



US Department
of Transportation
Federal Aviation
Administration

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

Form Approved
OMB No. 2120-0020
11/30/2007

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 USA	N5216E	Serial No. 24-1658
	Make Mooney		Model M20J
2. Owner	Name (As shown on registration certificate) DOERING RUSSEL F		Address (As shown on registration certificate) Address 751 Silver Creek Dr
			City Leander State TX Zip 78641 Country USA

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		C. Certificate No.
Name	St. Cloud Aviation	<input type="checkbox"/>	U. S. Certificated Mechanic	BDKR393C
Address	1544 45th Avenue SE	<input type="checkbox"/>	Foreign Certificated Mechanic	
City	Saint Cloud State MN	<input checked="" type="checkbox"/>	Certificated Repair Station	
Zip	56304 Country USA	<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 August 10, 2017 James D Fairchild <i>James D Fairchild</i>
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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. BDKR393C	Signature/Date of Authorized Individual August 10, 2017 James D Fairchild <i>James D Fairchild</i>
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NOTICE

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

8. Description of Work Accomplished

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

USA N5216E

08/10/2017

Nationality and Registration Mark

Date

1. Removed the following:
 - A. Garmin GTX330 Transponder
 - B. Terra AT3000 Encoder
 - C. Il Morrow 428-2003 Encoder

2. Installed the following:
 - A. Garmin GTX345 ADS-B transponder
 - B. ACK A-30.9 Altitude Encoder

3. Installed the GTX345 in radio stack using provisions from the removed GTX330. Replaced existing coaxial cable and wired from existing antenna to the GTX345. The GTX345 gets GPS position information from a previously installed Garmin GNS530W. The GTX345 provides FIS-B weather and TIS-B traffic to the GNS530W and also through Bluetooth. The GTX345 gets altitude info from new A-30.9 digital encoder w/ RS-232 found under the panel. The GTX345 is wired to the avionics buss through a 7277-2 series Klixon breaker. The A-30.9 is mounted at the pilots side firewall in the same location as the removed 428-2003.

4. The GTX345 was installed IAW Garmin install manual p/n 190-00734-10 Rev. 8 and per STC SA01714W1. The A-30.9 was installed in accordance with ACK Technologies install manual p/n A30M Rev. 6 and meets FAA TSO C88a. All units were installed per AC43.13-1B chapters 4,7,10,11 and 12 and AC43.13-2B chapters 1,2,3 and 11.

5. Installed Garmin FAA approved Flight Manual Supplement GTX345 p/n 190-00734-15 Rev. 2 in the aircraft flight manual.

6. Included Garmin GTX345 instructions for continued airworthiness p/n 190-00734-11 Rev. 5 section 4, in the aircrafts maintenance records.

7. Performed Transponder, altimeter and encoder test as required by FARs 91.411, 91.413 and 91.217 and were found to be within the limits of FAR43 appendices E and F and AC43.6b.

8. As installed the GTX345 ADS-B OUT system meets the requirements of 14 CFR section 91.227.

9. The continuous electrical load does not exceed 80% of the charging system.

10. Updated the weight and balance and equipment list.

-----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 11/30/2007 Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 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 N5216E	Serial No. 24-1658	
	Make Mooney	Model M-20J	Series
2. Owner	Name (As shown on registration certificate) DOERING RUSSELL F	Address (As shown on registration certificate)	
		Address 3652 RIVER RD SE City CLEAR LAKE State MN Zip 55319 Country USA	

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		<i>(As described in item 1 above)</i>	
<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 STC Aviation Inc.		U.S. Certificated Mechanic	Manufacturer
Address 1544 45th Ave SE		Foreign Certificated Mechanic	C. Certificate No.
City St. Cloud State MN		<input checked="" type="checkbox"/> Certificated Repair Station	BDKR393C
Zip 56304 Country USA		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

Signature/Date of Authorized Individual

Dave Backes 12/28/2007

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	<input checked="" type="checkbox"/> Maintenance Organization	Person Approved by Canadian Department of Transport
	FAA Designee	<input checked="" type="checkbox"/> Repair Station	Inspection Authorization	Other (Specify)

Certificate or Designation No.

Signature/Date of Authorized Individual

BDKR393C

Dave Backes 12/28/2007

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.)

N5216E	12/28/2007
Nationality and Registration Mark	Date

1. Description:

Upgraded the GNS530 to a GNS530W according to STC SA01933LA. Installed a GA35 GPS antenna on top of the cabin. Reused the existing nav and com antenna systems. Enclosed is an FAA Approved Flight Manual Supplement Dated _____ . Certified the GNS530W for IFR enroute and for precision approaches.

Weight and balance negligible. The equipment list has been revised. The change in the electrical load does not exceed 80% of the charging system. The airplane has been test flown according to FAR 91.407 and is returned to service.

3. Instructions of Continued Airworthiness:

Included Garmin document p/n 190-00357-65 rev A for the GNS530W Instructions for Continued Airworthiness in the aircraft maintenance records. This supersedes ICA for the previously installed GNS530.

***** NOTHING FOLLOWS *****

Additional Sheets Are Attached



U.S. Department of Transportation
Federal Aviation Administration

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

RECEIVED
DEC 09 2003

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

MSP FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 USC 1055). 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 Mooney	Model M20J
	Serial No. 24-1658	Nationality and Registration Mark N5216E
2. Owner	Name (As shown on registration certificate) Russ Doering	Address (As shown on registration certificate) 3652 County Rd 8 Clear Lake MN 55319

3. For FAA Use Only
THE DATA IDENTIFIED HEREIN COMPLIES WITH APPLICABLE AIRWORTHINESS REQUIREMENTS AND IS APPROVED ONLY FOR THE ABOVE DESCRIBED AIRCRAFT SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN FAR 43.7.

12/10/03 *[Signature]* **MSP FSDO**

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	B. Kind of Agency	C. Certificate No.
STC Aviation Inc. 1544 45th Ave SE St. Cloud MN 56304	<input type="checkbox"/> U.S. Certificated Mechanic	BDKR393C
	<input type="checkbox"/> Foreign Certificated Mechanic	
	<input checked="" 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 12-30-03	Signature of Authorized Individual <i>[Signature]</i> Dave Backes
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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 12-30-03	Certificate or Designation No. B D142393C	Signature of Authorized Individual <i>[Signature]</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. Introduction:

Reference AC43.13-1B Chapter 11, Chapter, AC43.13-2A chapter 1 par.1 - thru 11, Chapter 2 par. 21 thru 27.

Manufacturer	Equipment	Description	Install Man P/N
Garmin	GTX330	Transponder Mode S	190-00207-02 rev E

2. Description: Installed the transponder in the radio stack. Removed a KT76A transponder. Reused the existing antenna system. Performed FAR's 91.411 and 91.413.

Weight and balance and the equipment list has been revised. The change in the electrical load does not exceed 80% of the charging system.

3. Control, operation information: Consult the appropriate manufacturer's operation manual.

4. Servicing information: N/A

5. Maintenance instructions: N/A

6. Trouble shooting information: N/A

7. Removal and replacement information: Consult the appropriate manufacturer's install manual.

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. For commuter category aircraft: N/A

14. Recommended overhaul periods: N/A

15. Airworthiness limitation 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. The FAA inspector accepts the change by signing Block 3 and including the following statement:

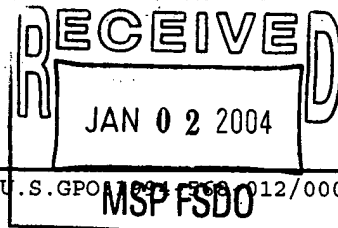
"The attached revised/new Instructions for Continued Airworthiness dated _____ for the above aircraft of component major alteration have been accepted by the FAA, superseding the Instructions for continued Airworthiness dated _____. Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, it's location, date of the Form 337."

16. Revision: A letter will be submitted to the local FSDO with a copy of the revised FAA form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement:

"The attached revised/new Instructions for Continued Airworthiness dated _____ for the above aircraft of component major alteration have been accepted by the FAA, superseding the Instructions for continued Airworthiness dated _____. Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, it's location, date of the Form 337."

***** NOTHING FOLLOWS *****

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

GL15

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 Mooney	Model M20J
	Serial No. 24-1658	Nationality and Registration Mark N5216E
2. Owner	Name (As shown on registration certificate) Russell F Doering	Address (As shown on registration certificate) 3652 Country Road 8 Clear Lake MN. 55319-9636

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	B. Kind of Agency	C. Certificate No.
David M Harper 1123 Campbell Ave. WILLMAR MN 56201	<input checked="" type="checkbox"/> U.S. Certificated Mechanic	480-62-8281
	<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 9-26-2002	Signature of Authorized Individual <i>David M Harper</i>	David M Harper
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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	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 9-26-2002		Certificate or Designation No. 480-62-8281 IA		Signature of Authorized Individual <i>David M Harper</i>	
				David M Harper	

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.)

N5216E M20J SN 24-1658

Installed STC SA5631SW Standby vacuum system in accordance with Aero Safe drawing list 820900 revision C dated 4-19-85 or later FAA approved revision.
Weight and Balance amended

END

***** NOTHING FOLLOWS *****:



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 C

Office Identification

MSP FSDO

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

1. Aircraft	Make Mooney	Model M20J
	Serial No. 24-1658	Nationality and Registration Mark N5216E
2. Owner	Name (As shown on registration certificate) Russell Doering	Address (As shown on registration certificate) 3652 County Rd 8 Clearlake MN 55319

3. For FAA Use Only

THE DATA IDENTIFIED HEREIN COMPLIES WITH APPLICABLE AIRWORTHINESS REQUIREMENTS AND IS APPROVED ONLY FOR THE ABOVE DESCRIBED AIRCRAFT SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN FAR 43.7.

6/18/02 Scott G. [Signature] **MSP FSDO**

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				

RECEIVED

AUG 08 2002

MSP FSDO

6. Conformity Statement

A. Agency's Name and Address STC Aviation Inc. 1544 45th Ave SE St. Cloud MN 56302	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. BDKR393C
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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 8-6-02	Signature of Authorized Individual <i>[Signature]</i> Dave Backes
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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 8-6-02		Certificate or Designation No. BDKR393C	Signature of Authorized Individual <i>[Signature]</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. Introduction:

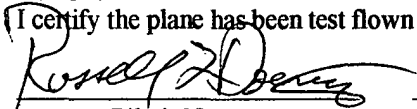
Reference AC43.13-1B Chapter 11, Chapter, AC43.13-2A chapter 1 par. 1 - thru 11, Chapter 2 par. 21 thru 27, AC20-138 and used STC SA00864WI for basis of the installation. The GPS has TSO-C129a Class A1.

Equipment	Description	Install Man P/N
GNS530	GPS/NAV/COM	190-00181-02 rev B

2. Description: Removed a KX155 nav/com and a GPS150XL. Installed a Garmin GNS530 GPS/NAV/COM in the radio stack. The GPS is wired to the HSI and the Century 2000 autopilot. The GPS antenna is mounted on top of the cabin. Enclosed is an FAA Flight Manual Supplement Dated 6-18-02. The system is certified for IFR enroute and Non-precision approaches.

Weight and balance and the equipment list has been revised. The change in the electrical load does not exceed 80% of the charging system.

I certify the plane has been test flown and meets the requirements of AC20-138 and FAR 91.407.



Pilot's Name

1988572

Certificate Number

8-6-02

Date

- 3. **Control, operation information:** Consult the appropriate manufacture's install/operators manual.
- 4. **Servicing information:** N/A
- 5. **Maintenance instructions:** N/A
- 6. **Trouble shooting information:** N/A
- 7. **Removal and replacement information:** Consult the appropriate manufacture's install manual.
- 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. **For commuter category aircraft:** N/A
- 14. **Recommended overhaul periods:** N/A
- 15. **Airworthiness limitation 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. The FAA inspector accepts the change by signing Block 3 and including the following statement:

"The attached revised/new Instructions for Continued Airworthiness dated _____ for the above aircraft of component major alteration have been accepted by the FAA, superseding the Instructions for continued Airworthiness dated _____. Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, it's location, date of the Form 337."

***** NOTHING FOLLOWS *****

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
ACE-FSDO-07
Wichita, KS *WRS*

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 MOONEY	Model M20J
	Serial No. 24-1658	Nationality and Registration Mark N5216E
2. Owner	Name (As shown on registration certificate) SANFORD COMPANY INC	Address (As shown on registration certificate) 820 N CYPRESS CT WICHITA KS 67206-4012

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	B. Kind of Agency	C. Certificate No.
CORY FRENCH 217 S FIFTH TOWANDA KS. 67144	<input checked="" type="checkbox"/> U.S. Certificated Mechanic	AP512621962
	<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 10-16-2000	Signature of Authorized Individual <i>Cory French</i>
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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				REJECTED		
BY	FAA Fit Standards Inspector	Manufacturer	X	Inspection Authorization	Other (Specify)	
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection 10-16-2000		Certificate or Designation No. IA512621962	Signature of Authorized Individual <i>Cory French</i>			

RECEIVED
 WICHITA FSDO
 OCT 16 PM 1:07



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

Form Approved
OMB No. 2120-0020
For FAA Use Only
Office Identification

ACE 07 WBL

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 MOONEY	Model M20J
	Serial No. 24-1658	Nationality and Registration Mark N5216E
2. Owner	Name (As shown on registration certificate) SANFORD COMPANY INC	Address (As shown on registration certificate) 820 N GYPRESS CT WICHITA KS 67206-4012

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				

WICHITA FSDO

00 OCT 16 PM 2:44

RECEIVED

6. Conformity Statement		
A. Agency's Name and Address AIRCRAFT RADIO SERVICE INC Augusta Municipal Airport 4800 W BEECH DR STE 5 AUGUSTA KS 67010-9385	B. Kind of Agency <input type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input checked="" type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. PL2R087L

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 13 OCTOBER 2000	Signature of Authorized Individual <i>Dennis L. Baier</i> DENNIS L. BAIER
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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 Flt. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)	
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection 13 OCTOBER 2000		Certificate or Designation No. PL2R087L	Signature of Authorized Individual <i>Dennis L. Baier</i> DENNIS L. BAIER		

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.)

The following Century 2000 Autopilot serial #2K-0059 was installed in this Aircraft using Install Kit AK967-2030 with no Form 337. All components of this System is shown on Weight And Balance dated 14 SEPT 1988.

Performed conformity check of this Autopilot using Century Bulletin #2040 and per STC SA34462SW-D. The Autopilot is connected to the Aircraft electrical buss thru a 5 amp circuit breaker. The Electric Trim System is connected to the Aircraft electrical buss thru a 3 amp circuit breaker switch. The HSI is connected to the Aircraft electrical buss thru a 3 amp circuit breaker.

TABLE OF COMPONENTS

<u>PART #</u>	<u>ITEM</u>	<u>SERIAL #</u>	<u>LOCATION INS.AFT OF DAWUM</u>
NSD360A	HSI	Did not remove.	11.25
IC948-2	NAV Switching Relay	56	.50
1B495	Flux Detector	H05295A	161.0
1D755	Slaving Adapter	912BR	117.85
23-1100-4A	26VAC Converter	None	117.25
1D937	A/P Computer	119	8.90
1B759-2	Disconnect Relay	233	6.25
1C784-880	Roll Servo	541	59.75
1C784-2-880	Pitch Servo	349	143.50
1C791-3-884	Trim Servo	195	135.75
1C707-1	NAV Converter	441	117.75
52D67M	Horizon	T7645A	17.46

Placed Flight Manual Supplement in POH.

-----END-----

Additional Sheets Are Attached

Supplemental Type Certificate



 Number SA8462SW-D
 THIS STC IS FOR
 Century Flight Systems, Inc.
 365 FRENCH ONLY.
 P.O. Box 610
 Mineral Wells, TX 76067
 ONLY ORIGINAL ISSUE
 CORPORATE SEALED
 STC COPY IS VALID
 FOR INSTALLATION

This certificate, issued to

certifies that the change in type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 3 of the Civil Air Regulations.

Original Product—Type Certificate Number: 2A3
 Make: MOONEY
 Model: M20F and M20J

Description of Type Design Change:

Installation of a Century Automatic Flight System, Model AK967 consisting of a Century 2010/2030/2031/2050/2051 Autopilot per Bulletin No. 2024, dated 04-03-87, Revision 6 dated 03-15-00 and Master Drawing List No. 87A1178, dated 04-03-87, Revision F dated 03-15-00 (14 Volt System) or later FAA/DAS Approved Revision.

Limitations and Conditions:

FAA/DAS Approved Supplement to Pilot's Operating Handbook and/or FAA/DAS Approved Airplane Flight Manual Supplements P/N 68s1004, dated 04-03-87 Rev. 4 dated 03-15-00 or later FAA/DAS Approved Revision and Century 2000 Autopilot Operator's Manual P/N 68S1035, dated 07-15-86 Revision dated 04-09-99 or later FAA Approved Revision.

STC SA00081SE Rocket Engineering Corp. IO-550A on Mooney M20J is compatible with but not required by this STC.

Compatibility of this modification with other previously approved modifications must be determined by the installer.

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

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

Date of application: 04-10-87

Date reissued:

Date of issuance: 04-27-87

Date amended: 01-04-93, 04-21-93 Rev. 2,
Rev. 3 03-15-00

By direction of the Administrator



William R. Watson

(Signature)

William R. Watson

DAS Staff Coordinator DAS 7 SW

(Title)

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

100

100



MAJOR REPAIR AND ALTERATION

(Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

ACE 27 Dec

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 MOONEY	Model M20J
	Serial No. 24-1658	Nationality and Registration Mark N5216E
2. Owner	Name (As shown on registration certificate) SANFORD COMPANY INC	Address (As shown on registration certificate) 820 N CYPRESS CT WICHITA KS 67206-4012

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					WICHITA FSDO
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address AIRCRAFT RADIO SERVICE INC Augusta Municipal Airport 4800 W BEECH DR STE 5 AUGUSTA KS 67010-9385	B. Kind of Agency <input type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input checked="" type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. <div style="text-align: center; font-size: 1.2em;">PL2R087L</div>
--	---	--

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 13 OCTOBER 2000	Signature of Authorized Individual <i>Dennis L. Baier</i> DENNIS L. BAIER
--------------------------------	--

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 FII. Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection 13 OCTOBER 2000		Certificate or Designation No. PL2R087L	Signature of Authorized Individual <i>Dennis L. Baier</i> DENNIS L. BAIER	

RECEIVED

OCT 16 PM 1:44

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.)

The following Equipment was installed in this Aircraft 14 SEPT 1988 with no Form 337. All of this equipment is shown on Weight And Balance Supplement dated 14 SEPT 1988.

Performed conformity check of existing King KN64, serial #16942, DME using King Installation Manual part #006-00144-0006. The KN64 is connected to the Aircraft electrical buss thru a 3 amp circuit breaker and is located 14.25 inches aft of datum. The KA 60 DME Antenna is located 69.0 inches aft of datum.

Performed conformity check of existing 3M 1000 Weather Mapping System per BF Goodrich Installation Manual part #78-8051-9150-5. The WX1000 Processor, serial #UXPO780050, is connected to the Aircraft electrical buss thru a 4 amp circuit breaker and located 125.7 inches aft of datum. The WX1000 Antenna, serial #UXAO7800050, is located 168.0 inches aft of datum. The WX1000 Display, serial #UXDO780050, is located 10.0 inches aft of datum.

Performed conformity check of existing Argus 5000, serial #1425, Moving Map per Argus Installation Manual part #5003. The Argus 5000 is connected to the Aircraft electrical buss thru a 2 amp fuse and is located 10.0 inches aft of datum.

-----END-----

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

For FAA Use Only

Office Identification
GA-FSDO-11 *PSB*

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 MOONEY	Model M20J
	Serial No. 24-1658	Nationality and Registration Mark N5216E
2. Owner	Name (As shown on registration certificate) WRONG BROTHERS AVAITION INC.	Address (As shown on registration certificate) PO BOX 447 BLOWING ROCK NC 28605

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				

RECEIVED
 MAR 9 1995
 GEORGIA FSDO
 ATLANTA, GA

6. Conformity Statement

A. Agency's Name and Address EPPS AVIATION # 1 AVIATION WAY DEKALB-PEACHTREE AIRPORT ATLANTA, GA. 30341	B. Kind of Agency <input type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input checked="" type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. ESMR688D
--	---	---------------------------------------

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 3-7-95	Signature of Authorized Individual <i>[Signature]</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 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 3-7-95		Certificate or Designation No. ESMR688D	Signature of Authorized Individual <i>[Signature]</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.)

INSTALLED BA-6210 FILTER ASSEMBLY IN ACCORDANCE WITH INSTALLATION INSTRUCTIONS BA-6206 DATED SEPTEMBER 12, 1997 OR LATER FAA APPROVED REVISION. NO WEIGHT AND BALANCE CHANGE.

END

Additional Sheets Are Attached

BRACKETT AIR FILTERS

INSTRUCTIONS

ASSEMBLY PART NO. BA-6210

APPROVED ON AIRCRAFT MODELS: SEE FAA APPROVED
APPLICABILITY LIST

FAA APPROVAL DATA: STC-SA71GL List No. 1
FAA-PMA Supplement No. 1

Your new polyurethane air filter element has been designed to give maximum dust collecting efficiency, good air flow, lightweight, and economical replacement. The element has been treated with a special treatment called a wetted agent and is approximately 98% efficient. The special wetted agent is the secret to the efficiency of capturing dust and repelling water. The element has also been treated with a fire retardant. For the above reasons, replace the element each 200 hours of use or every 12 months or when 50% covered with foreign material. DO NOT WASH AND REUSE.

INSTALLATION INSTRUCTIONS

- Step 1. Remove original air filter and discard.
- Step 2. Install filter assembly onto aircraft using the same procedure as original.
- Step 3. Remove element BA-6205 from plastic bag and install into frame assembly.
- Step 4. Fasten grill onto frame with the 2 AN3-23A bolts, making sure center bar on grill is under frame.
- Step 5. To replace future elements remove the grill with the 2 screws only.
- Step 6. NOTE: After initial installation of filter assembly fill out FAA Form 337 for return to service. On future replacement of parts this form will not be required.

SERVICING: Under normal conditions, replace filter element, PN BA-6205, after 200 hours use or 1 year intervals. Under severely dusty conditions, check daily and replace when element is 50% covered with foreign material.

Instruction Sheet
Part No. BA-6206
Date: Rev. 8-29-88

Mfg. by:
Brackett Aircraft Co., Inc.
Kingman, AZ

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Bureau Process No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION 02-22-93

NEI NE-PS00-01

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.

1. AIRCRAFT	MAKE Mooney	MODEL M20J
	SERIAL NO. 24-1658	NATIONALITY AND REGISTRATION MARK N5216E
2. OWNER	NAME (As shown on registration certificate) Wrong Brothers Aviation Inc.	ADDRESS (As shown on registration certificate) P.O. Box 447 Blowing Rock, NC 28605

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				XXX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS Edward J. Novak Jr. Shoreline Aviation Inc. Old Colony Lane Marshfield, MA 02050	B. KIND OF AGENCY		C. CERTIFICATE NO. A+P22445833
	<input checked="" type="checkbox"/>	U.S. CERTIFICATED MECHANIC	
	<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 of 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 02/10/93	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Edward J. Novak Jr.</i>
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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		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION 02/10/93	CERTIFICATE OR DESIGNATION NO. A+P22445833IA	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Edward J. Novak Jr.</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) Installed Jordan Hawley Engineering Inc, TKS De-icing system in accordance with installation manual no. 4600.INS and S.T.C. SA2367CE.
- 2) Installed F.A.A. Approved Flight Manual Revision in the Supplement section of the Pilot's operating handbook.
- 3) Operational check of the system was satisfactory as was the aircraft flight test.
- 4) Instrument panel was placarded with "FLIGHT INTO KNOWN ICING CONDITIONS IS PROHIBITED".
- 5) Aircraft equipment list and weight and balance were revised as required.

END

ADDITIONAL SHEETS ARE ATTACHED

 US 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	2. AIRCRAFT BUILDER'S NAME (Make)	3. AIRCRAFT MODEL DESIGNATION	FAA CODING		
	N5216E	Mooney Aircraft Corp.	M20J	5870219		
	4. AIRCRAFT SERIAL NO.	5. ENGINE BUILDER'S NAME (Make)	6. ENGINE MODEL DESIGNATION	41511		
	24-1658	Lycoming	I0-360-A3B6D			
7. NUMBER OF ENGINES	8. PROPELLER BUILDER'S NAME (Make)	9. PROPELLER MODEL DESIGNATION	10. AIRCRAFT IS (Check if applicable)			
One	McCauley	B2D34C214/90DHB-16E	IMPORT			
APPLICATION IS HEREBY MADE FOR: (Check applicable items)						
A <input checked="" type="checkbox"/> 1 STANDARD AIRWORTHINESS CERTIFICATE (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 SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)						
II. CERTIFICATION REQUESTED	2 LIMITED		1 CLASS I			
	5 PROVISIONAL (Indicate class)		2 CLASS II			
	3 RESTRICTED (Indicate operation(s) to be conducted)		1 AGRICULTURE AND PEST CONTROL	2 AERIAL SURVEYING	3 AERIAL ADVERTISING	
			4 FOREST (Wildlife conservation)	3 PATROLLING	6 WEATHER CONTROL	
			7 MARRIAGE OF CARGO	4 OTHER (Specify)		
	4 EXPERIMENTAL (Indicate operation(s) to be conducted)		1 RESEARCH AND DEVELOPMENT	2 AMATEUR BUILT	3 EXHIBITION	
			4 FACING	5 CREW TRAINING	MKT SURVEY	
			0 TO SHOW COMPLIANCE WITH FAR			
	8 SPECIAL FLIGHT PERMIT (Indicate operation to be conducted, then complete Section VI or VII as applicable on reverse side)		1 FERRY FLIGHT FOR REPAIRS, ALTERATIONS, MAINTENANCE OR STORAGE			
			2 EVACUATE FROM AREA OF IMPENDING DANGER			
		3 OPERATION IN EXCESS OF MAXIMUM CERTIFICATED TAKE-OFF WEIGHT				
		4 DELIVERING OR EXPORT	5 PRODUCTION FLIGHT TESTING			
		6 CUSTOMER DEMONSTRATION FLIGHTS				
C MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE "Restricted Operation" and "Standard" or "Limited," as applicable)						
A. REGISTERED OWNER (As shown on certificate of aircraft registration) IF DEALER, CHECK HERE <input checked="" type="checkbox"/>						
NAME Mooney Aircraft Corporation			ADDRESS P. O. Box 72, Kerrville, TX 78029			
B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)						
X AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.) 3-1-88 2A3 Preliminary			X AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) 88-10			
AIRCRAFT LISTING (Give page number(s)) N/A			SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated) N/A			
C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS						
X CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173		TOTAL AIRFRAME HOURS 3.2		EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed)		
D. CERTIFICATION — 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 507 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 7-12-88		NAME AND TITLE (Print or type) Robert A. Kromer, General Manager		SIGNATURE <i>Robert A. Kromer</i>		
IV. INSPECTION AGENCY VERIFICATION						
A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY: (Complete this section only if FAR 21.183(d) applies)						
2 FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.)		3 CERTIFICATED MECHANIC (Give Certificate No.)		4 CERTIFICATED REPAIR STATION (Give Certificate No.)		
5 AIRCRAFT MANUFACTURER (Give name of firm)						
DATE		TITLE		SIGNATURE		
V. FAA REPRESENTATIVE CERTIFICATION						
(Check ALL applicable blocks in items A and B)						
A. I find that the aircraft described in Section I or VII meets requirements for:			X THE CERTIFICATE REQUESTED			
			4 AMENDMENT OR MODIFICATION OF CURRENT AIRWORTHINESS CERTIFICATE			
B. Inspection for a special flight permit under Section VII was conducted by:						
DATE		DISTRICT OFFICE		FAA INSPECTOR'S SIGNATURE		
7-12-88		SW MIDO 43		FAA INSPECTOR CERTIFICATE HOLDER UNDER: FAR 65, FAR 121, 127 or 135, FAR 145 <i>Jacob A. Schmidt</i> Jacob A. Schmidt DMIR SW-6034		

VI. PRODUCTION FLIGHT TESTING	A. MANUFACTURER	
	NAME	ADDRESS
	B. PRODUCTION BASIS (Check applicable item)	
	<input type="checkbox"/> PRODUCTION CERTIFICATE (Give production certificate number) <input type="checkbox"/> TYPE CERTIFICATE ONLY <input type="checkbox"/> APPROVED PRODUCTION INSPECTION SYSTEM	
C. GIVE QUANTITY OF CERTIFICATES REQUIRED FOR OPERATING NEEDS		
DATE OF APPLICATION	NAME AND TITLE (Print or type)	SIGNATURE
VII. SPECIAL FLIGHT PERMIT PURPOSES OTHER THAN PRODUCTION FLIGHT TEST	A. DESCRIPTION OF AIRCRAFT	
	REGISTERED OWNER	ADDRESS
	BUILDER (Make)	MODEL
	SERIAL NUMBER	REGISTRATION MARK
	B. DESCRIPTION OF FLIGHT	
	FROM	TO
	VIA	DEPARTURE DATE
		DURATION
	C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT	
	<input type="checkbox"/> PILOT	<input type="checkbox"/> CO-PILOT
<input type="checkbox"/> OTHER (Specify)		
D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS:		
3-1-89 370 DESTROYED		
E. THE FOLLOWING RESTRICTIONS ARE CONSIDERED NECESSARY FOR SAFE OPERATION (Use attachment if necessary)		
...		
F. CERTIFICATION — 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 501 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
VIII. AIRWORTHINESS DOCUMENTATION (FAA use only)	<input checked="" type="checkbox"/> A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable	<input checked="" type="checkbox"/> G. Statement of Conformity, FAA Form 8130-9 (Attach when required)
	<input type="checkbox"/> B. Current Operating Limitations Attached	<input type="checkbox"/> H. Foreign Airworthiness Certification for Import Aircraft (Attach when required)
	<input type="checkbox"/> C. Data, Drawings, Photographs, etc (Attach when required)	<input type="checkbox"/> 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	<input type="checkbox"/> J. Current Airworthiness Certificate Issued in Accordance with FAR _____ (Copy attached)
	<input type="checkbox"/> E. Major Repair and Alteration, FAA Form 337 (Attach when required)	
	<input checked="" type="checkbox"/> F. This Inspection Recorded in Aircraft Records	

copy

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS N5216E	2. MANUFACTURER AND MODEL MOONEY Aircraft Corp.	3. AIRCRAFT SERIAL NUMBER 24-1658	4. CATEGORY 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 a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Part 23, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE 7-12-88	FAA REPRESENTATIVE Jacob A. Schmidt	DESIGNATION NUMBER DMTR SW-6034	

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

U.S. Government Printing Office - 1984-5-528

Not Subject to OMB Clearance

UNITED STATES OF AMERICA
 DEPARTMENT OF TRANSPORTATION
 FEDERAL AVIATION ADMINISTRATION
STATEMENT OF CONFORMITY

SECTION I - AIRCRAFT

1. MAKE Mooney Aircraft Corporation	2. MODEL M20J
3. SERIAL NO. 24-1658	4. REGISTRATION NO. N5216E

SECTION II - ENGINE

1. MAKE	2. MODEL
3. SERIAL NO.	

SECTION III - PROPELLER

1. MAKE	2. HUB MODEL
3. BLADE MODEL	4. HUB SERIAL NO.
5. BLADE SERIAL NOS.	

SECTION IV - CERTIFICATION

I hereby certify that:

A. I have complied with Section 21.33(a).

B. The aircraft described above, produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate, is in a condition for safe operation, and was flight checked on 7-1-88 (Date)

C. The engine or propeller described above, presented herewith for type certification, conforms to the type design therefor.

D. The engine or propeller described above produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate and is in a condition for safe operation. The engine or, if applicable, the variable pitch propeller was subjected by the manufacturer to a final operational check on _____ (Date)

Deviations: **None**

SIGNATURE OF CERTIFIER Robert A. Kromer <i>Robert A. Kromer</i>	TITLE General Manager
ORGANIZATION Mooney Aircraft Corporation	DATE 7-12-88

CONTINUA DO ESTE TITULO
REPEATS PART NO TWENTY TWO
RENTAS INHICA NOTAMAUJARECOY
INSTRUCTIONS

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

1. By the applicant for a type certificate or a supplemental type certificate at the time he presents an aircraft or parts thereof to the FAA for tests.
2. By the applicant for a type certificate or a supplemental type certificate for each engine or propeller submitted for type certification.
3. By the type certificate holder or licensee manufacturing products under a type certificate only, upon the initial transfer by him of the ownership of each product or upon application for the original issue of an aircraft airworthiness certificate, or an Airworthiness Approval Tag (FAA Form 8130-3).

This form should be completed as follows:

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

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

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

Section IV. Certification.

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

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

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

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

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

22-0-7