



US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020  
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 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. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark <b>N732VP</b>	Serial No. <b>21061811</b>	
	Make <b>Cessna</b>	Model <b>T210M</b>	Series
2. Owner	Name (As shown on registration certificate) <b>Cole, Charles</b>	Address (As shown on registration certificate) Address <b>904 Driver Rd NW</b> City <b>Fort Payne</b> State <b>AL</b> Zip <b>35967</b> Country <b>USA</b>	

**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type _____	_____	_____
			Manufacturer _____		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name <b>Gann Aviation Inc</b>	Address <b>120 Gasque Dr.</b> City <b>Lafayette</b> State <b>Ga</b> Zip <b>30728</b> Country <b>USA</b>	<input type="checkbox"/> U. S. Certificated Mechanic	<input type="checkbox"/> Manufacturer
		<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
		<input checked="" type="checkbox"/> Certificated Repair Station	<b>GHVR840X</b>
		<input type="checkbox"/> Certificated Maintenance Organization	

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.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <b>Ron Dorsey</b>
--	--

**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee <input checked="" type="checkbox"/>	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. <b>GHVR840X</b>	Signature/Date of Authorized Individual <b>Ron Dorsey 06/09/2020</b>
---	---

## 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.)*

N732VP

Nationality and Registration Mark

06/09/2020

Date

Removed the following equipment from aircraft:

- 1) ARC DME 400 Indicator Head for Pilots Panel F.S. 37.5
- 2) Removed DME 400 RT from aft Fuselage F.S. 178.00

#### Installed Equipment

G5 Electronics Flight Display Pilots Flight Panel at F.S.39.0  
GMU 11 magnetometer right wing station 124.00  
GAD29B Adapter Copilots glove box F.S. 30.00

The work above was done IAW Cessna service manual and AC43.13-1b and 2b.

The G5 HSI was installed as per manual 190-0112-10 and STC SA 01818WI. The G5 was connected to the installed GNS530W and GNS430W. The unit was attached to the avionics buss via a 5 amp circuit breaker. It was also connected to the aircraft Pitot and Static system.

\*\*\*\*\*Nothing Below This Line\*\*\*\*\*

☐ Additional Sheets Are Attached



US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020  
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 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. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark <b>N732VP</b>	Serial No. <b>21061811</b>	
	Make <b>Cessna</b>	Model <b>T210M</b>	Series
2. Owner	Name (As shown on registration certificate) <b>Cole, Charles</b>	Address (As shown on registration certificate) Address <b>904 Driver Rd NW</b>	
		City <b>Fort Payne</b>	State <b>AL</b>
		Zip <b>35967</b>	Country <b>USA</b>

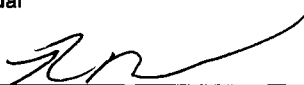
**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type _____ Manufacturer _____		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name <b>Gann Aviation Inc.</b>	Address <b>120 Gasque Dr</b> City <b>Lafayette</b> State <b>Ga</b> Zip <b>30728</b> Country <b>USA</b>	<input type="checkbox"/> U. S. Certified Mechanic	<input type="checkbox"/> Manufacturer
		<input type="checkbox"/> Foreign Certified Mechanic	C. Certificate No.
		<input checked="" type="checkbox"/> Certified Repair Station	<b>GHVR840X</b>
		<input type="checkbox"/> Certificated Maintenance Organization	

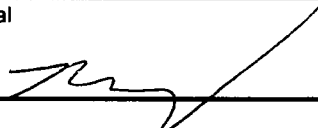
D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <b>Ron Dorsey</b>  <b>06/09/2020</b>
--	---

**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee <input checked="" type="checkbox"/>	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. <b>GHVR840X</b>	Signature/Date of Authorized Individual <b>Ron Dorsey</b>  <b>06/09/2020</b>
---	---

## 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.)

N732VP

Nationality and Registration Mark

06/09/2020

Date

Validated that the previous installation of the GNS430 was installed IAW Garmin instructions and approved via a FAA field approved Form 337. Verified this aircraft and all interfaced equipment are covered under the STC AML. Determined that the location of the unit meets the field of view requirements. The existing wiring was inspected and determined to be IAW STC AML data. The existing GA56 antenna was removed and installed on the outside of the top fuselage as per Cirrus service manual 34-50.

- 1) Removed GA56 antenna p/n 011-00134-00 and installed new GA35 GPS/Waas antenna p/n 013-00235-00 s/n 191899, replaced existing coax with new RG 142, and IAW Garmin upgrade manual p/n 190-00357-06 and STC SA01933LA
- 2) Removed GNS430 p/n 011-00280-00 unit and installed Garmin GNS430W p/n 011-01060-45, s/n 97104437 installation done IAW Garmin upgrade manual p/n 190-00357-06 and STC SA01933LA.
- 3) The GNS430W was configured identical to the original 430 unit. All interfaces were checked IAW GNS430W installation manual 190-00356-02 section 5.
- 4) Removed the Aircraft Flight Manual Supplement for the GNS430 and installed a GNS430W AFMS p/n 190-00356-63,
- 5) ICA instructions for the GNS430W p/n 190-00356-65 Instructions for Continued Airworthiness were placed in the Aircraft records.

\*\*\*\*\*Nothing Below This Line\*\*\*\*\*

☐ Additional Sheets Are Attached



US Department  
of Transportation  
**Federal Aviation  
Administration**

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

Form Approved  
OMB No. 2120-0020  
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 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. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

<b>1. Aircraft</b>	Nationality and Registration Mark <b>N732VP</b>	Serial No. <b>21061811</b>
	Make <b>Cessna</b>	Model <b>T210M</b>
<b>2. Owner</b>	Name (As shown on registration certificate) <b>Charles Cole</b>	Address (As shown on registration certificate) Address <b>904 Driver Rd NW</b>
		City <b>FT Payne</b> State <b>AL</b>
		Zip <b>35967</b> Country <b>USA</b>

**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name <b>Gann Aviation Inc</b>		<input type="checkbox"/> U. S. Certificated Mechanic	<input type="checkbox"/> Manufacturer
Address <b>120 Gasque Dr</b>		<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City <b>Lafayette</b> State <b>Ga</b>		<input checked="" type="checkbox"/> Certificated Repair Station	<b>GHVR840X</b>
Zip <b>30728</b> Country <b>USA</b>		<input type="checkbox"/> Certificated Maintenance Organization	

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.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <b>Ron Dorsey</b> <b>02/08/2018</b>
--	--

**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee <input checked="" type="checkbox"/>	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. <b>GHVR840X</b>	Signature/Date of Authorized Individual <b>Ron Dorsey</b> <b>02/08/2018</b>
---	--

## 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.)*

N732VP

Nationality and Registration Mark

02/08/2018

Date

Validated that the previous installation of the GNS430 was installed IAW Garmin instructions and approved via a FAA field approved Form 337. Verified this aircraft and all interfaced equipment are covered under the STC AML. Determined that the location of the unit meets the field of view requirements. The existing antenna cable was change to RG400 cable. The existing wiring was inspected and determined to be IAW STC AML data. The existing GA56 antenna was removed and installed on the outside of the top fuselage as per Cessna Service manual and AC43.13 1b and 2b.

- 1) Removed GA56 antenna p/n 011-00134-00 and installed new GA35 GPS/Waas antenna p/n 013-00235-00 s/n 143243 and IAW Garmin upgrade manual p/n 190-00357-06 and STC SA01933LA
- 2) Removed GNS430 p/n 011-00280-00 unit and installed Garmin GNS430W p/n 011-01060-45, s/n 9712768 installation done IAW Garmin upgrade manual p/n 190-00357-06 and STC SA01933LA.
- 3) The GNS430W was configured identical to the original 430 unit. All interfaces were checked IAW GNS430W installation manual 190-00356-02 section 5.
- 4) Removed the Aircraft Flight Manual Supplement for the GNS430 and installed a GNS430W AFMS p/n 190-00356-63,
- 5) ICA instructions for the GNS430W p/n 190-00356-65 Instructions for Continued Airworthiness were placed in the Aircraft records.

\*\*\*\*\*Nothing Below This Line\*\*\*\*\*

☐ Additional Sheets Are Attached



US Department  
of Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020  
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 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. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark <b>N732VP</b>	Serial No. <b>21061811</b>
	Make <b>Cessna</b>	Model <b>T210M</b>
2. Owner	Name (As shown on registration certificate) <b>Charles Cole</b>	Address (As shown on registration certificate) Address <b>904 Driver Rd NW</b> City <b>FT Payne</b> State <b>AL</b> Zip <b>35967</b> Country <b>USA</b>

**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type _____ Manufacturer _____	_____	_____

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name <b>Gann Aviation Inc</b>	Address <b>114 Gasque Dr</b>	<input type="checkbox"/> U. S. Certificated Mechanic	<input type="checkbox"/> Manufacturer
City <b>Lafayette</b> State <b>Ga</b>	Zip <b>30728</b> Country <b>USA</b>	<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
		<input checked="" type="checkbox"/> Certificated Repair Station	<b>GHVR840X</b>
		<input type="checkbox"/> Certificated Maintenance Organization	

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.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <b>Ron Dorsey</b> <i>[Signature]</i> <b>02/08/2018</b>
--	---

**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee <input checked="" type="checkbox"/>	Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No. <b>GHVR840X</b>	Signature/Date of Authorized Individual <b>Ron Dorsey</b> <i>[Signature]</i> <b>02/08/2018</b>
--	---

## 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.)

N732VP

Nationality and Registration Mark

02/08/2018

Date

- 1) Removed GTX327 transponder rack, connector and wiring.
- 2) Installed GTX345 ADSB Transponder as manual 190-01499-02 rev. 3 and STC SA01714WI
- 3) The GTX345 was attached to the existing Aircraft Transcal encode output to provide altitude and heading info.
- 4) The GTX345 was attached to the existing transponder antenna and the avionics buss via a 5 amp C/B.
- 5) The GTX345 was attached to the existing GNS530W to provide GPS info and also display weather and traffic information.

All work was done IAW AC43.13 1b and 2b and Cessna service manual and the data listed.

The antenna's were installed as per data in AC43.13-2b Chapter 3.

All wire used in the installation shall be of appropriate standard aircraft quality grade and size as described in AC 43.13-1B, Chapter 11, Sections 5-20.

All circuits shall be protected in accordance with AC 43.13-1B, Chapter 11,

An electrical load analysis was performed on each aircraft, as described in AC43.13-1B, Chapter 11 Section 3.

The GTX345 was tested and programmed and found to be in compliance with AC20-165, and FAR43 appendix F. The approved Flight manual supplements was placed in the POH and Pilots Guide 190-01499-00 Rev C were placed in the aircraft.

\*\*\*\*\*NOTHING BELOW THIS LINE\*\*\*\*\*

☐ Additional Sheets Are Attached





U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

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

AUG 31 2004

Form Approved  
OMB No. 2120-0020

For FAA Use Only

Office Identification

GL03

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 \$1,000.00 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make <b>CESSNA</b>	Model <b>T210M</b>
	Serial No. <b>21061811</b>	Nationality and Registration Mark <b>N732VP</b> <b>N732VP</b>
2. Owner	Name (As shown on registration certificate) <b>Renken, Henry J. Jr. Trustee</b>	Address (As shown on registration certificate) <b>39W539 Deer Run Drive Saint Charles, IL 60175</b>

**3. For FAA Use Only**

--	--	--	--	--	--

**4. Unit Identification**

**5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~ (As described in Item 1 above) ~~~~~				
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

**6. Conformity Statement**

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
David Noe C/O Poplar Grove Airmotive 11619 Route 76 Poplar Grove, IL 61065	<input checked="" type="checkbox"/> U.S. Certificated Mechanic	IA 344386227
	<input type="checkbox"/> Foreign Certificated Mechanic	
	<input type="checkbox"/> Certificated Repair Station	
	<input type="checkbox"/> 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 <b>8/30/2004</b>	Signature of Authorized Individual <b>David Noe</b> <i>David Noe</i>
--------------------------	---

**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

BY	FAA Flt Standards Inspector	Manufacturer	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station	<input type="checkbox"/>	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection <b>8/30/2004</b>	Certificate or Designation No. <b>IA344386227</b>	Signature of Authorized Individual <i>David Noe</i>
---	--	--

## 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 McCauley wheels and brakes and installed cleveland 199-60 wheel and brake kit in accordance with manufacturer's IM199-60 instruction manual. Approved for installation under STC-SA52GL. No weight and balance change.

☐ Additional Sheets are Attached

APR 16 2003

 <b>MAJOR REPAIR AND ALTERATION</b> <b>(Airframe, Powerplant, Propeller, or Appliance)</b>		Form Approved OMB No. 2120-0020 For FAA Use Only Office Identification 103	
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 1958)			
1. Aircraft	Make CESSNA	Model T210M	
	Serial No. 21061811	Nationality and Registration Mark N732VP	
2. Owner	Name (As shown on registration certificate) RENKEN, HENRY J.	Address (As shown on registration certificate) 39W539 DEER RUN DRIVE ST, CHARLES, IL 60175	
	3. For FAA Use Only		
4. Unit Identification			
Unit	Make	Model	Serial No.
AIRFRAME	(As described in item 1 above)		
POWERPLANT			
PROPELLER			
APPLIANCE	Type		
	Manufacturer		
5. Type			
6. Conformity Statement			
A. Agency's Name and Address		B. Kind of Agency	
R&M AVIATION, INC. 3232 PLEASANT STREET DEKALB, IL 60115		<input type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input checked="" type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer	
		C. Certificate No. RMVR672H	
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 April 11, 2003		Signature of Authorized Individual Michael Carey	
7. Approval for Return to Service			
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED			
BY	FAA Fit Standards Inspector	Manufacturer	Inspection Authorization
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group
Date of Approval or Rejection April 11, 2003		Certificate or Designation No. RMVR672H	Signature of Authorized Individual Michael Carey

## 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.)

INCORPORATED STC #SA1990CE, INCREASED GROSS WEIGHT FROM 3,800 LB. TO 4,000 LB.  
FOR TAKE-OFF AND FLIGHT-FLIGHT MANUAL SUPPLEMENT DATED MAY 1, 1984 INSTALLED,  
AND PLACARD P.N. 0505087-15 FOR DAY/NIGHT/VFR/IFR INSTALLED AT THIS TIME. THERE  
ARE NO CONFLICTING STC'S AT THIS TIME.

-----END-----

☐ Additional Sheets Are Attached



U.S. Department of  
Transportation  
Federal Aviation  
Administration

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

Form Approved  
OMB No. 2120-0020

For FAA Use Only

Office Identification

OCT 11 2001  
GL03

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 1958)

1. Aircraft	Make CESSNA	Model T210M
	Serial No. 21061811	Nationality and Registration Mark N732VP
2. Owner	Name (As shown on registration certificate) RENKEN, HENRY J.	Address (As shown on registration certificate) 39W539 DEER RUN DRIVE ST. CHARLES, IL 60175

3. For FAA Use Only

4. Unit Identification				5. Type	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address R&M AVIATION, INC. 3232 PLEASANT STREET DEKALB, IL 60115	B. Kind of Agency <input type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input checked="" type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. RMVR672H
--	---	--------------------------------

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 October 9, 2001	Signature of Authorized Individual MICHAEL A. CAREY
-------------------------	--

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

BY	FAA Fit Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	X Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection October 9, 2001		Certificate or Designation No. RMVR672H	Signature of Authorized Individual	

### 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 AEROSAFE CORPORATION "GUARDIAN 1 STANDBY VACUUM SYSTEM" I/AW STC #SA4626SW,  
REVISION 3, DATED 05/09/83, OR LATER FAA APPROVED REVISIONS. SEE INSTALLATION INSTRUCTIONS  
FOR 100 HR./ANNUAL INSPECTION REQUIREMENTS TO ASSURE CONTINUED AIRWORTHINESS.

END



Additional Sheets Are Attached

REV  
OCT 11 2001

<b>MAJOR REPAIR AND ALTERATION</b> <b>(Airframe, Powerplant, Propeller, or Appliance)</b>				Form Approved OMB No. 2120-0020 For FAA Use Only Office Identification <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <b>GL03</b> </div>	
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 1958)					
<b>1. Aircraft</b>	Make <b>CESSNA</b>	Model <b>T210M</b>			
	Serial No. <b>21061811</b>	Nationality and Registration Mark <b>N732VP</b>			
<b>2. Owner</b>	Name (As shown on registration certificate) <b>RENKEN, HENRY J.</b>		Address (As shown on registration certificate) <b>39W539 DEER RUN DRIVE ST. CHARLES, IL 60175</b>		
<b>3. For FAA Use Only</b>					
<b>4. Unit Identification</b>					<b>5. Type</b>
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~(As described in item 1 above)~~~~~				
POWERPLANT	TCM	TSIO-520-R	512047		X
PROPELLER					
APPLIANCE	Type				
	Manufacturer				
<b>6. Conformity Statement</b>					
<b>A. Agency's Name and Address</b> <b>R&amp;M AVIATION, INC.</b> <b>3232 PLEASANT STREET</b> <b>DEKALB, IL 60115</b>		<b>B. Kind of Agency</b> <input type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input checked="" type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer		<b>C. Certificate No.</b>  <b>RMVR672H</b>	
<b>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.</b>					
<b>Date</b> <b>October 9, 2001</b>		<b>Signature of Authorized Individual</b>  <b>MICHAEL A. CAREY</b>			
<b>7. Approval for Return to Service</b>					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> <b>APPROVED</b> <input type="checkbox"/> <b>REJECTED</b>					
<b>BY</b>	FAA Fit Standards Inspector	Manufacturer	Other (Specify)		
	FAA Designee	Repair Station			
		X	Inspection Authorization	Person Approved by Transport Canada Airworthiness Group	
<b>Date of Approval or Rejection</b> <b>October 9, 2001</b>		<b>Certificate or Designation No.</b> <b>RMVR672H</b>		<b>Signature of Authorized Individual</b>  	

### 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.)*

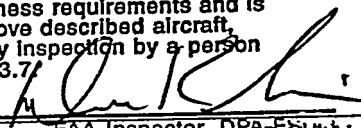
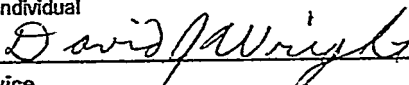
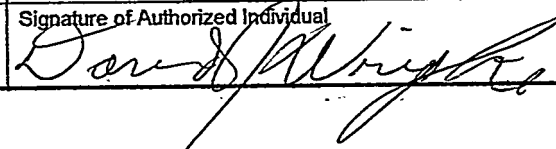
INSTALLED GAMI FUEL INJECTORS I/A/W GENERAL AVIATION MODIFICATIONS, INC. INSTALLATION  
PROCEDURE, No. IP-97-002, REV. 1, DATED 02/06/97, AND STC #SE09289SC. (KIT # GT14B, S.N. 8952)

—END—

☐ Additional Sheets Are Attached



V7R/17R CNS-430

U.S. Department of Transportation Federal Aviation Administration		<b>MAJOR REPAIR AND ALTERATION</b> <b>(Airframe, Powerplant, Propeller, or Appliance)</b>		For FAA Use Only Office Identification <b>GL03</b>	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$ 1,000 for each such violation (Section 901 Federal Aviation Act of 1958).					
1. Aircraft	Make <b>CESSNA</b>	Model <b>T210M</b>		Nationality and Registration Mark <b>USA N732VP</b>	
	Serial No. <b>21061811</b>	Address (As shown on registration certificate) <b>39W539 Deer Run Dr. St. Charles, IL 60175 USA</b>			
2. Owner	Name (As shown on registration certificate) <b>Henry J. Renken Jr. Trust</b>				
3. For FAA Use Only					
The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7. <b>SEP 14 2001</b> 					
Date		FAA Inspector, DPA		Unit Identification	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				<b>X</b>
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				
6. Conformity Statement					
A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.	
AVIONICS PLACE 5257 Falcon Rd. Rockford, IL 61109 FQ5R866M		U. S. Certified Mechanic Foreign Certified Mechanic <input checked="" type="checkbox"/> Certified Repair Station Manufacturer		FQ5R866M Radio Limited Instrument	
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 <b>12-September-2001</b>		Signature of Authorized Individual <b>David J. Wright</b> 			
7. Approval for Return to Service					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization		Other (Specify)
	FAA Designee	<input checked="" type="checkbox"/> Repair Station	Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection <b>12-September-2001</b>		Certificate or Designation No. <b>FQ5R866M</b>	Signature of Authorized Individual 		

## 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. Introduction: A. Installed GNS-430 s/n 97104437 in radio stack above GTX-327 and below GNS-530 in clear view of pilot.  
B. Antenna mounted on top at station #42.
2. Description: A. Installed I.A.W. manufacturers instructions p/n 190-00140-02, Rev. J, dated 02-22-01 AC 43.13-1B Chap 4, 11, 12, AC 43.13-2A Chap 2 & 3, AC 23.1309-1A, AC 20-138 Chap 7 (VFR), and PAR 8(c)(1)(iv)(IFR install).  
B. Supporting data on STC SA#00705WV.  
C. Installed 5 amp C/B labeled GPS.  
D. GPS does not interfere with any other equipment, (electromagnetic compatibility), and other equipment in A/C does not interfere with GPS unit. Electrical load analysis was performed. GNS- does not produce excessive load on systems per A/C specifications.  
E. GNS-430 is directly connected to GI-106A, GTX-327, GNS-530, WX-500, and DME.  
F. Installation functions checked satisfactorily per procedures found in Initial Checkout Section of Installation Manual. Ground checks include verification of conformity to airworthiness criteria in accordance with A/C 20-138 PAR 8(c)(2). The A/C has been placarded "GPS NOT APPROVED FOR NAVIGATION". This placard to remain in installed for navigation until flight test certification is completed and FAA Approved Airplane Flight Manual Supplement has been approved. See paragraph below of this form for flight test certification and AFM approval date. The GPS has been flight tested in accordance with AC 20-138 PAR 8(c)(2) on  
Date: 9-14-01  
By: Gandhi Wright  
Certificate #: 12341465  
and found to meet the requirements of IFR enroute, terminal, and non-precision approach flight. An Airplane Flight Manual Supplement C-T210M approved by the FAA dated SEP 14 2001 has been installed within the airplane. Garmin GNS-430 Pilot's Guide p/n 190-00140-00, Rev. F, dated July 00 has been included and must be available to the flight crew during IFR operations.  
G. All inspection records and other documents pertaining to this major alteration are on file at Avionics Place under W.O. #5505. A/C weight and balance and equipment list amended in accordance with AC 43.13-1B Chap 11, Section 3 thru 3.36, and Section 11.37.
3. Control, operation information: N/A
4. Servicing information: N/A
5. Maintenance instructions: N/A
6. Trouble shooting information: N/A
7. Removal and replacement information: N/A
8. Diagrams: N/A
9. Special inspection requirements: N/A
10. Application of protective treatments: N/A
11. Data: N/A
12. List of specific tools: N/A
13. Commuter category: N/A
14. Recommended overhaul periods: N/A
15. Airworthiness Limitations Section: N/A
16. Revision: A letter will be submitted to the local FSDO with a copy of the revised FAA ICA.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

AVIONICS PLACE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

FAA APPROVED FLIGHT MANUAL SUPPLEMENT  
GARMIN GNS-430 VHF COMMUNICATIONS TRANSCEIVER/  
VOR/ILS RECEIVER / GPS RECEIVER

AIRCRAFT MAKE: CESSNA

AIRCRAFT MODEL: T210M

AIRCRAFT SER. NO.: 21061811

AIRCRAFT REG. NO.: N732VP

This document must be carried in the aircraft at all times. It describes the operating procedures for the GARMIN GNC-430 navigation system when it has been installed in accordance with GARMIN Installation Manual 190-00140-02 Rev. J (Rev. A or later) and the FAA Form 337 dated 9-14-01.

For aircraft with an FAA Approved Flight Manual, this document serves as the FAA Approved Flight Manual Supplement for the GARMIN GNS-430.

The information contained herein supplements or supercedes the basic Airplane Flight Manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this document, consult the basic Airplane Flight Manual.

FAA APPROVED: 

For

Scott Horejs  
Principal Avionics Inspector  
Dupage District Flight Office  
31W775 North Ave.  
West Chicago, IL 60185-1056

FAA APPROVED DATE: SEP 14 2001

Page 1 of 8



C-T210M  
N732VP

AVIONICS PLACE  
5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

LOG OF REVISIONS			
Revision Number	Revision Date	Description	ECO Number
A	9/16/98	Initial Release	-----
B	10/6/98	Revised acceptable software versions	9793
C	5/17/99	Added references to automatic localizer course capture and crossfill operations to support main software version 2.07	11032
D	10/28/99	Add BFGoodrich WX-500 and SKYWATCH Interfaces	12055
E	4/26/00	Updated paragraph describing automatic localizer capture feature	13206
F	8/17/00	Add a note to the Normal Procedures about legs not flown by the GNS 430	13932

FAA APPROVED DATE: SEP 14 2001

Page 2 Of 9



# AVIONICS PLACE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

Aircraft Make: Cessna  
Aircraft Model: T210M  
Aircraft Serial Number: 21061811

GARMIN GNS 430 VHF Communications  
Transceiver / VOR/ILS Receiver / GPS Receiver

## Table of Contents

SECTION .....	PAGE
GENERAL .....	3
LIMITATIONS .....	4
EMERGENCY PROCEDURES .....	5
NORMAL PROCEDURES .....	6
PERFORMANCE.....	8
WEIGHT AND BALANCE.....	8
AIRPLANE & SYSTEM DESCRIPTIONS.....	8

FAA APPROVED DATE: SEP 14 2001

Page 3 of 9





Aircraft Make: Cessna  
Aircraft Model: T210M  
Aircraft Serial Number: 21061811

**GARMIN GNS 430 VHF Communications  
Transceiver / VOR/ILS Receiver / GPS Receiver**

**SECTION I  
GENERAL**

1. The GNS 430 System is a fully integrated, panel mounted instrument, which contains a VHF Communications Transceiver, a VOR/ILS receiver, and a Global Positioning System (GPS) Navigation computer. The system consists of a GPS antenna, GPS Receiver, VHF VOR/LOC/GS antenna, VOR/ILS receiver, VHF COMM antenna and a VHF Communications Transceiver. The primary function of the VHF Communication portion of the equipment is to facilitate communication with Air Traffic Control. The primary function of the VOR/ILS Receiver portion of the equipment is to receive and demodulate VOR, Localizer, and Glide Slope signals. The primary function of the GPS portion of the system is to acquire signals from the GPS system satellites, recover orbital data, make range and Doppler measurements, and process this information in real-time to obtain the user's position, velocity, and time.
2. Provided the GARMIN GNS 430's GPS receiver is receiving adequate usable signals, it has been demonstrated capable of and has been shown to meet the accuracy specifications for:
  - VFR/IFR enroute, terminal, and non-precision instrument approach (GPS, Loran-C, VOR, VOR-DME, TACAN, NDB, NDB-DME, RNAV) operation within the U.S. National Airspace System in accordance with AC 20-138.
  - One of the approved sensors, for a single or dual GNS 430 installation, for North Atlantic Minimum Navigation Performance Specification (MNPS) Airspace in accordance with AC 91-49 and AC 120-33.
  - The systems meets RNP5 airspace (BRNAV) requirements of AC 90-96 and in accordance with AC 20-138, and JAA AMJ 20X2 Leaflet 2 Revision 1, provided it is receiving usable navigation information from the GPS receiver.

Navigation is accomplished using the WGS-84 (NAD-83) coordinate reference datum. Navigation data is based upon use of only the Global Positioning System (GPS) operated by the United States of America.



Aircraft Make: Cessna GARMIN GNS 430 VHF Communications  
Aircraft Model: T210M Transceiver / VOR/ILS Receiver / GPS Receiver  
Aircraft Serial Number: 21061811

**SECTION II  
LIMITATIONS**

1. The GARMIN GNS 430 Pilot's Guide, P/N 190-00140-00, Rev. A, dated October, 1998, or later appropriate revision, must be immediately available to the flight crew whenever navigation is predicated on the use of the system.

The GARMIN 400 Series Pilot's Guide Addendum, Display Interface for Traffic and Weather Data, must be immediately available to the flight crew if the BFGoodrich WX-500 Stormscope® or the BFGoodrich SKYWATCH™ Traffic Advisory System (TAS) is installed.

2. The GNS 430 must utilize the following or later FAA approved software versions:

Sub-System	Software Version
Main	2.00
GPS	2.00
COMM	1.22
VOR/LOC	1.25
G/S	2.00

The Main software version is displayed on the GNS 430 self test page immediately after turn-on for 5 seconds. The remaining system software versions can be verified on the AUX group sub-page 2, "SOFTWARE/DATABASE VER".

3. IFR enroute and terminal navigation predicated upon the GNS 430's GPS Receiver is prohibited unless the pilot verifies the currency of the data base or verifies each selected waypoint for accuracy by reference to current approved data.
4. Instrument approach navigation predicated upon the GNS 430's GPS Receiver must be accomplished in accordance with approved instrument approach procedures that are retrieved from the GPS equipment data base. The GPS equipment database must incorporate the current update cycle.
  - (a) Instrument approaches utilizing the GPS receiver must be conducted in the approach mode and Receiver Autonomous Integrity Monitoring (RAIM) must be available at the Final Approach Fix.
  - (b) Accomplishment of ILS, LOC, LOC-BC, LDA, SDF, MLS or any other type of approach not approved for GPS overlay with the GNS 430's GPS receiver is not authorized.



Aircraft Make: Cessna  
 Aircraft Model: T210M  
 Aircraft Serial Number: 21061811

**GARMIN GNS 430 VHF Communications**  
**Transceiver / VOR/ILS Receiver / GPS Receiver**

- (c) Use of the GNS 430 VOR/ILS receiver to fly approaches not approved for GPS require VOR/ILS navigation data to be present on the external indicator.
  - (d) When an alternate airport is required by the applicable operating rules, it must be served by an approach based on other than GPS or Loran-C navigation, the aircraft must have the operational equipment capable of using that navigation aid, and the required navigation aid must be operational.
  - (e) VNAV information may be utilized for advisory information only. Use of VNAV information for Instrument Approach Procedures does not guarantee Step-Down Fix altitude protection, or arrival at approach minimums in normal position to land.
5. If not previously defined, the following default settings must be made in the "SETUP 1" menu of the GNS 430 prior to operation (refer to Pilot's Guide for procedure if necessary):
- (a) dis, spd .....  $\frac{n}{mi}$  k<sub>t</sub> (sets navigation units to "nautical miles" and "knots")
  - (b) alt, vs .....  $\frac{ft}{min}$  (sets altitude units to "feet" and "feet per minute")
  - (c) map datum ..WGS 84 (sets map datum to WGS-84, see note below)
  - (d) posn .....deg-min (sets navigation grid units to decimal minutes)

NOTE: In some areas outside the United States, datums other than WGS-84 or NAD-83 may be used. If the GNS 430 is authorized for use by the appropriate Airworthiness authority, the required geodetic datum must be set in the GNS 430 prior to its use for navigation.

### SECTION III EMERGENCY PROCEDURES

#### ABNORMAL PROCEDURES

1. If GARMIN GNS 430 navigation information is not available or invalid, utilize remaining operational navigation equipment as required.
2. If "RAIM POSITION WARNING" message is displayed the system will flag and no longer provide GPS based navigational guidance. The crew should revert to the GNS 430 VOR/ILS receiver or an alternate means of navigation other than the GNS 430's GPS Receiver.
3. If "RAIM IS NOT AVAILABLE" message is displayed in the enroute, terminal, or initial approach phase of flight, continue to navigate using the GPS equipment or revert to an



Aircraft Make: Cessna  
Aircraft Model: T210M  
Aircraft Serial Number: 21061811

GARMIN GNS 430 VHF Communications  
Transceiver / VOR/ILS Receiver / GPS Receiver

alternate means of navigation other than the GNS 430's GPS receiver appropriate to the route and phase of flight. When continuing to use GPS navigation, position must be verified every 15 minutes using the GNS 430's VOR/ILS receiver or another IFR-approved navigation system.

4. If "RAIM IS NOT AVAILABLE" message is displayed while on the final approach segment, GPS based navigation will continue for up to 5 minutes with approach CDI sensitivity (0.3 nautical mile). After 5 minutes the system will flag and no longer provide course guidance with approach sensitivity. Missed approach course guidance may still be available with 1 nautical mile CDI sensitivity by executing the missed approach.
5. In an in-flight emergency, depressing and holding the Comm transfer button for 2 seconds will select the emergency frequency of 121.500 Mhz into the "Active" frequency window.

#### SECTION IV NORMAL PROCEDURES

##### 1. DETAILED OPERATING PROCEDURES

Normal operating procedures are described in the GARMIN GNS 430 Pilot's Guide, P/N 190-00140-00, Rev. A, dated October 1998, or later appropriate revision.

##### 2. PILOT'S DISPLAY

The GNS 430 System data will appear on the Pilot's HSI. The source of data is either GPS or VLOC as annunciated on the display above the CDI key.

##### 3. AUTOPILOT / FLIGHT DIRECTOR OPERATION

Coupling of the GNS 430 System steering information to the autopilot/flight director can be accomplished by engaging the autopilot/flight director in the NAV or APR mode.

When the autopilot/flight director system is using course information supplied by the GNS 430 System and the course pointer is not automatically driven to the desired track, the course pointer on the HSI must be manually set to the desired track (DTK) indicated by the GNS 430. For detailed autopilot/flight director operational instructions, refer to the FAA Approved Flight Manual Supplement for the autopilot/flight director.





## AVIONICS PLACE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

Aircraft Make: Cessna GARMIN GNS 430 VHF Communications  
Aircraft Model: T210M Transceiver / VOR/ILS Receiver / GPS Receiver  
Aircraft Serial Number: 21061811

#### 4. CROSSFILL OPERATIONS

For dual GNC 400 Product Series installations, crossfill capabilities exist between the number one and number two GNC 400 Systems. Refer to the GARMIN GNS 430 Pilot's Guide for detailed crossfill operating instructions.

#### 5. AUTOMATIC LOCALIZER COURSE CAPTURE

By default, the GNS 430 automatic localizer course capture feature is enabled. This feature provides a method for system navigation data present on the external indicators to be switched automatically from GPS guidance to localizer / glide slope guidance at the point of course intercept on a localizer at which GPS derived course deviation equals localizer derived course deviation. If an offset from the final approach course is being flown, it is possible that the automatic switch from GPS course guidance to localizer / glide slope course guidance will not occur. It is the pilot's responsibility to ensure correct system navigation data is present on the external indicator before continuing a localizer based approach beyond the final approach fix.

#### 6. DISPLAY OF LIGHTNING STRIKE DATA

For installations that interface the BFGoodrich WX-500 Stormscope and the GNS 430, lightning strike data detected by the WX-500 will appear on the GNS 430. For detailed operating instructions regarding the interface of the GNS 430 with the WX-500, refer to the WX-500 Pilot's Guide and the GNS 430 Pilot's Guide Addendum for the WX-500 Stormscope interface.

#### 7. DISPLAY OF TRAFFIC ADVISORY DATA

For installations that interface the BFGoodrich SKYWATCH Traffic Advisory System (TAS) and the GNS 430, traffic data detected by the SKYWATCH will appear on the GNS 430. For detailed operating instructions regarding the interface of the GNS 430 with the SKYWATCH, refer to the FAA Approved Flight Manual Supplement for the SKYWATCH, the Pilot's Guide for the SKYWATCH and the GNS 430 Pilot's Guide Addendum for the SKYWATCH Traffic Advisory System interface.

FAA APPROVED DATE: SEP 14 2001

Page 8 of 9

100

**AVIONICS PLACE**

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

Aircraft Make: Cessna GARMIN GNS 430 VHF Communications  
Aircraft Model: T210M Transceiver / VOR/ILS Receiver / GPS Receiver  
Aircraft Serial Number: 21061811

**SECTION V  
PERFORMANCE**

No change.

**SECTION VI  
WEIGHT AND BALANCE**

See current weight and balance data.

**SECTION VII  
AIRPLANE & SYSTEM DESCRIPTIONS**

See GNS 430 Pilot's Guide for a complete description of the GNS 430 system.

FAA APPROVED DATE: SEP 14 2001

Page 9 of 9  
Page 9



U.S. Department  
of Transportation

Federal Aviation  
Administration

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

For FAA Use Only

Office Identification

SEP 14 2001  
**GL03**

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$ 1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make <b>CESSNA</b>	Model <b>T210M</b>
	Serial No. <b>21061811</b>	Nationality and Registration Mark <b>USA N732VP</b>
2. Owner	Name (As shown on registration certificate) <b>Henry J. Renken Jr. Trust</b>	Address (As shown on registration certificate) <b>39W539 Deer Run Dr. St. Charles, IL 60175 USA</b>

## **3. For FAA Use Only**

The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7.

SEP 14 2001

Date

FAA Inspector, DPA-FSPV

## **4. Unit Identification**

## **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				<b>X</b>
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

## **6. Conformity Statement**

A. Agency's Name and Address <b>AVIONICS PLACE 5257 Falcon Rd. Rockford, IL 61109 FQ5R866M</b>	B. Kind of Agency	C. Certificate No.
	<input type="checkbox"/> U. S. Certified Mechanic	<b>FQ5R866M</b>
	<input type="checkbox"/> Foreign Certified Mechanic	<b>Radio</b>
	<input checked="" type="checkbox"/> Certified Repair Station	<b>Limited Instrument</b>
<input type="checkbox"/> 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 <b>12-September-2001</b>	Signature of Authorized Individual <b>David J. Wright</b> <i>David J. Wright</i>
----------------------------------	---

## **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

BY	FAA Flt. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	<input checked="" type="checkbox"/> Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection <b>12-September-2001</b>		Certificate or Designation No. <b>FQ5R866M</b>	Signature of Authorized Individual	

## 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. Introduction: A. Installed WX-500 system processor s/n JDP06103820 located at station #161.4 and antenna s/n JCA06107447 located at station #189.4.
2. Description: A. Installed I.A.W. manufacturers instructions p/n 009-11500-001, Rev. B, dated 06-10-99, AC 43.13-1B Chap 4, 11, & 12, and AC 43.13-2A Chap 2 & 3.  
B. Installed 3 amp C/B labeled WX-500. Electrical load analysis was performed. WX-500 does not produce excessive load on system per A/C specifications.  
C. WX-500 does not interfere with any other avionics or instruments in A/C.  
D. WX-500 is directly connected to GNS-430, GNS-530, and KI-525A.  
E. Owners operation manual was placed in A/C.  
F. System ground checked good.  
G. Weight and balance revised.
3. Control, operation information: N/A
4. Servicing information: N/A
5. Maintenance instructions: N/A
6. Troubleshooting information: N/A
7. Removal and replacement information: N/A
8. Diagrams: N/A
9. Special inspection requirements: N/A
10. Application of protective treatments: N/A
11. Data: N/A
12. List of special tools: N/A
13. Commuter category A/C: N/A
14. Recommended overhaul periods: N/A
15. Airworthiness Limitations Section: N/A
16. Revision: A letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. Department  
of TransportationFederal Aviation  
Administration**MAJOR REPAIR AND ALTERATION**  
**(Airframe, Powerplant, Propeller, or Appliance)**

For FAA Use Only

Office Identification

87/13  
GL03

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$ 1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make CESSNA	Model T210M
	Serial No. 21061811	Nationality and Registration Mark USA N732VP
2. Owner	Name (As shown on registration certificate) Henry J. Renken Jr. Trust	Address (As shown on registration certificate) 39W539 Dear Run Dr. St. Charles, IL 60175 USA

## 3. For FAA Use Only

The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7.

SEP 14 2001

Date

FAA Inspector, DPA-ESV

4. Unit Identification

## 5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

## 6. Conformity Statement

A. Agency's Name and Address AVIONICS PLACE 5257 Falcon Rd. Rockford, IL 61109 FQ5R866M	B. Kind of Agency U. S. Certified Mechanic Foreign Certified Mechanic <input checked="" type="checkbox"/> Certified Repair Station Manufacturer	C. Certificate No. FQ5R866M Radio Limited Instrument
---	---	---

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  
12-September-2001

Signature of Authorized Individual

David J. Wright

## 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

BY	FAA Fit. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	<input checked="" type="checkbox"/> Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 12-September-2001		Certificate or Designation No. FQ5R866M	Signature of Authorized Individual David J. Wright	

## 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. Introduction: A. Installed GNS-530 s/n 78402634 in radio stack above GNS-430 and below PM-7000MS in clear view of pilot.  
B. Antenna mounted on top at station #42.
2. Description: A. Installed I.A.W. manufacturers instructions p/n 190-00180-02, Rev. C, dated 09-22-00, AC 43.13-1B Chap 4, 11, 12, AC 43.13-2A Chap 2 & 3, AC 23.1309-1A AC 20-138 Chap 7 (VFR), and PAR 8(c)(1)(iv)(IFR install).  
B. Supporting data on STC SA#00705WI.  
C. Installed 5 amp C/B labeled GPS.  
D. GPS does not interfere with any other equipment, (electromagnetic compatibility), and other equipment in A/C does not interfere with GPS unit. Electrical load analysis was performed. GNS- does not produce excessive load on systems per A/C specifications.  
E. GNS-530 is directly connected to KI-525A, GTX-327, WX-500, JPI, GNS-430, 400B A/P, and DME.  
F. Installation functions checked satisfactorily per procedures found in Initial Checkout Section of Installation Manual. Ground checks include verification of conformity to airworthiness criteria in accordance with A/C 20-138 PAR 8(c)(2). The A/C has been placarded "GPS NOT APPROVED FOR NAVIGATION". This placard to remain in installed for navigation until flight test certification is completed and FAA Approved Airplane Flight Manual Supplement has been approved. See paragraph below of this form for flight test certification and AFM approval date. The GPS has been flight tested in accordance with AC 20-138 PAR 8(c)(2) on  
Date: 9-15-01  
By: [Signature]  
Certificate #: 2391469  
and found to meet the requirements of IFR enroute, terminal, and non-precision approach flight. An Airplane Flight Manual Supplement C-T210M approved by the FAA dated SEP 14 2001 has been installed within the airplane. Garmin GNS-530 Pilot's Guide p/n 190-00181-00, Rev. A, dated 5/00 has been included and must be available to the flight crew during IFR operations.  
G. All inspection records and other documents pertaining to this major alteration are on file at Avionics Place under W.O. #5505. A/C weight and balance and equipment list amended in accordance with AC 43.13-1B Chap 11, Section 3 thru 3.36, and Section 11.37.
3. Control, operation information: N/A
4. Servicing information: N/A
5. Maintenance instructions: N/A
6. Trouble shooting information: N/A
7. Removal and replacement information: N/A
8. Diagrams: N/A
9. Special inspection requirements: N/A
10. Application of protective treatments: N/A
11. Data: N/A
12. List of specific tools: N/A
13. Commuter category: N/A
14. Recommended overhaul periods: N/A
15. Airworthiness Limitations Section: N/A
16. Revision: A letter will be submitted to the local FSDO with a copy of the revised FAA ICA.

END

☐ ADDITIONAL SHEETS ARE ATTACHED



# AVIONICS PLACE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

## FAA APPROVED FLIGHT MANUAL SUPPLEMENT GARMIN GNS 530 VHF COMMUNICATIONS TRANSCEIVER/ VOR/ILS RECEIVER/GPS RECEIVER

Aircraft Make: CESSNA

Aircraft Model: T210M

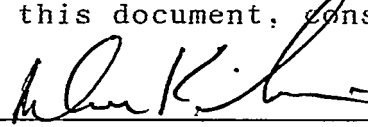
Aircraft S/N: 21061811

Aircraft Reg. No.: N732VP

This document must be carried in the aircraft at all times. It describes the operating procedures for the GARMIN GNS 530 navigation system when it has been installed in accordance with GARMIN Installation Manual 190-00181-02 Rev. C (Rev. A or later) and FAA Form 337 dated 9-14-01.

For aircraft with an FAA Approved Flight Manual, this document serves as the FAA Approved Flight Manual Supplement for the GARMIN GNS 530. For aircraft that do not have an approved flight manual, this document serves as the FAA Approved Supplemental Flight Manual for the GARMIN GNS 530.

The information contained herein supplements or supercedes the basic Airplane Flight Manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this document, consult the basic Airplane Flight Manual.

FAA APPROVED: 

For Scott Horejs  
Principal Avionics Inspector  
Dupage District Flight Office  
31W775 North Ave.  
West Chicago, IL 60185-1056

FAA APPROVED DATE: SEP 14 2001

Page 1 of 8

100

AVIONICS PLACE

5257 Falcon Rd.

Rockford, IL 61109

815-229-5360

C-T210M  
N732VP

Table of Contents

SECTION .....	PAGE
GENERAL .....	3
LIMITATIONS .....	4
EMERGENCY PROCEDURES .....	5
NORMAL PROCEDURES .....	6
PERFORMANCE.....	8
WEIGHT AND BALANCE.....	8
AIRPLANE & SYSTEM DESCRIPTIONS.....	8



## SECTION I GENERAL

1. The GNS 530 System is a fully integrated, panel mounted instrument, which contains a VHF Communications Transceiver, a VOR/ILS receiver, and a Global Positioning System (GPS) Navigation computer. The system consists of a GPS antenna, GPS Receiver, VHF VOR/LOC/GS antenna, VOR/ILS receiver, VHF COMM antenna and a VHF Communications Transceiver. The primary function of the VHF Communication portion of the equipment is to facilitate communication with Air Traffic Control. The primary function of the VOR/ILS Receiver portion of the equipment is to receive and demodulate VOR, Localizer, and Glide Slope signals. The primary function of the GPS portion of the system is to acquire signals from the GPS system satellites, recover orbital data, make range and Doppler measurements, and process this information in real-time to obtain the user's position, velocity, and time.
2. Provided the GARMIN GNS 530's GPS receiver is receiving adequate usable signals, it has been demonstrated capable of and has been shown to meet the accuracy specifications for:
  - VFR/IFR enroute, terminal, and non-precision instrument approach (GPS, Loran-C, VOR, VOR-DME, TACAN, NDB, NDB-DME, RNAV) operation within the U.S. National Airspace System in accordance with AC 20-138.
  - One of the approved sensors, for a single or dual GNS 530 installation, for North Atlantic Minimum Navigation Performance Specification (MNPS) Airspace in accordance with AC 91-49 and AC 120-33.
  - The system meets RNP5 airspace (BRNAV) requirements of AC 90-96 and in accordance with AC 20-138, and JAA AMJ 20X2 Leaflet 2 Revision 1, provided it is receiving usable navigation information from the GPS receiver.

Navigation is accomplished using the WGS-84 (NAD-83) coordinate reference datum. Navigation data is based upon use of only the Global Positioning System (GPS) operated by the United States of America.

22

# AVIONICS PLACE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

C - T210M  
N232VP

## SECTION II LIMITATIONS

1. The GARMIN GNS 530 Pilot's Guide, P/N 190-00181-00, Rev. A, dated April 2000 or later appropriate revision must be immediately available to the flight crew whenever navigation is predicated on the use of the system.

The GARMIN 500 Series Pilot's Guide Addendum, Display Interface for Traffic and Weather Data, must be immediately available to the flight crew if the BFGoodrich WX-500 Stormscope® or the BFGoodrich SKYWATCH™ Traffic Advisory System (TAS) is installed.

2. The GNS 530 must utilize the following or later FAA approved software versions:

Sub-System	Software Version
Main	2.00
GPS	2.00
COMM	1.22
VOR/LOC	1.25
G/S	2.00

The Main software version is displayed on the GNS 530 self test page immediately after turn-on for 5 seconds. The remaining system software versions can be verified on the AUX group sub-page 2, "SOFTWARE/DATABASE VER".

3. IFR enroute and terminal navigation predicated upon the GNS 530's GPS Receiver is prohibited unless the pilot verifies the currency of the data base or verifies each selected waypoint for accuracy by reference to current approved data.
4. Instrument approach navigation predicated upon the GNS 530's GPS Receiver must be accomplished in accordance with approved instrument approach procedures that are retrieved from the GPS equipment data base. The GPS equipment database must incorporate the current update cycle.
  - (a) Instrument approaches utilizing the GPS receiver must be conducted in the approach mode and Receiver Autonomous Integrity Monitoring (RAIM) must be available at the Final Approach Fix.
  - (b) Accomplishment of ILS, LOC, LOC-BC, LDA, SDF, MLS or any other type of approach not approved for GPS overlay with the GNS 530's GPS receiver is not authorized.





AVIONICS PLAGE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

C - T210M  
N232VP

- (c) Use of the GNS 530 VOR/ILS receiver to fly approaches not approved for GPS requires VOR/ILS navigation data to be present on the external indicator.
  - (d) When an alternate airport is required by the applicable operating rules, it must be served by an approach based on other than GPS or Loran-C navigation, the aircraft must have the operational equipment capable of using that navigation aid, and the required navigation aid must be operational.
  - (e) VNAV information may be utilized for advisory information only. Use of VNAV information for Instrument Approach Procedures does not guarantee Step-Down Fix altitude protection, or arrival at approach minimums in normal position to land.
5. If not previously defined, the following default settings must be made in the "SETUP 1" menu of the GNS 530 prior to operation (refer to Pilot's Guide for procedure if necessary):
- (a) dis, spd .....  $\frac{n}{m}$  k<sub>t</sub> (sets navigation units to "nautical miles" and "knots")
  - (b) alt, vs .....  $\frac{ft}{min}$  (sets altitude units to "feet" and "feet per minute")
  - (c) map datum ..WGS 84 (sets map datum to WGS-84, see note below)
  - (d) posn .....deg-min (sets navigation grid units to decimal minutes)

NOTE: In some areas outside the United States, datums other than WGS-84 or NAD-83 may be used. If the GNS 530 is authorized for use by the appropriate Airworthiness authority, the required geodetic datum must be set in the GNS 530 prior to its use for navigation.

### SECTION III EMERGENCY PROCEDURES

#### ABNORMAL PROCEDURES

1. If GARMIN GNS 530 navigation information is not available or invalid, utilize remaining operational navigation equipment as required.
2. If "RAIM POSITION WARNING" message is displayed the system will flag and no longer provide GPS based navigational guidance. The crew should revert to the GNS 530 VOR/ILS receiver or an alternate means of navigation other than the GNS 530's GPS Receiver.
3. If "RAIM IS NOT AVAILABLE" message is displayed in the enroute, terminal, or initial approach phase of flight, continue to navigate using the GPS equipment or revert to an

22

AVIONICS PLACE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

C-T 210M  
N732VP

alternate means of navigation other than the GNS 530's GPS receiver appropriate to the route and phase of flight. When continuing to use GPS navigation, position must be verified every 15 minutes using the GNS 530's VOR/ILS receiver or another IFR-approved navigation system.

4. If "RAIM IS NOT AVAILABLE" message is displayed while on the final approach segment, GPS based navigation will continue for up to 5 minutes with approach CDI sensitivity (0.3 nautical mile). After 5 minutes the system will flag and no longer provide course guidance with approach sensitivity. Missed approach course guidance may still be available with 1 nautical mile CDI sensitivity by executing the missed approach.
5. In an in-flight emergency, depressing and holding the Comm transfer button for 2 seconds will select the emergency frequency of 121.500 Mhz into the "Active" frequency window.

SECTION IV  
NORMAL PROCEDURES

1. DETAILED OPERATING PROCEDURES

Normal operating procedures are described in the GARMIN GNS 530 Pilot's Guide, P/N 190-00181-00, Rev. A, dated April 2000 or later appropriate revision.

2. PILOT'S DISPLAY

The GNS 530 System data will appear on the Pilot's CDI/HSI. The source of data is either GPS or VLOC as annunciated on the display above the CDI key.

3. AUTOPILOT / FLIGHT DIRECTOR OPERATION

Coupling of the GNS 530 System steering information to the autopilot/flight director can be accomplished by engaging the autopilot/flight director in the NAV or APR mode.

When the autopilot/flight director system is using course information supplied by the GNS 530 System and the course pointer is not automatically driven to the desired track, the course pointer on the HSI must be manually set to the desired track (DTK) indicated by the GNS 530. For detailed autopilot/flight director operational instructions, refer to the FAA Approved Flight Manual Supplement for the autopilot/flight director.



# AVIONICS PLAGE

5257 Falcon Rd.  
Rockford, IL 61109  
815-229-5360

C-T210M  
N732VP

## 4. CROSSFILL OPERATIONS

For dual GNC 500 Product Series or GNC 500/GNC 400 Product Series installations, crossfill capabilities exist between the number one and number two Systems. Refer to the GARMIN GNS 530 Pilot's Guide for detailed crossfill operating instructions.

## 5. AUTOMATIC LOCALIZER COURSE CAPTURE

By default, the GNS 530 automatic localizer course capture feature is enabled. This feature provides a method for system navigation data present on the external indicators to be switched automatically from GPS guidance to localizer / glide slope guidance as the aircraft approaches the localizer course inbound to the final approach fix. If an offset from the final approach course is being flown, it is possible that the automatic switch from GPS course guidance to localizer / glide slope course guidance will not occur. It is the pilot's responsibility to ensure correct system navigation data is present on the external indicator before continuing a localizer based approach beyond the final approach fix. Refer to the GNS 530 Pilot's Guide for detailed operating instructions.

## 6. DISPLAY OF LIGHTNING STRIKE DATA

For installations that interface the BFGoodrich WX-500 Stormscope and the GNS 530, lightning strike data detected by the WX-500 will appear on the GNS 530. For detailed operating instructions regarding the interface of the GNS 530 with the WX-500, refer to the WX-500 Pilot's Guide and the GNS 530 Pilot's Guide Addendum for the WX-500 Stormscope interface.

## 7. DISPLAY OF TRAFFIC ADVISORY DATA

For installations that interface the BFGoodrich SKYWATCH Traffic Advisory System (TAS) and the GNS 530, traffic data detected by the SKYWATCH will appear on the GNS 530. For detailed operating instructions regarding the interface of the GNS 530 with the SKYWATCH, refer to the FAA Approved Flight Manual Supplement for the SKYWATCH, the Pilot's Guide for the SKYWATCH and the GNS 530 Pilot's Guide Addendum for the SKYWATCH Traffic Advisory System interface.

100

AVIONICS PLACE

5257 Falcon Rd.

Rockford, IL 61109

815-229-5360

C-T210M  
N732VP

**SECTION V  
PERFORMANCE**

No change.

**SECTION VI  
WEIGHT AND BALANCE**

See current weight and balance data.

**SECTION VII  
AIRPLANE & SYSTEM DESCRIPTIONS**

See GNS 530 Pilot's Guide for a complete description of the GNS 530 system.

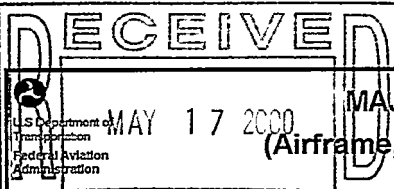
FAA Approved Date: SEP 14 2001

Page 8 of 8

100

100





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

Form Approved  
OMB No. 2120-0020

For FAA Use Only

Office Identification

66-13

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 1958)

1. Aircraft	Make Cessna	Model T210M
	Serial No. 21061811	Nationality and Registration Mark N732VP
2. Owner	Name (As shown on registration certificate) WSS Planes, Inc.	Address (As shown on registration certificate) Rt. 26, Box 99 Princeton, IL 61356

3. For FAA Use Only

4. Unit Identification				6. Type	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)			<input checked="" type="checkbox"/>	<input type="checkbox"/>
POWERPLANT				<input type="checkbox"/>	<input type="checkbox"/>
PROPELLER				<input type="checkbox"/>	<input type="checkbox"/>
APPLIANCE	Type			<input type="checkbox"/>	<input type="checkbox"/>
	Manufacturer			<input type="checkbox"/>	<input type="checkbox"/>

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Steve J. Myers Myers Aviation, Inc. 1684 River Mill Rd., Oshkosh, WI 54901	<input checked="" type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer	4717804081A

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 May 15, 2000	Signature of Authorized Individual 
----------------------	--

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	<input type="checkbox"/> FAA Fit Standards Inspector	<input type="checkbox"/> Manufacturer	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)
	<input type="checkbox"/> FAA Designee	<input type="checkbox"/> Repair Station	<input type="checkbox"/> Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection May 15, 2000	Certificate or Designation No. 4717804081A	Signature of Authorized Individual 		

### 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. Repaired damage to lower forward fuselage station 0.0 to 129.6 by replacing the following parts:

- A. Forward lwr. skin Part No. 1213788-6.
- B. Lwr. skin Part No. 1210501-12.
- C. Lwr. skin Part No. 1210501-3.
- D. Gusset Part No. 1211329-1.
- E. Lwr. skin Part No. 1210505-11.

2. Replacement parts installed per Cessna Parts and Maintenance Manual.

3. Installation procedures per AC43.13-1A, Chapter 2, Section 3.


4. No equipment list revision.

5. No weight and balance change.

END

☐ Additional Sheets Are Attached

DC  
22

 U.S. Department of Transportation Federal Aviation Administration		<b>MAJOR REPAIR AND ALTERATION</b> (Airframe, Powerplant, Propeller, or Appliance)		Form Approved OMB No. 2120-0020 For FAA Use Only	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).					
1. Aircraft	Make <b>Cessna</b>		Model <b>T210M</b>		
	Serial No. <b>21061811</b>		Nationality and Registration Mark <b>USA N73ZVP</b>		
2. Owner	Name (As shown on registration certificate) <b>JERRY DEAN LANDING</b>		Address (As shown on registration certificate) <b>RR 1 St. Clair, MO 63077</b>		
	3. For FAA Use Only				
4. Unit Identification					
Unit	Make	Model	Serial No.	5. Type	
AIRFRAME	(As described in Item 1 above)			Repair	Alteration
POWERPLANT					X
PROPELLER					
APPLIANCE	Type				
	Manufacturer				
6. Conformity Statement					
A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.	
<b>Daniel B. Dickman Route 6 Box 211 Rolla, MO 65401</b>		<input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer		<b>A.I. 1570585</b>	
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 <b>August 13, 1991</b>		Signature of Authorized Individual <i>Daniel B. Dickman</i>			
7. Approval for Return To Service					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA Fit, Standards Inspector	Manufacturer	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection <b>August 13, 1991</b>		Certificate or Designation No. <b>A.I. 1570585</b>	Signature of Authorized Individual <i>Daniel B. Dickman</i>		

**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. Modified aircraft using STC SA5737SW by Uvalde Flight Center, Inc. for removal of landing gear doors.
2. Installed Bracket Air Filter as covered by STC SA693CE, SA71GL, SH12CE application and cross reference chart.

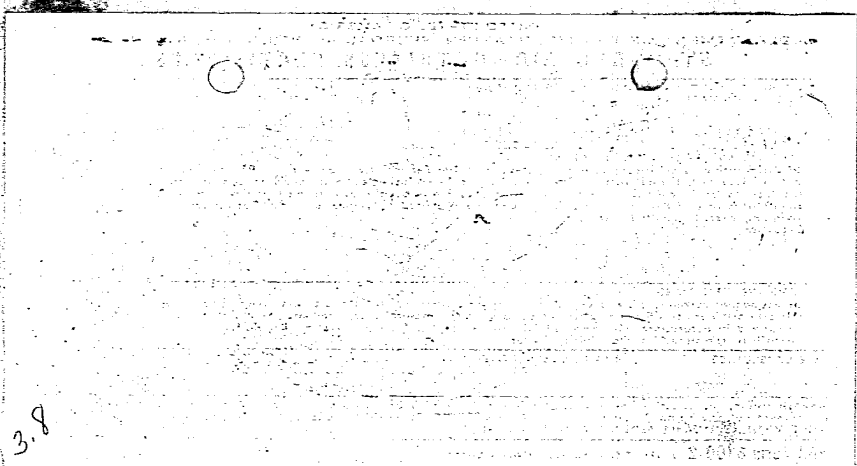
\*\*\*\*\*END\*\*\*\*\*

☐ Additional Sheets Are Attached

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION APPLICATION FOR AIRWORTHINESS CERTIFICATE				INSTRUCTIONS—Print or type. Do not write in shaded areas; these are for FAA use only. Submit original only to an authorized FAA Representative. If additional space is required, use an attachment. For special flight permits complete Sections II and VI or VII as applicable.				
I. AIRCRAFT DESCRIPTION	1. REGISTRATION MARK <b>N732VP</b>	2. AIRCRAFT BUILDER'S NAME (make) <b>Cessna</b>	3. AIRCRAFT MODEL DESIGNATION <b>T210M</b>	4. YR. MFG. <b>1977</b>	5. FAA CODING <b>2073451</b>			
	5. AIRCRAFT SERIAL NO. <b>21061811</b>	6. ENGINE BUILDER'S NAME (make) <b>Continental</b>	7. ENGINE MODEL DESIGNATION <b>TS10-520-R</b>	8. AIRCRAFT WEIGHT <b>17040</b>				
	8. NUMBER OF ENGINES <b>One</b>	9. PROPELLER BUILDER'S NAME (make) <b>McCauley</b>	10. PROPELLER MODEL DESIGNATION <b>D3A34C402/90DFA-10</b>	11. AIRCRAFT IS: <input type="checkbox"/> EXPORT <input type="checkbox"/> IMPORT				
II. CERTIFICATION REQUESTED	APPLICATION IS HEREBY MADE FOR: (Check applicable items)							
	A <input checked="" type="checkbox"/> STANDARD AIRWORTHINESS CERT. (Indicate category) <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> UTILITY <input type="checkbox"/> ACROBATIC <input type="checkbox"/> TRANSPORT <input type="checkbox"/> GLIDER <input type="checkbox"/> BALLOON							
	B <input type="checkbox"/> SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)							
	2. LIMITED							
	5. PROVISIONAL (Indicate class)							
	3. RESTRICTED (Indicate operation(s) to be conducted)							
	4. EXPERIMENTAL (Indicate operation(s) to be conducted)							
	8. SPECIAL FLIGHT PERMIT (Indicate operation to be conducted then complete Section VI or VII as applicable on reverse side)							
	1. CLASS I							
	2. CLASS II							
III. OWNER'S CERTIFICATION	C <input checked="" type="checkbox"/> MULTIPLE AIRWORTHINESS CERTIFICATE (Check appropriate Restricted Operation and Standard or Limited as applicable above)							
	A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration)							
	NAME <b>Cessna Aircraft Company</b>			ADDRESS <b>5800 East Pawnee Road Wichita, Kansas 67201</b>				
	B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)							
	X AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Revision No.) <b>3A21 Rev. 27</b>			X AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) <b>77-03</b>				
	AIRCRAFT LISTING (Give page No(s).)			SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated)				
	C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS							
	X CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173			TOTAL AIRFRAME HOURS— <b>3.8</b>		3 EXPERIMENTAL ONLY—Enter hours flown since last certificate issued or renewed		
	D. CERTIFICATION—I hereby certify that I am the owner (or his agent) of the aircraft described above; that the aircraft is registered with the Federal Aviation Administration in accordance with Section 501 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations; and that the aircraft has been inspected and is airworthy and eligible for the airworthiness certificate requested.							
	DATE OF APPLICATION <b>2-25-77</b>		NAME AND TITLE (Print or type) <b>Gen. Mgr. William A. Boettger, Pawnee Div.</b>					
SIGNATURE <i>William A. Boettger</i>								
IV. INSPECTION AGENCY VERIFICATION	A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY: (Complete this section only if FAR 21.187(d) applies)							
	2 FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.)		3 CERTIFICATED MECHANIC (Give Certificate No.)		6 CERTIFICATED REPAIR STATION (Give Certificate No.)			
	5 AIRCRAFT MANUFACTURER (Give Name of Firm)							
	DATE _____ TITLE _____ SIGNATURE _____							
V. FAA REPRESENTATIVE CERTIFICATION	(Check ALL applicable blocks) I find that the aircraft described in Section I or VII meets the requirements for: <input checked="" type="checkbox"/> The certification requested, or <input type="checkbox"/> Amendment or modification of its current airworthiness certificate. Inspection for a special flight permit under Section VII was conducted by: <input type="checkbox"/> FAA Inspector; certificate holder under <input type="checkbox"/> FAR 65, <input type="checkbox"/> FAR 121 or 127, or <input type="checkbox"/> FAR 145.							
	DATE <b>4-9-77</b>		DISTRICT OFFICE <b>ICT EMDO 3-0-43</b>		DESIGNEE'S SIGNATURE AND NO. <i>Daniel L. Gobis</i> Cessna Aircraft Co., Pawnee Div. Designation Option Manufacturer, CE-1		FAA INSPECTOR'S SIGNATURE	

<b>VI. PRODUCTION FLIGHT TESTING</b>	<b>A. MANUFACTURER</b>		
	NAME		ADDRESS
	<b>B. PRODUCTION BASIS (Check applicable item)</b>		
	<input type="checkbox"/> PRODUCTION CERTIFICATE (Give production certificate number) <input type="checkbox"/> TYPE CERTIFICATE ONLY <input type="checkbox"/> APPROVED PRODUCTION INSPECTION SYSTEM		
<b>C. GIVE QUANTITY OF CERTIFICATES REQUIRED FOR OPERATING NEEDS:</b>			
DATE OF APPLICATION		NAME AND TITLE (Print or type)	SIGNATURE
<b>VII. SPECIAL FLIGHT PERMIT PURPOSES OTHER THAN PRODUCTION FLIGHT TEST</b>	<b>A. DESCRIPTION OF AIRCRAFT</b>		
	REGISTERED OWNER		ADDRESS
	BUILDER (Make)		MODEL
	SERIAL NUMBER		REGISTRATION MARK
	<b>B. DESCRIPTION OF FLIGHT</b>		
	FROM		TO
	VIA		DEPARTURE DATE      DURATION
	<b>C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT</b>		
	<input type="checkbox"/> PILOT <input type="checkbox"/> CO-PILOT <input type="checkbox"/> NAVIGATOR <input type="checkbox"/> OTHER (Specify)		
	<b>D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS:</b>		
	<b>E. THE FOLLOWING RESTRICTIONS ARE CONSIDERED NECESSARY FOR SAFE OPERATION (Use attachment if necessary)</b>		
<b>F. CERTIFICATION</b> —I hereby certify that I am the registered owner (or his agent) of the aircraft described above; that the aircraft is registered with the Federal Aviation Administration in accordance with Section 301 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations; and that the aircraft has been inspected and is airworthy for the flight described.			
DATE		NAME AND TITLE (Print or type)	SIGNATURE
<b>VIII. AIRWORTHINESS INFORMATION (FAA use only)</b>	<input checked="" type="checkbox"/>	A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable	G. Statement of Conformity, FAA Form 317 (Attach when required)
	<input type="checkbox"/>	B. Current Operating Limitations Attached	H. Foreign Airworthiness Certification for Import Aircraft (Attach when required)
	<input type="checkbox"/>	C. Data, Drawings, Photographs, etc. (Attach when required)	I. Previous Airworthiness Certificate Issued in Accordance with FAR _____ CAR _____ (Original attached)
	<input checked="" type="checkbox"/>	D. Current Weight and Balance Information Available in Aircraft	J. Current Airworthiness Certificate Issued in Accordance with FAR 21.183 (a) _____ (Copy attached)
	<input type="checkbox"/>	E. Major Repair and Alteration, FAA 337 (Attach when required)	
	<input checked="" type="checkbox"/>	F. This Inspection Recorded in Aircraft Records	

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION			
STANDARD AIRWORTHINESS CERTIFICATE			
1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N732VP	Cessna 421OM	21061811	Normal
5. AUTHORITY AND BASIS FOR ISSUANCE This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein. Exceptions:			
None			
6. TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or annulled, this certificate is valid for the period established by the Administrator, this airworthiness certificate is valid as long as the maintenance, preventive maintenance, and alterations are performed in accordance with Parts 23, 25, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER	
4-9-77	Daniel E. Goble	PC4	
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.			
FAA Form 8100-2 (7-67) FORMERLY FAA FORM 1362			



3.8