US Department
of Transportation
Federal Aviation
Administration

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

Form Approved OMB No. 2120-0020 5/31/2018	Electronic Tracking Number

For FAA Use Only

Fed	ransportation deral Aviation ministration	on	(AllTr	ame, r	owerplant, i	Prop	eı	ier, or App	lance)				
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		Nationality N310CM		gistratio	n Mark				Serial No. 310P-0178	`		-	
1. Ai	ircraft	Make	''						Model	,		l	Series
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		Name (As	shown	on regist	ration certificate)			Address (As	show	n on re	gistration	certificate)
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									Zip 3792			Cour	ntry US
							3.	For FAA Use	Only				
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			PROPE	LLER									
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			APPLIA	NCE	Manufacturer								
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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.

N310CM 3 1-

8. Description of Work Accomplished

Nationality and Registration Mark

Date

- 1. REMOVED MECHANICAL FUEL FLOW GUAGE, CAPPED FUEL LINE AT WING ROOT.
- 2. INSTALATION OF JP INSTRUMENTS FUEL FLOW INDICATING SYSTEM IN ACCORDANCE WITH JPI STC SA00861SE INSTALATION MANUAL FS-450, REPORT NO. 400, REVISION B DATED 12-12-2012.
- 3. INSTALLED 1 AMP CIRCUIT BREAKER. DRAW ON FS-450 1/4 AMP
- 4. NO SIGNIFICANTE CHANGE IN WEIGHT AND BALANCE

 -1011	

Hottel States of America

Benertment of Transportation—Wederal Aniation Administration

Supplemental Type Certificate

Number SA00861SE

This certificate, issued to

J. P. Instruments P.O. Box 7033

Huntington Beach, CA 92646

certifies 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 * of the * Regulations.

Original Product — Type Certificate Number: Make:

*See attached FAA Approved Model List (AML)

No. SA00861SE for a list of approved airplane

models and applicable airworthiness regulations.

Description of the Type Design Change. Installation of J.P. Instruments (JPI) fuel flow indicating system in accordance with JPI Installation Manual FS-450, Report No. 400, Revision -, dated August 16, 2000, or later FAA approved revision.

Limitations and Conditions. Approval of this change in type design applies to the aircraft models listed on the AML only. This approval should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate, FAA Approved Model List (AML) No. SA00861SE, and Airplane Flight Manual Supplement No. 1, dated December 18, 2000, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft.

Note: This STC requires the installation of a fuel flow transducer per STC SA00432SE; or aircraft listed on the FAA approved AML SA00432SE and that have been previously modified with a fuel flow indication system that utilizes the Flowscan fuel flow transducer, P/N: 201-A, 201-B, 201-C or 231 are eligible for installation for the FS-450. This certificate does not constitute installation approval of the fuel flow transducer.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

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:

April 7, 2000

Date reissued:

Date of issuance:

December 18, 2000

Date amended:



(Signature) Acting Manager, Seattle Aircraft

Certification Office

(Title)

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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J.P. INSTRUMENTS FAA APPROVED MODEL LIST for STC SA00861SE FOR

INSTALLATION OF THE (FS-450) 450000 SERIES FUEL FLOW INSTRUMENT

Issue Date: December 18, 2000

				ssue Date: Decemi	
ITE	AIRCRAFT MAKE	AIRCRAFT MODEL	TYPE	CERTIFICATION	AML
M			CERTIFICATE	BASIS FOR	REVISION DATE
			NUMBER	ALTERATION	<u> </u>
41.	Cessna	177RG	A20CE	FAR 23	12-18-2000
42.	Cessna	180, 180A, B, C, D, E, F, G, H, J, K	5A6	CAR 3	12-18-2000
43.	Cessna	182, 182A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R	3A13	CAR 3	12-18-2000
44.	Cessna	182E, F, G, H, J, K, L, M, N, P, Q (Peterson, STC SA3825SW)	3A13	CAR 3	5-31-2001
45.	Cessna	182T	3A13	CAR 3	5-31-2001
46.	Cessna	T182T	3A13	CAR 3	5-31-2001
47.	Cessna	182 Series Air Planes Corp, STC SA00152WI	3A13	CAR3	12-18-2000
	2222	Engine IO-520 and IO-550			
48.	Cessna	1828	3A13	FAR 23	12-18-2000
49.	Cessna	R182, T182, TR182	3A13	CAR 3	12-18-2000
50.	Cessna	185, 185A, B, C, D, E, A185E, A185F	3A24	CAR 3	12-18-2000
51.	Cessna	188, 188A, 188B, A188, A188A, A188B, T188C	A9CE	FAR 21	12-18-2000
52.	Cessna	195, A, B	A-790	CAR 3	12-18-2000
53.	Cessna	206, 206, P206A, B, C, D, E, TP206A, B, C, D, E,	A4CE	CAR 3	12-18-2000
	2223	U206, U206A, B, C, D, E, F, G, TU206A, B, C, D, E, F, G			
54.	Cessna	206H	A4CE	CAR 3	5-31-2001
55.	Cessna	T206H	A4CE	FAR 23	12-18-2000
56.	Cessna	U206A, B, C, D, E, F, G. (with Lycoming TIO-540- series engine per STC SA2123NM)	A4CE	CAR 3	12-18-2000
	Cocces	207, 207A, T207, T207A	A16CE	FAR 23	12-18-2000
57.	Cessna	210, 210A, B, C, D, E, F 210-5, 210-5A, T210F, 210G,	3A21	FAR 23	12-18-2000
58.	Cessna	T210G, 210H, T210H, 210J, T210J, T210K, 210K, 210L,	3A21	1 71 25	12-10-2000
		T210G, 210H, T210H, 210J, T210J, T210K, 210K, 210L, T210L, 210M, T210M, 210N, P210N, T210N, 210R, P210R,			
		T210R, 210M, 1210M, 210N, P210N, 1210N, 210K, P210K,			
59.	Cessna	T303	A34CE	FAR 23	1-27-2003
60.	Cessna	310, C, D, E, F, G, H, E310H, 310I, J, K, L, N, P, Q, R 310J-1, E310J, T310P, Q, R, T310Q, 310R, T310R	3A10	CAR 3	12-18-2000
61.	Cessna	320, A, B, C, D, E, F, 320-1, 335, 340, 340A	3A25	CAR 3	12-18-2000
62.	Cessna	336	A2CE	CAR 3	12-18-2000

Rev C Page 3 of 8

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J.P.INSTRUMENTS
Supplement No. 1
P.O. Box 7033
Huntington Beach, CA 92646

FAA APPROVED
AIRPLANE/ROTORCRAFT FLIGHT MANUAL SUPPLEMENT OR
SUPPLEMENTAL AIRPLANE FLIGHT MANUAL (INCLUDING POH AND
FAA AFM)

(FOR THOSE AIRCRAFT WITHOUT A BASIC AIRPLANE FLIGHT MANUAL)

FS-450 FUEL FLOW INDICATOR FOR

Single and Twin, Reciprocating Engine Powered Aircraft as listed On Approved Model List of

STC SA00861SE

REG. NO. <u>N310C</u>M SER. NO. <u>310 P - 0</u>178

This Supplement must be attached to the

FAA Approved Airplane/Rotorcraft Flight Manual when the J.P. Instruments FS-450 is installed in accordance with Supplemental Type Certificate SA 00432SE. For those airplanes without a basic Airplane Flight Manual, the Supplemental AFM must be in the aircraft when the FS-450 is installed.

The information contained in this Airplane/Rotorcraft Flight Manual Supplement/
Supplemental Aircraft Flight Manual supplements or supersedes the basic manual/
placards only in those areas listed. For limitations, procedures and performance information
not contained in this supplement, consult the basic Airplane Flight manual, Markings and
Placards

FAA APPROVED:

Manager, Special Certification Branch, ANM-190S Federal Aviation Administration Seattle Aircraft Certification Office Transport Airplane Directorate

Date:_Docember 18, 2000____

Page 1 of 4

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J.P.Instruments Fuel Flow Installation Manual FS-450

Report # 400
Page 1 of 16
Rev A: Date 02/1/2002

Table of Contents

1	Installation Instructions	2
2	Placards and Markings	2
3	Installing the Fuel Flow Transducer:	3
4	Mounting Procedure 700921	4
5	Mounting Procedure: 700922	5
6	Mounting Procedure 700923	6
7	Mounting Procedure:700924	7
8	Specifications and Limitations	8
9	TSO Conditions	8
10	Specifications and Limitations	9
11	TSO Label	10
12	Operating Instructions	11
13	Initial Check Out	
14	List of Major components:	12
15		14
16	Instructions for Continued Airworthiness (ICA)	14
	Wiring Drawing	15
17	Tempiate Drawing	16

J.P.INSTRUMENTS PO BOX 7033 HUNTINGTON BEACH CA 92646

J.P.Instruments Fuel Flow Installation Manual FS-450

FAA Approved

Report # 400 Page 1 of 10 Rev B: Date 12/12/2012

Page

Table of Contents

1. General2
2. Route the (Optional) External Warning Control Line
3. Install the Instrument in the Panel2
4. Route the Fuel Flow Transducer Wires:
5. Installing the Fuel Flow Transducer:
6 List of major components:2
7. TSO Conditions3
8 Specifications and Limitations
9 Pilot Programmable Modes:4
<u>Drawing 450124</u> 5
<u>Drawing 450457</u> 6
10 Initial Check Out7
11 EMI Radio Test:
12 Operation Instructions
Instructions for Continued Airworthiness

J.P.INSTRUMENTS PO BOX 7033 HUNTINGTON BEACH CA 92704

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Pilot's Guide

Fuel Scan FS-450M TWIN

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Printed in the United States of America

J.P. INSTRUMENTS

Information: P. O. Box 7033 Huntington Beach, CA 92646

Factory: 3185B Airway Costa Mesa, CA 92626

(714) 557-5434 Fax (714) 557-9840

www.jpinstruments.com

Rev NC 11/03

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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 5/31/2018	Electronic Tracking Number
	or FAA Use Only

of Transportation Federal Aviation Administration	on	(Airfr	ame, F	owerplant, l	Prop	oeli	er, or App	liance)						
instructions	IONS: Print and dispos on. (49 U.S.	ition of the	his form	ies. See Title 14. . This report is r	4 CF equir	R § ed b	43.9, Part 43 by law (49 U.S	Appendix B S.C. §44701)	3, and). Fail	d AC lure	43.9 to repo	1 (or sul ert can re	bsequent revision the sult in a civil penalty	ereof) for for each
	Nationalit N310CM		gistratio	n Mark				Serial No. 310P-01						
1. Aircraft	Make CESSN							Model 310P					Series	
	Name (As	s shown (on regis	tration certificate)								certificate)	
2. Owner	JAMES	E McKII	McKINNON					1 27	NOX\ 922-	VILL	Ε		State TN	
						3. F	For FAA Use		J	000			ntry <u>00</u>	
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4. Typ	ре			1		5. l	Unit Identifica	ition						
Repair	Alteration	U	nit		Ma	ke	_	Model			Serial N	0.		
	\checkmark	AIRFRA	AME					(As described in Item 1 above)						
		POWER	RPLANT											
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	NETH D PI					В.		y ated Mechanic	C		[Ma	nufacturer	
Address 1235 City SEVIE	AIRPORT ERVILLE	RD		State TNI				ficated Mecha				C. Certi	ficate No.	
zip 37862		untry US		_ State _TN		\vdash		ificated Repair Station ificated Maintenance Organization 3400858						
have be	D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.					hereto								
Extended ranger 14 CFR P App. B			1 -	ature/Date of Au NETH D PHILI			Individual Am	≈ E	A	Jh.	lle		3 7=b 2020	>
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	A Designee		Rep	air Station	×	Ins	spection Author	orization	_	Othe	r (Spe	cify)		
Certificate or Designation N	0.		-	ature/Date of Au				_						
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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.

N310CM 3 7-6 2020

8. Description of Work Accomplished

Nationality and Registration Mark

Date

- 1. REMOVED MECHANICAL FUEL FLOW GUAGE, CAPPED FUEL LINE AT WING ROOT.
- 2. INSTALATION OF JP INSTRUMENTS FUEL FLOW INDICATING SYSTEM IN ACCORDANCE WITH JPI STC SA00861SE INSTALATION MANUAL FS-450, REPORT NO. 400, REVISION B DATED 12-12-2012.
- 3. INSTALLED 1 AMP CIRCUIT BREAKER . DRAW ON FS-450 1/4 AMP
- 4. NO SIGNIFICANTE CHANGE IN WEIGHT AND BALANCE

----- END -----

Hutter States of America

Benertment of Transportation—Federal Aniation Administration

Supplemental Type Certificate

Number SA00861SE

This certificate, issued to

J. P. Instruments P.O. Box 7033

Huntington Beach, CA 92646

certifies 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 * of the *Regulations.

Original Product — Type Certificate Number: Make:

*See attached FAA Approved Model List (AML)

No. SA00861SE for a list of approved airplane

models and applicable airworthiness regulations.

Description of the Type Design Change: Installation of J.P. Instruments (JPI) fuel flow indicating system in accordance with JPI Installation Manual FS-450, Report No. 400, Revision -, dated August 16, 2000, or later FAA approved revision.

Limitations and Conditions. Approval of this change in type design applies to the aircraft models listed on the AML only. This approval should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate, FAA Approved Model List (AML) No. SA00861SE, and Airplane Flight Manual Supplement No. 1, dated December 18, 2000, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft.

Note: This STC requires the installation of a fuel flow transducer per STC SA00432SE; or aircraft listed on the FAA approved AML SA00432SE and that have been previously modified with a fuel flow indication system that utilizes the Flowscan fuel flow transducer, P/N: 201-A, 201-B, 201-C or 231 are eligible for installation for the FS-450. This certificate does not constitute installation approval of the fuel flow transducer.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

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:

April 7, 2000

Date reissued.

Date of issuance:

December 18, 2000

Date amended:



(Signature) Acting Manager, Seattle Aircraft

Certification Office

(Title)

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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J.P. INSTRUMENTS FAA APPROVED MODEL LIST for STC SA00861SE FOR

INSTALLATION OF THE (FS-450) 450000 SERIES FUEL FLOW INSTRUMENT

Issue Date: December 18, 2000 CERTIFICATION AML AIRCRAFT MODEL TYPE ITE AIRCRAFT MAKE REVISION DATE М CERTIFICATE BASIS FOR NUMBER ALTERATION A20CE **FAR 23** 12-18-2000 177RG 41. Cessna 12-18-2000 180, 180A, B, C, D, E, F, G, H, J, K 5A6 CAR 3 42. Cessna 12-18-2000 182, 182A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R 3A13 CAR 3 Cessna 43. 3A13 CAR 3 5-31-2001 Cessna 182E, F, G, H, J, K, L, M, N, P, Q (Peterson, STC 44. SA3825SW) 3A13 CAR 3 5-31-2001 182T 45. Cessna 3A13 CAR 3 5-31-2001 46. Cessna T182T 182 Series Air Planes Corp, STC SA00152WI 3A13 CAR3 12-18-2000 Cessna 47. Engine IO-520 and IO-550 12-18-2000 **FAR 23** 3A13 Cessna 182S 48. CAR 3 12-18-2000 R182, T182, TR182 3A13 Cessna 49. CAR 3 12-18-2000 3A24 185, 185A, B, C, D, E, A185E, A185F Cessna 50. 188, 188A, 188B, A188, A188A, A188B, T188C A9CE FAR 21 12-18-2000 51. Cessna A-790 CAR 3 12-18-2000 195, A, B Cessna 52. 12-18-2000 206, 206, P206A, B, C, D, E, TP206A, B, C, D, E, A4CE CAR 3 Cessna 53. U206, U206A, B, C, D, E, F, G, TU206A, B, C, D, E, F, G 206H A4CE CAR 3 5-31-2001 Cessna 54. FAR 23 12-18-2000 A4CE Cessna T206H 55. A4CE CAR 3 12-18-2000 U206A, B, C, D, E, F, G. (with Lycoming TIO-540- series 56. Cessna engine per STC SA2123NM) FAR 23 12-18-2000 207, 207A, T207, T207A A16CE 57. Cessna FAR 23 12-18-2000 210, 210A, B, C, D, E, F 210-5, 210-5A, T210F, 210G, 3A21 Cessna 58. T210G, 210H, T210H, 210J, T210J, T210K, 210K, 210L. T210L, 210M, T210M, 210N, P210N, T210N, 210R, P210R, T210R T303 A34CE **FAR 23** 1-27-2003 Cessna 59. 310, C, D, E, F, G, H, E310H, 310I, J, K, L, N, P, Q, R 3A10 CAR 3 12-18-2000 60. Cessna 310J-1, E310J, T310P, Q, R, T310Q, 310R, T310R 12-18-2000 320, A, B, C, D, E, F, 320-1, 335, 340, 340A 3A25 CAR 3 Cessna 61. CAR 3 12-18-2000 A2CE Cessna 336 62.

Rev C Page 3 of 8

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J.P.INSTRUMENTS
Supplement No. 1
P.O. Box 7033
Huntington Beach, CA 92646

FAA APPROVED
AIRPLANE/ROTORCRAFT FLIGHT MANUAL SUPPLEMENT OR
SUPPLEMENTAL AIRPLANE FLIGHT MANUAL (INCLUDING POH AND
FAA AFM)
(FOR THOSE AIRCRAFT WITHOUT A BASIC AIRPLANE FLIGHT
MANUAL)

FS-450 FUEL FLOW INDICATOR FOR

Single and Twin, Reciprocating Engine Powered Aircraft as listed On Approved Model List of

STC SA00861SE

reg. no. <u>N310C</u>M ser. no. <u>310 P - 0</u>178

This Supplement must be attached to the **FAA Approved Airplane/Rotorcraft Flight Manual** when the J.P. Instruments FS-450 is installed in accordance with Supplemental Type Certificate SA 00432SE. For those airplanes without a basic Airplane Flight Manual, the Supplemental AFM must be in the aircraft when the FS-450 is installed.

The information contained in this Airplane/Rotorcraft Flight Manual Supplement/ Supplemental Aircraft Flight Manual supplements or supersedes the basic manual/ placards only in those areas listed. For limitations, procedures and performance information not contained in this supplement, consult the basic Airplane Flight manual, Markings and Placards

FAA APPROVED:

Manager, Special Certification Branch, ANM-190S Federal Aviation Administration Seattle Aircraft Certification Office

Transport Airplane Directorate

Date: Docember 18, 2000____

Page 1 of 4

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J.P.Instruments Fuel Flow Installation Manual FS-450

Report # 400
Page 1 of 16
Rev A: Date 02/1/2002

Table of Contents

1	Installation instructions	2
2	Placards and Markings	2
3	installing the Fuel Flow Transducer:	3
4	Mounting Procedure 700921	4
5	Mounting Procedure: 700922	5
6	Mounting Procedure 700923	6
7	Mounting Procedure:700924	7
8	Specifications and Limitations	
9	TSO Conditions	8
10	Specifications and Limitations	8
11	TSO Label	9
12	Operating Instructions	10
13	Initial Check Out	11
14	List of Major components:	12
15	Instructions for Continued Airworthiness (ICA)	14
16	Wiring Drawing	14
17	Template Drawing	15
	- outliere or called	16

J.P.INSTRUMENTS PO BOX 7033 HUNTINGTON BEACH CA 92646

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J.P.Instruments Fuel Flow Installation Manual FS-450

FAA Approved

Report # 400 Page 1 of 10 Rev B: Date 12/12/2012

Page

Table of Contents

1. General2
2. Route the (Optional) External Warning Control Line
3. Install the Instrument in the Panel2
4. Route the Fuel Flow Transducer Wires:
5. Installing the Fuel Flow Transducer: 2
6 List of major components:
3
3
9 Pilot Programmable Modes:
<u>Drawing 450124</u> 5
<u>Drawing 4504576</u>
10 Initial Check Out7
11 EMI Radio Test:
12 Operation Instructions
Instructions for Continued Airworthiness

J.P.INSTRUMENTS PO BOX 7033 HUNTINGTON BEACH CA 92704

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Pilot's Guide

Fuel Scan FS-450M TWIN

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Printed in the United States of America

J.P. INSTRUMENTS

Information: P. O. Box 7033 Huntington Beach, CA 92646

Factory: 3185B Airway Costa Mesa, CA 92626

(714) 557-5434 Fax (714) 557-9840

www.jpinstruments.com

Rev NC 11/03

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Federal Aviation Administration

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

Form Approved OMB No. 2120-0020

For FAA Use Only

Office Identification

TINSTRUGTIONS: Printortype all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instruction	ons
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 \$1,0	000
for each such violation (Section 901 Federal Aviation Act of 1958).	

4 41	Make Cessna Aircraft	Model 310P
1. Aircraft	Serial No. 310P-0178	Nationality and Registration Mark N310 CM
2. Owner	Name (As shown on registration certificate) Williams, James A.	Address (As shown on registration certificate) P.O. Box 4541 Newark, DE. 19711
	3 For FAA	Liea Only

		·	4. 1	Unit Identification			5. Type	
Unit	AME AME AME AME AME AME AME AME	Alteration						
AIRFRAME	(As desc	cribe	d in Item 1 above)				
POWERPLANT	Lycoming	TI	0	-540-A2B	L-4870- L-1275-	61		X
PROPELLER	•							
APPLIANCE								
		6	. Co	nformity Statement		····	<u> </u>	
A. Agency's N	ame and Address		T			C. Certi	ficate No.	
23	pert G. Raith 326 Seavles Rd. Balto, MD21222-	321 <i>1</i>	X		anic	<i>i.</i> i	1+P 6944	-1
D. I certify the	nat the repair and/or alteration made t n made in accordance with the requir I herein is true and correct to the bes	o the un	it(s) of P	art 43 of the U.S. Federal	and described on the Aviation Regulation	ne reverse ons and th	or attachme at the inforn	ents hereto nation

Signature of Authorized Individual
Signature Of Authorized Individual 15 April 99 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 Other (Specify) FAA Flt. Standards Manufacturer Inspection Authorization Inspector BY Person Approved by Transport Canada Airworthiness Group FAA Designee Repair Station Date of Approval or Rejection Certificate or Designation No. Signature of Authorized Individual Hilbert II, Raith 20 June 99

Date

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.)

Removed Prestolite starters Model-MHB4018 and installed SKy-Tec starters Model-149(V)PM in accordance with mfg,'s installation/instructions dated: 19 Jan. 98, and approved per STC 00218NY.

Enter corrections to equipment list and weight and balance records

Make necessary maintenance record entry in lag-

Operational grd. check-out before return to active service.

☐ Additional Sheets Are Attached

SEP 2 1 1992

2
US Department of Transportation
Federal Aviation

Form Approved OMB No. 2120-0020

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and	dienneiti	on of this form.	This	report is required	l bv law (49 U.S.C. 1421).	, and AC 43.9- Failure to repo	1 (or subsequent can result i	ent revision tl n a civil penal	nereof) for in ty not to exce	structions eed \$1,000		
		Make CESSNA	No. P-0178 (As shown on registration certificate) LIAMS JAMES A 3. For FAAL 4. Unit Iden Make Mode (As described in Item				Model 310P						
1. Air	craft	Serial No. 310F-01	78	- Sir Arabatan Hajirin			Nationality and Registration Mark USA NG10CM						
2. Ow	ner	Name (As sho WILLIAM	wn c S J	n registration cei AMES A	tificate)		Address (As shown on registration certificate) PO BOX 4541 NEWARK DE 19711						
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Date	3/15/	50				Signature of Au		vidual	-00	20.n.	Óx.		
0.5	9/15/				7. An	proval for Return			,				
Pur	suant to	the authority	giver il Avi	persons specifi ation Administra	ed belov	w. the unit ident	fled in item 4	was inspecte	ed in the ma	nner prescri	bed by the		
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BY	FAA	Designee	Х	Repair Station		Person Approved	iness Group	_	J	:	.'		
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FAA Form 337 (12-88)

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.

Description of Work Accomplished

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

- 1.) Removed the following:
 NARCO MK 16 NAV/COM
 NARCO MP 16 CONVERTER
 NARCO UGR 2 G/S RECEIVER BENDIX/KING KN 71 CONVERTER BENDIX/KING KI 206 INDICATOR 2.) Installed the following:
 BENDIX/KING KX 155 NAV/COM BENDIX/KING KI 209 INDICATOR
- 3.) The above equipment installed in accordance with the manufacturer's installation manual, BENDIX/KING p/n 006-0179-05.
- 4.) The above equipment installed in accordance with AC 43.13-1A, Ch. 11, 13, 15; AC 43.13-2A, Ch. 2, 3.
- 5.) Equipment checked with no adverse interference to any other
- 6.) Maximum continuous electrical load does not exceed 80% of the alternators capacity.
- 7.) Weight and balance and equipment list revised to reflect these
- 8.) For further details see work order no.OCM-2250, this repair station.

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Additional Sheets Are Attached

±U.S.GPO:1989-0-863-171

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	. •			AND ALTERATION IR AND ALTERATION Int, Propeller, or Appliance) IR. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision from Model 310 P NATIONALITY AND REGISTRATION MARK N 310 CM ADDRESS (As shown on registration certificate) Lisbon, New Hampshire 3. FOR FAA USE ONLY 4. UNIT IDENTIFICATION MODEL SERIAL MO. REPARMING FOREIGN CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPARM STATION MANUACTURER Tion made to the unit (s) identified in item 4 above and described on the reaccordance with the requirements of Part 43 of the U.S. Federal Aviation Regin is true and correct to the best of my knowledge. SIGNATURE OF AUTHORIZED INDIVIDUAL 7. APPROVAL FOR RETURN TO SERVICE ecified below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 4 was inspected in the manner presented below, the unit identified in item 5 was inspected in the manner presented below, the unit identified in item 6 was inspected in the manner presented below, the unit identified in item 6 was inspected in the manner presented below, the unit identified in item 6 was inspected in the manner presented below, the unit identified in item 6 was inspected in the manner presented below, the unit identified in item 6 was inspected in the manner presented below, the unit identified in item 6 was inspected in the manner presented below, the unit identified in item 6 was inspected in the manner presented below, the unit identified in item 6 was inspecte	. 1 1	3						
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1 4100	MAJOR REPAIR AND ALTERATION [Airframe, Powerplant, Propeller, or Appliance) INSTRUCTIONS: Print or type all entire. See FAR 43-0, PAR 43 Appendix B, and AC 43-9-1 (or subsequent revision the for instructions and disposition of this form. ANACE CESSNA: ANACE CESSNA: SERIA NG-0P0178 NAME (ANANOM or registration certificate) ALPINE AVIATION ALPINE ALPINE AVIATION ALPINE A											
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FAA Form 337 (7-67)

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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.)

- Airframe modified in accordance with STC SA4213 WE, held by Bob Fields Aerocessories, by installation of inflatable door seal in accordance with Drawing 3920 and instructions issued with the STC.

NOTHING FOLLOWS

ADDITIONAL SHEETS ARE ATTACHED

FAA AC 72-490

.. U.S. GPO 1981 775-332-47

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

AUG 2 0 1990

FOR FAA USE ONLY

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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 afterations 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 this date Ryan WX-7A weather mapping system.

Receiver (model 175C27) and display (model 275) installed in instrument panel as per AC 43.13-2, Fig. 2-2.

Processor (model 377) remote mounted on fwd. Avionics shelf as per AC 43.13-2, Big. 3.

Loop antenna (model 277) installed on bottom of A/C as per AC 43.13-2, fig 3.15.

System wired and installed as per installation manual #377A200.

Circuit breakers and wiring is provided for all units installed as recommended by manufacturer.

Compass deviation well within limits of AC 43.13-2, Chapter 2, Part F. Alternator load well within 80% capacity.

Appropriate log book entries were made. Weight and balance revised.

Paner DESCRIPTION SET DESCRIPT

ADDITIONAL SHEETS ARE ATTACHED

FEDERAL AVIATION AGENCY

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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.

DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. craft nationality and registration mark and date work completed.) Identify with air-Installed Earco GLC-60 course line computer system. Installed two Herco Mark 16
Eav/Com sets with one VOA-50H navigation indicator, one Earco MET-21 Herker Receiver, GAR Radio altimiter, fee indicator, Marco transponder ATG-A, papel and installed Sendig T-12-C receiver and indicator, Earer CLC display and off set exterol head.

Above equipment located in center radio panel space factory provided. Two Harco UCR-2 Olide Slope Receivers and two Harco HP-16 converters, installed 4) factory radio rack, left hand side of rose compartment, courseline computer, 200 tted on bottom radio rack left mee section/ Installed Marco UMA-1 Marker Antenna, ARUA-15 VHF Com/Antenna aft of rear spar on belley, VMA-10 antenna on top of vertical fin. installed Ring KA-21a vertical com untenna top of fesslage, Narco, UDA BERGERONS enterna lover left hand nose section, installed RGA DES antenna bottom of right center section. Installed UNI-2AR units right side in forward radio rack factory provided with UDI-2R control in radio panel. Installed ground avoidance radar altimiter indicator in radio panel, installed unit intall section aft of baggage compartment. Installed Bendix ADF loop model 2321 bottom of fuselage, Narco ATGA Flightguard Transponder located left mose section. All equipment installed as per manufacturers installation manual. Manufacturers wire harness and Mil-W-5086 wiring used. All work performed in accordance with acquipped with two 50 amp alternators and the load is in accordance with ACi3-13-1,

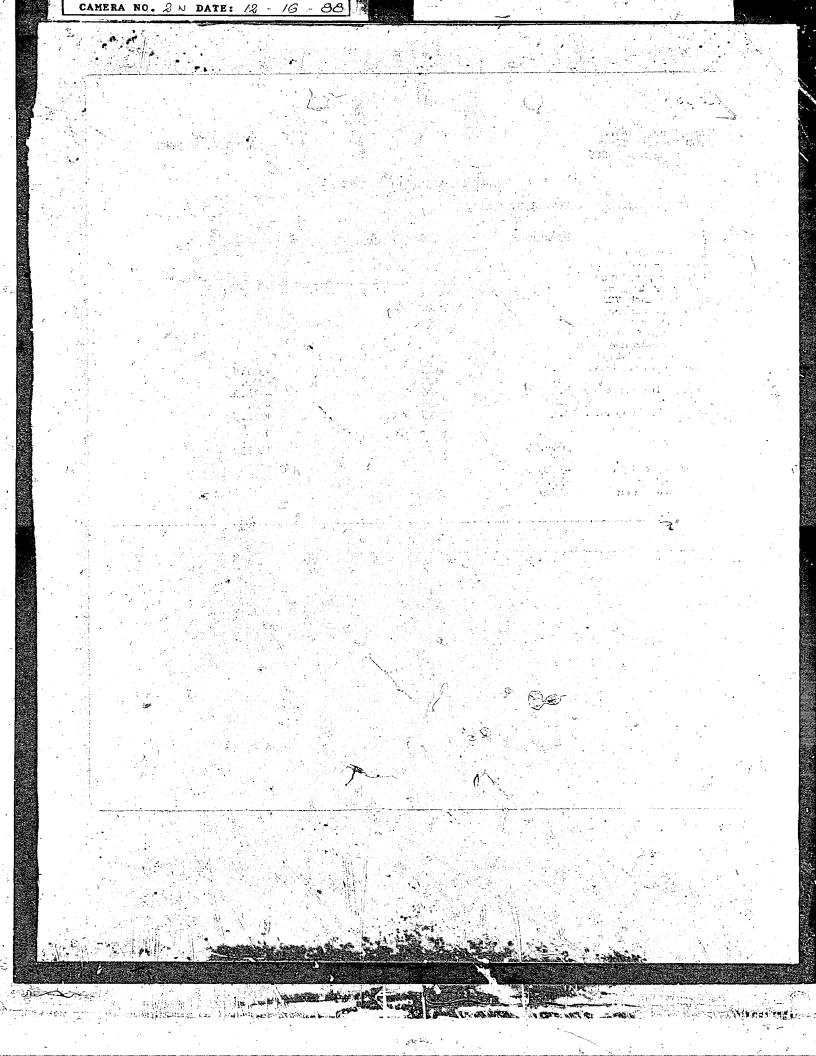
Aircraft empty 3520. 35.8 126,320 VMA-1 Harker Antenna +1.0 +165. +165. King KA-21 Gen Ant. 2.0 +165. +66. King KA-21 Gen Ant. 2.0 +165. +66. KING KA-10 Antenna 1.0 +221 +66. VMA-10 Antenna 1.0 +221 +66. VMA-10 Inits 1.25 +111 +176.25 Sareo VRP-37 Ant. 1.25 +116 +177.2 A-11 isolation emp. 1.0 -28 -216 BIT-2h Marker Beacon 1.5 -18 -27.0 FIG Converter 2.00 -28 -28.0 FIG Converter 2.00 -28 -56. areo Flight guard 5.3 -31.	<u>Iten</u>	Weight (1b:		8/H 310F0178	
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ARGA-15 Com Antenna .8 .75 .60. ARGA-10 Antenna .8 .75 .60. IMA-10 Antenna .1.0 .25 .60. IMA Transceiver Ant. 1.25 .11.1 .22. IMI-2AR Units .1.3 .22 .311.6 IMA-21 Harker Beacon/ 1.5 .1827.0 IMA-21 isolation and .1.0 .28 .29.0 IMA-20 Converter 2.00 .28 .50. Area flight guard .3 .3 .20 .31.4	LEE Antenna	a i ja Patricia 🚅 Tibi ka paraja s		+165.	
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ADDITIONAL SHEETS ARE ATTACHED

Riley Turbo Sales 2900 Preston Tower Dallas, Texas 75225

Gesana 310P 310F0178, H 310CM

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CAMERA NO. 4 NIDATE: 12-29-83

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.)
- 1. King KNS-80 Integrated Navigation System previously installed with King KI-206 by another agency.
- 2. Conformity inspection performed by this agency this date in accordance with FAA approved Form 337 dated 1/19/79 for aircraft N5881N S/N 14426.
- 3. This installation conforms to the procedure outlined in Mortheastern Avionics, Inc. RNAV Installation Procedure Manual as approved by NE GADO letter dated August 28, 1979.
- The PMAV system is approved for VPR, IFR enroute and approach modes.

FINE

ADDITIONAL SHEETS ARE ATTACHED

DEPA IT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Born Approved Budget Bureau No. 04-R060.1

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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.

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ADDITIONAL SHEETS ARE ATTACHED

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FORM Approved
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CAMERA NO. 4/1DATE: 12-29-83

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

SOUTHWEST REGION FORT WORTH, TEXAS

EXPERIMENTAL OPERATING LIMITATIONS

283-2846

2=0-42

, Iss	ue Date Oct. 9, 1969 Expiration Date Jan. 10, 1970
MAK	E Cessna MODEL 310P SERIAL NO.310P-0178REG. NO.N310CM
1.	This aircraft is certificated in the Experimental classification for the purpose of: To Show Compliance with F.A.R.
>2.	The aircraft may not be operated for other than the purpose for which the certificate was issued.
3.	The aircraft is to be identified "experimental" in accordance with FAR 45.23.
4.	Persons or property shall not be carried for compensation or hire.
5.	Occupancy of the aircraft is restricted to persons essential to the flight test involved.
6.	All flights shall be conducted under Visual Flight Rules (VFR). Day or Night
. 7.	All flights shall be conducted in accordance with the applicable FAA air traffic and general operation rules of FAR Part 91.
8.	The control tower shall be notified of the experimental nature of the aircraft when operating into or out of airports with operating control towers.
9.	All flights shall be conducted within the following boundaries and/or corridors: N/A

10. This aircraft does not comply with the International Airworthiness Standards of ICAO, Annex 8, Part II.

Charles E. Harris
FAA Representative

SW-EMD0-42 Designation

SW Form 8130-1-1 (8/68)

CAMERA HO. 4 //DATE: 12-29-83



	PR 2 = 1970	
UNITED STATES DEPARTMENT OF TI FEDERAL AVIATION	RANSPORTATION Bure ADMINISTRATION	Approved Bud au No. 04-R016
STATEMENT. OF	CONFORMITY	2-0-42
SECTION I -		
Cessna	2. MODEL 310P	
3. SERIAL NO. 310P-0178	4 5500551	
SECTION II -		
I. MAKE	2. MODEL	AU F
SERIAL NO. SECTION III - P	PARELLED.	
. MAKE	2. HUB MODEL	4
<u>and the second of the second </u>		
BLADE MODEL	4. HUB SERIAL NO.	
BLADE SERIAL NOS.		
SECTION IV - CE	RTIFICATION	
hereby certify that:		
A. I have complied with Section 21.33(a).		
B. The aircraft described above, produced under type certificat	te celu (RAD 31 Cut s T)	()
is in a condition for safe operation, and was flight checked	ce only (FAR 21 Subpart F), conforms to its t	ype certificate,
The state of the s	(Date)	
	(2010)	
	the state of the s	
D. The engine or propeller described above produced under two	of type certification, conforms to the type	·
C. The engine or propeller described above, presented herewith D. The engine or propeller described above produced under type certificate and is in a condition for safe operation. The engine by the manufacturer to a final operational check on	of type certification, conforms to the type	·
D. The engine or propeller described above produced under type certificate and is in a condition for safe operation. The engine by the manufacturer to a final operational check on	n for type certification, conforms to the type e certificate only (FAR 21 Subpart F), confor ine or, if applicable, the variable pitch prope	
D. The engine or propeller described above produced under type certificate and is in a condition for safe operation. The engine by the manufacturer to a final operational check on	e certificate only (FAR 21 Subpart F), conforme or, if applicable, the variable pitch prope	ms to its type Her was subjec
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CAMERA NO. 4 A/DATE: 12-29-83



This form should be submitted to a representative of the Administrator under the following circumstances:

- By the applicant for a type certificate or a supplemental type certificate at the time he presents an aircraft or parts thereof to the PAA for tests.
- 2. By the applicant for a type certificate or a supplemental type certificate for each engine or propeller submitted for type certification.
- 3. By the type certificate holder or licensee manufacturing products under a type certificate only, upon the initial transfer by him of the ownership of each product or upon application for the original issue of an aircraft airworthiness certificate, or an Airworthiness Approval Tag (FAA Form 186).

This form should be completed as follows:

Section I. Aircraft. Complete the pertinent part of only this section when certification covers an aircraft or part thereof.

Section II. Engine. Complete this section when certification covers an engine.

Section III. Propeller. Complete this section when certification covers a propeller.

Section IV. Certification.

Item A. Check this block when an aircraft or part thereof is presented for flight or ground tests during type certification or supplemental type certification.

Item B. Check this block when the holder or licensee of a type certificate only, initially transfers the ownership of an aircraft manufactured under that type certificate, or applies for the original issuance of an airworthiness certificate.

Item C. Check this block when an engine or propeller is presented for type certification.

Item D. Check this block when an engine or propeller is presented for airworthiness approval and insert the date the product completed a final operational check.

The certification must be signed by an authorized person who holds a responsible position in the manufacturing organization.

C FAA AC F69-1736

punched by Operator #20

DEPAR T OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved Budget Bureau No. 04-R060.1

		, Powerplant, P							IFICATION	
INSTRUCT	TIONS: Print or tions and dispos	type all entries. See	FAR	43.9	FAR 43 Appe	ndix B, an	d AC 43.9-1	(or subsequer	nt revision	thereo
	MAKE		,			MODEL		-		
1. AIRCRAFT		Cessna					310P			
	SERIAL NO.			100		NATIONAL		EGISTRATION	MADY	
	3	310P-0178							MAKK	
	NAME (As show	m on registration certif	icate			ADDRESS /	As shown on	registration cer	4:6-4-1	
2. OWNER		ay/Ray Rapapor							rincare)	
	Miche	el Martin	.					Elliott	. 1	
			3	3. FO	FAA USE ONL	Υ	TOPOIT.	Mich. 4823	34	 -
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DATE	2/5/7	g sign.	TUN	E of	faa dispec	TOR Z	Torge	ison AGE		0-2
		4. UN	IT IDE	NTIF	CATION				5.	TYPE
UNIT	1000	MAKE	- 5		MODEL		SEI	RIAL NO.	REPAIR	ALTE
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					ANUFACTURER					
attachmen and that t	that the repair a its hereto have b the information	and/or alteration mad been made in accordar furnished herein is tr	le to t nce wi nce and	the u ith th d cor	nit(s) identifie requirements rect to the best	of Part 43	4 above an	d described or Federal Avia	n the rever	se or
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		7. AF	PROVA	IL FO	R RETURN TO S	FRVICE:	un	sen		
ursuant to the	he authority give	en persons specified beral Aviation Administr	elow,	the u	nit identified in	n item 4 w	as inspected	in the manne	r prescribe	d hy
544.5		at Aviation Administr	ation	and	APPROV	VED R	EJECTED		44,5-5,5-6	
	LT. STANDARDS	MANUFACTURER	11	NSPEC	TON AUTHORIZATE	ON C	OTHER (Specify)			
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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.)
 - (1) Installed King KNS-80 Digital Area Navigation System in accordance with King installation manual 006-0154-00.

 Dated 7-22-76. Other manuals used, include King KI-206 and manual 006-0137-00.
 - (2) Bench & ground tests were conducted in accordance with manufacturers recommendations & AC 90-55A, para.3.
 - (3) The system was Flight tested by QCE personnel over the course, as on file at G.A.D.O. # 20.
 - (4) All work accomplished in accordance with AC 43.13-1 & 2.
 - (5) Weight and Balance computed & entered in A/C permanent file.

ADDITIONAL SHEETS ARE ATTACHED

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DEPAR T OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

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. MODEL Cessna 310P AIRCRAFT SERIAL NO. NATIONALITY AND REGISTRATION MARK N3IOCM 310P-0178 ADDRESS (As shown on registration certificate)
19300 Mt. Klliott NAME (As shown on registration certificate) R.M. Gray, Ray Rapaport, and Michail Martin 2. OWNER Detroit Michigan 48234 3. FOR FAA USE ONLY

	4. UI	IT IDENTIFICATION	5. TYPE
UNIT	MAKE	MODEL SERIAL NO.	REPAIR ALTER-
AIRFRAME	••••••	(As described in item 1 above)	х
POWERPLANT			
PROPELLER			-
APPLIANCE	TYPE	The state of the s	
ATTEINITEE	MANUFACTURER		

6. CONFORMITY STATEMENT
A. AGENCY'S NAME AND ADDRESS B. KIND OF AGENCY

Michail Martin
BIOO Narhan Oscar Dr.
Clarkson, Michigan 48016

6. CONFORMITY STATEMENT
B. KIND OF AGENCY
C. CERTIFICATE NO

X U.S. CERTIFICATE MECHANIC
FOREIGN MECHANIC
CERTIFICATED REPAIR STATION
MANUFACTURER

6. CONFORMITY STATEMENT
C. CERTIFICATE NO

MAPP 1606218

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 Ayiation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE SIGNATURE OF AUTHORIZED INDIVIDUAL

SIGNATURE OF AUTHORIZED INDIVIDUAL

THORAGON THORAGON

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 MANUFACTURER X INSPECTION AUTHORIZATION OTHER (Specify)

FAA DESIGNEE REPAIR STATION CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT OF

FAA Form 337 (7-67)

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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 wing locker fuel system L.H. and R.H. in accordance with Cessna approved accessory Kit AK 320-167J, L.H. installation AK 320-168K, R.H. installation. AK 402-149A, Partial plumbing R.H. AK 402-147A, Partial plumbing L.H. And installation Manuals. Complete system operational check normal and pressure leak tested. Pilot check list, owners mammal supplement, and fuel selector placards, installed in proper order. Aircraft log book entry and Wt. & Balance report and equipment list revised. All reworked structure prepaired and painted with No. 6160 Matterhorn White Alumigrip Enamel. END.

ADDITIONAL SHEETS, ARE ATTACHED

±1975-G.P.O.-1703-M/673-200/17

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		DEPAR T OF TRA	NSPORTATI	10N	. H. Males (*)	Form Approved	<u> </u>	
	,	FEDERAL AVIATION A			4 NOV 1976	Form Approved Budget Bureau		
	MAJO	OR REPAIR AN	ID AL	TERATION			1 USE ONL	<u> </u>
		Powerplant, Pr			e) .	OFFICE IDENTIF	CATION	203
INSTRUCT	TIONS: Print or to	pe all entries. See	FAR 43	.9, FAR 43 Apper	dix B, and AC 4	3.9-1 (or subsequen	t revision the	ereof)
1. AIRCRAFT	MAKE	Cessna			MODEL 310)P		- 19 - 15 - 14
I. AIRCRAFI	SERIAL NO.	OP-0178			NATIONALITY AND 18 N 3 1 (D REGISTRATION	MARK	
2. OWNER	NAME (As shown	on registration certifi	cate)		ADDRESS (As shown 950 Calli Quakertor	ornia Rd.	tificate)	-4,1
	Ciamer P	escer v.	3.	FOR FAA USE ONL		He rue	3331	
	,	74. UN	IT IDEN	TIFICATION			5. TI	PE.
UNIT	A	MAKE		MODEL		SERIAL NO.	REPAIR	ALTER-
AIRFRAME			As descr	ibed in item 1 abo	/e) <i>************************************</i>	•••••	·, .	x
OWERPLANT							\$	-
ROPELLER							2	
APPLIANCE	MANUFACTURER						-	-
	L. " ·		6. CO	NFORMITY STATEME	NT	<u> </u>	<u> </u>	
A. A	AGENCY'S NAME	AND ADDRESS			OF AGENCY	C. CI	RTIFICATE N	10.
lead inc	Aviation	Service, In	ic.	U.S. CERTIFICATE	MECHANIC		3535	
. e. E			_	FOREIGN CERTIFIC		Airfr	ame 1.&	3
eading.	Pa.	19603	<u> </u> _	MANUFACTURER	AIR STATION	Radic	1, 2,	8 3
attachme	nts hereto have be	nd/or alteration ma een made in accorda urnished herein is t	ince wit	he unit(s) identifi th the requirement correct to the be	s of Part 43 of t	he U.S. Federal Avi dge.	on the rever ation Regula	se or tions
tana ang tanang salah	mber 1976	and project		Charles E.	Combs	ép. 362324	145	•
Pursuant to	the authority give	7. In persons specified al Aviation Adminis		L FOR RETURN TO		spected in the mant	ner pr es cribe	l by
FAA	FLT. STANDARDS	MANUFACTURER		NSPECTION AUTHORIZA	OTHER	(Specify)		
JY	DESIGNEE X	REPAIR STATION	0	ANADIAN DEPARTMEN OF TRANSPORT INSPEC OF AIRCRAFT	TOR	لمحال المنطقي معال المالية المالية		• •
ATE OF APP		CERTIFICATE OR DESIGNATION NO	SI	MATURE OF AL	trankle	VĮDUAL		
/ Septe	mber 1976	CRS 3535	7	Sames H. 1	ranklin	Enspe	ctor	
AA Form 3	37 (7-67)		0	1			. (83	20)

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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.)

ITEM WEIGHT ARM LOCATION

Installed:
King KT-76 Transponder & Rack 3.5 11.0 Center Instr. Panel
Trans-Cal D120-P2-T
Encoding Altimeter 1.2 13.0 Center Instr. Panel
King Transponder Installation Kit .5 12.0 Fed. Fuselage "

Blind encoder installed in accordance with Trans-Cal drawing E-100124 installation instructions and AC43:13-2.

Wiring connected to King KT-76 per installation manual 006-0067-01 drawing 696-3003-00.

Ground checked in accordance with Table 2 of AC43-5.

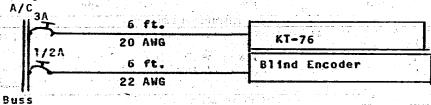
Equipment list revised.

All pertinent data referenced herein is on file at CRS 3535,

Work has been accomplished in accordance with AC43:13-1 Chapter 11 AC43:13-2 Chapters 1 & 2.

Continuous electrical load does not exceed 80% of the total output of 100 amperes produced by two 50 ampere generators.

See weight and balance dection of Aircraft Flight Manual for changes reflected by this alteration.



This installation is approved based on a similar installation of Trans-Cal D120-P2-T Blind Encoder and King KT-76 approved by GADO #3 on FAA 337 dated 25 March 1975 for Piper PA 32-300 H1287T.

ADDITIONAL SHEETS ARE ATTACHED

± 1975-G.P.O.-1708-M/673-200/175

CAMERA NO. 4//DATE: 12-29-83

TEST SHEET BLIND ENCODING ALTIMETER CHECK AC 43-6, PAR 7, TABLE 2

TEST ALTITUDE D2 D4 A1 A2 A4 B1 B2 B4 C1 C2 C4 READING	OBSERVED ERROR	DONN	OBSERVED
-1.000 FT. 0 0 0 0 0 0 0 0 0 1 0 1 0 10 70	-20 -20 -20 0 -40 -30 -30 -6 -0 -40 -20 -30 -20 -50 -60 -90 -70 -50 -60 -80 -80 -80 -80 -80 -80 -80	READING -1000 -10 530 990 1100 1310 1520 1810 1990 2620 2720 3000 3930 5990 11930 13930 14780 15970 17930 14970	50 60 20 60 50 40 30 40 60 30 30 50 70 60 50 70 120 120 120 120 120 120 120 12
ENCODING ALTIMETER TYPE AND MODEL Trans-Cai D-120-P2-	r ·		-
ALTIMETER S/R 26390 MODEL TRANSPONDER KT-76			
INTERFACE YES NO XX MODEL (if Appl	icable)		
A/C MAKE AND MODEL Cessna 310 A/C #	#31.0C		
CHECK PERFORMED BY AM Dechnic CRS	# 3535	V	L.,
DATE PERFORMED 1 Hovember 1976		/ 1	
TEST EQUIPMENT USED Tichels 7.30;			
CLASS OF TRANSPONDER Class I			-

1. 1		FEDERAL AVIATE	JN ADM	SPORTAT AINISTR	ATION			rem Approve	d u No. 04-1	R060.1
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CAMERA NO. 4 NDATE: 12-29-83

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.)

Removed GAR Radar Altimeter and related antenna.

Installed Bonzer TRN71 Radar Altimeter and related antenna and indicator in accordance with Bonzer Installation Manual and AC43-13-2 Chapters 1, 2 and 3.

Wired in accordance with AC43-13-1, Chapter 11.

New Weight and Balance computation entered in aircraft log and equipment list revised.

Aircraft was test flown for operational aspects as set forth in FAR 91.167 and FAR 135.143b. All components were operating properly.

ADDITIONAL SHEETS ARE ATTACHED

C FAA AC 78-4906

	FEDERAL AVIATION	D A	LŦE	RATION-		Bud	Approved get Bureau N FOR FAA	USE ON	
	(Airframe, Powerplant, Pro	pell	er,	or Applian	ce)	OFFI	CE DRIVIE	EATION	
INSTRUCT	TIONS: Print or type all entries. See lons and disposition of this form.	FAR 4	3.9	, FAR 43 Appe	ndix B, and	AC 43.9-1 (or	subsequent	revision t	hereof)
1. AIRCRAFT	MAKE Cessna				MODEL 3	10P			
1. AINCIAI I	SERIAL NO. 310P - 0178				NATIONALI 310C	TY AND REGIS M	TRATION M.	ARK	
2. OWNER	NAME (As shown on registration certific Riley Turbo Sales	·	рa	tion	ADDRESS (A	s shown on reg Preston S Tex.	stration certif 79225	ficate)	
			_	R FAA USE ONI	Y			··	
		TIDE	NTIF	ICATION				5.	TYPE
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CAMERA WO. 4 A/DATE: 12-29-83

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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.

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	MAKE Cessn		11.	***	MODEL 3101			LifeTec
1. AIRCRAFT	SERIAL NO.	310P-0178						
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2. OWNER		on registration cert rbo Sales		ration	AD2960(AP1	Texas 7522	ertificate)	-
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CAMERA NO. 4 NDATE: 12-29-83

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.

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

Install oxygen system. Sky Ox ICC- 3AA 114.9 cu. ft. 1800 psi bottle installed in rack behind baggage compartment. Back installed between station 182.00 to 177.50. See attatched sketch. Original Sky Oxx valve used. Bottle and valve tested April 1967. Zep regulator A2000-WA mounted front inboard side of bottle rack. 3/16 "hi pressure copper tubing with silver soldered end fittings from bottle to gauge to filler valve to regulator. Zep ZV681C Filler valve. Scott p/n 8808-1 Pressure gauge red lined at 1750 psi. Gauge mounted in forward face of bulkhead 132.00 to be visible to pilot. Filler valve and shut off valve accessable from cabin through door in bulkhead 132.00. 5/16 " seamless aluminum tubing with AN fittings used from regulator to Zep outlets. Zep Z651C outlets installed in factory mount aft of top instrument light, For pilot and copilot use. & Zep Z651 passenger outlets mounted in factory holesin indivigal reading light and air vent bracket above windows. All parts used listed in 310P parts book. All lines routed under headlinging in top of aircraft properly secured and routed away from oil, fuel, electrical and moving control systems. System was leake checked and no leaks found. System was functionally tested and all outlets preformed properly. Installation in accordance with Chapter 6 paragraph 71 through 76.

Installed two whelen model SA strobe lights in aft fuselage. One on top of fuselage at + 136. Installed with .040 doubler T3 aluminumn, simalar to figure 4-2 of chapter 4 of 43-13-2. One installed at + 160 on bottom of fuselage. .040 T3 doubler similar to figure 4.1 of chapter 4 of 43-13-2. Wiring was MIL-5086 shielded # 16 wire from a 5 amp circuit breaker to switch to light. Switch properly marked. Lights functionally tested and effects no other equipment orvision. Work accomplished in accordance with chapter 4 of 43-13-2.

equipment orvision. Work accomplished in accordance with chapter 4 of 43-13-2.

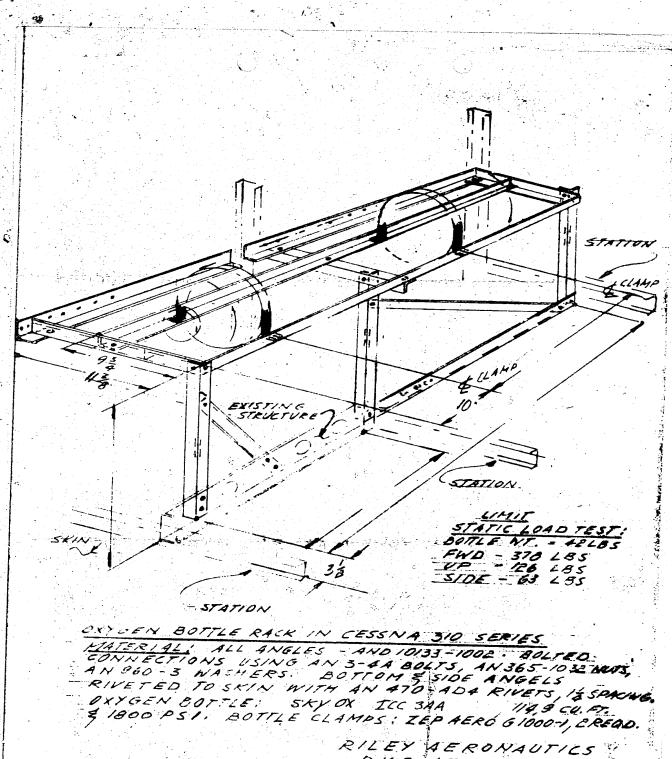
Install Goodrich propeller de-icm kit for Cessna 310P with Lycoming engines and Hartzell propellers. Kit # 77-360 and parts list dated 2/17/70. Goodrich system 77-080 and report # 60-726A and maintenance publication # 63-200. All parts furnished by Goodrich and installed in accordance with Goodrich drawings and instructions. Timer 3E1150-3 mounted on left lower front side of station 0. System functionally tested satisfactory. Electrical load with all systems turned on does not exceed 80% of the alternator capacity. All wiring harnesses switches and circuit breakers furnished by Goodrich. Aircraft was reweighed after all equipment was installed. Weight and ballance data revised and equipment list revised. All work accomplished in accordance with 43-13-1 and 2.

The End

ADDITIONAL SHEETS ARE ATTACHED

* U.S GU, ENHMENT PRINTING OFFICE : 1965 DF-761-748

CAMERA NO. 4 NOATE: 12-29-83



RILEY AERONAUTICS

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FAA Form 337 (7-67)

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	(Airframe, Powerplant, Pro			ice)	OI	FICE IDENTIF		
INSTRUCT	TIONS: Print or type all entries. See I cons and disposition of this form.	FAR 43.	9, FAR 43 Appe	ndix B, and	AC 43.9-1 (or subsequen	revision t	hereof)
1. AIRCRAFT	MAKE: Cessna			MODEL 3	10P			•
1. AIRCRAIT	SERIAL NO. 310P-0178			NATIONALI	and the second second	ISTRATION A	ARK	
2. OWNER	NAME (As shown on registration certification Riley Turbo Sales Corpor			ADDRESS (A			ificate)	
		3. F	OR FAA USE ONI	LY		1.	,	1
	4. UNIT	T IDENTI	FICATION				T .	
UNIT	MAKE		MODEL		SERI	AL NO.	REPAIR	TYPE
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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.

STC SA 2082 WB and drawing S	accordance with Turbo Propulsion Corporation memory "H" and "J", of TP31000 drawing list -510-A2B engines and two new Hartzell HC-E3YR-2A / F-6-11A governors. Installed in conformity ng list.
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CAMERA NO. 4 NDATE: 12-29-83

NATIONALITY AND REGISTRATION MAR	RKS Z MANUFACTURER AND MCDEL	NATION	IRCRAFT SERIAL	4. CATEGORY
N310CM	Cessna 3150		OR-0178	Normal
AUTHORITY AND B. This airworthine date of issuance therefor, to be	ss certificate is insued pursuant to be the aircraft to which issued ha in condition for table operation, and detailed aircraft iness cade ar	the Pederal Aviation A school anapated and f	ound to conform	to the type certificate nents of the applicable
Exceptions: N TERMS AND CONDI Unless sooner su this airworthines	one K	a terminatur date is of	him is establishing in the second of the sec	ad by the Administrator,

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CAMERA NO. 4 N/DATE: 12-27-85

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United States of America
FEDERAL TION AGENCY
CERTIFICATE Or AIR WORTHINESS

1. MATIONALITY AND REGISTRATION MARKS

N 310CM

2. AIRCRAFT AIRWORTHINESS CLASSIFICATION
EXPERT MENTAL—TO SHOW COMPLIANCE
WITH FAR (SEE REVERSE SIDE)

3. This Certificate of Airworthiness is issued pursuant to the Federal Aviation Act of 1958.
The aircraft identified hereon is considered airworthy when maintained and operated in accordance with the Christopher of applicable aircraft Operation Limitations.
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MDATE: 12 CAMERA NO.

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- 3. Flights for purposes other than to show compliance with FAR prohibited.

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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.)

Install oxygen system. Sky Ox ICC- 3AA 114.9 cu. ft. 1800 psi bottle installed in rack behind baggage odepartment. Back installed between station 182.00 to 177.50. See attached sketch. Original Sky Oxx valve used. Fottle and valve tested April 1967. Zep regulator A2000-WA mounted front inboard side of bottle rack. 3/16 hi pressure copper tubing with silver soldered end fittings from bottle to gauge to filler valve to regulator. Zep ZV681c Filler valve. Scott p/n 8808-1 Pressure gauge red lined at 1750 psi. Gauge mounted in forward face of bulkhead 132.00 to be visible to pilot. Filler valve and shut off valve accessable from tubing with AN fittings used from regulator to Zep outlets. Zep Z651C outlets installed in factory mount aft of top instrument light, For pilot and copilot use. 8 Zep Z651 passenger outlets mounted in factory holesin indivigal reading light and air vent bracket above windows. All parts used listed in 310P parts book. All lines routed under headlinging in top of aircraft properly control systems. System was leake checked and no leaks found. Installation in accordance with Chapter 6 paragraph 71 through

76.
Installed two whelen model SA strobe lights in aft fuselage. One on top of fuselage at + 136. Installed with .040 doubler T3 aluminum, simalar to figure 4-2 of chapter 4 of 43-13-2. One installed at + 160 on bottom of fuselage. .040 T3 doubler similar to figure 4.1 of chapter 4 of 43-13-2. Wiring was MIL-5086 shielded # 16 wire from a 5 amp circuit breaker to switch to light. Switch properly marked. Lights functionally tested and effects no other equipment orvision. Work accomplished in accordance with chapter 4 of 43-13-2.

Install Goodrich propeller design kit for Cassna 310P with Lyncoming

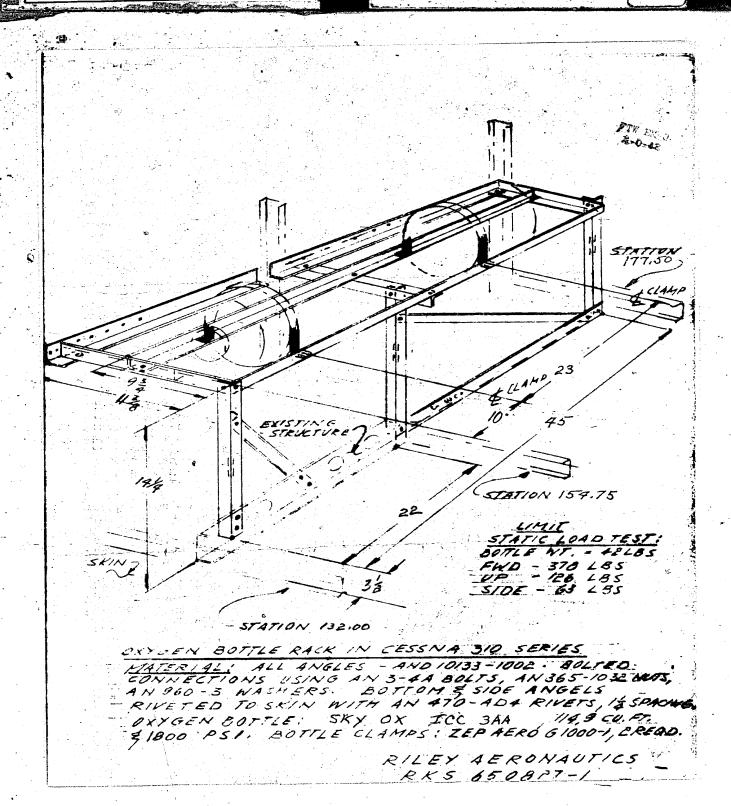
Install Goodrich propeller de-ics kit for Cessna 310P with Lycoming engines and Hartzell propellers. Kit # 77-360 and parts list dated 2/17/70. Goodrich system 77-080 and report # 60-726A and maintenance publication # 63-200. All parts furnished by Goodrich and Installed in accordance with Goodrich drawings and instructions. Timer 3E1150-3 mounted on left lower front side of station 0. System functionally tested satisfactory. Electrical load with all systems turned on does not exceed 80% of the alternator capacity. All wiring harnesses switches and circuit breakers furnished by Goodrich. Aircraft was reweighed after all equipment was installed. Weight and ballance data revised and equipment list revised. All work accomplished in accordance with 43-13-1 and 2.

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ADDITIONAL SHEETS ARE ATTACHED

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TVERNMENT PRINTING OFFICE : 1967 OF-272-08



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STC SA 2 Install	ations carfied out in accordance with Turbo Propulsion Corporation 2002 WB and drawing suggary "H" and "J", of TF31903 drawing list two new Lycoming TIC-510-A2B engines and two new Hartzell HC-E3YR-2A / propellers and Piqua F-6-11A governors. Installed in conformity
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Form Approved 0-42

Budget Bureau No. 04-R058.2

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Punched by Operator #41

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CAMERA NO. 4/1DATE: 12-27-83

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION SOUTHWEST REGION

SOUTHWEST REGION FORT WORTH, TEXAS 717 DODO 2=0_42

EXPERIMENTAL	OPERATING	LIMITATIONS

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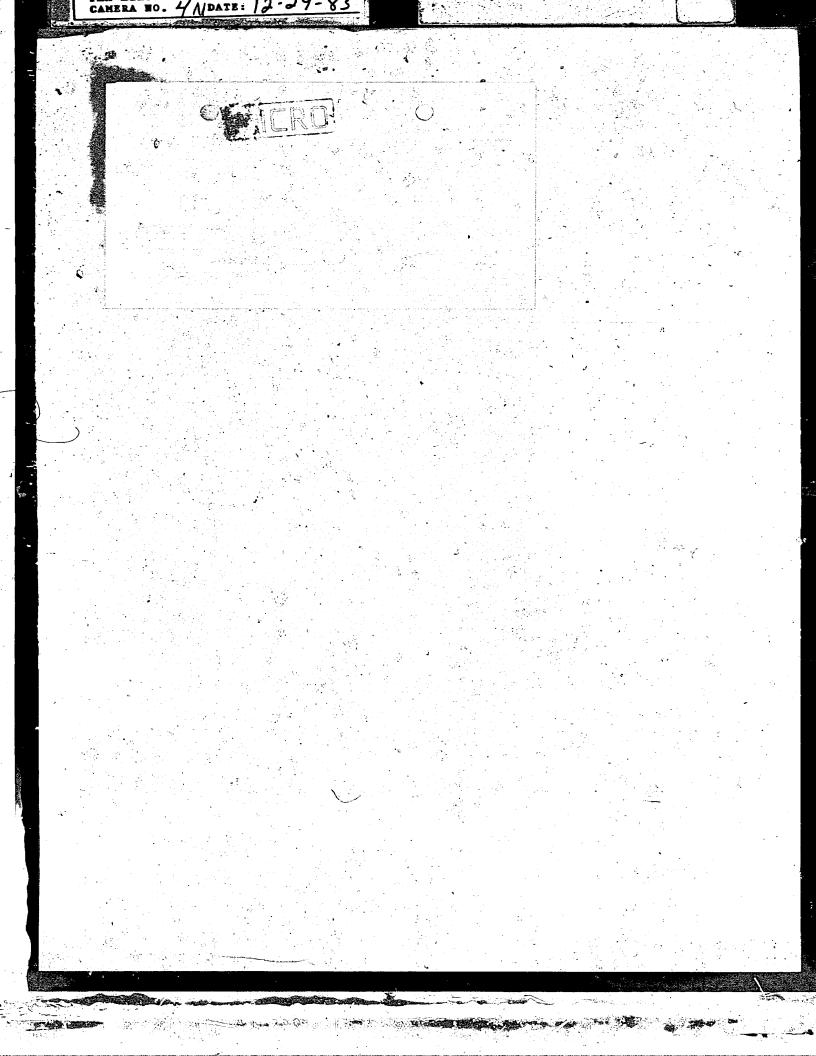
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MDATE: 12-29-CAMERA NO.

> UNITED STATES OF AMERICA CERTIFICATE OF AIRWORTHINESS

FTW EXIO 2-0-42

310CM.

2. AIRCRAFT AIRWORTHINESS CLASSIFICATIO

EXPERIMENTAL-TO SHOW COMPLIANCE WITH PAR (SEE REVERSE SIDE)

3. This Certificate of Airworthiness is issued pursuant to the Federal Aviation Act of 1958. The aircraft identified hereon is considered airworthy when maintained and operated in

accordance with the Court Appendix and applicable aircraft Operation Limitations.

4. This Certificate will remain in effect of tong way become of the property of the propert remnational archemics such backty the Administrator of the forest deviction.

X8664. Supplies Jan. 10,1970

5. DATE OF ISSUANCE

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7. DESIGNATION NO.

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10/9/69

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

Form FAA 13628 (5-59)

CAMERA MO. 4 NDATE: 12-29

- of this rations inched 10/9/67 be a part of this ratificate.
 This aircraft mass not comply with the International Airworthiness Standards of ICAD. Annex 8. Part 11. Special permission must be obtained for flights over foreign countries.
- 3. Flights for purposes other than to show compliance with FAR prohibited.

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Form Approved. Budget Bureau No. 04-R058.2

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≝	Λ_	RECORDS MAINTAINED IN CO		1 FAR 91,173	· · · · · · · · · · · · · · · · · · ·	┥.	1:35	hrs			
=	I t	hereby certify that I am t Aviation Agency in accord the aircraft has been inspec	ted and is air	worthy and e	ligible for the	aircraftion A	describe ct of 1958 cation(s)	d above; i, and ap requeste	that the aircraft is	regi:	stered with the Federal n Regulations; and that
Ì	DAT	E OF APPLICATION		TLE (Print or I			SK	NATURE	$\nu - 1$	_	D :44-
L	Ľ.	7-11-69			Control Mana			//	<u>-</u> /. (_	crewill
5	IИ	ACCORDANCE WITH FAR	21.183, THE	AIRCRAFT DES	CRIBED ABOVE	HAS	BEEN INS	PECTED	AND FOUND AIRY	VORT	HY BY:
A GEN	2	(Give Certificate No.)	₹	3 CSST#	Certificate No.)	C (IA)		6	(Gire Certifica	oome ste N	STIC REPAIR STATION
INSPECTION AGENCY VIRIFICATION	3	AIRCRAFT MANUFACTURE	R (Give name a	of firm)							FAA CODING
Sistematical Si	DAT	E	TIR€				Sic	SNATURE			,
	✝	A. CURRENT OPERATING LIMI	TATIONS AVAILA	BLE IN AIRCRA	FT	Y	G. THIS I	NSPECTIO	N RECORDED IN AIRC	RAFT	RECORDS
35	_	B. CURRENT OPERATING LIMI					H. STATE	MENT OF	CONFORMITY, FAA F	ORM.	317 (Attach when required)
ΙĒĒ	\vdash	C. CURRENT APPROVED FLIGH			RAFT	_	I. PREVIO	US AIRW	ORTHINESS CERTIFICA	TE IS	SUED IN ACCORDANCE WITH
0 E	<u> </u> -	D. DATA, DRAWINGS, PHOTO				_	FAR		CAR		(Orig. attached)
AIRWORTHINESS DOCUMENTATION	-	E. CURRENT WEIGHT & BALA				-			CERTIFICATE ISSUED	IN /	ACCORDANCE WITH
> 4	⊢≏	F. MAJOR REPAIR AND ALTER				- X	- FAR _	<u>21.18</u>	3 a	(Cop	y attached)
	+	A. I have inspected the air									
<u>≧</u>	⊢X	B. I have inspected the air	confe described	above for t	is in condition	for **	fe experie	nental or	peration O 13 au	~~	
NTATIVE	 -				. is in condition		experu				Executive Engines
	-	C. Current Airworthiness	Certificate ame	NOS d	OFFICE NO.			SNATURE	Cessna A	One	Co., Military Div.
AAA REPRES	DAT	7-11-69	Delegat Option	nor	ICT EMDO		,		B Sain	220)	M. Rowden
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Punched by Operator #48

UNITED ST	ATES OF AMERICA	THINESS C	VIATION GEN ERTIFICAT	E
NATIONALITY AND REGISTRATION MARKS	Cesson 310P	ATION	AIRCRAFT SERIAL NUMBER	4. CATEGORY
AUTHORITY AND BASIS FOR IS This airworthiness certificate the of issuance, the sire therefor, to be in conditio comprehensive and detaile Aviation, except as noted Exceptions: NOTE	*	HTY	- * - 	
TERMS AND CONDITIONS Unless sooner surrendered, this airworthiness certificat performed in accordance vaircroft is registered in	the United Saltes	Tital teneral and	V //21	e, and alterations are appropriate, and the IGNATION NUMBER
ATE OF ISSUANCE	FAA REPRESENTATION	tomprod	Some	CE-3
7-11-69 Any alteration, reproduction,		Bown N	by a fine not ex	stor \$1,000 or im-
Any alteration, reproduction, prisonment not exceeding 3 y ANCE WITH APPLICABLE FED	or misuse of this certific	TIFICATE MUST BE D	ISPLAYED IN THE A	RCRAFT IN ACCORD

TELEPINA .

CAHERA WO. TOWN SA