subject.

Note: Compliance to section 91.225 and section 91.227 requires installation of equipment meeting the performance requirements of TSO-C166b or TSO-C154c equipment after January 1, 2020.

How can the ADS-B OUT system obtain initial approval?

Initial ADS-B OUT system pairings (transmitter/GPS) must be approved for installation using the Type Certificate (TC), Amended TC (ATC), or Supplemental Type Certificate (STC) process. Consult your Aircraft Certification Office to determine the appropriate approval process for these initial installations. Once the performance of the initial pairing has been established, the FAA considers follow-on installations of the same pairing to be approved.

Organization Designation Authorization (ODA) holders can issue ATC and STC when authorized by their FAA Organization Management Team (OMT).

After initial approval, can applicable ADS-B OUT systems be installed on aircraft not covered by that approval?

Yes, ADS-B OUT systems that have previously received FAA approval and meet all of the following conditions may be installed and returned to service on other aircraft without further data approval:

Note: If an Approved Model List (AML) STC is available that provides for the installation of specific ADS-B transmitter and GPS pairings on listed aircraft, consider using the data from that AML STC for the ADS-B OUT system installation.

Note: Some elements of an ADS-B OUT installation may not meet the definition of a minor alteration, such as the installation of antenna(s) that penetrate a pressure vessel. Such installation elements may require additional data from the aircraft manufacturer or other FAA approved data. Reference Attachment 1 of this memorandum, ADS-B OUT Alteration Flowchart for guidance on determining the eligibility of ADS-B OUT installations covered by this policy.

- a. The ADS-B OUT equipment is manufactured under TSO-C166b or TSO-C154c;
- b. The Global Navigation Satellite System (GNSS) position sensor is manufactured under TSO-C129 or later, TSO-C145a/C146a or later, or TSO-C196 or later;
- c. The installer has a statement of compliance from the applicable manufacturer(s) or STC holder that the equipment (self-contained) or specific equipment pairing (ADS-B OUT transmitter and GNSS position sensor) have been shown, via TC, Amended TC, or STC, to comply with all section 91.227 requirements. This statement of compliance may be included in the applicable installation instructions. The installation instructions must address how the equipment is to be installed and maintained to comply with not only the applicable TSOs but also section 91.227 requirements;
- d. The installer has documentation from the STC holder(s) (per section 91.403(d)) that indicates the owner/operator of the aircraft has permission to use the STC data for the alteration:
- e. The ADS-B OUT equipment, GNSS position sensor, and interconnect wiring are connected in accordance with the applicable manufacturer's or STC installation instructions;
- f. The installation is performed in accordance with documentation from the manufacturer(s) or STC holder indicating what configuration settings, if applicable, are to be used for the ADS-B OUT system to meet section 91.227 requirements which include, but may not be limited to:
 - (1) FAA assigned Mode S/International Civil Aviation Organization (ICAO) code address (hexadecimal/octal format) associated with current aircraft registration;
 - (2) Emitter Category (ref. AC 20-165, Chapter 3);
 - (3) System Integrity Level (SIL);
 - (4) System Design Assurance (SDA):
 - (5) Flight Identification (e.g., N-number); and
 - (6) GNSS sensor settings required to correctly communicate with the ADS-B OUT equipment
- g. The installation is performed in accordance with 14 CFR Part 43. Acceptable methods, techniques, and practices may be found in AC 43.13-2B;

- h. The installed ADS-B OUT system has been verified to comply with both the system configuration and equipment performance requirements of section 91.227. The system configuration aspects of section 91.227 requirements include the ICAO code address, emitter category, SIL, SDA, flight identification, etc. Performance aspects of section 91.227 requirements include Navigation Integrity Category (NIC), Navigation Accuracy Category for Position and Velocity (NACp and NACv), etc. Acceptable compliance verification methods include:
 - (1) Operational Flight Evaluation. Conduct an operational flight evaluation (OFE) per section 91.407(b) and request an FAA ADS-B compliance report at the following email address 9-AWA-AFS-300-ADSB-AvionicsCheck@faa.gov. Include the aircraft's registration number (N-number) and the ADS-B transmitter and GPS equipment make/model information when submitting requests to the FAA for ADS-B OUT system OFE performance checks. Following receipt of the applicable OFE compliance report the installer must verify the installed ADS-B OUT system complies with all section 91.227 performance requirements and the system configuration is correct for the aircraft; or
 - (2) Ramp Test Equipment (ref. section 91.407(c)). Use ramp test equipment to verify proper system configuration and compliance with section 91.227 equipment performance requirements.
- i. The ADS-B OUT alteration must be documented in the aircrast maintenance record per section 43.9(a) and include the statement, "The installed ADS-B OUT system was shown to meet the equipment performance requirements of 14 CFR section 91.227."

Submit a FAA Form 337 to document ADS-B OUT alterations. On Form 337, Block 8, include the following compliance statement, "The installed ADS-B OUT system was shown to meet the equipment performance requirements of 14 CFR section 91.227" along with the applicable ADS-B OUT transmitter and GPS make/model information. Submit the completed Form 337 to the Aircraft Registration Branch, AFS-750, P.O. Box 25504, Oklahoma City, Oklahoma 73125. The Form 337 can be submitted directly without FAA approval in Block 3.

Note: ADS-B OUT alterations performed on aircraft operated by certificated operators may be documented in a manner acceptable to the Administrator.

Can ADS-B OUT systems that do not meet the requirements for installation without further data approval be installed?

Yes, an ADS-B OUT system that fails to meet the requirements for installation without further data approval (as discussed above) must be performed using approved data through appropriate means (See FAA Order 8300.16, *Major Repair and Alteration Data Approval* for data approval means). Document applicable ADS-B OUT major alterations, per section 43.9, and include the required statements and equipage information specified in the above section in the aircraft maintenance record and on Form 337, Block 8.

Does installation of an ADS-B Out system require revision of the Aircraft Flight Manual (AFM)?

Yes, following installation of a compliant ADS-B OUT system the General section of the AFM must be revised to include the following statement, "The installed ADS-B OUT system has been shown to meet the equipment performance requirements of 14 CFR 91.227." Applicable AFM revisions do not require FAA approval.

Can a TC holder modify their aircraft design for ADS-B OUT under a minor change in type design?

Yes, on those aircrast with existing equipment which can be modified to comply with ADS-B OUT performance requirements and which meet the criteria for a minor alteration as specified in this memorandum. Some installations may not constitute a major change in type design, so the use of a TC amendment or STC is an acceptable method for approval. Once a specific ADS-B OUT system pairing receives a design approval, use of this same pairing on a different aircrast type is a minor aspect of the design change. If other aspects of the design change are evaluated and determined to be minor, the overall design change may be made as a minor change to type design. Pursuant to 14 CFR section 21.95, minor changes in type design may be approved under a method acceptable to the FAA before submitting to the FAA any substantiating or descriptive data.

For aircraft requiring initial installation of ADS-B OUT equipment, consult your Aircraft Certification Office regarding applicability for a major change in type design.

Under FAA Order 8100.15B, Organization Designation Authorization Procedures qualified ODA holders can issue ADS-B OUT approvals without first getting FAA approval. (For additional information, see FAA Policy Memo No. AIR100-15-140-DM30 and AIR100-15-140-DM37 under http://rgl.faa.gov.)

Who should I contact for questions about this policy memorandum?

Mr. James Marks (AFS-360), Phone: (202) 267-1707, email: james.marks@faa.gov

Mr. Alejandro Rodriguez (AIR-130), Phone: (202) 267-8692, email: Alex.J.Rodriguez@faa.gov.

Distribution List:

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Managers, All Manufacturing Inspection District Offices

Manager, Transport Standards Staff, ANM-110

Manager, Small Airplane Directorate Standards Office, ACE-110

Manager, Rotorcrast Directorate Standards Staff, ASW-110

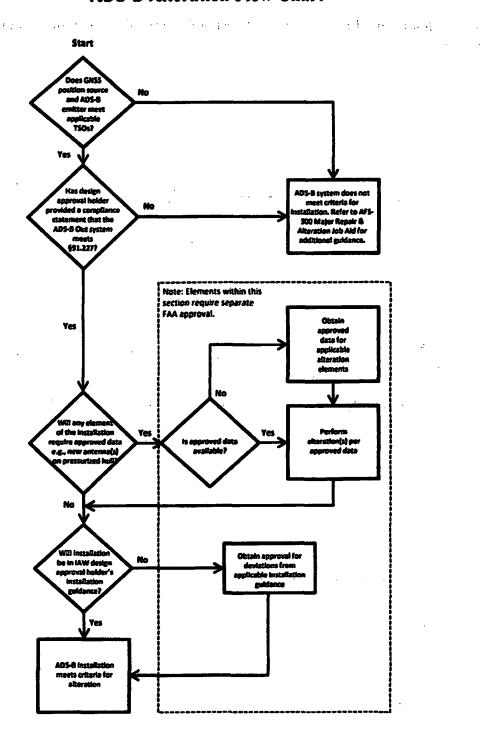
Manager, Engine and Propeller Directorate Standards Staff, ANE-110

Manager, Air Transportation Division, AFS-200

Manager, Flight Technologies and Procedures Division, AFS-400

Manager, General Aviation and Commercial Division, AFS-800

Attachment 1 ADS-B Alteration Flow Chart



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US 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 NIK -DEN -FSDO

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 suc	ch violation (Sectio	n 901 Federal Aviati	ion Ac	t of 1958).			- 01111 polita	itý not to ext	, σου φ 1,000	
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Date of Approva	al or Rejection	Certificate or		Signature of Author	ized Indi	vidual				
December	20, 2001	Designation No. FDBR221K		CE Mos						
FAA Form 327										

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 airworthiness requirements.

8. Description of Work Accomplished

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

AIRCRAFT MAKE: CESSNA

AIRCRAFT MODEL: 175A

AIRCRAFT S/N: 56271

AIRCRAFT REG. #: N6771E

Install P S Engineering model PM-1000 II Intercom system in provide radio panel space at station in accordance with manufacturer's Installation Manual, Document Number 200-123-0001, Revision 1, dated December 2000 and the acceptable methods, techniques and practices contained in AC 43.13-2A, Chapter 2, paragraph 21, 22, 23 and 27, figures 2.1 and 2.2.

Wiring utilized is Tefzel Mil Spec # W22759 and 27500.

Power supplied to unit from aircraft power buss via resettable circuit breaker, Klixon P/N: 7277-2-1 ampere as called for by the manufacturer. Placard Circuit Breaker as "ICS".

Maintenance of the P S Engineering PM-1000 II Intercom is on condition only. Periodic airworthiness maintenance of the PM-1000 II Intercom is not required.

Perform ground test evaluations and operational checks of installed unit in accordance with manufacturer's specifications with no objectionable interference or EMI found to effect other aircraft systems.

Amend aircraft weight and balance and equipment list.

Install Operator's Manual in aircraft paperwork.

Details of this installation are on file at Freedom Avionics Co., Hgr. #3, Jeffco Airport, 11915
Airport Way, Broomfield, CO. 80021 under Work Order # 11623.

THE END

☐ Additional Sheets Are Attached

US Department of Transportation Federal Aviation

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

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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 airworthiness requirements.

8. Description of Work Accomplished
(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Installed STC \$A 2067DM, BA\$ Shoolder Harness System, T&O-C22F un accordance with BA\$ Report 100, BA\$ Report 1502, BA\$ Report 1302. Weight and Balance Changes negligible.

US 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

NMF500-03

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).

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

8. Description of Work Accomplished

(Il more space is required, altach additional sheets. Identily with aircraft nationality and registration mark and date work completed.)

Removed Induction Air Filter, Cessna Pt. #120009. 1017 28, 1997 CESSUA 175

Brackett Aircraft Company Inc. STC SA71GL.

No change to aircraft weight & balance.

Additional Sheets Are Attached

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United States of America

Bepartment of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA71GL

This cortificate, issued to

Brackett Aircraft Company, Inc.

7045 Flightline Drive Kingman, Arizona 86401

cortifies that the change in the type design for the following product with the limitations and conditions

therefor as specified hereon meets the airworthiness requirements of Part 📑 🥕

Regulations.

Original Product - Type Certificate Number: *

- *See attached FAA Approved Model List (AML)
- ake: * No. SA71GL for list of approved aircraft
- Model. * models and applicable airworthiness regulations.

Description of Type Design Change: Installation of air filters in accordance with AML No. SA71GL, dated April 17, 1995, or later FAA approved revision.

Limitations and bimditions: Approval of this change in type design applies to the above aircraft model(s) only. This approval should not be extended to aircraft of this model on which other previously approved modifications are incorpy in unless it is determined that the interrelationship between this change and any of those other provided a proved modifications will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate and FAA Approved Model List (AML) No. SA71GL dated April 17, 1995, or later FAA approved revision must be maintained as part of the permanent records for the modified aircraft.

This cortificate and the supporting data which is the basis for approval shall remain in effect until sur-

rendered, suspended, rowked, or a termination date is otherwise established by the Administration of the

Fedoral Aviation Administration

Dale of application:

January 9, 1975

Sale reasued: March 3, 1983

Late of issuance

February 21, 1975

Late unrended: April 17, 1995

By direction of the Administrator

(Signature)

Manager, Propulsion Branch
Los Angeles Aircraft Certification Of

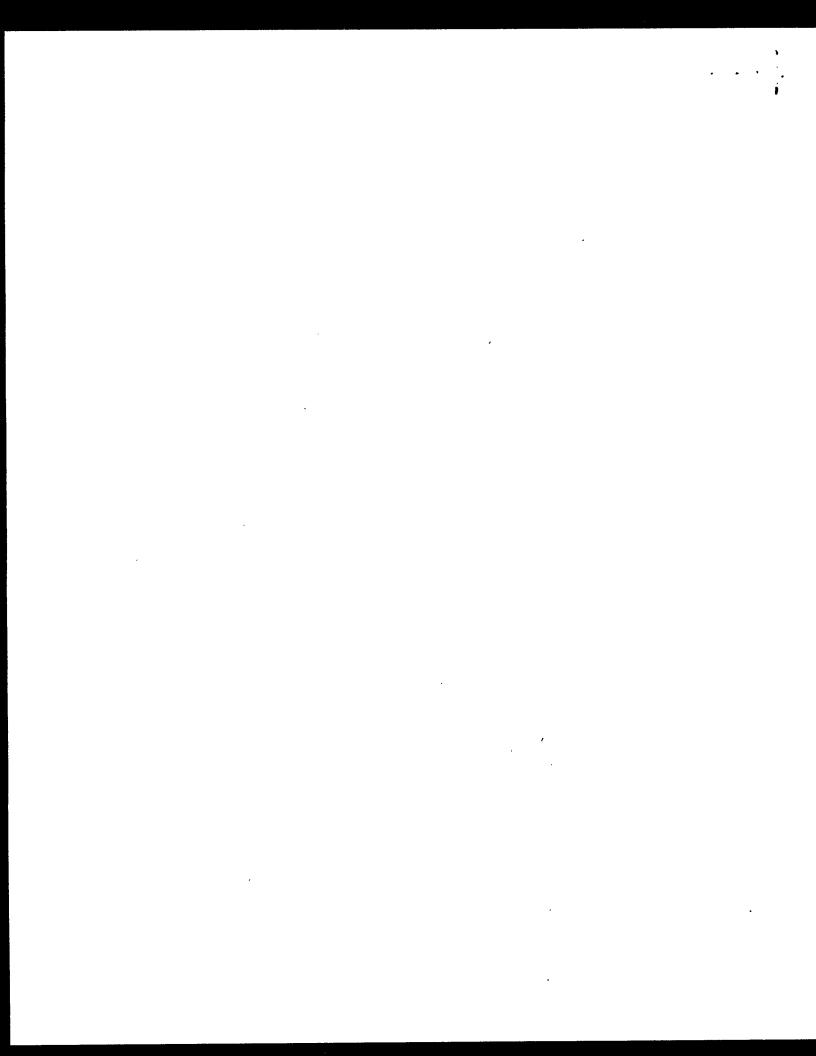
Los Angeles Aircraft Certification Office

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA FORM \$110-2 (10-68)

Page 1 of 2



US Department of Transportation Federal Aviation Administration

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

Form Approved	. ,	
OMB No. 2120-0020		
For FAA Use	Or	ily

Office Identification

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E/Da	
MF500-03	

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).

for e	ach suc	r violation (Section	n 901 Federal Aviat	ion Ac	t of 1	958).						
d 82	4	Make CESSN	IA				Model 1	75A				
1. Airc	ratt	Serial No. 562	271			Nationality and Registration Mark N6				N6771E		
		Name (As shown	on registration ce	rtificate	9)		Address (As shown on registration certificate)					
2. Owi	ner	1	VALTER E JI PATRICIA A	R	2247 ARCTIC C ANCHORAGE AK							
		<u> </u>			3. 1	For FAA Use Or	ily					
		· · · · · · · · · · · · · · · · · · ·			4. (Unit Identificati	on			5. Type	5. Type	
, U	nit	Make				Model		Serial N	lo.	Repair	Alteration	
AIRFRA	NRFRAME(As des				cribe	d in Item 1 abov	(B) -	*****************	^		xx	
POWER	RPLANT											
PROPE	LLER											
APPLIA	NCE	Type CE Manufacturer							• .			
					6 Co	nformity Staten				<u> </u>	<u> </u>	
A. Age	ency's N	ame and Address				Kind of Agency			C. Cer	rtificate No.		
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		SSNA DRIVE			<u> </u>	Foreign Certific	ated Mecha	anic	523			
POA	ELAN	D, CO 8053	38		-	Certificated Rep	air Station	·	4	•		
						Manufacturer			<u>l</u>			
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Date					Sig	nature of Autho	rized Indi	ividual		·		
	JULY	28, 1997			-	Ilmust C	Line	tre	• • •		* ;	
		, · · · ·			<u> </u>	al or Return To						
Pursi Admi	inistrato	the authority given r of the Federal Av	n persons specifie iation Administrati	d belov	w, the	unit identified	in item 4	4 was inspected EJECTED	in the ma	inner prescrib	ed by the	
вү	FAA	FIt. Standards ector	Manufacturer	Х	Insp	ection Authoriza	tion	Other (Specify	,	,		
		Designee	Repair Station	, ,	Can	on Approved by ada Airworthines	s Group			* ".	- ,	
		al or Rejection	Certificate or Designation No. 50590423.	2	Sign	Dance		Ingran			Arts and	
					-		-					

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

The second of the second 8. Description of Work Accomplished
(If more space is required, attach additional sheets, Identity with aircraft nationality and registration mark and date work completed.)

100x 58, 1997

#Z00IDC, Rev. A, dated 4-2-93. Group, Inc. dba Zeftronics STC #SA8031SW, and Zeftronics Drawing #Z001DC, Rev. A, dated 4-2-93. Removed Voltage Controller Pt. #15100 in accordance with Tovya

No change to atroratt weight & balance.

END

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United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA8031SW

This corlificale, issued to Tovya Group, Inc. dba Zeftronics 1622 E. Whaley St. Longview, TX 75601-6830

cortifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part

L. Regulations.

Original Product - Type Certificate Number: *

attached FAA Approved Model List

Make: * Medel: * No. SA8031SW for list of approved aircraft and certification data.

Description of Trype Design Change:

Installation of Zeftronics Alternator Controller Unit P/N R15100 (Product Configuration File ZOCPCF), or R15V00 (Product Configuration File ZODPCF), in accordance with Zeftronics Drawing Z00IDC, dated 1/31/91 (R15100), or Z00IDD, dated 1/31/91 (R15V00), or later FAA approved revision.

Limitations and Conditions: Compatibility of this modification with previously installed equipment must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: January 31, 1991

Jule reissued :

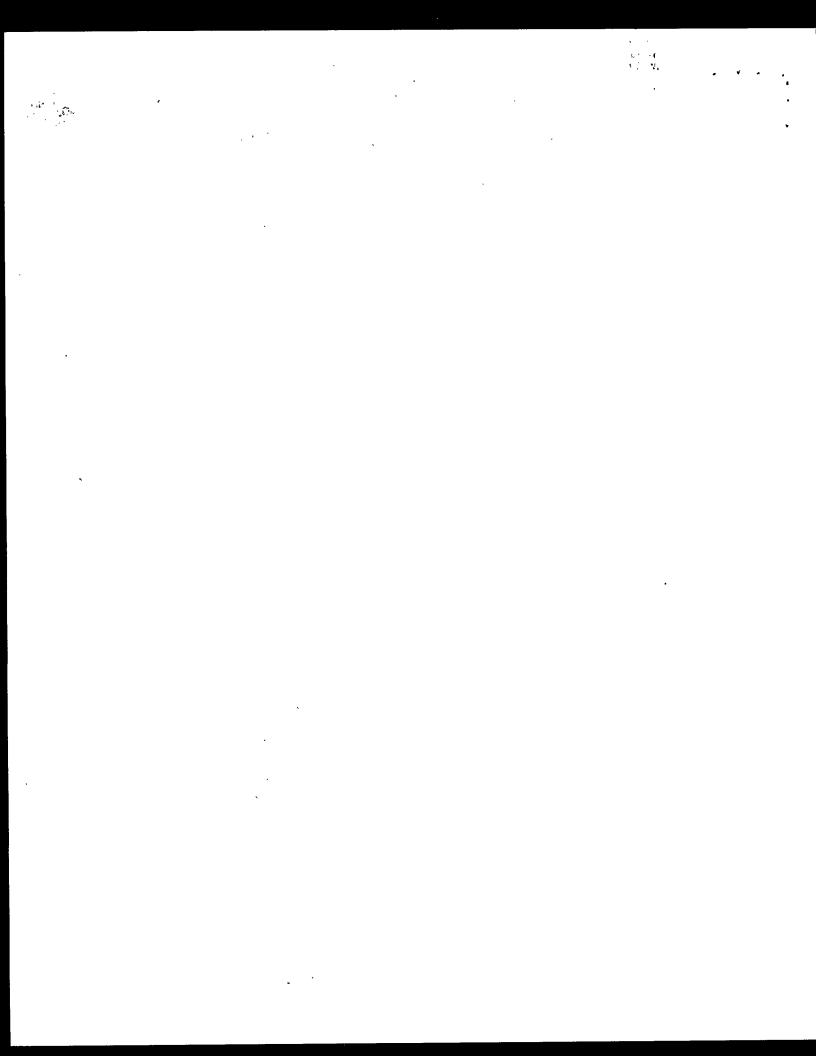
May 28, 1991 Gale of issuance:

(Jale neuroded.01/06/92, 11/17/92, 1/6/94

By direction of the Administrator

Mark R. Schilling Manager Special Certification Office

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.





R15100

R15V00 VR:14V. OV:1.6V;

VOLTAGE REGULATOR REPLACES

CESSNA: C611001-0201,-0101/2 FORD: D4FF-10316-BA, CA. ELECTRODELTA: VR600,

R15V10 is a combination of R15100 (C61 001-0201, Voltage Regulator) & VI 11 (C593001-0101, OV Sensor)



R15100 Rev A R15V00 Rev A

V1510A

16V. 5.0A

14Vdc VOLTAGE REGULATOR SELF-PROTECTING versions of R15100 & R15V00.

has field-ground short protection and on 🗥 unit system FAULT / FUNCTION INDICATOR light to show condition of alternator switch / field-rotor / wiring, & voltage regulator.



R25101 R25102

R25101 Rev A R25102 Rev A

<u>28 Vdc VOLTAGE REGULATOR</u> REPLACES C611004-0101 & C611004-0102

Have field to ground short protection and on unit FIELD FAULT INDICATOR light to show if alternator's field or field wiring is, grounded SELF PROTECTING

-800-362-8985

SOME UNITS COME WITH BUILT-IN TEST LIGHT





28Vdc VOLTAGE REGULATOR

REPLACES

CESSNA: C611002-0102/5 (27.7V)

CESSNA: C611004-0101 (27,7V)

CESSNA: C611004-0102 (28.8V)

For OV Relay, V25101 (C593001-0101)

ELECTRODELTA: VR500-0101,-0102

32**V. (** 5.0A

32Vdc OVER-VOLTAGE SENSOR REPLACES

CESSNÁ: C593003-0101, -0102 ELECTROMECH: EM233,2057. ELECTRODELTA: OS100-0101/2.

V25101 can be used with P/N: C611004-0101/2, VR500, R25101 R25102, & R25101 / R25107 rev A.



ASK YOUR DISTRIBUTOR

32Vdc OVER-VOLTAGE SENSOR Replaces 💝

PIPER: 484182, 584043, 550382 Other mfr P/N: FOC4003A,B OS75-28, X17634, 74804, X41530.

V2510A-can be used with 28Vdc; V.Regulators - VSF7403. B00286, etc.

16V. . 0,2A

16VG OVER-VOLTAGE SENSOR REPLACES CESINA: C593001-0101 Other mfr P/N: EM235. 0800002. OS60-0101. 0337

VIII00 can be used with CESSNA: C61 (001-0201, -0101/2, VR600, R15 (00), and R15100 Rev A.

Z**Ě**FTRONICS

16Vdc OVER-VOLTAGE SENSOR REPLACES

PIPER: 450393,450397,550380. Other mfr P/N: B00339, B00289, X16799, X17621, OS75-14, FOC4002A,B.

V1510A can be used with 14Vdc V.Regulators like R1510N and R1510L.

VSF7203 = R1510N. VSF7403 = R2510N

CALL: 1-800-362-8985



EQ1500 =12V

V11100

EO2500 =24V

PARALLELING RELAYS.

EQ1500 for 12Vdc Generators, Delca-Remy: 1116887.

EQ2500 for 24Vdc Generators. ces Delco-Remy 1116902.



R1510N

14V VOLTAGE REGULATOR REPLACES

PRESTOLITE: VSF7201,2,3,4, ELECTRODELTA: VSF7203A. PIPER: 550-383. TCM: 649684-1.

FOR OVERLAY USE VISIOA Unlike VSF7203, R1510N is a repairable unit.



R15Y0N -14V R25V0N - 21V

ALTERNATOR CONTROLLER

COMBINES V. Regulator, OV relay, Low/OV Sensor & Indicator in one.

Recommended for use in single engines with VSF7203 of VSF7403, e.g. BELLANCA; en



R2510N

28V VOLTAGE REGULATOR

REPLACES * PRESTOLITE: VSF7401,2,3,4. ELECTRODELTA: VSF7403A PIPER: 550-381. TCM: 649684-2.

FOR OVRELAY USB V2510A. Unlike VSF7403, R2510N is a repairable with

MORE PRODUCTS TO COME

MORE PRODUCTS TO COME



R1510L = 14Y.

R15V0L VR=14V. OV=16V

VOLTAGE REGULATOR REPLACES

R1510L=PAC#484-121, 68804-003 VR206/A, B00331, B00267, X16300B.

R15VQL = PAC# 557-337. B00371. Has Built-in field-ground short protection, fault / function light dystem trouble-shooting light).



R15300 VR=14V, OV=16V R1530B

14V VOLTAGE REGULTOR --REPLACES

Mooney: 880016-503, 800207-505, VR415=R15300 880016-501, EM2073, VR414, 20082 = R1530B Beech:35-380093-1,2,3. B00403-1 =R1530B 20053, 20065, 20137, 20437, EM2073-1 + R1530B

Has Built-in field-ground short 🕒 protection, fault / function light (on unit self'system trouble-shooting light).



CUSTOM DESIGN FOR OEM & KIT PLANE BUILDERS: 903-758-6661.

R251DR

28V VOLTAGE REGULATOR REPLACES

Delco-Remy: 9000**591** Used on CESSNA, PIPER, BEECH. Has field to ground short protection; and on unit FIELD FAULT INDICATOR light to show if alternator's field or field wiring is grounded SELF PROTECTING



R25400

ERNATOR CONTROLLER REPLACES

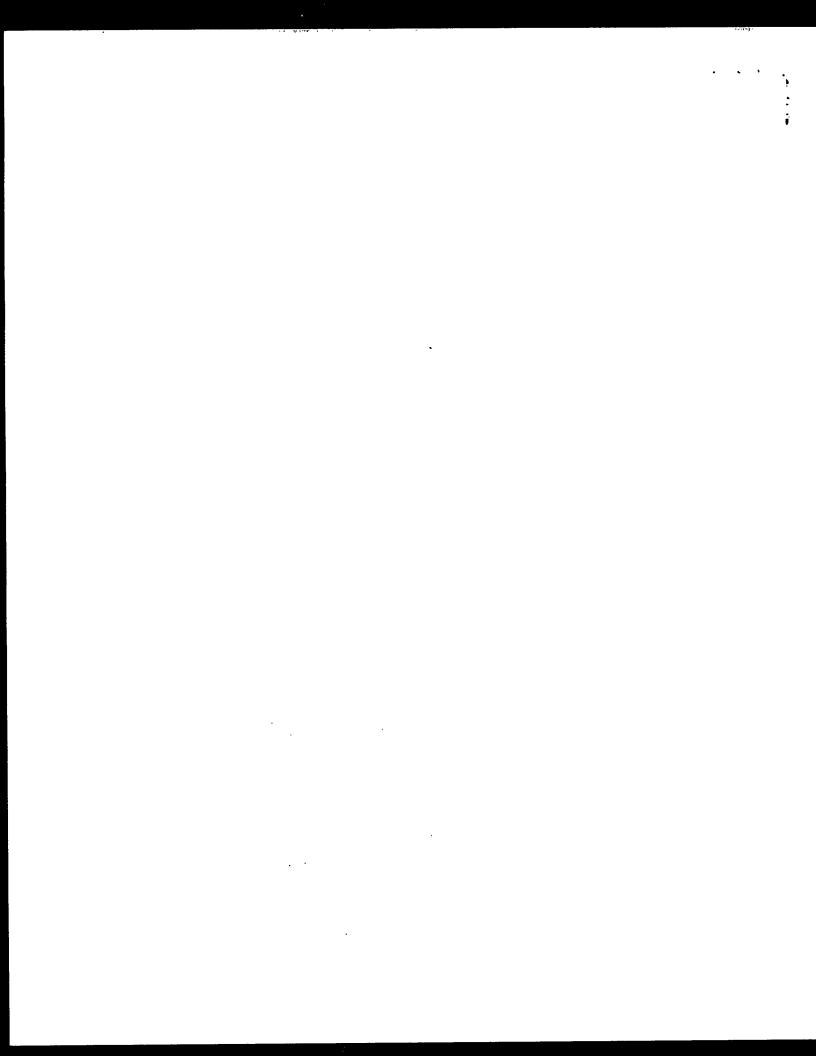
Cessna: C611005-0101,-0102,-0103 Electrodelta: VR515F, G.

R25400 has built-in field-to-ground short protection, & on unit FAULT IFUNCTION indicator light to show. condition of ACU, and Alternator switch, field winding and wiring.



ZÉRO96-1.PUB

1622 East Whaley Street,-Longview, TX 75601, USA Tech help; 903-758-6661 Fax: 903-236-9766



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US Depa of Transp	rtment Origion
Federal Adminis	

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

Form Approved States See See See See See See See See See S
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).

for each suc	h violation (Section 901 Federal Avi	ation A	ct of 1	1958).		sport carresult in a	civii pena	ity not to exc	eea \$ 1,000	
2	Make CESSNA		Model 175 Nationality and Reg			175				
1. Aircraft	Serial No. 56271					Nationality and Registration Mark N6771E				
2. Owner	Name (As shown on registration of STEIGE WALTER E D STEIGE PATRICIA A	TR.	e)	Address (As shown on registration certificate) 2247 ARCTIC CIRCLE ANCHORAGE AK 99503						
5			3. I	For FAA Use Or	ıly			 .		
1										
6			4. (Unit Identification	חכ			5. Type		
Unit	Make			Model		Serial No	·.	Repair	Alteration	
AIRFRAME	IRFRAME (As described in Item 1 above)								xx	
POWERPLANT						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* *			
PROPELLER,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
APPLIANCE	Type Manufacturer	2.7	,			٠.		*		
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A. Agency's Na	ame and Address.			Kind of Agency		N	C. Certi	licate No.	(- 3 5	
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	nat the repair and/or alteration made in accordance with the requirement is true and correct to the bes			identified in item		Aviation Heanialic	ne reverse ons and th	or attachmer at the inform		
JULY,	28, 1997		Sign	nature of Autho	rized Ind	ividual	1, 2, -		· · ·	
`.				al for Return To		ielen : · · ·				
Pursuant to t Administrator	he authority given persons specifier of the Federal Aviation Administrat	d belovion and	w, the	unit identified	in item	4 was inspected in	the mann	ner prescribe	ed by the	
	Fit. Standards	x	T	ection Authorizat		Other (Specify)	,			
- FAA.	Designee		Perso Cana	on Approved by ada Airworthines	Fransport Group		د د د د د د د د د د د د د د د د د د د	enter to a secondar	Company and a	
JULY 28	Certificate or Designation No. 50590423	2	Sign	Danis	zed Indiv	vidual	**************************************	**************************************	**************************************	
AA Form 337 11	12 881	**********		erright 1/2 miles			-	******		

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

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.) 8. Description of Work Accomplished

Mellie Nelle

THE CHONERNERT PRINTING OFFICE: 1582-769-012/60157

McCauley Propeller model 18175, serial #71144. Removed Continental Engine model GO-300-C, serial #12021-9-C and

. dated March 3,1978. Installation was accomplished using MASA Drawing List #17500 Installed Lycoming Engine model 0-360-A1A, serial #L-7383-36A and Hartzell Propeller model HC-C2YK-1BF, serial #L-7383-36A and accordance with Barbara or Bob Williams STC #SA424CE.

were as follows: welghed after completion of alteration. Weight & balance changes Atroratt Equipment List was amended as required. Atroraft was

C.G. -Before alteration: Empty Weight - 1521.1

Useful Load - 828.9

C.G. - 37.91 After alteration: Empty Weight - 1511.0

0.988 - bsod Luleau

---- END ----

United States of America

Bepartment of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA424CE

This certificate, issued to

Barbara or Bob Williams Box 431, 213 N. Clark 316-782-3851

800-752-0748

Udall, Kansas 67146

cortifies that the change in the type design for the following product with the limitations and conditions

therefor as specified hereon meets the airworthiness requirements of Part 3 of the

of the Civil Air

Regulations.

Original Product - Type Certificate Number: 3A17

Make: Cessna:

Model: 175, 175A and 175B (landplane)

Description of Type Design Change: Installation of Lycoming 0-360-A1A or 0-360-A1D engine and Hartzell HC-C2YK-1A/7666-2, HC-92ZK-8D/8447-12A or McCauley 2D36C14/78KM-4 propeller.

Data Required: Doyn Drawing List No. SA424CE approved September 25, 1969, or later FAA approved revisions and a copy of this certificate; or MASA Drawing List No. 17500 dated January 31, 1978, or later FAA approved revisions and a copy of this certificate.

Limitations and Gonditions: This approval should not be extended to other specific airplanes of these models on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of the airplanes. (See Continuation Sheets 2 through 4.)

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the

Federal Aviation Administration.

Date of application:

January 28, 1966

Date of issuance: May 6, 1966

Dale wissued :

July 1, 1975; September 5, 1979

Salvamended: September 25, 1969; September 3, 1976; January 31, 1978

By direction of the Administrator Laurence A. Herran

(Signature)

A BARRY D. CLEMENTS

Chief, Wichita Engr. & Mfg. District Office

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Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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USE THEREOF IS PERMISSIBL

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United States of America

Department of Transportation—Federal Abiation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA424CE

The conditions and limitations of Aircraft Type Certificate Data Sheet No. 3A17 apply except as follows:

Engine: Lycoming 0-360-A1A or 0-360-A1D.

Fuel: 91/96 minimum grade aviation gasoline.

Engine Limits: Model 175 and 175A

For all operations 2700 r.p.m. (180 hp.)

Model 175B

Takeoff (5 minutes) 2700 r.p.m. (180 hp.) Maximum continuous 2550 r.p.m. (175 hp.)

Propeller and Propeller Limits:

1. (a) Hartzell HC-C2YK-1A/7666A-2 or /7666-2

(b) Hartzell HC-C2YK-1B/7666A-2 or /7666-2

Diameter: Not over 74 in., not under 72 in.

Placard: "Avoid continuous operation between 2000 and 2250 r.p.m."

Pitch Settings at 30-in. station: Low 14°

High 29° ±1°

Governor: Hartzell F-3-1 or F-3-1A

Spinner Assembly: Hartzell 835-21P (required)

2. Hartzell HC-92ZK-8D/8447-12A

Diameter: Not over 72 in., not under 70.5 in.

Placard: None

Pitch Settings at 30 in. station: Low 13°

High 27°

Governor: Hartzell D-1-1 or D-1-5

Spinner Assembly: Hartzell 835-6 (required)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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WRITING BY BOB OR BARBARA WILLIAMS

ANY OTHER USE CONSTITUTES FRAUD

United States of America

Department of Transportation—Federal Abiation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA424CE

3. McCauley 2D36C14/78KM-4

Diameter: Not over 74 in., not under 72 in.

Placard: "Avoid continuous operation while descending between 2250

and 2550 r.p.m. with manifold pressure settings below

15 inches mercury."

Pitch Settings at 30 in. station: Low 12.7°

High 27.5° ±1°

Governor: McCauley C290D3/T18

Spinner: McCauley D-2137 (required)

Powerplant Instrument Markings: Tachometer (red line) 2700 r.p.m.

Cessna 175B (yellow arc) 2550 - 2700 r.p.m.

Hartzell HC-C2YK-1A/7666-2 or HC-C2YK-1B/7666-2 (red arc) 2000 - 2250 r.p.m.

Oil Temperature Gage: 245° F. (red line)

Oil Pressure Gage: Minimum 25 p.s.i. (red line) Maximum 100 p.s.i. (red line)

Normal 60 to 90 p.s.i. (green arc)

Fuel Pressure Gage: Minimum 0.5 p.s.i. (red line)

Maximum 8.0 p.s.i. (red line) 3 to 5 p.s.i. Normal (green arc)

Oil Capacity: 8 qts. @ -22 (unusable 2 qts.) See Note 1 for data on system oil.

Current weight and balance report, together with list of equipment included in certificated empty weight and loading instructions, when necessary must be provided for each aircraft at the time of modification. The certificated unusable fuel and oil are as follows:

> 4 lbs. 0 -22 54 lbs. (+46) Model 175 4 lbs. @ -22 60 lbs. (+46) Model 175A, 175B

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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United States of America

Department of Transportation—Jederal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA424CE

The following information must be displayed in the form of composite or individual placards.

- 1. Above the fuel pump switch: * "Fuel Pump Pull On"
- 2. On the dome light fuse placard:
 * "Fuel Pump"
- 3. On nav light fuse placard: * "Nav and Starter"
- 4. In close proximity to the tachometer:
 "Avoid continuous operation while descending between 2250 and 2550 r.p.m. with manifold pressure settings below 15 inches mercury."

(on aircraft equipped with 2D36C14/78KM-4 McCauley propeller)

- 5. Tachometer marking 175B only:
 - (a) If graduated dial is marked, yellow arc between 2550 and 2700.
 - (b) If glass is marked, yellow arc between 2550 and 2700, white slip mark, and placard on glass maximum continuous r.p.m. 2550.
- 6. In close proximity to the tachometer:
 "Avoid continuous operation between 2000 and 2250 r.p.m."

(on aircraft equipped with HC-C2YK-1A/7666-2 Hartzell propeller)

INFORMATION CONTAINED HEREIN IN REGARD TO STC SA424CE IS THE PROPERTY OF BOB OR BARBARA WILLIAMS. REPRODUCTION OF ANY DRAWING OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR EXPRESSLEY AUTHORIZED IN WRITING BY BOB OR BARBARA WILLIAMS. THIS PACKET IS AUTHORIZED ONLY TO BE USED ON AIRCRAFT N 6771E SN56271 AND NO OTHER. ANY OTHER USE CONSTITUTES FRAUD. SIGNED

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,	US Department of Transportation

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

Form App	roved
OMB No.	roved 2120-0020

For FAA Use Only
Office Identification

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Federal Aviation Administration

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).

	Make CESSNA			Model 175A				
1. Aircraft	Serial No. 56271	· · · · · · · · · · · · · · · · · · ·	Nationality and Registration Mark N6771E					
	Name (As shown on re	tistration cartific	2/01					
2. Owner	STEIGE WALT		a(6)		shown on registration	•		
z. Owner	STEIGE PATE		•		ARCTIC CIRCI RAGE AK 9 5		03	
		The DUT	A sequirements and	Catyplies with a	pplicable	-		
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			Comonzada Mi PAR	43./.	7			
		0731-9		- R/L	Much			
*·····································		Bane	Approving Inspec	IN LAW SPONS				
			4. Unit Identific	ation		5. Type	Ţ	
Unit	Make	<u>l.</u>	Model		Serial No.	Repair	Alteration	
AIRFRAME	***************************************	Marana (As de	scribed in Item 1 ab	ove) 	~~~~~		X	
POWERPLANT								
PROPELLER								
	Туре					-		
PPLIANCE "	Manufacturer				y de la ser gare gare y agreción de exempleo. El des las de estados de estados de las			
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. Agency's Na	me and Address	<u> </u>	B. Kind of Agend	cy: Kirkeline	C Cer	tificate No.	 	
MARK SE	ADER		U.S. Certifical	ed Mechanic				
5212 CE	SSNA DRIVE D, CO 80538	in dering for a	Certificated P	icated Mechanic	523	743573		
			Manufacturer					
D. I certify the have been furnished	at the repair and/or alteral made in accordance with herein is true and correct	tion made to the u the requirement to the best of my	nit(s) identified in ite s of Part 43 of the U	em 4 above and d S: Federal Aviat	escribed on the reversion Regulations and t	e or attachmer hat the inform	its hereto stion	
ale * `			Signature of Auth			1, 6		
JULY	16, 1997		MAN	lan		• •	ese Edistriction	
Dangeronna to st		7. Aj	provet for Return T	o Service	A Company of the Comp		*	
Administrator	ne authority given person of the Federal Aviation A	15 specified belo dministration and	w, the unit identifie	d in item 4 was	inspected in the mar	ner prescribe	d by the	
	It. Standards		Inspection Authoriz	- S MEDEO	ner (Specily)	3.		
FAAD	<u> </u>	Station	Person Approved by Canada Airworthine	/ Transport	to state to be a	A STATE OF THE STATE OF		
te of Apurovat	or Rejection * Certific	ate or				7 Ta 25		
		ation No.	Signature of Author	rized individual	_			

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

8. Description of Work Accomplished (if more space is required to a second of the seco

Mellie

1/16/97

the modification per STC SA424CE. thatalled was removed from the original top cowl removed during wide to the center of the leading edge of the cowl. The lip to provide clearance for the starter ring gear assembly. Cowl was modified by installing a raised lip. 2 inches high and 10 inches Modified top engine cowl previously installed per STC SAAZACE,

in AC 43.13-1A, Chapter 2, Section 3. appropriate length, and using methods and techniques as described line of the cowl to create a fairing for the raised lip. The raised lip. The raised lip. The from .032 thick, 2024-T3 aluminum was installed down the center A raised blister 10 inches wide and 34 inches long, fabricated

END ----

Company of the Company of the Company

US Department of transportation
Federal Aviation

: ,

(Airframe, Powerplant, Propeller, or Appliance)

	Form-Approved OMB No:2120-0020 PM PAGE CO.	
	For FAA Use Only	_
1	Office Identification	-
-	NM FSAGOS	•

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).

101 68611 300	on violation (decitor) out a cheral Ma	iauon A	CI UI	1930).					,
	Make				Model			···	· · · · · · · · · · · · · · · · · · ·
1. Aircraft	CESSNA					175A			,
i. Aliciali	Serial No. 56271			Nationality and Registration Mark N6771E					
	Name (As shown on registration of	ertilica	le)		Address	(As shown on reg	istration c	ertificate)	
2. Owner			•						,
Z. Owner	STEIGE WALTER E					7 ARCTIC C			,
	STEIGE PATRICIA	A			ANC	Horage as	995	U 3	•
	The Are 7	<u> </u>	3.	For FAA Use Or	ıly		-		j
	cpowe de	scribed	uirem aircre	d herein complied ents and is appropriate subject to confirm I in FAR 43.7.	roved only formity in	a fam alica			
	Of THE T		1	see of	1132	aur-			
	T	7	4.	UNIPESSAMESTA	130C-03			5. Type	
Unit	Make			Model		Serial No).	Repair	Alteration
AIRFRAME	***************************************	(As des	scribe	d in Item 1 abov	(B) •••••	******			xx
POWERPLANT									
PROPELLER									
	Туре	†							
APPLIANCE	Manufacturer								
		·							ĺ
t			6. Co	nformity Statem	ent				
A. Agency's N	ame and Address			Kind of Agency			C. Certif	icate No.	*************************************
MARK SE	ADER		X	U.S. Certificated					
5212 CE	SSNA DRIVE		~	Foreign Certificated Mechanic			523743573		
LOVELAN	D, CO 80538	100	-	Certificated Repair Station					
			بي	Manufacturer		- <u> </u>	14.3		
furnished	at the repair and/or alteration made n made in accordance with the requi herein is true and correct to the bes		know	ledge.	. reuerar	Aviation Regulatio	e reverse ns and the	or attachmer at the inform	nts hereto ation
Date 5.3	particle of the first		Sig	nature of Author	zed Ingli	vidual .	S 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. 7	
JULY	16, 1997	19 47 1 18 18 18	6	UMIK.	10	MIMI	. · ·	aprilip of the second	e jih
		7. Ap	prov	High Heturn To	Service				
Pursuant to t Administrator	he authority given persons specific of the Federal Aviation Administrat	ed below	w. the	unit identified	in item 4	was inspected in	the, mann	er prescribe	d by the
	Fit. Standards	x	1	ection Authorizati		Other (Specify)	C 4	to as the sta	1, 10 °
	Designee Repair Station	3.1 3	Cana	on Approved by T da Airworthiness	Group *	Apple of the State of	e a geografia		. 3. J. 410
ate of Approva	Certificate or Designation No.	-74 : 17 -1	Sign	alure of Authoria	zed Indivi	dual	e de la companya de		e 1 e
				Janeil	1	Smin		A 4 1 1 1 1	2000
AA Form 337 (1	2 88)					- your			

NOTICE

compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements. 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 configuration appropriate aircraft record. An alteration must be

8. Description of Work Accomplished
(If more space is required, attach additional sheets, Identify with aircraft nationality and registration mark and date work completed.)

MOLLIE ...

1/16/97 CESSUA 175A

reference to STC SA 777CE. Installed Spinner, Piper Pt. #67790 on aircraft previously modified per STC SA424CE. Installation was performed with reference to STC SA 777CE.

Hartzell HC-C2YK-1A propeller, on a Cessna 175A airframe. The Spinner called for in STC SAA24CE, (Hartzell Pt. #835-21p is alteration, installation of a Lycoming 0-360-A1A engine, and a alteration, installation of a Lycoming 0-360-A1A engine, and a alteration, installation of a Lycoming 0-360-A1A engine, and a site of a Lycoming 0-360-A1A engine 0-3

A Additional Sheets Are Attached

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type

Number SATTICE

Robert L. & Barbara V. Williams

117 E. First

Udall, KS . 67146

emlifice that the change in the type design for the following product with the limitations and confis

therefor as specified hereon meets the sirevorthiness orgainsments of Part

of the Citil Air 3

Cessna

175, 175A, 175B, 1750 and P1700 (Landplants Only) R172E (T/41B)

Installation of a Lycoming 0+360-AlA, 180 h.p. engine and a Hertzell HC-02YK-1A/7666A-2 propeller as indicated on continuation sheet

Data Required: Avcon Industries, Inc. Drawing List No. 17813 dated April 12, or 17513-1 dated May 6, 1980, or later PAA approved havisions and a copy of this certificate, including continuation skeet.

Emilations and Constitions: This approval should not be extended to other specific airplanes of these medels on which other previously approved modifications are incorporated inless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the air orthiness of the airplane. Also, see continuation sheet.

This cortificate and the supporting date which is the basis for approve wondered, surpended, wordled, or a lormination date of other the Administrator of the

Federal Aviation Administration.

LICENSE AGREEMENT

UNDER

Doto-fapplication: April 12, 1971

Glob of issuance: April 30, 1971

Sint misely August 5, 1981

July 23, 1971; September 8, 1976

May 6, 1980 by direction of the Commission

BARRY D. CLEMENTS

Chief. Aircraft Certification Program

(Tille) Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

Toma : 25 2

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Bepartment of Transportation—Rederal Abiation Administration

Supplemental Type Cert

(Continuation Sheet)

Vumber

Engines: Lycoming 0-360-AlA

*Fuel: 91/96 or 100/130 min. grade aviation gasoline

*Engine Limits: For all operations 2700 r.p.m. (180 Kp)

Propeller and

Hartzell HC-C2YK-1B/76664-2 o Propeller Limits: (a)

· Hartzell HC-C2YR /766**06-**2 or_:/7666-2

r 74 ia., not under 72 ia.

Avoid continuous operation between Plac Ard: 2000 and 2250 r.p.m."

tch Settings: At 30 in. station

Low 140 High 290 ± 10

(Na additional tolerance permitted)

Governor: Hartzell F-3-1 or F-3-1A or F-2-88 (b)

(Avcon Drawing No. 17015 or P/N 67790) Spinner;

Required

*Powerplant Instrument

Markings:

Tachometer 2700 r.p.m. (rad line)

2000-2250 r.p.m. (red arc)

Oil Temperature Gage: 245°F (red line)

Oil Pressure Gage: Minimum - 25 p.s.i. (red line)

Maximum - 100 p.s.i. (ped line)

Normal - 60 to 90 p.s.i. (green arc)

Fuel Pressure Cage:

15 p.s.14 (red line) Mainum p.scl. (red line)

5 p#s.i. (green arc)

In addition to the placards specified above, the prescribed operation limitation indicated by an asterisk (*) must also be displayed by a permanent marking. (*) Intentional spins prohibited.

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM \$116-2-1 (10-69)

scoring the may be rent fored in accordance with FAR 21:87 May 6, PAGE 2 OF 2 PAGE

Rei sued August 5, 1981

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ANY OTHER USE Satutite: R VUVUSVA

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pepartment onsportation eral Aviation	rAirliame, Po	REPAIR A	r topo.	,			r subsequ	Office Id	entificat 17 F.S	100 p3	0
STRUCTION d disposition	NS: Print or type all entrie: n of this form. This report violation (Section 901 Fe	s. See FAR 43.9 Is required by I deral Aviation	, FAH 437 aw (49 U. Act of 19	S.C. 14 58).	(21). Fal	lure to report o	an result				
I Each out	Make					1751					
1	CESSNA					Nationality a	na Hegisii 71 E	211011111			
Mrcraft	Serial No. 56271			N67712 Address (As shown on registration certificate) 2247 ARCTIC CIRCLE							1
Owner	Name (As shown on reg STEIGE WA) STEIGE PA	CILL -	cale)	-		1 224	7 ARCT HORAGE		99503		
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										5. Type	
			4.		dentific	ation	S	rial No.		Repair	Alteration
· Unit	Make				lodel 						xx ·
AIRFRAME	mining	ر) شفغفمودنومونو. 	As descri	bed in	item 1 6	ibove) steed					
POWERPLAN	41					`	ļ			 	
								-		\	
PROPELLER	· /		v						1	. \	
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APPLIANCE	E Menulacturer		7								
1				6. Cor	lormity	Statement			C. Ce	ertilicate No	
	A Address			B. I	Kind of	Agency rlificated Mecha	ınle			GR6R5711	
A, Agend	cy's Name and Address	S. TNC.		-	Foreign	Certificated Me	chanic		$\frac{1}{R-1}$, R-2,	L-AF,
1	AV-TECH AVIONIC			XX	Certific	ated Repair Stat	llon		⊣ լ.−1	, L-R,	L-85 ·
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D. Ic	ertily that the repair and/o	or alteration me	ide to the	unil(s) nts of f	identifi Parl 43 c wiedge.	ed in item 4 about 18 the U.S. Fed	eral Aviat	ion Regula	itions a	nd that the I	hiormation
ha tu	ertify that the repair and the live been made in accordance in the secondar in	correct to the		Si	gnature	of Authorized	Individue			<u> </u>	
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1 1	13 APRIL, 1992						vice		· · · · ·		nanthad hy t
			Mad b	افصاما	the unit	Identified in	Item 4 wa	s Inspecte CTED	d in the	manner p	
Purs Adn	suant to the authority glandistrator of the Federal			and Is	A D	h Authorization	U KESC	thet (Spec	ily)		-
	FAA Fit. Standards Inspector	Manufactur	er 			J L., 120	nsport				
BA	LAW Designer	XX Repair Stat		1 10	Consda 1	Airworthiness C		10)		
Dale	of Approval or Rejection	Certificate Designation GR6R57	อก พฮ.	ľ		ERT STEEN		Stee			
ļ	13 APRIL, 1992	CACAD		لتنا	<u> </u>	region de vieto e e debere			:		

FAA Form 337 (12-88)

NOTICE

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

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

WORK PERFORMED ON CESSNA 175A N6771E ON 13 APRIL, 1992;

INSTALLED AMERIKING AK350 ALTITUDE ENCODER ON BOTTOM OF GLOVE BOX UNDER RIGHT INSTRUMENT PANEL, AND CONNECTED TO EXISTING KING KT76A TRANSPONDER I.A.W. INSTRUCTIONS IN AMERIKING MANUAL P/N IM3501001.

CHECKED FOR CORRESPONDENCE PER FAR 91.217 WITH EXISTING SHIPS ALTIMETER AND FOUND IN COMPLIANCE. PURFORMED CHECKS REQUIRED BY FAR 91.411(a)(3), 91.411 FOUND IN COMPLIANCE WITH FAR 43, APPENDIX E(c) AND F.

UPDATED AIRCRAFT WEIGHT AND BALANCE RECORDS AND LOG BOOK TO REFLECT THIS CHANGE. WCRK PERFORMED I.A.W. AC43.13-1A CHAPTERS 11 AND 15, AND AC43.13-2A CHAPTER 2.

DEPARTMENT OF TRANSPORTATION RECEIVED THE PROPERTY Form Approved Budget Bureau No. 04-R060.1 FEDERAL AVIATION ADMINISTRATION MAJOR REPAIR AND ALTERATION FOR FAA USE ONLY (Airframe, Powerplant, Propeller, or Appliance) OFFICE IDENTIFICATION FSD003 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. MAKE MODEL CESSNA 175A 1. AIRCRAFT SERIAL NO NATIONALITY AND REGISTRATION MARK 56271 N6771E NAME (As shown on registration certificate) ADDRESS (As shown on registration certificate)
P.C. BOX 900
ESTES PARK, COLO 805 2. OWNER WALTER E. STEIGE JR. 3. FOR FAA USE ONLY 4. UNIT IDENTIFICATION 5. TYPE UNIT MAKE SERIAL NO. ALTER-ATION AIRFRAME (As described in item 1 above) X POWERPLANT PROPELLER APPLIANCE MANUFACTURER CONFORMITY STATEMENT A. AGENCY'S NAME AND ADDRESS B. KIND OF AGENCY C. CERTIFICATE NO. David A. King U.S. CERTIFICATED MECHANIC Judson Flying Service FOREIGN CERTIFICATED MECHANIC 10383 North 85th St A&P 523884251 CERTIFICATED REPAIR STATION Longmont, Colo 80503 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 Oct 25, 1990 David A. King 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 APPROVED REJECTED FAA FLT. STANDARDS OTHER (Specify) MANUFACTURER INSPECTION AUTHORIZATION CANADIAN DEPARTMENT FAA LESIGNEE REPAIR STATION OF TRANSPORT INSPECTOR OF AIRCRAFT DATE OF APPROVAL OR CERTIFICATE OR

SIGNATURE OF AUTHORIZED INDIVIDUAL

Oct 25, 1990 FAA Form 337 (7-67) DESIGNATION NO

2052200 A&P

(8320)

Curtiss L. Bing

FAA AIRCEAFT BEGISTRY
CAMERA NO. / DATE: 3-1-91

NOTICE

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

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

CESSNA 175A, S/N 56271, N6771E

Installed one NARCO ELT-910, Emergency Locator Reacon, 1 NARCO ELT Antenna & cable, 1 Panel Mounted Remote Switch and wiring harness. Installed per NARCO Specificiations and instructions in Owners Manual & Pilot's Guide 03754-0621.

Total weight 5.6 Lbs installed at the 116.5" Station.

Weight & Balance & Equipment list amended to show change,

The section of ventile for him who is



ADDITIONAL SHEETS ARE ATTACHED

WILL INFERIOR

U.S. GOVERNMENT PRINTING DESIDE: 1977-271-021-090

OF TRANSPORTATION DEPART Form Approved Budget Bureau No. 04-R060.1 FEDERAL AVIATION ADMINISTRATION MAJOR REPAIR AND ALTERATION FOR FAA USE ONLY OFFICE IDENTIFICATION (Airframe, Powerplant, Propeller, or Appliance) AAL-FSDO-R2 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. MODEL CESSNA 175A 1. AIRCRAFT SERIAL NO. NATIONALITY AND REGISTRATION MARK U.S. N6771E 56271 NAME (As shown on registration certificate) ADDRESS (As shown on registration certificate) 2. OWNER 2247 Arctic Circke Anch. AK 99502 Walt Steige 3. FOR FAA USE ONLY 4. UNIT IDENTIFICATION 5. TYPE UNIT MODEL SERIAL NO. ALTER REPAIR MOITA AIRFRAME (As described in item 1 above) x POWERPLANT PROPELLER APPLIANCE MANUFACTURER 6. CONFORMITY STATEMENT A. AGENCY'S NAME AND ADDRESS B. KIND OF AGENCY C. CERTIFICATE NO. U.S. CERTIFICATED MECHANIC Werner G. Roth A&P 395321932 FOREIGN CERTIFICATED MECHANIC 930 Bench Court Anchorage, AK 99904 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 **5JUL82** 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 APPROVED REJECTED FAA FLT. STANDARDS OTHER (Specify) MANUFACTURER INSPECTION AUTHORIZATION ВΥ CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT FAA DESIGNEE REPAIR STATION OF APPROVAL OR CERTIFICATE OR SIGNATURE OF AUTHORIZED INDIVIDUAL REJECTION DESIGNATION NO. **5JUL82**

FAA Form 337 (7-67)

☆ U.S. Government Printing Office 1977-772-646/141

(8320)

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 airworthiness requirements.

ADDITIONAL SHEETS ARE ATTACHED

U. S. DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION		Form Approved.	Budget Bureau No. 41-R041.5,
APPLICATION FOR AIRWORTHINESS CE AND/OR ANNUAL INSPECTION OF AN	APPLICATION FOR AIRWORTHINESS CERTIFICATE AND/OR ANNUAL INSPECTION OF AN AIRCRAFT		
1. TYPE OF APPLICATION (Check which)	1.0	Field Representative	
. X ORIGINAL ISSUANCE OF CERTIFICATE	a. □ peces	TIFICATION UNDER THE P	20VIGTOUS
b. ANNUAL INSPECTION FOR RENEWAL OF CERTIFICATE		IPLE CERTIFICATE UNDER 1	
. AMENDMENT OR MODIFICATION OF CURRENT CERTIFICAT	LE T	CANTA PORTE DRIBER	THE PROVISIONS OF CAR 8
2. AIRWORTHINESS CLASSIFICATION (Check appropriate It is requested that the Certificate of Airworthiness by worthiness classification(s):	item(s)) be issued to pern	ait operation of the air	craft in the following air-
LE STANDARD (NORMAL, UTILITY, ACROBATIC, TRANSPORT C	ATEGORIES		
LIMITED (SEE CAR 9)			
c. RESTRICTED (SEE CAR 8) (Check the restricted special purpose operation(s) to be conducted)			
AGRICULTURAL AND PEST CONTROL	□ PATRO	LLING	
☐ AERIAL ADVERTISING		AND WILDLIFE CONSERVA	TION
☐ AERIAL SURVEYING		ER CONTROL	
GLIDER TOWING	OTHER	and the second s	
d. CEXPERIMENTAL			Company of the Company
(Check the type of experimental operation(s) to be conducted)			
RESEARCH AND DEVELOPMENT	☐ RACING	• The second of	
☐ AMATEUR-BUILT	☐ EXHIBI	TION	
☐ DEMONSTRATION	☐ OTHER		entralis. Terretakon errakonak erretakoak
3. AIRCRAFT IDENTIFICATION (Complete all ttems)		ed blacks (cf.)	The House was selected as a second
B. AIRCRAFT MAKE B. AIRCRAFT MOD	DFL	I - AIRCRAFT	
Cessna	175A	c. AIRCRAFT	56271
d. ENGINE MAKE	e. ENGINE MO	IDFIL	
Continental	GO-30		
4. AIRCRAFT REGISTRATION INFORMATION (Complete	all steme)		- :
a. REGISTERED OWNER'S FULL NAME		F MAILING ADDRESS	AIDCDAFT NATIONAL INC.
			c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
Cagana Aimamast Comme		1.41	
Cessna Aircraft Company	Wichit	ta, Kansas	N= 6771E
그렇게 가지 하면 하는 항상 경우가 되었다.		71. 11.	
5. AIRCRAFT OWNER'S CERTIFICATION (Check and comple	ets appropriate item)		'
I hereby certify that I am the registered owner (oregistered* with the Civil Aeronautics Administration a or 502 and when operated displays the following eviden	r his agent) of the required by the	ne aircraft identified in e Regulations of the	Item 3 above which is dministrator, Part 501
a. CERTIFICATE OF REGISTRATION, FORM ACA-500 (PART A).	NATE OF ICCUE	•	
b. APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B).	FORM ACA-SM PAR	T A ENDWARDED TO	
		- A LUNINARDED TO CAN A	INCHAF I RECORDS BRANCH,
C. A DEALER'S REGISTRATION CERTIFICATE, FORM ACA-1707, DATE	<u>в 8-5-59</u>		
			I
*In order to be eligible for registration an aircraft must be owned by a citizen of the United States, as defined by Section 1 (13) of the Civil Aeronautics Act of 1938, as amended.	111.31		
ATTACHMENTS (Check which)		_ ~	등 하는 이번 살으로 다니
☐ ACA-319 ☐ WEIGHT AND BALANCE REPORT	10.	Del Roskam	
ACA-337 DATA, DRAWINGS, ETC.	(SIGNATURE	OF REGISTERED OWNER OR AUT	HORIZED AGENT)
	12-19-1		
	12-19-3 (DATE)	Owi	ner's Agent
16_eneez_a	· · · · · · · · · · · · · · · · · · ·		(11.12)

Form ACA-305 (11-51)

	ARTMENT OF COMME	*** ***	44,474,64.6
AIRCRAFT (To be completed by a CAA	INSPECTION RE		
The aircraft described in Item 3 on the reverse of the (Check and complete applicable items) AIRCRAFT AND ENGINE CERTIFICATION BAS AIRCRAFT SPECIFICATION NO. 3A17 B. AIRCRAFT LISTING PAGE NO. C. AIRWORTHINESS DIRECTIVE SUMMARY (YEAR) CIVIL AIR REGULATION PART 8 (MODIFIED TYPE CERT	IS THROUGH SHEET REVISION N	103	m to the following:
2. AIRCRAFT AND ENGINE OPERATING RECORD a. AIRCRAFT NEW—NO PREVIOUS OPERATION OR MAINTI b. COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRE c. AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BE d. ENGINE RECORDS INDICATE THE FOLLOWING OPERATI SERIAL NO. SERIAL NO. SERIAL NO. SERIAL NO. SERIAL NO.	ENANCE HISTORY CTIVES RECORDED EN OPERATED A TOTAL OF _	Hours	
3. PREVIOUS INSPECTION RECORD (INSPECTION LAST AIRWORTHINESS INSPECTION CONDUCTED BY AIRCRAFT MANUFACTURER BY APPROVED REPAIR STATION, CERTIFICATE N BY MECHANIC, CERTIFICATE NO. b. PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-	(DATE)		
4. AIRWORTHINESS DQCUMENTS ISSUED OR RE ■. ☑ OPERATION LIMITATIONS. FORM ACA-309, WAS-ISSUED b. ☐ CURRENT OPERATION LIMITATIONS, FORM ACA-309, ISS c. ☐ CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AV d. ☑ CURRENT WEIGHT AND BALANCE INFORMATION IS AV e. ☐ THIS INSPECTION HAS BEEN RECORDED IN THE AIRCR f. ☑ CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISS g. ☐ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE BY (NAME OF ISSUING REPRESENTATIVE)	(OOPY AFTACHED) CAR AVAILABLE IN AIRCRAFT AILABLE IN AIRCRAFT AFT RECORDS UED TO EXPIRE (DATE)	3.777 (b) di aircraft ndefinite (DATE)	splayed in
The state of the s	inspected under the au		ated repair station
G. CAL PEPRESENTATIVE CERTIFICATION I HAVE INCRUITED FINE INCRAFT COMPANY DESIGNES SIGNATURE By AVIATION SAFETY DISPLIFITION BY NEW YORK AVIATION SAFETY DISPLIFIT AVIABLE TO SAFETY DISP	DESIGNATION NO. CAA DESIGNATION NO.	RWORTHY UNAIRWORTH (Check appropriate tlem) DATE 12-19-59 DATE	☐ ACCEPTED
□ ATTACHMENT			REINSPECTED SPOT CHECKED

Form ACA-805a (11-51)

1. AIRCRAFT MAKE		з м	1300L	SERIAL NO.	3.1 1 1 · · · · ·	D REGISTRATION M.
	Cessna NAME (Pirst, middle, last)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	175A	DDRESS (Street and number, city,	N67	71E
2. OWNER	Automotive Parts Company, Inc.	& Equip		300 ea. Fifti Anchorage, A	h Avenue	e falleger pro- Torrespondible
COMPLE CORDAN	TE ONLY FOR UNIT REPAIR CE WITH CIVIL AERONAUTION	ED AND/OR	ALTERED. DESC	RIBE WORK ACCOMP	LISHED ON RE	VERSE IN AC
UNIT	MAKE 1	said the d	MODEL	SERIAL: NO.	NATURE OF	WORK (Check)
AIRFRAME	*****************	M (As described	in item I above) PP4	, in the second		
POWERPLAN			BRATION		1 1 1 1 2 1 2 E	11 XXXX
PROPELLER	-1-1-1	CABLE AIR		HEREIN COMPLIES WIT QUIREMENTS AND IS RIVED AIRCRAFT SUBJECT	APPROVED	(i qualità
APPLIANCE	TYPE AND MANUFACTURER	IS.II (b).	NSPECTION BY	PERSON AUTHORIZED	N CAR	Fpr.
		DATE 13-1		RE V. W. De	Mast	REGION
AIRCRAF	T WEIGHT AND BALANCE DA ER the repairs and/or alterations described below were made.	This ite case of a stalled i if applic	n an aircrait. Ai	leted by repair or altern t, it will not be complet this time, it will be com	tion agency. E ed until such co pleted by the in	owever is in
CATEGOR	EMPTY WEIGHT (P)			R OF GRAVITY (Inches from datus	n)* USEF	UL LOAD (Pounds)
Norma	1 1498.0	-	+37.	58	**************************************	5 2
. CONFORI	MITY STATEMENT (Complete and	check)				
AGENCY'S NAI	AE AND ADDRESS	,	b. KIND OF AGENCY		e. CERTIFICAT	E NO.
	Earl Dodge 1801 Lake Otis Ro Anchorage, Alask		☐ Foreign Ce ☐ Certificate ☐ Manufactu	ificated Mechanic, ertificated Mechanic, d Repair Station, arer, heck if repair or alterat	na tata	301282
	3 a	<u> </u>	tion	made under delegation procedures.)	op-	<u> </u>
attachmer	hat the repair and/or alteration its hereto have been made in a mation furnished herein is true a	ecordance with	the requirements	of Part 18 of the U.S.	nd described on Civil Air Regula	the reverse of the
	mber [8, 196] air sud/or alteration completed)			(Bignature of suthorized	thdividual)	
(1) site rep	L FOR RETURN TO SERVICE	the unit ident		as inspected in the man	ner prescribed b	y the Adminis
. APPROVA	to the authority specified below he Federal Aviation Agency an	d is				
APPROVA Pursuant trator of t	PROVED BY GEAR Flight Standards	пее 🗌 Мапі		Canadian Department of Other (Specify)		
APPROVA Pursuant trator of t	he Federal Aviation Agency and PROVED BY FAA Design JECTED BY FAA Flight	пее 🗌 Мапі	ir Station 🗆	Other (Specify)	F	ESDO-L
Pursuant trator of t	PROVED BY GRANDESS JECTED BY GRANDESS JECTED BY IFAA Flight Standards Inspector	nee Manu	ir Station 🗆	Other (Specify) The of authorized individual; tity The of authorized individual; tity	F	ESDO-L

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INSTRUCTIONS

This form must be completed in duplicate each time a major repair and/or alteration is made of an aircraft, airframe, powerplant, propeller or appliance. After the repair and/or alteration has been inspected and item 6 completed, the original copy of this form will be made available to the aircraft owner for retention as part of the aircraft records. The duplicate copy is retained by the FAA for administrative purposes.

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8. DESCRIPTION OF WORK ACCOMPLISHED.

Removed GE-ASIB Radio. Removed GE-AS-IB Power Supply. Installed King KY-90 Radio and KS-501 Power Supply. Installed VHF whip antenna. KY-90 was installed in the same location as the GE-AS-IB and was attached to the standard Cessna mounting brackets (radio) at the instrument panel. The KY-90 was anchored by means of four AN-526-8-32 machine screws and AN-365-8-32 stop nuts. The KS-501 power supply base was attached to the A/C at the same location as was the GE power supply and was anchored by means of four AN-526-8-32 screws and four AN-365-8-32 nuts. This location is on left side of cabin section just aft of firewall. (+5 arm) The VHF whip was installed on top of A/C on the left side at +30 arm and was attached by drilling a 3/8" hole in skin of A/C. All wiring was fabricated according to factory instructions. Power for the KY-90/KS-501 was taken from the main buss through a 4AG/10 amp fuse. Total A/C current drain (continuous) is calculated to be 19.2 amps at cruise voltage which does not exceed 80% of generator capacity which is 35 amps. 👙 🔠 🔠

WEIGHT & BALANCE DATA

Item Weight Arm	Moment
GE Radio -8.0 +12	-96
GE Power Supp4.0 +5	-20
KY-90 Radio +4.0	+48 1, 112 11
KS-501 Power Sup. 331 +4.0 124 +5	+20
VHF Whip Antenna +1.0 +30	+30
A/C (previous) 1501.0 37.53	56334.65
New empty wt 1498. 0 +37. 58	56301.65

Use Index 56, 30 on gravity loading envelope. C. G. limits checked and found to be satisfactory.

REGION 5 (**G**SDO-1

OKLAHOHA CITY, OKLA.

29. Wd 95 1 01 NUT

HOND OF THE PROPERTY AND RESISTRATION MARK and date "If additional space is needed attach additional and the Check block if additional sheets are attached.

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RESION 5

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MATOD	DEDAID AND ALTERA	CIVIL AER	ARTMENT OF COM	RATION		roved. ureau No. 41-R052.4
	REPAIR AND ALTERAT MAKE CESSNA		ODEL 175A	SERIAL NO. 7 SERIA	•	PLIANCE) REGISTRATION MA
2. OWNER	AUTOMOTIVE PAR EQUIPMENT COMP	TS AND	ADDI	RESS (Street and number, city, 300 East 5	th Ave Alaska	10/20/20/20/20/20/20/20/20/20/20/20/20/20
3. COMPLETE CORDANCE	ONLY FOR UNIT REPAIL			IBE WORK ACCOMPL	ISHED ON RE	VERSE IN AC
UNIT	MAKE	/	MODEL	SERIAL NO.	NATURE OF	WORK (Check)
z. AIRFRAME	***************************************	MA (As described	in item I above) #####	*************	LO	XXX
b. POWERPLANT	1	The date	indentified herein	complied with applicable	e nirworthiness	re
c. PROPELLER	A		nity inspection by	els for the above destrib a person suphorized in		
. APPLIANCE	TYPE AND MANUFACTURER	Date 2/	17/61 Signa	we for Jan	/***	
4. AIRCRAFT *AFTER des	WEIGHT AND BALANCE D the repairs and/or alterations cribed below were made.	case of a	s spare component, :	ed by repair or alterati it will not be complete his time, it will be comp	on agency F	EGION 5 SDO 1 lowever in the emponent is in-
CATEGORY	EMPTY WEIGHT (if applie	able.	F GRAVITY (Inches from datum)	-	UL LOAD (Pounds)*
NORMAI	1501		≠ 39.4			349
. CONFORMI	TY STATEMENT (Complete an	d check)		1		
	O. M. Sasseen 2409 McRae Rd Anchorage, Al	•	☐ Certificated I ☐ Manufacturer ☐ (Chec	ficated Mechanic./ Repair Station.) In	1006506
	t the repair and/or alterati hereto have been made in a ion furnished herein is true				d described on livil Air Regula	the reverse or tions and that
Februar (Date repair	ry 16,1961 and/or alteration completed)		Ta/11	(Signature of authorized in	EECC.	·
APPROVAL F Pursuant to t trator and is	FOR RETURN TO SERVICE the authority specified below	E (Check and comple v the unit ident	tte appropriate (tems) tified in item 3 was	inspected in the manne	prescribed by	the Adminis-
ZXPPR □ REJE		ation Rep		nadian Department of Ther (Specify)	ransport Inspec	etor of Aircraft
(Date of a	2/17/6/ pproval or rejection)		Jh	n Om Ho		REGION CSDO-1
	PLETÈD ONLY BY CAA PE	RSONNEL	. Joignature o	s sooneried individual; fitte o	r l A	cu
	for engineering comment		ached memorandum	— ☐ Spot Cheel	7	3.8.61
	(Date)		(Date)	$\mathbb{Z} = \mathbb{Z}^{n}$		Date)

(Signature Aviation Safety Agent)

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B. DESCRIPTION OF WORK ACCOMPLISHED.

- 1. Install oversize nose wheel and tire Cessna 310 fork wheel and tire.
- 2. Remove wheel fairings 17lbs. at \$47.0
- 3. Install 800x 600 main gear tires, weight increase 16lbs at + 47.0
- 4. Sunair Radio was removed and General Electric ASIB Radio
- and power supply was installed previously by parties unknown. Instalation of radio was in instrument panel same location as Sanair Radio. Power supply wasbolted to left side of cabin section aft of fire wall by 4 101/32 screws, and elastic stop nuts. G E Radiow weight increase 121bs at + 15.0 Sumair Radio weight 26.5 at + 79.
- 5. Parts used in oversixe nose gear installation.
 - 1 ea. 96-32186 Wheel (Goodyear)
 1 ga.0441016-24 Tire (Goodyear)
 1 ea.0441016-13 Tube (Goodyear)
 1 ea.0442000-36 Axle tube 9(CESSNA)
 2 ea. 0842000-35 Axle Spacers (CESSNA)
 1 ea. 0842000-30 YOKE (CESSNA)
 1 ea. 0842000-31 Shim (Cessna)
 2 ea. 0842000-37 Buckets (CESSNA)
 2 ea. AN4-17A Bolts (CESSNA)
 2 ea. AN4-16A Bolts (CESSNA)
- Weight and Balance data:

ITEM		WT.	والمرواء فالتعاليك	ARM		MCMENT
A/C		1516.	5	+ 39.1		58295.15
	- 전체회회교(H) 2.30년년	100			7.5	
Remove St	mair Radio			+ 79.0		-2093-5
Remove Wi	neel Fairing			+47.0		≛ 799.0
Oversize	Tires \	+16.0		+47.0		752.0
Install (+12-0		0.at-		180.0
Radio		CHARLES .	A Company			

1501 N.E. WT.

OKLAHOMA CZ Z G Z KLA.

1501/59227 15 + 39.4

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Use index 59.22 on gravity loading envelope.

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		CIVIL AERO	RTMENT OF COM	RATION		игеви No. 41-R052.4.	
MAJOR	REPAIR AND ALTERATION	N FORM (A	AIRFRAME, POV	VERPLANT, PROPEL	LER OR A	PPLIANCE)	
1. AIRCRAFT	MAKE CESSNA	МО	175	SERIAL NO. 56271	NG	AND REGISTRATION MARK	
2. OWNER	NAME (Pirel, middle, last) AASNA AERONAUTKAL	/was	B	SPEA	DAD, ALA	sk4	
3. COMPLET CORDANG	E ONLY FOR UNIT REPAIRE E WITH CIVIL AERONAUTIC	ED AND/OR A	LTERED. DESCR	IBE WORK ACCOMPLI	SHED ON F	EVERSE IN AC-	
UNIT	MAKE		MODEL	SERIAL NO.	NATURE MAJOR REPAIR	OF WORK (Check)	
a. AIRFRAME	***************************************	▲ (As described i	n item I above) 🚧 🚧	***********			
b. POWERPLANT	· · · · · · · · · · · · · · · · · · ·	1	·, ·	1			
c. PROPELLER		· 李宁·			en	1300	
APPLIANCE	TYPE AND MANUFACTURER	27 1/2/27	₹.\$ 			• •	
4. AIRCRAF	T WEIGHT AND BALANCE DA ER the repairs and/or alterations described below were made.	TA This ite case of a stalled in if applic	spare component, n an aircraft. At t	ted by repair or alterati it will not be complete his time, it will be comp	on agency. d until such bleted by the	However, in the component is in- installing agency,	
CATEGORY	EMPTY WEIGHT (Po			OF GRAVITY (Inches from datum)* , U	SEFUL LOAD (Pounds)*	
STD	7.576.5	-	39.1				
	MITY STATEMENT (Complete and	check)	b. KIND OF AGENCY		e. CERTIFI	CATE NO.	
g. AGENCY'S NAM	MR BORER 1307 W39Th SDENDRD,	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)					
attachmen the inforn	that the repair and/or alteratints hereto have been made in a nation furnished herein is true:	ccornance witi	i the reduirements	Of I will it of the c. w.		on the reverse or culations and that	
	· ·	v the unit ider	ntified in item 3 wa	s inspected in the man	ner prescribe		
Æ AF □ RI	PPROVED BY CAA Des			Canadian Department of Other (Specify) A. 1.	Transport In	spector of Afferait	
	e of approval or rejection)		Wignato	re of authorized individual; title	/25/96 or identification	number)	
	OMPLETED ONLY BY CAA PE	RSONNEL					
	ded for engineering comment od 3/2-68 REGION 5 (Date) GSD0-1 AA designation number)	☐ See a ☐ Reinspected	(Date)	Spot Che	Hor	(Date) VIII	

FAA AIRCRAFT REGISTRY	Y	بأحربه
FAA AIRCRAFT REGISTRY CAMERA NO. 4/DATE:	5 - 14 - 8	<u>66</u>

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8. DESCRIPTION OF WORK ACCOMPLISHED.

Distalled A.S.L. Bird Dog R.D.F. 2 Receiver in accordance with

Ewcs. -R.D.F.2

15-16.5

78.6 58084 13.0 196 582

YeurEWCG 39.1

he Index 58.23 on gravity londing envelope -



*If additional space is needed attach additional sheets bearing aircraft nationality and registration mark and date work completed.

Check block if additional sheets are attached.

U. S. COVERNMENT PRINTING OFFICE 16-54010-

GPO 992342