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: N280MB	Serial No.: 3255	
	Make: Twin Commander	Model: 500S	Series: 500
2. Owner	Name *(As shown on registration certificate)*: AeroMetric, Inc.	Address *(As shown on registration certificate)*: Address 4020 Technology Parkway; City Sheboygan; State WI; Zip 53083; Country USA	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☑	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address
Name: Robert S Ringel
Address: 1620 Cambridge Avenue
City: Sheboygan State: WI
Zip: 53081 Country: USA

B. Kind of Agency
- ☑ U. S. Certificated Mechanic
- ☐ Foreign Certificated Mechanic
- ☐ Certificated Repair Station
- ☐ Certificated Maintenance Organization
- ☐ Manufacturer

C. Certificate No.: A&P 2722551 IA

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: Robert S Ringel 11/26/12

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
- ☐ FAA Designee
- ☐ Manufacturer
- ☐ Repair Station
- ☐ Maintenance Organization
- ☑ Inspection Authorization
- ☐ Persons Approved by Canadian Department of Transport
- Other *(Specify)*

Certificate or Designation No.: A&P 2722551 IA

Signature/Date of Authorized Individual: Robert S Ringel 11/26/12

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.)

N280MB	11/26/12
Nationality and Registration Mark	Date

This aircraft has an existing modification for a camera installation. The modification includes two viewports cut into the lower portion of the fuselage and the associated structural reinforcement. The installation is previously approved via STC SA1332SW and FAA Form 337 dated May 7, 1984. This report will substantiate the four equipment installations currently being used in the aircraft. Attached is FAA Form 8110-3 statement of compliance, "Shrike Commander Camera Installations, drawings AM-SC-1000, dated 11/25/12." And "Stress Report Shrike Commander Camera installations Report AM-SC-1000SR, dated 11/25/12." System and installations shall be inspected for conformity to the installation drawings, condition and security of installation to coincide with regularly scheduled maintenance events. No special Instructions for Continued Airworthiness apply.

---------- END ----------

☐ Additional Sheets Are Attached

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: November 25, 2012

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Twin Commander	500-S	Airplane	Aerometric Inc

LIST OF DATA

IDENTIFICATION	TITLE
Drawings: AM-SC-1000, Rev - Dated 11/25/12	Strike Commander Instls
Reports: AM-SC-1000SR, Rev - Dated 11/25/12	Stress Report Strike Commander Camera Installations
	NOTES: 1. This approval is for structural aspects only and is only for the engineering design data, not installation approval.

PURPOSE OF DATA

In support of a major alteration to Twin Commander 500-S S/N 3255

APPLICABLE REQUIREMENTS *(List specific sections)*

FAA CAR Part 3, Amendment 1 through 4 per TCDS 6A1 Rev. 46,
Paragraphs 3.171, 3.172, 3.173, 3.174, 3.181, 3.182, 3.183, 3.184, 3.186, 3.188, 3.291, 3.292, 3.293, 3.294, 3.295, 3.296, 3.301, 3.302, 3.305, 3.306, 3.386

CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with conditions and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed above and on attached sheets numbered none have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I (We) Therefore
- [ ] Recommend approval of these data
- [x] Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
John X. Schober Jr.	DERT-410129-CE	Structures

AM-SC-1000SR

Stress Report
Shrike Commander Camera Installations

Rev -
Date: 11/25/12

Prepared By: _____
John X. Schober Jr
Structural DER

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2 Scope

This report will analyze various camera and equipment installations into a Shrike Commander aircraft. The aircraft is a Rockwell International model 500S, serial number 3255. The aircraft has an existing modification for camera installations. The modification includes two viewports cut into the lower portion of the fuselage and the associated structural reinforcement. The installation of the camera holes are previously approved via a STC.

This report will substantiate the seven equipment installation combinations currently being used on the aircraft. There are four different systems. Each system will be examined independently.

3 References

MMPDS, Metallic Materials Properties Development and Standardization
Rourks Equations for Stress and Strain 7th edition
TCDS 6A1 Twin Commander Model 500S
CAR3,
CFR23

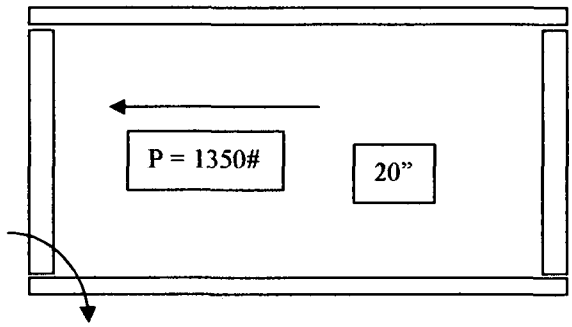
4 Structural Substantiation AM-SC-1000, Shrike Commander Camera Installations

4.1 -15 Forward Equipment Rack

The forward equipment rack is a 4130 steel weldment. It is made up of 1.0" x 0.125" tube. The weldment is attached to the existing seat tracks with angles that clamp onto the seat tracks at four locations. The angles are attached to the rack with two AN4 bolts each. The equipment rack is used for various installations. Therefore a conservative analysis will use a total weight of 150 lbs.

Check weldment

The total loading of 150 lbs will be critical for the 9G forward loading. The load will be reacted at the welds as a moment. Assume that the load is applied to the rack at ¾ of the height of the rack.



Free Body Diagram; Forward Equipment Rack

P = 100 #(9G) = 1350 lbs
H = 25"(3/4) = 20 in
The moment is reacted by all four of the legs of the rack

M = PH = 1350#(20")/4 = 6750 in-lb

Applied stress = Mc/I

C = 1.0"/2 = 0.5 in
$I = (1/12)(1.^4-(1.-2(0.125))^4) = 0.057$

Applied Stress = 6750(0.5)/0.057 = 11,842 psi

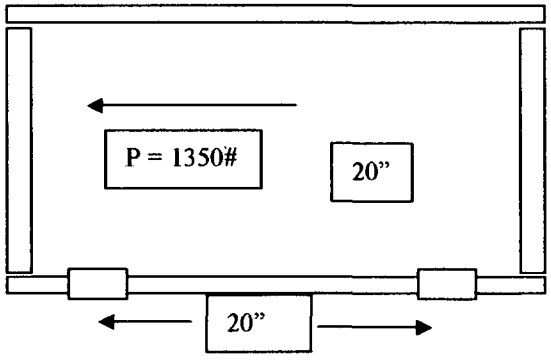
Conservatively assume the allowable Ftu is for annealed 4130, since the welding is after heat treatment.

Ftu = 95 ksi MMPDS

MS = 95,000 / 11,589 - 1 = **+High**

Check Attachment Angles

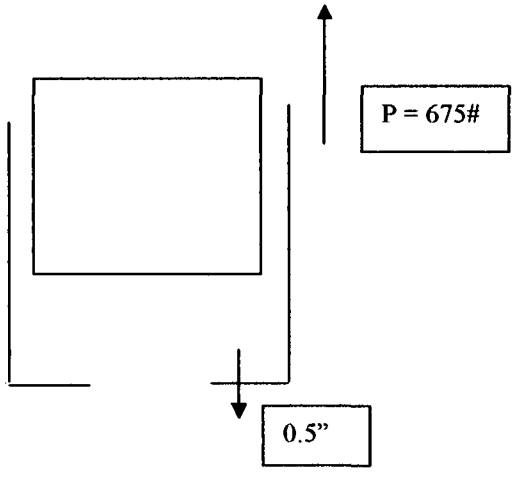
The rack is attached at four locations with angles that clamp onto the existing seat tracks. Each of the angles are attached with two AN4 fasteners. The angles are 0.10" 4130. The angles will react the load in bending. The load applied to the angle is derived from a moment/couple. The angles are 3.0" long.



Free Body Diagram; Equipment Rack With Angles

Each location has two angles

P = 1350# (20")/(20")(2) = 675 lbs



Free Body Diagram; Seat Track Angles

M = 675#(0.5") = 338 in-lb
C = 0.10"/2 = 0.05"
I = (1/12)(bh^3) = 3.0(0.10^3)/12 = 0.00025
Mc/I = 338(0.05)/0.00025 = 67,500 psi
Ftu = 95 ksi MMPDS

MS = 95/68 -1 = **+0.41**

Check Fasteners

Each location has two AN4 fasteners. The fasteners will react the loading in shear.

P = 1350# (20")/(20")(2) = 675 lbs

Pallow = 3,680 lbs AN4 specification sheet

MS = 3680/675 -1 = **High**

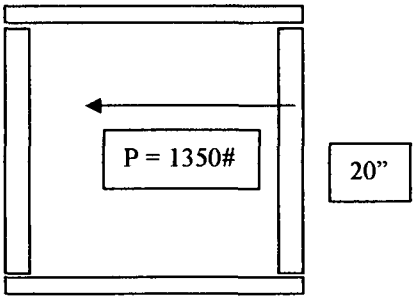
Therefore this engineering is acceptable.

4.2 -17 Aft Baggage Equipment Rack

The Aft Baggage equipment rack is a 6061T6 aluminum weldment. It is made up of 1.5" x 0.125" angles and plates. The rack is attached to the existing baggage floor with 25 0.3125 diameter screws. The equipment rack is used for various installations. Therefore a conservative analysis will use a total weight of 150 lbs.

Check attachment to the fuselage

The total loading of 150 lbs will be critical for the 9G forward loading. The load will be reacted evenly in shear by all fasteners. The kick load will be reacted by the forward and aft fasteners as a moment/couple. The aft 10 fasteners are critical for shear and tension. Assume the center of gravity is 20". The depth of the rack is 24"..



Free Body Diagram; aft baggage Equipment Rack

P = 100 #(9G) = 1350 lbs
H = 20" in

Applied load
Shear = 1350#/25 fast = 54 lbs
Tension = 1350# (20"/24" * 10 fast) = 112.5 lbs

Allowable load

Shear = 2700 lbs
Tension = 3600 lbs

MS = High

4.3 AM-SC-1000-01, Optec Gemini LiDAR Installation

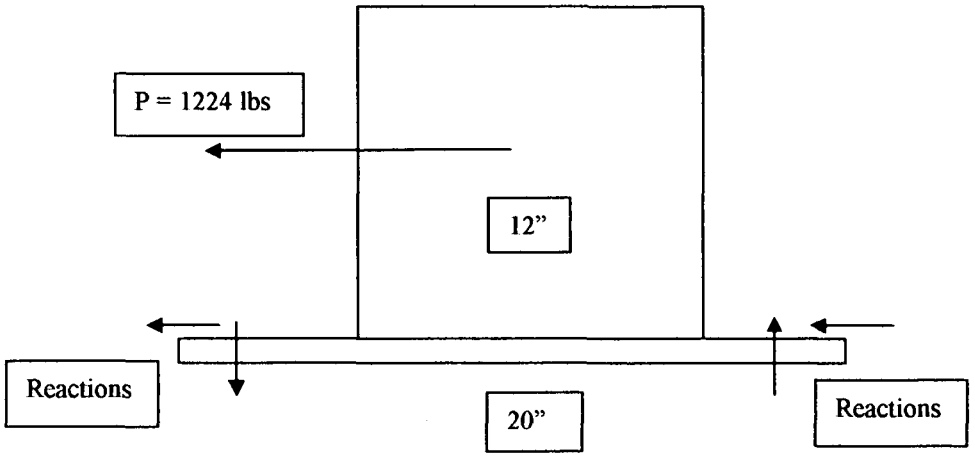
This engineering installs the camera and support equipment for an Optec Gemini LiDAR system. The installation consists of the -11 Forward Equipment Rack, LiDAR camera, and control box.

4.3.1 LiDAR Camera Installation

The LiDAR Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 136 lbs. The bolts will react the forward loading in shear split between the four attachments. The kick load will be reacted as a moment/couple. The aft attachments will be critical for shear and tension.

P = 136#(9G) = 1224 lbs

Height of the center of gravity is assumed to be 12 in



Free Body Diagram; LiDAR Camera Installation

Applied loading
Pshear = 136#(9G)/4 fast = 306 lbs
Ptension = 136#(9G)(12")/(20"*2fast) = 367 lbs

Allowable Loading
Pshear = 6,500 lbs
Ptension = 5,750 lbs

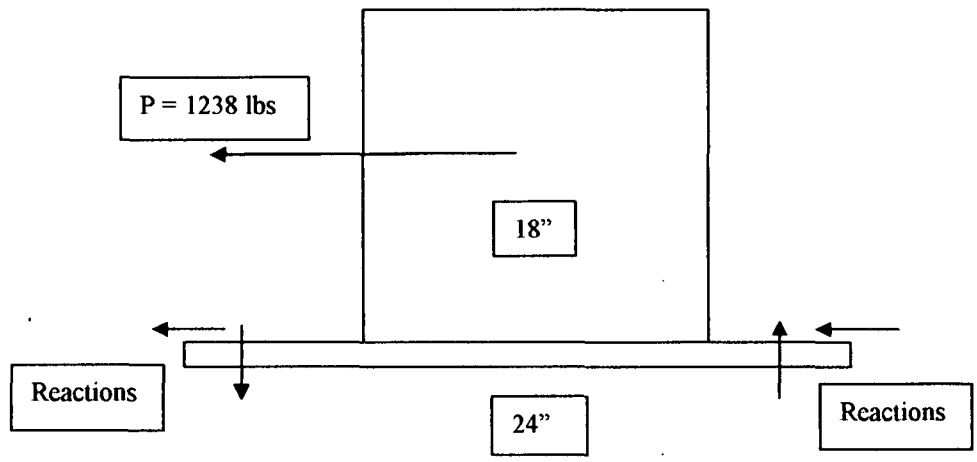
MS = **High**

4.3.2 LiDAR Control Box Installation

The LiDAR Control Box and its assembly is installed with four AN4 fasteners. The total weight of the unit is 137.5 lbs. The bolts will react the forward loading in shear split between the four attachments. The kick load will be reacted as a moment/couple. The aft attachments will be critical for shear and tension.

P = 137.5#(9G) = 1238 lbs

Height of the center of gravity is assumed to be 18 in



Free Body Diagram; LiDAR Camera Installation

Applied loading
Pshear = 137.5#(9G)/4 fast = 309 lbs
Ptension = 137.5#(9G)(18")/(24"*2fast) = 929 lbs

Allowable Loading
Pshear = 3,680 lbs
Ptension = 4,800 lbs

$$MS = \frac{1}{\sqrt{R_{shear}^2 + R_{tension}^2}} - 1 = \frac{1}{\sqrt{\left(\frac{309lbs}{3680lbs}\right)^2 + \left(\frac{929lbs}{4800lbs}\right)^2}} - 1 = +3.739$$

Therefore this engineering is acceptable.

4.4 AM-PN-1000-03, RMK Top 15 Film Camera Installation

This engineering installs the camera and support equipment for an RMK Top 15 Film Camera system. The installation consists of the -11 Forward Equipment Rack, camera, and -13 Aft Equipment Rack.

4.4.1 -15 Forward Equipment Rack

The forward equipment rack is acceptable per the analysis above. This installation carries a total weight of 69 lbs and the analysis above uses a total weight of 150 lbs.

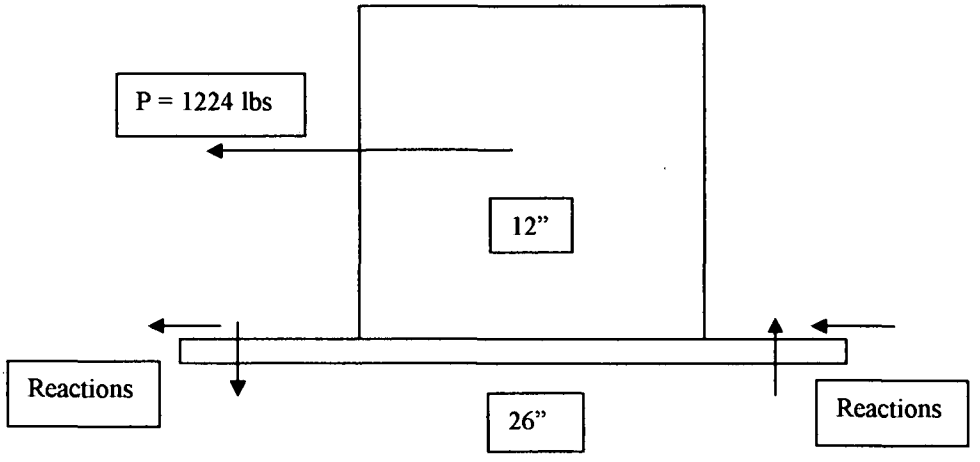
MS = 150/60 – 1 = **+1.5**

4.4.2 RMK Top 15 Film Camera Installation

The RMK Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 48 lbs. The bolts will react the forward loading in shear split between the four attachments. The kick load will be reacted as a moment/couple. The aft attachments will be critical for shear and tension.

P = 136#(9G) = 1224 lbs

Height of the center of gravity is assumed to be 12 in



Free Body Diagram; LiDAR Camera Installation

Applied loading
Pshear = 136#(9G)/4 fast = 306 lbs
Ptension = 136#(9G)(12")/(26"*2fast) = 282 lbs

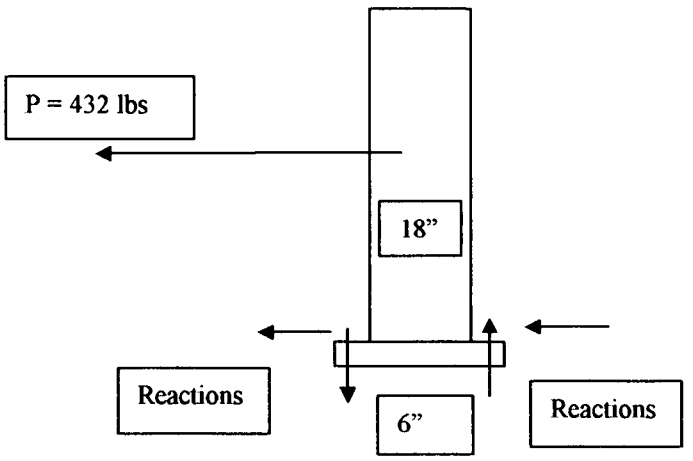
Allowable Loading
Pshear = 6,500 lbs
Ptension = 5,750 lbs

MS = **High**

4.4.3 T-NT Scope Installation

The T-NT Scope is attached to the existing fastener locations with four AN4 bolts each. The equipment weighs a total of 48 lbs and is 36 inches tall. The inertial loading is critical 9G forward loading. The fasteners will equally react the shear loading. The kick load will be reacted as a moment / couple. The aft fasteners will be critical for shear and tension.

P = 48#(9G) = 432 lbs



Freebody diagram T-NT Scope

Applied loading
Pshear = 48#(9G)/4 fast = 108 lbs
Ptension = 48#(9G)(18")/(6"*2fast) = 648 lbs

Allowable Loading
Pshear = 3,680 lbs
Ptension = 4,800 lbs

$$MS = \frac{1}{\sqrt{R_{shear}^2 + R_{tension}^2}} - 1 = \frac{1}{\sqrt{\left(\frac{108lbs}{3680lbs}\right)^2 + \left(\frac{648lbs}{4800lbs}\right)^2}} - 1 = +6.24$$

Therefore this engineering is acceptable.

4.5 AM-PN-1000-05, DMC Digital Mapping Camera Z/I Installation

This engineering installs the camera and support equipment for an DMC Digital Mapping Camera system. The installation consists of the -11 Forward Equipment Rack, camera, and -13 Aft Equipment Rack.

4.5.1 -15 Forward Equipment Rack

The forward equipment rack is acceptable per the analysis above. This installation carries a total weight of 80 lbs and the analysis uses a total weight of 150 lbs.

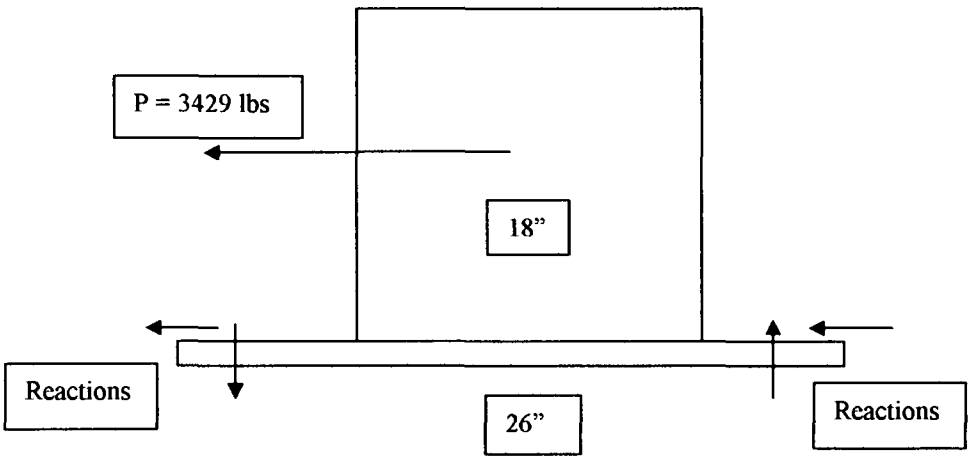
MS = 150/80 – 1 = **+0.88**

4.5.2 DMC Digital Mapping Camera Installation

The DMC Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 381 lbs. The bolts will react the forward loading in shear split between the four attachments. The kick load will be reacted as a moment/couple. The aft attachments will be critical for shear and tension.

P = 381#(9G) = 3429 lbs

Height of the center of gravity is assumed to be 18 in



Free Body Diagram; LiDAR Camera Installation

Applied loading

Pshear = 381#(9G)/4 fast = 857 lbs

Ptension = 381#(9G)(18")/(26"*2fast) = 1187 lbs

Allowable Loading

Pshear = 6,500 lbs

Ptension = 5,750 lbs

$$MS = \frac{1}{\sqrt{R_{Shear}^2 + R_{Tension}^2}} - 1 = \frac{1}{\sqrt{\left(\frac{857lbs}{6500lbs}\right)^2 + \left(\frac{1187lbs}{5750lbs}\right)^2}} - 1 = +3.082$$

4.6 AM-PN-1000-07, Gemini LiDAR Install With Partial RMK Top Film Camera

This engineering installs the camera and support equipment for an Optec Gemini LiDAR system and a RMK Top Film Camera. The installation consists of the -11 Forward Equipment Rack, LiDAR camera, TAS Camera and baggage compartment equipment rack.

4.6.1 -15 Forward Equipment Rack

The forward equipment rack is acceptable per the analysis above. This installation carries a total weight of 50 lbs and the analysis uses a total weight of 150 lbs.

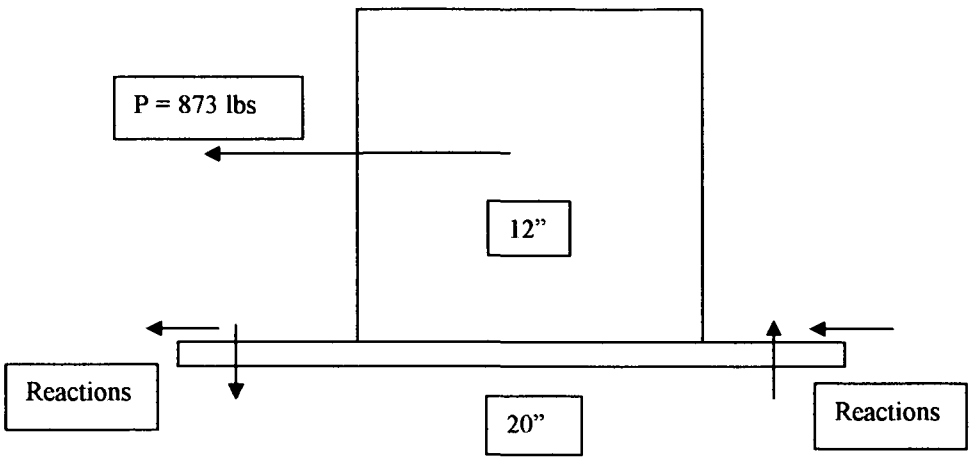
MS = 150/50 – 1 = **+2.0**

4.6.2 LiDAR Camera Installation

The LiDAR Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 97 lbs. The bolts will react the forward loading in shear split between the four attachments. The kick load will be reacted as a moment/couple. The aft attachments will be critical for shear and tension.

P = 97#(9G) = 873 lbs

Height of the center of gravity is assumed to be 12 in



Free Body Diagram; LiDAR Camera Installation

Applied loading

Pshear = 97#(9G)/4 fast = 218 lbs

Ptension = 97#(9G)(12")/(20"*2fast) = 262 lbs

Allowable Loading

Pshear = 6,500 lbs

Ptension = 5,750 lbs

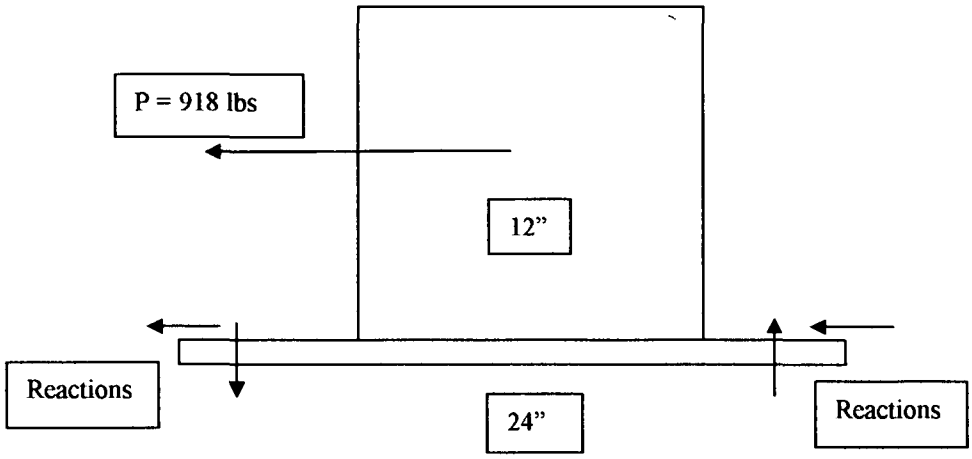
MS = **High**

4.6.3 RMK Camera Installation

The RMK Camera and its assembly is installed with four AN4 fasteners. The total weight of the unit is 102 lbs. The bolts will react the forward loading in shear split between the four attachments. The kick load will be reacted as a moment/couple. The aft attachments will be critical for shear and tension.

P = 102#(9G) = 918 lbs

Height of the center of gravity is assumed to be 18 in



Free Body Diagram; LiDAR Camera Installation

Applied loading

Pshear = 102#(9G)/4 fast = 230 lbs

Ptension = 102#(9G)(12")/(24"*2fast) = 230 lbs

Allowable Loading

Pshear = 3,680 lbs

Ptension = 4,800 lbs

MS = +High

Therefore this engineering is acceptable.

4.7 AM-PN-1000-09, RMK TOP Install With Partial Gemini LiDAR

This engineering installs the camera and support equipment for an Optec Gemini LiDAR system. The installation consists of the -11 Forward Equipment Rack, LiDAR camera, and control box.

4.7.1 -15 Forward Equipment Rack

The forward equipment rack is acceptable per the analysis above. This installation carries a total weight of 51 lbs and the analysis uses a total weight of 100 lbs.

MS = 100/51 – 1 = **+0.96**

4.7.2 LiDAR Camera Installation

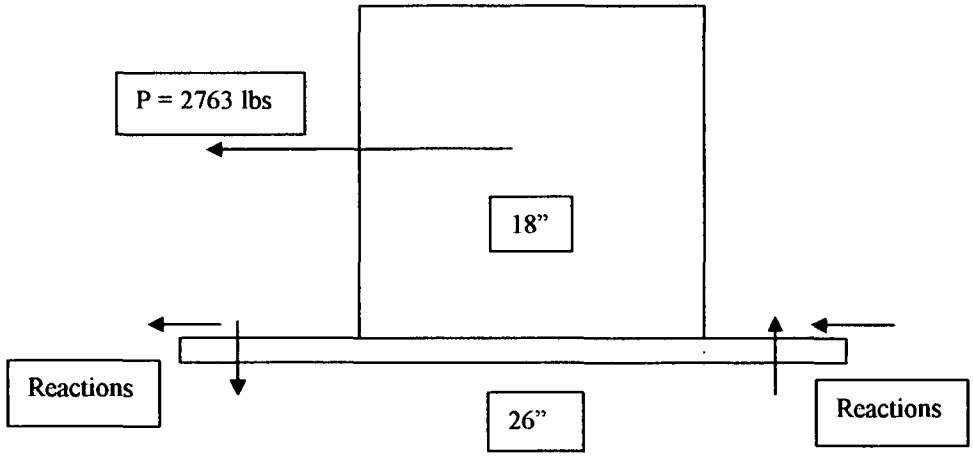
The LiDAR Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 97 lbs. The installation is the same as within the -07 installation above.

4.7.3 RMK TOP Camera Installation

The RMK (TAS) Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 307 lbs. The bolts will react the forward loading in shear split between the four attachments. The kick load will be reacted as a moment/couple. The aft attachments will be critical for shear and tension.

P = 307#(9G) = 2763 lbs

Height of the center of gravity is assumed to be 18 in



Free Body Diagram; LiDAR Camera Installation

Applied loading

Pshear = 307#(9G)/4 fast = 691 lbs

Ptension = 307#(9G)(18")/(26"*2fast) = 956 lbs

Allowable Loading
Pshear = 6,500 lbs
Ptension = 5,750 lbs

$$MS = \frac{1}{\sqrt{R_{Shear}^2 + R_{Tension}^2}} - 1 = \frac{1}{\sqrt{\left(\frac{691lbs}{6500lbs}\right)^2 + \left(\frac{956lbs}{5750lbs}\right)^2}} - 1 = +3.082$$

4.8 AM-PN-1000-11, DMC Install With RMK TOP

This engineering installs the camera and support equipment for an DMC system and a RMK Top Film Camera. The installation consists of the -11 Forward Equipment Rack, DMC camera, TAS Camera and baggage compartment equipment rack.

4.8.1 -15 Forward Equipment Rack

The forward equipment rack is acceptable per the analysis above. This installation carries a total weight of 80 lbs and the analysis uses a total weight of 150 lbs.
MS = 150/80 – 1 = **+0.96**

4.8.2 TAS Camera Installation

The TAS Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 97 lbs. The installation is the same as within the -09 installation above.

4.8.3 DMC Camera Installation

The RMK (TAS) Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 307 lbs. The installation is the same as the -05 installation above.

4.9 AM-PN-1000-13, RMK TOP Install With Partial DMC

This engineering installs the camera and support equipment for an DMC system and a RMK Top Film Camera. The installation consists of the -11 Forward Equipment Rack, DMC camera, TAS Camera and baggage compartment equipment rack.

4.9.1 -15 Forward Equipment Rack

The forward equipment rack is acceptable per the analysis above. This installation carries a total weight of 80 lbs and the analysis uses a total weight of 150 lbs.

MS = 150/80 – 1 = **+0.96**

4.9.2 TAS Camera Installation

The TAS Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 97 lbs. The installation is the same as within the -09 installation above.

4.9.3 DMC Camera Installation

The RMK (TAS) Camera and its assembly are installed with four AN5 fasteners. The total weight of the unit is 307 lbs. The installation is the same as the -05 installation above.

5 Conclusion

This engineering is acceptable for all loading applications. The designs comply with the appropriate design, construction and structural strength requirements imposed by the aircraft's certification basis.

REVISION	DESCRIPTION	RELEASED BY	DAT
—	INITIAL RELEASE	[signature]	11/2

NOTES: UNLESS OTHERWISE SPECIFIED

1. MAINTAIN MINIMUM 3X DIA EDGE DISTANCE AND 4X DIA PITCH MINIMUM FOR ALL FASTENER LOCATIONS UNLESS OTHERWISE NOTED.
2. INSTALL ELECTRICAL EQUIPMENT WITH MANUFACTURER RECOMMENDED HARDWARE UNLESS OTHERWISE NOTED.

-13	-11	-09	-07	-05	-03	-01	PART NO.	NOMENCLATURE	MATERIAL/COMM SPEC	MATERIAL SPEC	STOCK SIZE	PROCESS CODE	FINISH CODE
AR			AR			AR	AN5	BOLT					
AR	AR	AR	AR	AR	AR	AR	AN4	BOLT					
	AR	AR		AR	AR		AN3	BOLT					
1	1			1				Z() INFLIGHT CONTROLER BOX)					
1	1			1				SSD CARTRIDGE					
1								Z() POWER DISTRIBUTION BOX)					
1	1			1				Z() MOUNT WITH ADAPTOR RING)					
1	1							DMC MOUNTING PLATE					
1	1			1				CEU CAMERA ELECTRONIC UNIT					
1	1			1				CEU CAMERA BASE UNIT					
1	1			1				OPERATOR DISPLAY					
		AR			AR			FILTER & TOOL KIT					
		1			1			T-CU CONTROL UNIT					
		1			1			T-MC FILM MAGAZINE					
AR	AR	AR	AR	AR	AR			CABLES					
	1	1	1		1			T-4S MOUNT					
	1	1	1		1			RMX CAMERA LENS					
		1			1			TRIMBLE GPS					
1	1	1	1		1			POWER DISTRIBUTION BOX					
	1	1	1	1	1			PCS POS/VS					
						1		LIDAR CONTROL BOX MOUNTING BRACKETS					
						1		LIDAR CONTROL BOX					
						1		LIDAR HUB					
		1	1			1		LIDAR HEAD WITH INSULATOR JACKET					
1	1	1	1	1	1			PC16 CONVERTER					
1		1	1		1	1		LAP TOP COMPUTER					
		1	1				-17	AFT BAGGAGE EQUIPMENT RACK					
1	1	1	1	1	1		-15	FRONT EQUIPMENT RACK					
							-13	RMX TOP W/ PARTIAL DMC					
							-11	DMC INSTL W/ PARTIAL RMX TOP					
							-09	RMX TOP INSTL W/ PARTIAL GEMINI LIDAR					
							-07	GEMINI LIDAR INSTALLATION W/ PARTIAL RMX TOP FILM CAMERA					
							-05	DMC DIGITAL MAPPING CAMERA 2/1					
							-03	RMX TOP 15 FILM CAMERA INSTALLATION					
							-01	OPTEC GEMINI LIDAR INSTALLATION					

QTY REQD PER ASSY

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCE UNLESS SPECIFIED
FRACTIONS ±1/32 — DECIMALS .X=±.1 .XX=±.06 .XXX=±.005 — ANGLES X°=±2° X°X'=±0°30'

DRAWN BY
DESIGN
STRESS
APPROVAL

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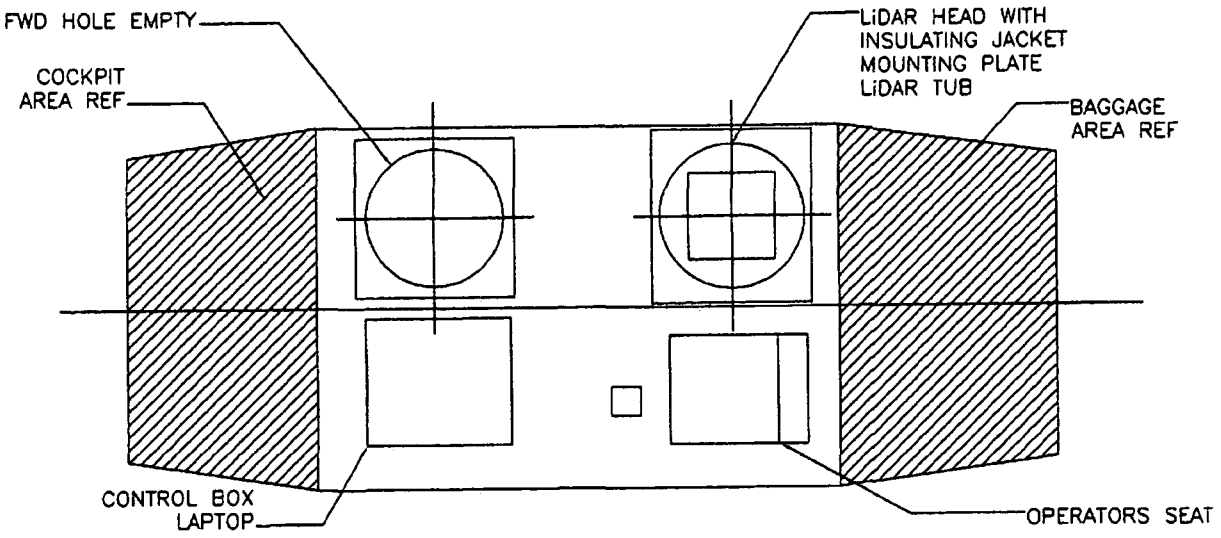
AEROMETRIC INC
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083

SHRIKE COMMANDER INSTLS

SIZE D — AM-SC-1000
ZONE
SCALE: NONE — SHEET 1 OF

COMPUTER GENERATED DWG USING AUTO



-01 OPTEC GEMINI LIDAR INSTALLATION

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCE UNLESS SPECIFIED:
FRACTIONS ±1/32 - DECIMALS .X=±.1 .XX=±.05 .XXX=±.005 - ANGLES X°=±2° X°X'=±0°30'

DRAWN BY
DESIGN
STRESS
APPROVAL

PROPRIETARY NOTICE

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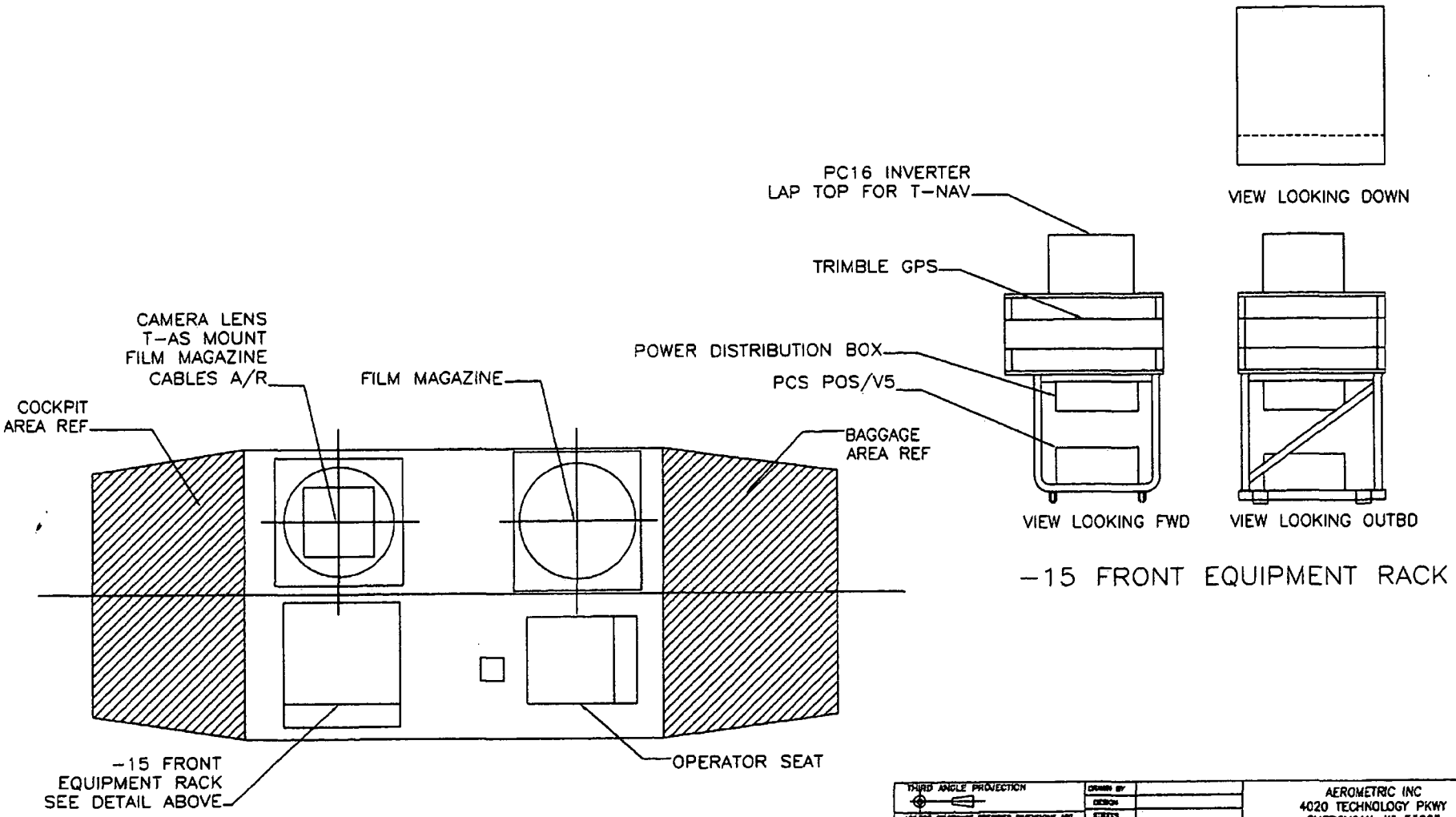
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083

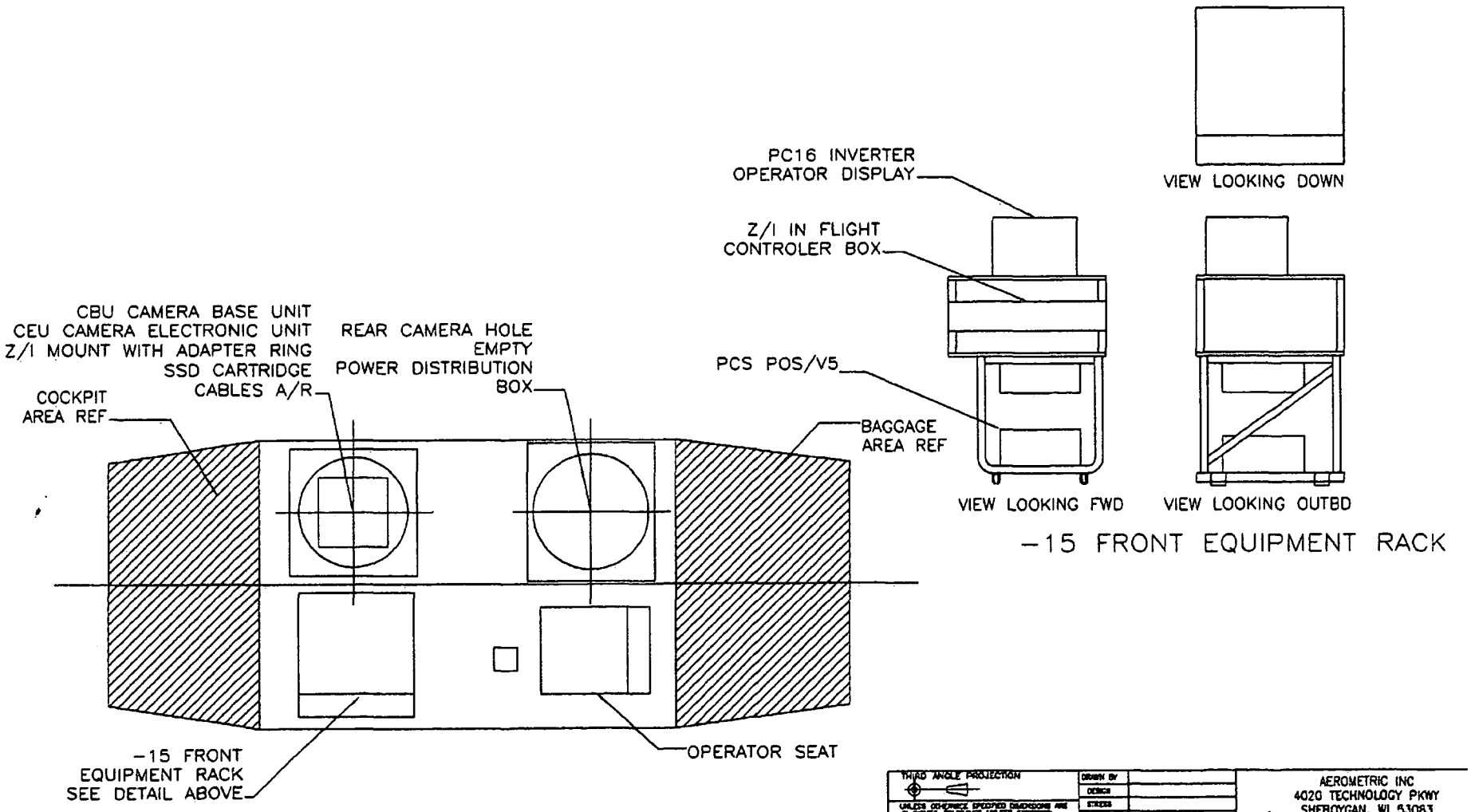
SHRIKE COMMANDER INSTL

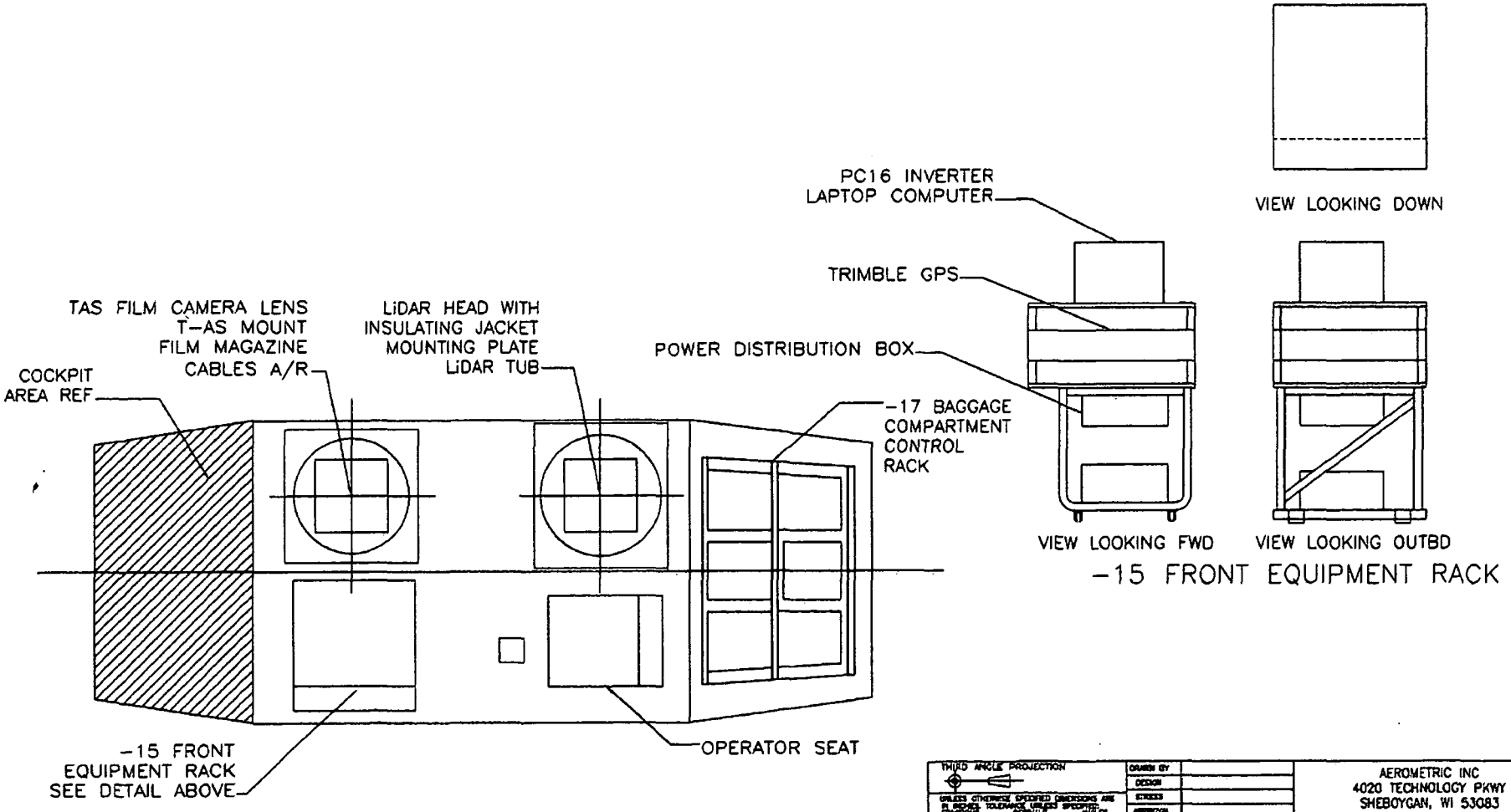
D AM-SC-1000

SCALE: NONE SHEET 2

COMPUTER GENERATED DWG USING A


CAMERA LENS
T-AS MOUNT
FILM MAGAZINE
CABLES A/R
COCKPIT
AREA REF
FILM MAGAZINE
BAGGAGE
AREA REF
-15 FRONT
EQUIPMENT RACK
SEE DETAIL ABOVE
OPERATOR SEAT
PC16 INVERTER
LAP TOP FOR T-NAV
TRIMBLE GPS
POWER DISTRIBUTION BOX
PCS POS/V5
VIEW LOOKING DOWN
VIEW LOOKING FWD
VIEW LOOKING OUTBD
-15 FRONT EQUIPMENT RACK
-03 RMK TOP 15 FILM CAMERA INSTALLATION
THIRD ANGLE PROJECTION
DRAWN BY
DESIGN
STRESS
APPROVAL
AEROMETRIC INC
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083
SHRIKE COMMANDER INSTLS
D
AM-SC-1000
SCALE NONE
COMPUTER GENERATED DWG USING AU


PC16 INVERTER
OPERATOR DISPLAY
Z/I IN FLIGHT
CONTROLER BOX
PCS POS/V5
BAGGAGE
AREA REF
VIEW LOOKING DOWN
VIEW LOOKING FWD
VIEW LOOKING OUTBD
-15 FRONT EQUIPMENT RACK
CBU CAMERA BASE UNIT
CEU CAMERA ELECTRONIC UNIT
Z/I MOUNT WITH ADAPTER RING
SSD CARTRIDGE
CABLES A/R
REAR CAMERA HOLE
EMPTY
POWER DISTRIBUTION
BOX
COCKPIT
AREA REF
-15 FRONT
EQUIPMENT RACK
SEE DETAIL ABOVE
OPERATOR SEAT
-05 DMC DIGITAL MAPPING CAMERA Z/I INSTALLATION
THIRD ANGLE PROJECTION
DRAWN BY
DESIGN
STRESS
APPROVAL
AEROMETRIC INC
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083
SHRIKE COMMANDER INSTLS
D
AM-SC-1000
SCALE NONE
SHEET 4 OF
COMPUTER GENERATED DWG USING AUT



-07 GEMINI LiDAR INSTALL WITH PARTIAL RMK TOP FILM CAMERA

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCE UNLESS SPECIFIED: FRACTIONS ±1/32 - DECIMALS .X=±.1 .XX=±.06 .XXX=±.005 - ANGLES X°=±2° X'X"=±0°30'

DRAWN BY
DESIGN
STRESS
APPROVAL

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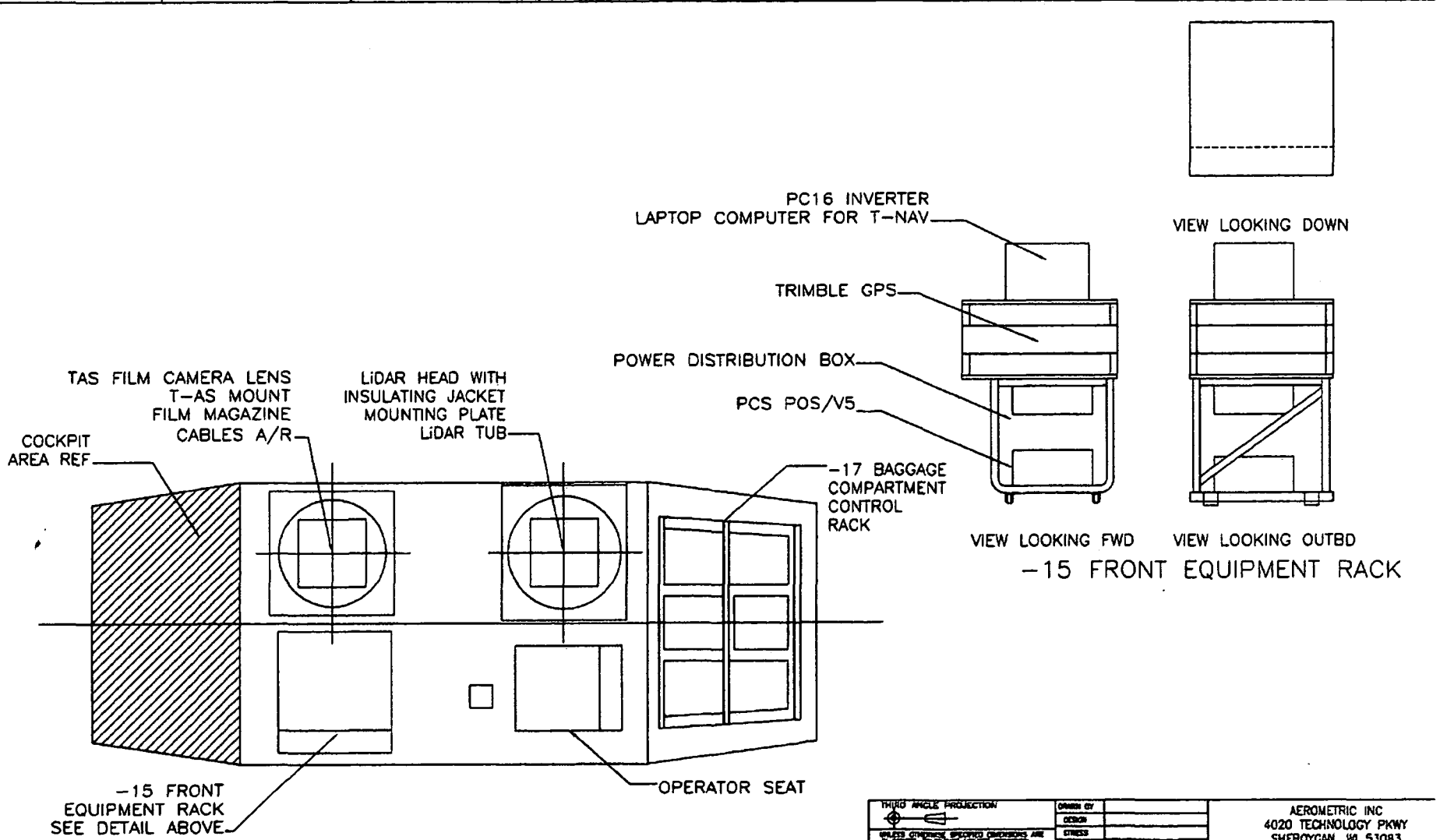
AEROMETRIC INC
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083

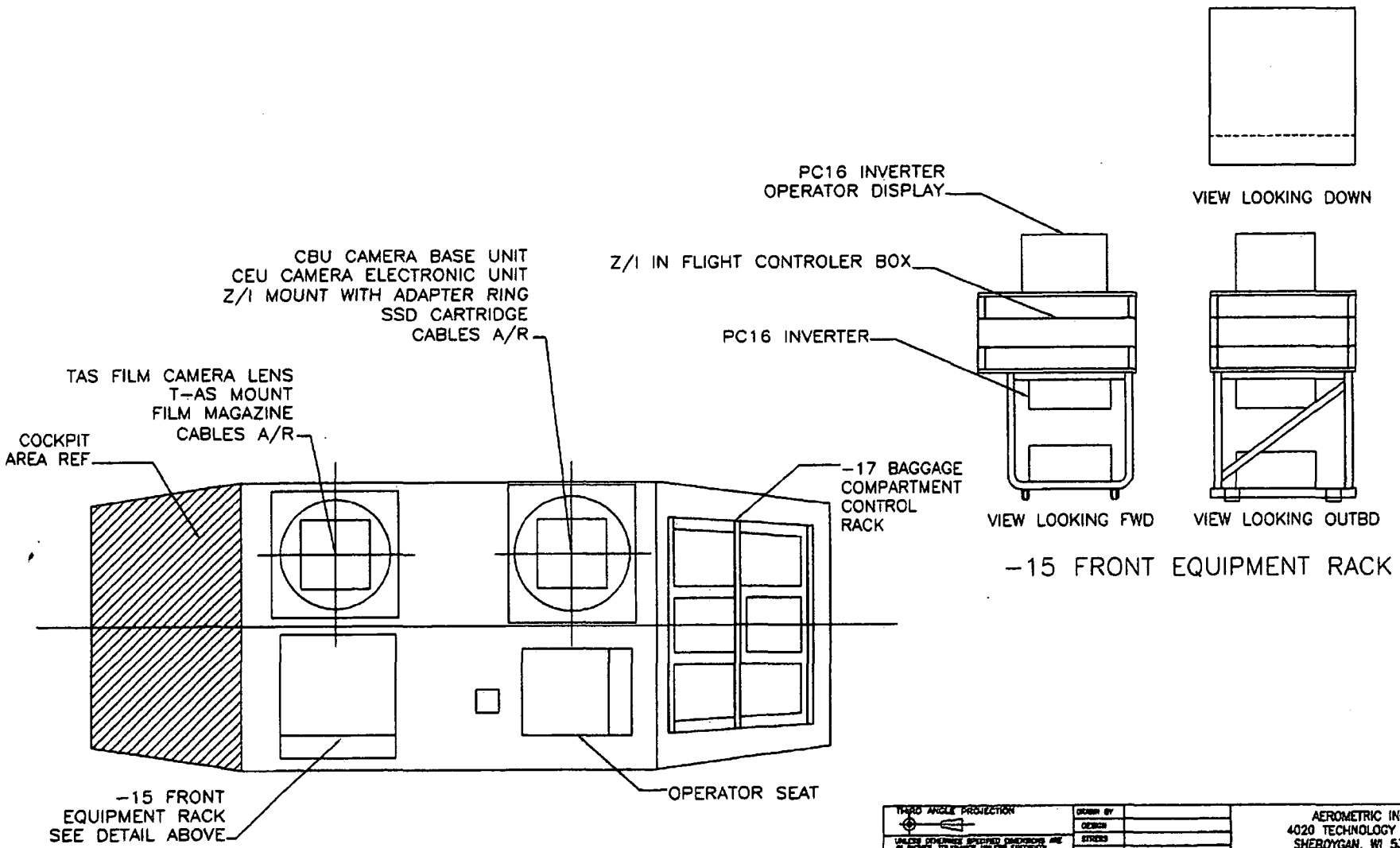
SHRIKE COMMANDER INSTLS

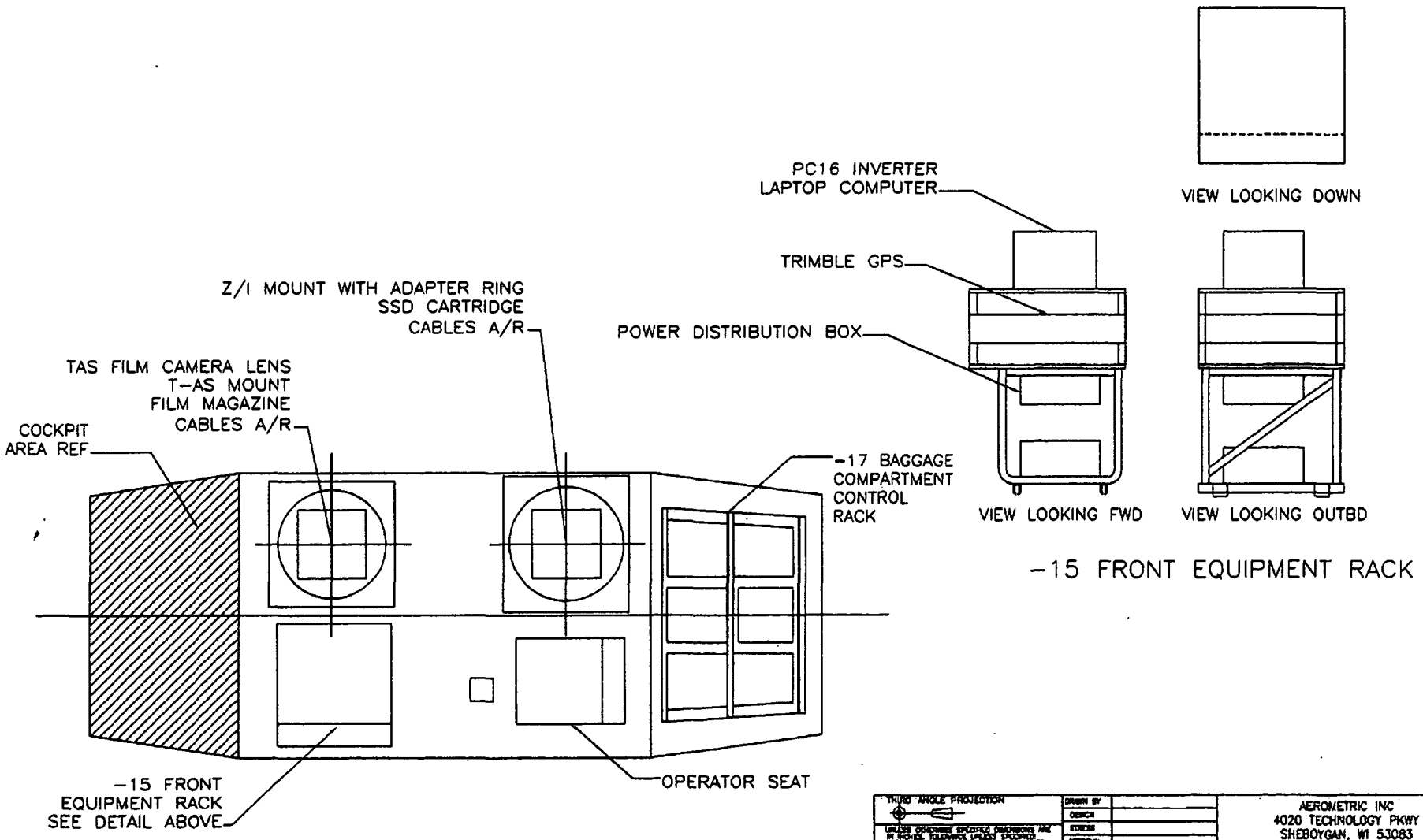
SIZE D
AM-SC-1000

SCALE: NONE
SHEET 5 OF

COMPUTER GENERATED DWG USING AUT


PC16 INVERTER
LAPTOP COMPUTER FOR T-NAV
TRIMBLE GPS
POWER DISTRIBUTION BOX
PCS POS/V5
VIEW LOOKING DOWN
VIEW LOOKING FWD
VIEW LOOKING OUTBD
-15 FRONT EQUIPMENT RACK
TAS FILM CAMERA LENS
T-AS MOUNT
FILM MAGAZINE
CABLES A/R
LiDAR HEAD WITH
INSULATING JACKET
MOUNTING PLATE
LiDAR TUB
COCKPIT
AREA REF
-17 BAGGAGE
COMPARTMENT
CONTROL
RACK
-15 FRONT
EQUIPMENT RACK
SEE DETAIL ABOVE
OPERATOR SEAT
-09 RMK TOP INSTALL WITH PARTIAL GEMINI LiDAR
THIRD ANGLE PROJECTION
AEROMETRIC INC
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083
SHRIKE COMMANDER INSTLS
AM-SC-1000
SCALE NONE
COMPUTER GENERATED DWG USING AUT


PC16 INVERTER
OPERATOR DISPLAY
Z/I IN FLIGHT CONTROLER BOX
PC16 INVERTER
VIEW LOOKING DOWN
VIEW LOOKING FWD
VIEW LOOKING OUTBD
-15 FRONT EQUIPMENT RACK
CBU CAMERA BASE UNIT
CEU CAMERA ELECTRONIC UNIT
Z/I MOUNT WITH ADAPTER RING
SSD CARTRIDGE
CABLES A/R
TAS FILM CAMERA LENS
T-AS MOUNT
FILM MAGAZINE
CABLES A/R
COCKPIT
AREA REF
-17 BAGGAGE
COMPARTMENT
CONTROL
RACK
-15 FRONT
EQUIPMENT RACK
SEE DETAIL ABOVE
OPERATOR SEAT
-11 DMC INSTALL WITH PARTIAL RMK TOP
THIRD ANGLE PROJECTION
AEROMETRIC INC
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083
SHRIKE COMMANDER INSTLS
AM-SC-1000
SCALE: NONE
COMPUTER GENERATED DWG USING AU



THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCE UNLESS SPECIFIED. FRACTIONS ±1/32 - DECIMALS X=±.1 XX=±.04 XXX=±.005 - ANGLES X=±2° XX=±0°30'

DRAWN BY
DESIGN
STRESS
APPROVAL

AEROMETRIC INC
4020 TECHNOLOGY PKWY
SHEBOYGAN, WI 53083

SHRIKE COMMANDER INSTLS

SIZE D
AM-SC-1000

SCALE: NONE
SHEET 8 OF

COMPUTER GENERATED DWG USING AUT

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 N280MB	Serial No. 3255	
	Make Rockwell International	Model 500-S	Series
2. Owner	Name (As shown on registration certificate) Aero-Metric Inc.	Address (As shown on registration certificate) Address 4020 Technology Pkwy. City Sheboygan State Wisconsin Zip 53083-6049 Country United States	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	X	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		
Name	Kevin A Warren- The New Firewall Forward		U.S. Certificated Mechanic	Manufacturer
Address	5212 Cessna Drive		Foreign Certificated Mechanic	C. Certificate No.
City	Loveland State CO	X	Certificated Repair Station	F4WR655Y
Zip	80538 Country United States		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 Kevin A Warren 3-4-2008

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		Person Appoved by Canadian Department of Transport
		FAA Designee	X	Repair Station		Inspection Authorization		Other *(Specify)*

Certificate or Designation No. F4WR655Y

Signature/Date of Authorized Individual Kevin A Warren 3-4-2008

FAA Form 337 (10-06)

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.)

N280MB	3-4-2008
Nationality and Registration Mark	Date

A/C Model: 500-S A/C S/N: 3255 Engine Model: TIO-540-J2B Engine S/N: RL-5989-61A, L-4825-61A

Installation of engines, modified with a Firewall Forward Technologies, LLC modified camshaft, into aircraft listed on the AML per Firewall Forward Technologies, LLC Installation Instructions FFT-INI-001-AFR, revision -, dated 02/06/03 or later FAA approved revision per STC SA01435LA. This installation must be don concurrently with STC SE01436LA, which installs the modified camshaft to the engine. For Continued Airworthiness Instructions refer to document number FFT-CAI-001. No weight and balance change. END.

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

☐ Additional Sheets Are Attached

Reproduced by Avantext, Inc.

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SA01435LA

Rockwell International - Shrike Commander
A/C Model: 500-S
S/N: 3255

This Certificate issued to Firewall Forward Technologies, LLC.
5212 Cessna Drive
Loveland, CO 80538

certifies that the change in the type design for the following product with the limitations and conditions thereto as specified hereon meets the airworthiness requirements of Part 21 of the Federal Aviation Regulations. * See applicable Type Certificate Data Sheet (T.C.D.S.) for certification basis

Original Product Type Certificate Number: *

Make: *

Model: *

* See attached FAA Approved Model List (AML) for list of approved airplane models and applicable T.C.D.S.

Description of Type Design Change: Installation of engines, modified with a Firewall Forward Technologies, LLC modified camshaft, into aircraft listed on the AML per Firewall Forward Technologies, LLC Installation Instructions FFT-INI-001-AFR, revision -, dated 02/06/03 or later FAA approved revision. This installation must be done concurrently with STC SE01436LA, which installs the modified camshaft to the engine.

Limitations and Conditions: Compatibility of this design change with previously approved modifications must be determined by the installer. The installation should not be incorporated in any airplane unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft. The approval of this modification applies to the above noted airplane model series only. A copy of this STC must be included in the permanent records of the modified airplane. 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.

See continuation page 3.

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: July 9, 1998

Date of issuance: February 14, 2003

Date revised:

Date amended:

By direction of the Administrator

(Signature)

Manager, Propulsion Branch
Los Angeles Aircraft Certification Office
(Title)

FEDERAL AVIATION ADMINISTRATION

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

This certificate may be transferred in accordance with FAR 21.47

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: N280MB	Serial No.: 3255	
	Make: Rockwell International	Model: 500-S	Series:
2. Owner	Name (As shown on registration certificate): Aero-Metric Inc.	Address (As shown on registration certificate): Address 4020 Technology Pkwy. City Sheboygan State Wisconsin Zip 53083-6049 Country United States	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☐	AIRFRAME	—	(As described in item 1 above)	—
☐	X	POWERPLANT	Lycoming	TIO-540-J2B	L-4825-61A
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency		
Name: Glenn Trostel- The New Firewall Forward			U.S. Certificated Mechanic	Manufacturer
Address: 5212 Cessna Drive			Foreign Certificated Mechanic	C. Certificate No.
City: Loveland	State: CO	X	Certificated Repair Station	F4WR655Y
Zip: 80538	Country: United States		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: Glenn Trostel 2-28-2008

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		Person Appoved by Canadian Department of Transport
		FAA Designee	X	Repair Station		Inspection Authorization		Other (Specify)

Certificate or Designation No.: F4WR655Y

Signature/Date of Authorized Individual: Glenn Trostel 2-28-2008

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.)

N280MB	2-28-2008
Nationality and Registration Mark	Date

A/C Model: 500-S A/C S/N: 3255 Engine Model: TIO-540-J2B Engine S/N: L-4825-61A

Installation of Firewall Forward Technologies, LLC modified camshaft in accordance with Master Drawing List FWF-MDL-ST9721LA-E, revision G, dated 2/14/03 or later FAA approved revision per STC SE01436LA. This installation must be done concurrently with STC SA01435LA, which modifies the airplane installation. For Continued Airworthiness Instructions refer to document number FFT-CAI-001. No weight and balance change, END.

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

☐ Additional Sheets Are Attached

Reproduced by Avantext, Inc.

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE01436LA

This Certificate issued to Firewall Forward Technologies, LLC.
5212 Cessna Drive
Loveland, CO 80538

Lycoming Engine Model: TIO-540-J2B
Engine S/N: L-4825-61A

certifies that the change in the type design for the following product with the limitations and conditions thereto as specified hereon meets the airworthiness requirements of Part 33 of the Federal Aviation Regulations.

Original Product Type Certificate Number: *

Make: *

Model: *

* See attached FAA Approved Model List (AML) for list of approved engine models and applicable T.C.D.S.

Description of Type Design Change: Installation of Firewall Forward Technologies, LLC modified camshaft in accordance with Master Drawing List FWF-MDL-ST9721LA-E, revision G, dated 2/14/03 or later FAA approved revision. This installation must be done concurrently with STC SA01435LA, which modifies the airplane installation.

Limitations and Conditions: Compatibility of this design change with previously approved modifications must be determined by the installer. The installation should not be incorporated in any engine unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft. The approval of this modification applies to the above noted engine model series only. A copy of this STC must be included in the permanent records of the modified engine. 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.

See continuation page 3.

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: July 9, 1998

Date of issuance: February 14, 2003

Date reissued:

Date amended:

By direction of the Administrator

(Signature)

Manager, Propulsion Branch
Los Angeles Aircraft Certification Office
(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

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: N280MB	Serial No.: 3255	
	Make: Rockwell International	Model: 500-S	Series:
2. Owner	Name (As shown on registration certificate): Aero-Metric Inc.	Address (As shown on registration certificate): Address 4020 Technology Pkwy. City Sheboygan State Wisconsin Zip 53083-6049 Country United States	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☐	AIRFRAME		*(As described in item 1 above)*	
☐	X	POWERPLANT	Lycoming	TIO-540-J2B	RL-5989-61A
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency		
Name: Glenn Trostel- The New Firewall Forward		☐ U.S. Certificated Mechanic	☐ Manufacturer	
Address: 5212 Cessna Drive		☐ Foreign Certificated Mechanic	C. Certificate No.	
City: Loveland State: CO		X Certificated Repair Station	F4WR655Y	
Zip: 80538 Country: United States		☐ 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: Glenn Trostel 2-28-2008

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	☐	Person Appoved by Canadian Department of Transport
	☐	FAA Designee	X	Repair Station	☐	Inspection Authorization	Other	*(Specify)*

Certificate or Designation No.: F4WR655Y

Signature/Date of Authorized Individual: Glenn Trostel 2-28-2008

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.)

N280MB	2-28-2008
Nationality and Registration Mark	Date

A/C Model: 500-S A/C S/N: 3255 Engine Model: TIO-540-J2B Engine S/N: RL-5989-61A

Installation of Firewall Forward Technologies, LLC modified camshaft in accordance with Master Drawing List FWF-MDL-ST9721LA-E, revision G, dated 2/14/03 or later FAA approved revision per STC SE01436LA. This installation must be done concurrently with STC SA01435LA, which modifies the airplane installation. For Continued Airworthiness Instructions refer to document number FFT-CAI-001. No weight and balance change, END.

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

☐ Additional Sheets Are Attached

Reproduced by Avantext, Inc.

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE01436LA

This Certificate issued to Firewall Forward Technologies, LLC.
5212 Cessna Drive
Loveland, CO 80538

Lycoming Engine Model: TIO-540-J2B
Engine S/N: RL-5989-61A

certifies that the change in the type design for the following product with the limitations and conditions thereto as specified hereon meets the airworthiness requirements of Part 33 of the Federal Aviation Regulations.

Original Product Type Certificate Number: *

Make: *

Model: *

* See attached FAA Approved Model List (AML) for list of approved engine models and applicable T.C.D.S.

Description of Type Design Change: Installation of Firewall Forward Technologies, LLC modified camshaft in accordance with Master Drawing List FWF-MDL-ST9721LA-E, revision G, dated 2/14/03 or later FAA approved revision. This installation must be done concurrently with STC SA01435LA, which modifies the airplane installation.

Limitations and Conditions: Compatibility of this design change with previously approved modifications must be determined by the installer. The installation should not be incorporated in any engine unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft. The approval of this modification applies to the above noted engine model series only. A copy of this STC must be included in the permanent records of the modified engine. 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.

See continuation page 3.

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: July 9, 1998

Date of issuance: February 14, 2003

Date reissued:

Date amended:

By direction of the Administrator:

(Signature)

Manager, Propulsion Branch
Los Angeles Aircraft Certification Office
(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

FAA GNS-430 VFK

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
GL13 DCM

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: ROCKWELL INTL	Model: 500-S
	Serial No.: 3255	Nationality and Registration Mark: N 280MB
2. Owner	Name (As shown on registration certificate): Aero-Metric, Inc.	Address (As shown on registration certificate): 4020 Technology Parkway, Sheboygan, WI 53083

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, SECTION 43.7"

DATE June 30, 2005 SIGNATURE [signature] FAA AGL-FSDO 13

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.
Skycom Avionics, Inc. 2441 Aviation Drive Waukesha, WI 53188	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	NC5D062N

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: 6/30/2005 Signature of Authorized Individual: [signature]

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 [X] APPROVED [ ] REJECTED

BY							Other (Specify)
		FAA Flt Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
6/30/05	NC5D062N	[signature]

FAA Form 337 (12-88)

NOTICE

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

8. Description of Work Accomplished

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

A/C MAKE: NORTH AMERICAN
A/C MODEL: AT-6G
A/C S/N: 49-3057
REG. NO.: N 5296V

INSTALLED THE FOLLOWING:
IFR Certification of a Garmin GNS-430 Nav/Com/GPS Receiver VFR installation previously approved on Form 337 dated 06/30/2005 (see attached copy).
Garmin GNS-430 Nav/Com/GPS is TSO'd under TSO# C129 class A1.
Garmin GA-56 GPS Antenna is TSO'd under TSO# C129 class A1.
The Garmin GNS-430 Nav/Com/GPS contains nav software version 2.00 or later FAA approved revision. The GPS system has been ground tested and flight tested (06/30/2005) at the following points with results as follows:

Hartford (HFX) GPS/NDB RWY. 11	Better than .10NM
Watertown (RYV) RWY. 29	Better than .10NM
Waukesha (UES) GPS/VOR-A	Better than .10NM

DOCUMENTATION:
AC43.13-1B chapter 11, paragraphs 424, 429, 443, 450, 519
chapter 15, paragraphs 750, 841, 842
AC43.13-2A chapter 2, paragraphs 21, 22, 23, 27
chapter 3, paragraphs 36, 38(b)
AC20-138A
The installation complies with the requirements of FAR's 23.1301, 23.1307(b), 23.1309(a)(1)&(2), 23.1321, 23.1322, 23.1357, 23.1365, 23.1367 and 23.1431.
The update was done in accordance with Garmin GNS-430 installation manual P/N 190-00140-02 Rev. P, Dated May 2005 (or later)

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS:
1) Introduction: GPS GNS-430 for the non-precision approach IFR approval
2) Description: Same as above
3) Control, operations information: See GNS-430 Pilot Guide P/N 190-00140-00 Rev. G, Dated May 2003 (or later) and FAA approved Flight Manual Supplement dated June 30, 2005.
4) Servicing information: N/A
5) Maintenance information: N/A
6) Troubleshooting information: N/A
7) Removal and replacement information: Refer to above installation manual for specific instructions in removal and replacement.
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: N/A
14) Recommended overhaul periods: No additional overhaul limits
15) Airworthiness limitation section: No additional airworthiness limits
16) Revision: A letter will be submitted to the FSDO with a copy of the revised FAA Form 337 and a 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 xx/xx/xxxx for the above aircraft superseding the instructions for Continued Airworthiness dated xx/xx/xxxx". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location and date of the Form 337.
17) Assistance: N/A
18) Implementation and record keeping: An entry has been entered into the aircraft records in accordance with FAR 43.9

----------END----------

☐ **Additional Sheets are Attached**

FAA 910532P F.F.

RECEIVED JUL 5 2005

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
GL13 ACM

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: ROCKWELL INTL	Model: 500-S
	Serial No.: 3255	Nationality and Registration Mark: N 280MB
2. Owner	Name *(As shown on registration certificate)*: Aero-Metric, Inc.	Address *(As shown on registration certificate)*: 4020 Technology Parkway, Sheboygan, WI 53083

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, SECTION 43.7"
DATE June 29, 2005 SIGNATURE [signature] FAA AGL-FSDO 13

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.
Skycom Avionics, Inc. 2441 Aviation Drive Waukesha, WI 53188	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	NC5D062N

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: 6/29/2005 — Signature of Authorized Individual: [signature]

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 [X] APPROVED [ ] REJECTED

BY							Other *(Specify)*
		FAA Flt Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
6/30/05	NC5D062N	[signature]

FAA Form 337 (12-88)

NOTICE

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

8. Description of Work Accomplished

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

A/C MAKE: ROCKWELL INTL
A/C MODEL: 500-S
A/C S/N: 3255
REG. NO.: N 280MB

INSTALLED THE FOLLOWING:
1-Shadin Company 910532P Fuel Flow Indicator, (TSO'd C44A) installed at STA# 71.0
1-Shadin Company 680501B Left Fuel Flow Transducer installed at STA# 140.0
1-Shadin Company 680501B Right Fuel Flow Transducer installed at STA# 140.0
The Shadin Company Fuel Flow Indicator was installed and tested in accordance with STC# SE445GL which applies to Lycoming T10-540-J2BD engines. This aircraft has a Lycoming T10-540-J2B engine which has an identical fuel system. The difference in engines is magneto installation..

DOCUMENTATION:
AC43.13-1B chapter 11, paragraphs 424, 429, 443, 450, 519
chapter 15, paragraphs 750, 841, 842
AC43.13-2A chapter 2, paragraphs 21, 22, 23, 27
chapter 3, paragraphs 36, 38(b)
The installation complies with the requirements of FAR's 23.1301, 23.1307(b), 23.1309(a)(1)&(2), 23.1321, 23.1322, 23.1357, 23.1365, 23.1367 and 23.1431.
Shadin Company 910532P Installation Manual/Pilot Guide P/N OP91053C.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS:
1) Introduction: 910532P installed as secondary system
2) Description: Same as above
3) Control, operations information: See Shadin Company 910532P Installation Manual/Pilot Guide P/N OP91053C.
4) Servicing information: N/A
5) Maintenance information: N/A
6) Troubleshooting information: N/A
7) Removal and replacement information: Refer to above installation manual for specific instructions in removal and replacement
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 A/C: N/A
14) Recommended overhaul periods: No additional overhaul limits
15) Airworthiness limitation section: No additional airworthiness limits
16) Revision: A letter will be submitted to the FSDO with a copy of the revised FAA Form 337 and a 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 xx/xx/xxxx for the above aircraft superseding the instructions for Continued Airworthiness dated xx/xx/xxxx". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location and date of the Form 337.
17) Assistance: N/A
18) Implementation and record keeping: An entry has been entered into the aircraft records in accordance with FAR 43.9

----------END----------

☐ **Additional Sheets are Attached**

FAA GNS-430 VFR

U.S. Department of Transportation
Federal Aviation Administration

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

RECEIVED JUL 5 2005

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
GL13 ACM

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: ROCKWELL INTL	Model: 500-S
	Serial No.: 3255	Nationality and Registration Mark: N 280MB
2. Owner	Name *(As shown on registration certificate)*: Aero-Metric, Inc.	Address *(As shown on registration certificate)*: 4020 Technology Parkway, Sheboygan, WI 53083

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, SECTION 43.7"

DATE June 29, 2005 SIGNATURE [signature] FAA AGL-FSDO 13

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.
Skycom Avionics, Inc. 2441 Aviation Drive Waukesha, WI 53188	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	NC5D062N

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
6/29/2005	[signature]

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 [X] APPROVED [ ] REJECTED

BY							Other *(Specify)*
		FAA Flt Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
6/30/05	NC5D062N	[signature]

FAA Form 337 (12-88)

NOTICE

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

8. Description of Work Accomplished

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

A/C MAKE: ROCKWELL INTL
A/C MODEL: 500-S
A/C S/N: 3255
REG. NO.: N 280MB

REMOVED THE FOLLOWING:
1-ARNAV 7000 Moving Map Display from STA# 71.0
1-ARNAV 452-0139 Loran Antenna from STA# 153.5

INSTALLED THE FOLLOWING:
1-Garmin GNS-430 Nav/Com/GPS, (TSO'd C129 class A1) installed at STA# 70.0
1-Garmin GA-56 GPS Antenna, (TSO'd C129 class A1) installed at STA# 153.5
The Garmin GNS-430 Nav/Com/GPS is coupled to the existing Century III Autopilot System and Bendix/King KI-525 HSI. Altitude information is provided via a Trans-Cal SSD-120 Encoder.
Installed placard "GPS FOR VFR USE ONLY" in full view of the pilot.

DOCUMENTATION:
AC43.13-1B chapter 11, paragraphs 424, 429, 443, 450, 519
chapter 15, paragraphs 750, 841, 842
AC43.13-2A chapter 2, paragraphs 21, 22, 23, 27
chapter 3, paragraphs 36, 38(b)
AC20-138A
The installation complies with the requirements of FAR's 23.1301, 23.1307(b), 23.1309(a)(1)&(2), 23.1321, 23.1322, 23.1357, 23.1365, 23.1367 and 23.1431.
Garmin GNS-430 installation manual P/N 190-00140-02 Rev. P, Dated May 2005 (or later)

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS:
1) Introduction: GPS GNS-430 installed as primary system
2) Description: Same as above
3) Control, operations information: See GNS-430 Pilot Guide P/N 190-00140-00 Rev. G, Dated April 2003 (or later)
4) Servicing information: N/A
5) Maintenance information: N/A
6) Troubleshooting information: N/A
7) Removal and replacement information: Refer to above installation manual for specific instructions in removal and replacement
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 A/C: N/A
14) Recommended overhaul periods: No additional overhaul limits
15) Airworthiness limitation section: No additional airworthiness limits
16) Revision: A letter will be submitted to the FSDO with a copy of the revised FAA Form 337 and a 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 xx/xx/xxxx for the above aircraft superseding the instructions for Continued Airworthiness dated xx/xx/xxxx". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location and date of the Form 337.
17) Assistance: N/A
18) Implementation and record keeping: An entry has been entered into the aircraft records IAW FAR 43.9

----------END----------

☐ **Additional Sheets are Attached**

RECEIVED

MAR 2 3 2004

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 G-2-13

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 or each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make: Twin Commander	Model: AC 500S
	Serial No.: 3255	Nationality and Registration Mark: N280MB
2. Owner	Name (*As shown on registration certificate*): AERO-METRIC, INC.	Address (*As shown on registration certificate*): 4020 Technology Parkway, Sheboygan, WI 53083

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, SECTION 43.7.

DATE: March 17, 2004 OFFICE: Milwaukee FSDO GL-13

SIGNATURE: Darrell C. McCullion

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.
Robert S. Ringel 1620 Cambridge Ave. Sheboygan, WI 53081	☒ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☐ Certified Repair Station ☐ Manufacturer	AP2722551IA

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
March 17, 2004	Robert S. Ringel

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
☐	FAA Designee	☐	Repair Station	☐	Person Approved by Transport Canada Airworthiness Group

Other (*Specify*)

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
March 19, 2004	AP2722551IA	Robert S. Ringel

FAA Form 337 (12-88)

Reproduced by Aviation DataSource, Inc.

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.

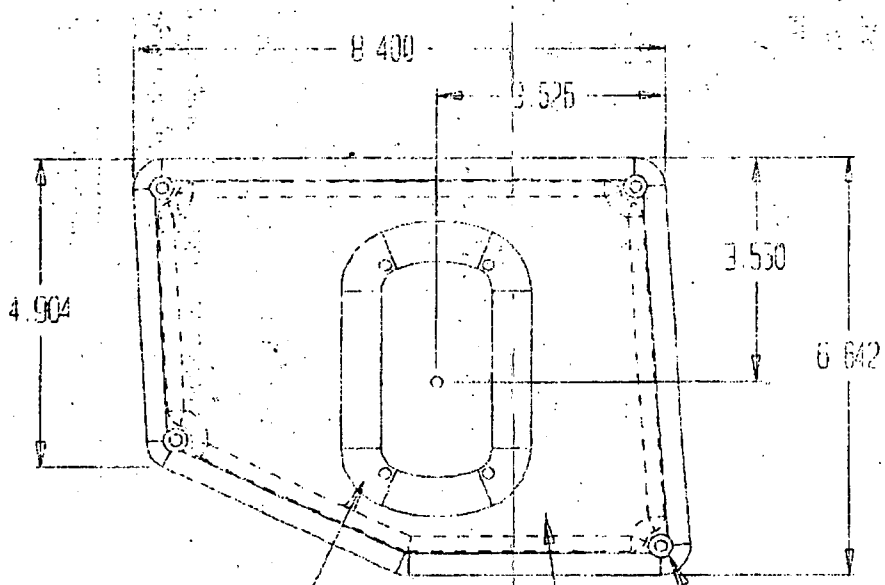
8. Description of Work Accomplished

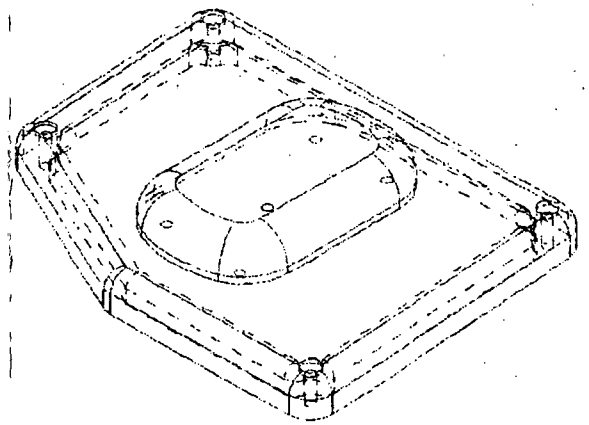
(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

1) Installed Novatel GPS-512 GPS antenna along with external mounting plate in accordance with AC43.13-2A.
2) The above installation was accomplished by installing the mounting plate and antenna at FS. #121.0 and RWS. #11.5. See attached drawings. The plate is secured by (4) 10/32 countersunk screws that are anchored in a fuselage stringer on the inboard side and by a wing stringer on the outboard side of the plate. A 3/4" hole in the fuselage under the mounting plate is necessary for the antenna coax connection at this same location.
3) This GPS antenna is not used for navigational purposes. This installation supports data acquisition of camera equipment installed in the aft camera hole IAW STC SA1182SW.
4) N/A
5) This installation will be inspected at each annual or 100 hour inspection as listed in FAR 43 Appendix D.
6) N/A
7) N/A
8) N/A
9) N/A
10) N/A
11) N/A
12) N/A
13) N/A
14) N/A
15) N/A
16) N/A

☒ Additional Sheets Are Attached

Att. Rob R from Dan H @ Stipe
467-1220



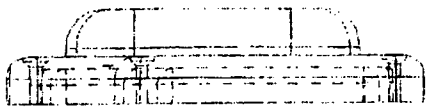


mounting holes drilled to match existing rivit holes in plane

GPS

plate pocketed out leaving 3/8" of material around outside edge for machining profile of plane mounting area

top of mounting plate .200" thick



this surface milled to match profile of plane

OCT 23 2000

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION GL13

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: Rockwell Commander	MODEL: 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: N280MB
2. OWNER	NAME (*As shown on registration certificate*): Aero Metric	ADDRESS (*As shown on registration certificate*): 4020 Technology Parkway Sheboygan, WI 53083

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Robert S. Ringel 1620 Cambridge Ave. Sheboygan, WI 53081	[X] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [ ] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	AP3927051521A

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
10/20/00	Robert S. Ringel

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 [X] APPROVED [ ] REJECTED

BY						
	[ ] FAA FLT. STANDARDS INSPECTOR	[ ] MANUFACTURER	[X] INSPECTION AUTHORIZATION	OTHER (*Specify*)
	[ ] FAA DESIGNEE	[ ] REPAIR STATION	[ ] CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
10/20/00	AP3927051521A	Robert S. Ringel

FAA Form 337 (7-67) (8320)

NOTICE

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

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

JANITROL COMBUSTION HEATER P/N FR62D95-1BEL, MODEL NO. B3500 INSTALLED IN ACCORDANCE WITH JANAERO DEVICES SERVICE LETTER # A-101 (TECHNICAL CONTENT FAA APPROVED)

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA

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
GL-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 of 1958).

1. Aircraft	Make: ROCKWELL	Model: 500-S
	Serial No.: 3255	Nationality and Registration Mark: N 280MB
2. Owner	Name *(As shown on registration certificate)*: AERO METRIC	Address *(As shown on registration certificate)*: 4708 N. 40TH STEET SHEBOYGAN, WI 53082

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.
SKYCOM AVIONICS, INC. 501 BLUEMOUND ROAD WAUKESHA, WI 53188	U.S Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	NC5D062N

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
10-15-97	

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	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10/15/97	NC5D062N	

FAA Form 337 (12-88)

NOTICE

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

8. Description of Work Accomplished

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

A/C MAKE : ROCKWELL
A/C MODEL: 500S
A/C S/N : 3255
A/C REG.#: N 280MB

REMOVED AN IDC 571-25005-02 ENCODING ALTIMETER S/N 2003.

COMPLETED INSTALLATION OF A TRANS-CAL SSD120 BLIND ENCODER. CHANGED WIRING TO MATCH TRANS-CAL INSTALLATION MANUAL.

THE TRANS-CAL BLIND ENCODER WAS TESTED WITH AN UNITED INSTRUMENTS 5934P-3A-8G ALTIMETER AND MEETS THE REQUIREMENTS OF FAR 91.217B. THE ENCODER IS TSO'D UNDER TSO #C88A. THE ALTIMETER WAS TESTED TO 35,000 FT. ON 10/15/97.

THE ENCODER IS WIRED TO THE EXISTING KIN[illegible]-76A TRANSPONDER WHICH IS TSO'D UNDER TSO# C74B. THIS INSTALLATION [illegible] INSPECTED PER FAR 91.411 THIS DATE AND MEETS THE REQUIREMENTS OF [illegible]43, APPENDIX F AND FAR 43, APPENDIX E.

A COMPLETE INTEGRATED SYSTEM CHECK WAS PERFORMED AND FOUND TO BE IN PROPER WORKING ORDER.

ALL WORK WAS PERFORMED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION MANUAL AND APPLICABLE PARTS OF AC 43.13-2A.

COMPLETED LOG ENTRY.

-------- END -------

☐ Additional Sheets Are Attached

☆U.S. GOVERNMENT PRINTING OFFICE 1992-769-012/60157

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
GL09

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: Rockwell Int'l.	Model: 500S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name *(As shown on registration certificate)*: Aerometric Engineering, Inc.	Address *(As shown on registration certificate)*: 4708 North 40th Street Sheboygan, Wisconsin 53081

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
APR 8 1996
FAA GRR FSDO

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Mayday Avionics, Inc. 5500 44th Street S.E. Grand Rapids, Michigan 49512		U.S. Certificated Mechanic	IT5R947M Radio 1, 2, 3 Instrument Ltd.
		Foreign Certificated Mechanic	
	X	Certificated Repair Station	
		Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
3-29-96	Kenneth R Malone Kenneth R. Malone

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 ☐ X APPROVED ☐ REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3-29-96	IT5R947M	Kenneth R Malone Kenneth R. Malone

FAA Form 337 (12-88)

NOTICE

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

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 the Bendix King KWX40 Weather Radar System and installed the Bendix/King RDS81 Weather Radar System. The RDS81 System consists of the IN812A Indicator and the RS811A Receiver/Transmitter/Antenna. The RDS81 is TSO'd per C63b.

The Indicator is located in the area vacated by the KWX40 Indicator. The RS811A is located on the forward bulkhead. It mounting bracket has been pull tested and meets or exceeds the requirements for the additional weight.

This installation was done per the Bendix/King RDS81 Installation Manual using AC43-13-1A, Chapter 11, Section 3 & 7 and AC43-13-2A, Chapter 2 as a guideline.

The aircraft was weighed after this installation. The log book entry has been completed.
>>>>>>>>>>>>>>>>>>>>>>>>>>>>END<<<<<<<<<<<<<<<<<<<<<<<<<<<<

☐ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

US Department of Transportation
Federal Aviation Administration

APR 2 3 1996

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification EL13

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: AERO COMMANDER	Model: 500S
	Serial No.: 3255	Nationality and Registration Mark: N280MB
2. Owner	Name (As shown on registration certificate): AERO METRIC INC	Address (As shown on registration certificate): 4708 N. 40th. St. SHEBOYGAN WISC. 53083

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.
STEVE BUTZEN N6216 RESOURCE DR. SHEBOYGAN FALLS WIS 53085	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	397568310

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
4/15/96	Steve B. Butzen 397568310

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	X	Inspection Authorization	Other (Specify)
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
4/15/96	1A397568310	Steve Butzen 1A397568310

FAA Form 337 (12 88)

NOTICE

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

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

This aircraft has been previously approved for a Gill 6381E Battery See 337 Dated July 14 1993 Removed this Battery & Replaced it with A Concord RG 380E/40 sealed battery.

Note 1. Gill 6381E is an approved battery in the 690 Commander by the FAA.
Note 2. the Concorde RG 380E/40 is approved in the 690 as a replacement for the 6381E PMA dated 4/9/96
Note 3. the Concorde RG 380E/40 is equal to or greater than the 6381E.

Changed weight & Balance to reflect +5lb Difference

Steve Butzen IA 392568310

End

☐ Additional Sheets Are Attached

☆U.S. GOVERNMENT PRINTING OFFICE· 1992-769-012/60157

ES

US Department of Transportation
Federal Aviation Administration

JAN 27 1995

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification GL13

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: Rockwell International	Model: Commander 500 S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name (As shown on registration certificate): Hero Metric Engineering Inc	Address (As shown on registration certificate): 4708 N. 46th. St. Sheboygan Wisc 53081

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Steve Butzen Sheboygan Cty Airport N6216 Resource Drive Sheboygan Falls Wisc. 53085	X U S Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	397 568310

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
1/25/95	Steve Butzen A&P397568310

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							Other (Specify)
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
1/25/95	IA397568310	Steve Butzen IA 397568310

FAA Form 337 (12 88)

NOTICE

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

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 A GPS ANTENNA by ACCUNAV PART # AT 575-9 SERIAL # 7034 AT STATION 65.0 AFT & 10.5 LEFT of CENTER

THE WEIGHT CHANGE (+5oz) WAS DETERMINED to BE NEGLIGABLE

This ANTENNA is not to BE USED for NAVIGATION, but to TRIGGER A CAMERA Shutter AT PRECISE LOCATIONS

ALL WORK DONE I.A.W. AC 43.13-2A CHAPTER 3 & ACCEPTED INDUSTRY STANDARDS

Steve Butzen IA3975683 10

END

☐ Additional Sheets Are Attached

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 5-23-95

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
GL09

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: Rockwell International	Model: 500S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name (As shown on registration certificate): Aerometric Engineering, Inc.	Address (As shown on registration certificate): 4708 North 40th Street, Sheboygan, Wisconsin 53081

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 Part 43, Section 43.7."

GRR FSDO — MAR 13 1995 — Signature of FAA Inspector

District Office — Date — Type

4. Unit Identification

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

RECEIVED
MAR 31 1995
FAA GRR FSDO
GRAND RAPIDS, MICHIGAN

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
MAYDAY AVIONICS, INC. 5500 44TH STREET, S.E. GRAND RAPIDS, MI 49512	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	IT5R947M RADIO 1,2,3 INSTRUMENT LIM

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: 3-29-95 — Signature of Authorized Individual: Kenneth Malone

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	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3-29-95	IT5R947M	Kenneth Malone

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 5-23-95

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.)

Approval to enable the previously installed Ryan International ATS9000 TCAD System.

Reference 337 form dated 2-3-95 on this aircraft for further details on this installation. The approval basis for this installation is STC SA1763GL. Aircraft Flight Manual Supplement dated MAR 20 1995 is required for this installation.

**********END**********

RECEIVED
MAR 31 1995
FAA GRR FSDO
GRAND RAPIDS, MICHIGAN

☐ Additional Sheets Are Attached

☆U.S. GOVERNMENT PRINTING OFFICE: 1992-769-012/60157

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 5-23-95

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
GI09

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: Rockwell International	Model: 500S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name (*As shown on registration certificate*): Aerometric Engineering, Inc.	Address (*As shown on registration certificate*): 4708 North 40th Street Sheboygan, Wisconsin 53081

"The data identified herein conform to the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR Part 43, Section 43.7."

For FAA Use Only

GRR FSDO — District Office
FEB 0 3 1995 — Date
Signature of FAA Inspector

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.
MAYDAY AVIONICS, INC. 5500 44TH STREET, S.E. GRAND RAPIDS, MI 49512	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	IT5R947M RADIO 1,2,3 INSTRUMENT LIM

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: 2-3-95
Signature of Authorized Individual: William G. Dawes

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	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
2-3-95	IT5R947M	William G. Dawes

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 5-23-95

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 King KT76 Transponder and installed King KT76A Transponder. The KT76A is located in the space vacated by the removed KT76. It uses the existing transponder antenna and is interfaced with the existing IDC Encoding Altimeter. This System has been tested and meets the requirements of 91.217 and 43, appendix E, parts a & c, and appendix F.

Removed Sigtronics SPA400 and installed Northern Airborne Technologies AA80 Intercom System. The unit is located an existing instrument hole below the transponder in the pilot's instruemnt panel. It was installed per the Northern Airborne Technologies Installation Instructions using AC43-13-1A, Chapter 11, Section 3 & 7 and AC43-13-2A, Chapter 2 as a guideline.

Installed Ryan International ATS9000 TCAD System. This System consists of the Display PN 70-1100, the Receiver/Computer PN 70-1101, Transponder Couplers PN 70-1040 (2ea), the Comant CI305 Antenna (2ea), and the Dual Ryan Antenna Coupler PN 71-1050.

The Display is located in an existing hole in the pilot's instrument panel. The Receiver/Computer is located on the an existing shelf in the nose of the aircraft at station -10.0. The CI305 Antennas are located on top of the aircraft at station 93 and on the bottom of the aircraft at station 43. Reference Mayday Avionics Drawing 23807 for further details on their mounting and doubler plates.

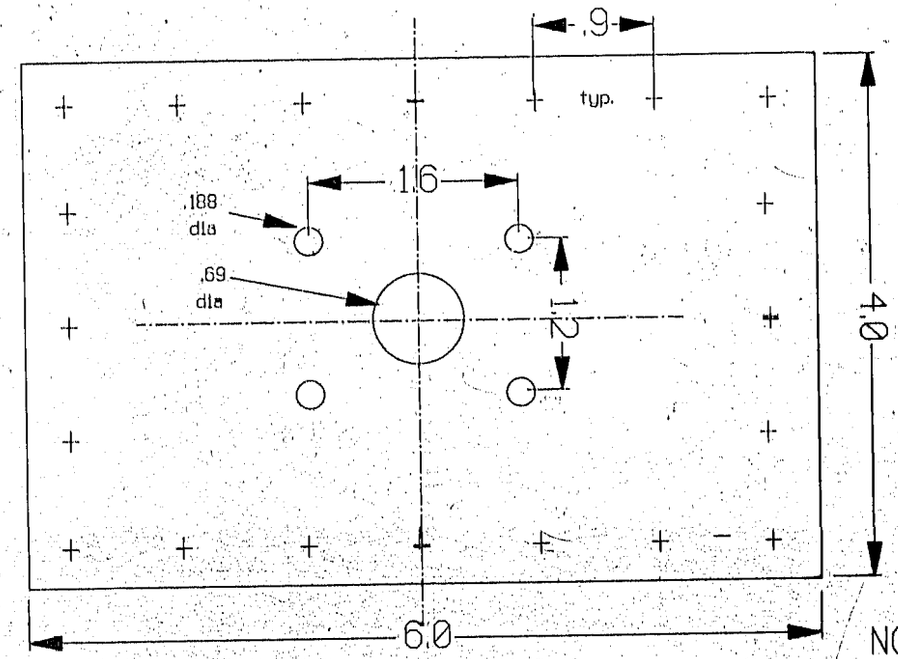
This System was installed per the Ryan International ATS9000 Installation Manual using AC43-13-1A, Chapter 11, Section 11, Section 3 & 7, AC43-13-2A, Chapter 2 & 3, as a guideline.

At this time the ATS9000 System has been disabled by tie rapping the TCAD circuit breaker.

The weight and balance has been revised and the log book entry has been completed.
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>END<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<

☐ Additional Sheets Are Attached

☆U.S. GOVERNMENT PRINTING OFFICE: 1992—769-012/60157



NOTE: 2 EACH INSTALLED

A/C SKIN-2024T3 .020/.025
DOUBLER-2024T3 .032
RIVETS-AN470AD4 20 ea.
F.S. TOP -93
F.S. BOTTOM-43
NON-PRESSURIZED A/C

UNLESS OTHERWISE SPECIFIED DIIMENSIONS ARE IN INCHES DECIMALS .XX ± .05 .XXX ± .010 ANGULAR ±0.5 DO NOT SCALE DRAWING		CI305			
		MAYDAY AVIONICS, INC. 5500 44TH. ST. S.E. GRAND RAPIDS, MI 49512 (616) 957-4920			
DRAWN BY RB	DATE 2-1-95				
CHECKED BY		SIZE	W.O. 23807	DWG NO. 23807	REV
SCALE NONE		REG 280MB	S/N 3255	SHEET 1	OF 1

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 5-23-95

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 5-23-95

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4-21-95

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: GL-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 of 1958).

1. Aircraft	Make: Rockwell International	Model: Commander 500 S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name (As shown on registration certificate): Aero Metric Engineering Inc	Address (As shown on registration certificate): 4708 N. 40th. St. Sheboygan Wisc 53081

3. For FAA Use Only

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Steve Butzen Sheboygan Cty Airport N. 6216 Resource Drive Sheboygan Falls Wisc 53085	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	397568310

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
1/25/95	Steve Butzen A&P 397568310

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	X	Inspection Authorization	Other (Specify)	
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group		

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
1/25/95	IA397568310	Steve Butzen IA397568310

FAA Form 337 (12-68)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4-21-95

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 A NAVIGATION PORT BETWEEN
STATIONS 85.4 AND 100.0 AND 12.375 LEFT OF
CENTER. ALL WORK DONE IAW. MASTER
DRAWING 51125 1 THRU 4 DATED 11/15/92
AND STC SA 13325W AC43-13 AND
ACCEPTED INDUSTRY STANDARDS
WEIGHT CHANGE DETERMINED TO BE NEGLIGABLE.

Steve Butzer IA 397568310

END

☐ Additional Sheets Are Attached

★U.S.GPO:1989-0-653-171

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 3-20-95

US Department of Transportation
Federal Aviation Administration

JAN 2 7 1995

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification GL13

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: Rockwell International	Model: Commander 500S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name (As shown on registration certificate): Hero Metric Engineering Inc	Address (As shown on registration certificate): 4708 N. 40th. St. Sheboygan Wisc 53081

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Steve Butzen Sheboygan Cty Airport N.6216 Resource Drive Sheboygan Falls Wis 53085	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	397568310

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
12/1/94	Steve Butzen A&P397568310

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	X	Inspection Authorization	Other (Specify)
	FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
12/1/94	1A397568310	Steve Butzen 1A397568310

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 3-20-95

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.)

Replaced O Ring Seals in the landing gear lower Struts IAW Gulfstream Aerospace technologies Drawing list GSDL-001, Rev. A, Dated Aug 10 1992 and install instructions GSI-001 Rev. A dated aug 10 1992 Listed per STC # SA8453SW

no weight Change
Steve Butzin A&P 3975268330

END

☐ Additional Sheets Are Attached

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 N DATE: 2-9-95

RECEIVED
DEC - 6 1994

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
GL13

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: ROCKWELL INTERNATIONAL	Model: 500S
	Serial No.: 3255	Nationality and Registration Mark: N280MB
2. Owner	Name (As shown on registration certificate): AERO METRIC ENGINEERING INC	Address (As shown on registration certificate): 4708 NORTH 40TH STREET SHEBOYGAN, WISCONSIN 53081

3. For FAA Use Only

4. Unit Identification

Unit	Make	Model	Serial No.	5. Type: Repair	5. Type: 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.
JET AIR CORPORATION 1921 AIRPORT DRIVE GREEN BAY, WISCONSIN 54313	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	CRS MZ2R023L

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
DECEMBER 1, 1994	Gary Zimmerman

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 X APPROVED ☐ REJECTED

BY						
	FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	Other (Specify)
	FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
DECEMBER 1, 1994	MZ2R023L	Gary Zimmerman

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 N DATE: 2-9-95

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 FAA/TSO-C96 APPROVED WHELEN ANTI-COLLISION LIGHT ASSY, PART NUMBER 90033-5 ON BOTTOM OF AIRCRAFT AT F.S. 207.0. ALL WORK ACCOMPLISHED IN ACCORDANCE WITH AC 43.13.1A CHAPTER 11 SECTION 1,2,3 AND AC 43.13.2A CHAPTER 4. NO WEIGHT AND BALANCE CHANGE.

---------- END ----------

☐ Additional Sheets Are Attached

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-5-94

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION
GL23

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: Rockwell	MODEL: 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: USA N280MB
2. OWNER	NAME (As shown on registration certificate): Aero-Metric Engineering, Inc.	ADDRESS (As shown on registration certificate): 4708 North 40th Street, Sheboygan, WI 53081

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
National Flight Services, Inc. 10971 E. Airport Services Rd. Swanton, Ohio 43558	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	DSCR311D

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
3/4/94	Carl L. Jackson [signature]

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER		INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	XX	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
3/4/94	DSCR311D	Carl L. Jackson [signature]

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-5-94

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 new wing lower spar cap by Aviadesign STC# SA00035SF, Reinforcement Kit SN: 502 per drawing AD-AC-0191 and installation instructions AD-AC-0194 issue B, AD-AC-0193 issue C, Certificate No. 6A1. Installed new #7 stringer, PN: 170045-31. Replaced R/H aft inbd wing skin, center fuselage skin with new as removed 2024T3 .063 aluminum. All work accomplished by STC and Standard Practices 43.13-2A. Weight and balance revised.
********** END **********

☐ ADDITIONAL SHEETS ARE ATTACHED

U S GPO 1981 775-332 47

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 6-8-94

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION CLE FSDO GC-25

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: Rockwell International	MODEL: Commander 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: USA N280MB
2. OWNER	NAME (As shown on registration certificate): Aero-Metric Engineering, Inc.	ADDRESS (As shown on registration certificate): 4708 North 40th St. Sheboygan, WI 53081

3. FOR FAA USE ONLY

The data identified herein comprised with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by a person authorized in FAR 43.1.

APPROVING INSPECTOR [signature] GC-25

DATE 3/17/94

4. UNIT IDENTIFICATION / **5. TYPE**

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Express Avionics, Inc. 10971 E. Airport Service Rd. Swanton, Ohio 43558	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Radio 1,2,3 L-SS, L-INS L-ACC XXER854K

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 3/17/94

SIGNATURE OF AUTHORIZED INDIVIDUAL Thomas A. Corwin [signature]

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	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
3/17/94	XXER854K	[signature]

MAR 1994 RECEIVED (8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 6-8-94

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 from aircraft an existing Arnav R-40 Loran system consisting of the following components;

1. 1 each R-40 Loran Receiver
2. 1 each Arnav Loran Antenna and Antenna Coupler

Installed in aircraft an Arnav FMS-7000 GPS/Loran navigation system consisting of the following components:

1. 1 each Arnav FMS-7000 Loran/GPS Rec p/n 453-7605-03
2. 1 each Arnav FMS-7000 CDU p/n 453-7000B
3. 1 each Arnav GPS Antenna p/n 870-0028
4. 1 each Arnav Loran Antenna p/n 452-0139
5. 1 each Arnav Altitude Serializer p/n 453-0510
6. 1 each RSU-21 Switching Unit

The above installation was performed in accordance with the Arnav FMS-7000 Supplementary Installation Guide p/n 570-1062 Dated Feb 1993, recommendations contained in FAA AC 43.13.1A Chapter 11, FAA AC 43.13.2A Chapter 2 and 3, and FAA AC 20-121A, and accepted industry standard practices.

The Arnav FMS-7000 Loran/GPS Navigation system was installed coupled to the Century IV AP/FD system utilizing an RSU-21 nav switching unit.

Aircraft maintenance records and weight and balance data have been updated to reflect the above installations.

A flight test was performed to verify previously installed equipment was not affected by this installation, and that the new equipment performs it's intended function.

The Arnav FMS-7000 Loran/GPS System is approved for VFR use only and the aircraft panel has been placarded "LORAN NOT APPROVED FOR IFR" AND "GPS NOT APPROVED FOR IFR".

Reference our WO# 2268, 2357 and Form 337 dated 3/3/94 for details of this installation

**********END**********

☐ ADDITIONAL SHEETS ARE ATTACHED

U S GPO 1981 775-332 47

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 6-8-94

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION CLE FS00 GL-25

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: Rockwell International	MODEL: Commander 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: USA N280MB
2. OWNER	NAME (As shown on registration certificate): Aero-Metric Engineering, Inc.	ADDRESS (As shown on registration certificate): 4708 North 40th St. Shdboygan, WI 53081

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	(As described in item 1 above)				XX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
EXPRESS AVIONICS, INC. 10971 E. AIRPORT SERVICE ROAD SWANTON OHIO 43558	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC XX CERTIFICATED REPAIR STATION MANUFACTURER	Radio 1,2,3 L-SS, L-INS, L-ACC XXER854K

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: 3/3/94

SIGNATURE OF AUTHORIZED INDIVIDUAL: THOMAS A. CORWIN

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						OTHER (Specify)
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER		INSPECTION AUTHORIZATION	
	FAA DESIGNEE	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
3/3/94	XXER854K	THOMAS A. CORWIN

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 6-8-94

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 from aircraft an existing Arnav R-40 Loran system consisting of the following components;

1. 1 each Arnav R-40 Loran Receiver
2. 1 each Arnav Loran Antenna and Antenna Coupler

Installed in aircraft an Arnav FMS-7000 GPS/Loran navigation system consisting of the following components:

1. 1 each Arnav FMS-7000 Loran/GPS Rec p/n 453-7605-03
2. 1 each Arnav FMS-7000 CDU p/n 453-7000-B
3. 1 each Arnav GPS Antenna p/n 870-0028
4. 1 each Arnav Loran Antenna p/n 452-0139
5. 1 each Arnav Altitude Serializer p/n 453-0510
6. 1 each RSU-21 Switching Unit

The above installation was performed in accordance with the Arnav FMS-7000 Supplementary Installation Guide p/n 570-1062 Dated Feb 1993, recommendations contained in FAA AC 43.13.1A Chapter 11, FAA AC 43.13.2A Chapter 2 and 3, and FAA AC 20-121A, and accepted industry standard practices.

Also removed the existing Century III Autopilot System and installed a Century IV Flight Director/Autopilot System in accordance with STC #SA3142SW-D.

The Arnav FMS-7000 Loran/GPS Navigation system was installed coupled to the Century IV AP/FD system utilizing an RSU-21 nav switching unit.

Aircraft maintenance records and weight and balance data have been updated to reflect the above installations.

A flight test was performed to verify previously installed equipment was not affected by this installation, and that the new equipment performs it's intended function.

The Arnav FMS-7000 Loran/GPS System is approved for VFR use only and the aircraft panel has been placarded "LORAN NOT APPROVED FOR IFR" AND "GPS NOT APPROVED FOR NAVIGATION" pending FAA Field approval of the Arnav FMS-7000 navigation system.

Reference our WOs # 2268 and 2357 for details of this installation

**********END**********

☐ ADDITIONAL SHEETS ARE ATTACHED

U S GPO 1981 775-332/47

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

US Department of Transportation
Federal Aviation Administration

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

SEA AUG 2 1993 RECEIVED

Form Approved
OMB No. 2120-0020 E130E
For FAA Use Only
Office Identification
SEA 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: ROCKWELL INTERNATIONAL	Model: Commander 500S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name (As shown on registration certificate): AERO-METRIC ENGINEERING, INC.	Address (As shown on registration certificate): 4708 North 40th Street, Sheboygan, WI 53081

3. For FAA Use Only

THE DATA/[redacted] 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.

JUL 15 1993 Thomas E. Cray
Date FAA Inspector AIM-FSDO-01

4. Unit Identification

Unit	Make	Model	Serial No.	5. Type: Repair	5. Type: Alteration
AIRFRAME	(As described in Item 1 above)				XX
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Hugh G. Evans MERLYN PRODUCTS, INC. West 7500 Park Drive Spokane, WA 99204	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	2264355A&P

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
July 14, 1993	Hugh G. Evans Hugh G Evans

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 XX APPROVED ☐ REJECTED

BY					Other (Specify)
	FAA Flt. Standards Inspector	Manufacturer	XX	Inspection Authorization	
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
July 14, 1993	IA1559677	Charles J. Wright Charles J. Wright

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

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 origional equipment batteries (2 each G35M) and installed 1 each Gill G6381 E battery.

NOTE:

1. Battery tray structural support of the 500S is identical to the 680E. The 680E is FAA approved for the Gill GE50 which is identical in weight to the Gill G6381E.
2. The 6381E battery performance is equal to, or greater than the origional equipment.

********** END **********

☐ Additional Sheets Are Attached

FAA AIRCRAFT REGISTRY:
CAMERA NO. 2N DATE: 9-22-93

Form Approved
O.M.B. No. 2120-0018

U.S. 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	4. YR MFR	FAA CODING
N280MB	Rockwell, Int'l	500S	1975	7630410
5. AIRCRAFT SERIAL NO.	**6. ENGINE BUILDER'S NAME (Make)**	**7. ENGINE MODEL DESIGNATION**		41533
3255	Lycoming	TIO-540-J2B(D)		
8. NUMBER OF ENGINES	**9. PROPELLER BUILDER'S NAME (Make)**	**10. PROPELLER MODEL DESIGNATION**	**11. AIRCRAFT IS (Check if applicable)**	
2	Hartzell	HC-C3YR-2UF/FC8468D-6R	IMPORT	

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A	1	X	STANDARD AIRWORTHINESS CERTIFICATE (Indicate category)	X	NORMAL		UTILITY		ACROBATIC		TRANSPORT		GLIDER		BALLOON
B			SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)												
	2		LIMITED												
	5		PROVISIONAL (Indicate class)	1		CLASS I									
				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)		5		PATROLLING		6		WEATHER CONTROL	
				7		CARRIAGE OF CARGO		0		OTHER (Specify)					
	4		EXPERIMENTAL (Indicate operation(s) to be conducted)	1		RESEARCH AND DEVELOPMENT		2		AMATEUR BUILT		3		EXHIBITION	
				4		RACING		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	6		MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE Restricted Operation and Standard or Limited as applicable)												

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on certificate of aircraft registration) — IF DEALER, CHECK HERE →

NAME	ADDRESS
AERO-METRIC Engineering, Inc.	4708 North 40th Street Sheboygan, WI. 53081

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.) 6A1 REV 45	X	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) 91-08-09
	AIRCRAFT LISTING (Give page number(s))	X	SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated) SA1158GL, SA5969NM, SA1332SW

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

X	CHECK IF RECORDS IN COMPLIANCE WITH ~~FAR 91.173~~ 91.419	TOTAL AIRFRAME HOURS 6393.5	3 EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed) 43.2

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 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	NAME AND TITLE (Print or type)	SIGNATURE
7-6-93	Hugh Evans Agent	Hugh Evans

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	X	CERTIFICATED MECHANIC (Give Certificate No.) AI1559677	6 CERTIFICATED REPAIR STATION (Give Certificate No.)
5	AIRCRAFT MANUFACTURER (Give name of firm)				

DATE	TITLE	SIGNATURE
7-6-93	Inspection Authorization	Carl J Wright

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: THE CERTIFICATE REQUESTED; 4 X AMENDMENT OR MODIFICATION OF CURRENT AIRWORTHINESS CERTIFICATE

B. Inspection for a special flight permit under Section VII was conducted by: FAA INSPECTOR; FAA DESIGNEE; CERTIFICATE HOLDER UNDER: FAR 65; FAR 121, 127 or 135; FAR 145

DATE	DISTRICT OFFICE	DESIGNEE'S SIGNATURE AND NO.	FAA INSPECTOR'S SIGNATURE
7-6-93		Dale A Mumford DALE A. MUMFORD - DAR-16-AC-NM	

FAA Form 8130-6 (11-88) SUPERSEDES PREVIOUS EDITION

FAA AIRCRAFT REGISTRY:
CAMERA NO. 2N DATE: 9-22-93

U.S.GPO:1989-241-672/90913

VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME | ADDRESS

B. PRODUCTION BASIS *(Check applicable item)*

- [ ] PRODUCTION CERTIFICATE *(Give production certificate number)*
- [ ] TYPE CERTIFICATE ONLY
- [ ] 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 — CUSTOMER DEMONSTRATION FLIGHTS ☐ *(Check if applicable)*

FROM | TO

VIA | DEPARTURE DATE | DURATION

C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT

- [ ] PILOT
- [ ] CO-PILOT
- [ ] NAVIGATOR
- [ ] OTHER *(Specify)*

D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS

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)

- [ ] A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable
- [ ] B. Current Operating Limitations Attached
- [ ] C. Data, Drawings, Photographs, etc. *(Attach when required)*
- [X] D. Current Weight and Balance Information Available in Aircraft
- [X] E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*
- [X] F. This Inspection Recorded in Aircraft Records
- [X] G. Statement of Conformity, FAA Form 8130-9 *(Attach when required)*
- [ ] H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
- [ ] I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.191(b) CAR _____ *(Original Attached)*
- [X] J. Current Airworthiness Certificate Issued in Accordance with FAR 21.183(d) *(Copy attached)*

FAA AIRCRAFT REGISTRY:
CAMERA NO. 2N DATE: 9-22-93

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
N-2807B	Rockwell International 500S	3255	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 Parts 21, 43, 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
07-06-93	Dale A. Mumford DALE A. MUMFORD	DAR-16-AC-NM

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 (8-82) GPO 892-804

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	SHOW COMPLIANCE WITH FAR	
B	MANU-FACTURER	NAME	N/A
		ADDRESS	N/A
C	FLIGHT	FROM	N/A
		TO	N/A
D	N- 280MB		SERIAL NO. 3255
	BUILDER Rockwell International		MODEL 500-S
E	DATE OF ISSUANCE November 20, 1992		EXPIRY May 31, 1993
	OPERATING LIMITATIONS DATED Nov. 20, 1992		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE Charlie Cotton CHARLIE COTTON, ASI (MFG)		DESIGNATION OR OFFICE NO. SEA-MIDO, ANM-108S

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 8130-7 (10/82)

SEE REVERSE SIDE

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

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

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: ROCKWELL INTERNATIONAL	Model: Commander 500S
	Serial No.: 3255	Nationality and Registration Mark: USA N280MB
2. Owner	Name (As shown on registration certificate): AERO-METRIC ENGINEERING, INC.	Address (As shown on registration certificate): 4708 North 40th Street, Sheboygan, WI 53081

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in Item 1 above)				XX
POWERPLANT	Lycoming	TIO-540-J2B(D)	L-4825-61A RL-5989-61A		XX
PROPELLER	Hartzell	HC-3YR-2UF/FC-8468D-6R	CK3564 CK3590		XX
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Hugh G. Evans MERLYN PRODUCTS, INC. West 7500 Park Drive Spokane, WA 99204	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	2264355A&P

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
July 6, 1993	Hugh G. Evans Hugh G. Evans

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	XX	Inspection Authorization	Other (Specify)
	FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
July 6, 1993	IA1559677	Charles J. Wright Charles J. Wright

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

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 LYCOMING TIO-540-J2B(D) ENGINES AND HARTZELL HC-3YR-2UF/FC-8468D-6R PROPELLERS ACCORDING TO STC SA5969NM AND MERLYN PRODUCTS, INC. REPORT 30-1 DATED SEPTEMBER 1, 1991, REVISION C (6/21/93). New weight & Balance this date. ***END***

☐ Additional Sheets Are Attached

☆U.S.G.P.O. 1990-761-753

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

Not Subject to OMB Clearance

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF CONFORMITY

SECTION I – AIRCRAFT

1. MAKE ROCKWELL INTERNATIONAL	2. MODEL Commander 500S
3. SERIAL NO. 3255	4. REGISTRATION NO. N280MB

SECTION II – ENGINE

1. MAKE Lycoming	2. MODEL TIO-540-J2B(D)
3. SERIAL NO. L-4825-61A and RL-5989-61A	

SECTION III – PROPELLER

1. MAKE Hartzell	2. HUB MODEL C3YR-2UF
3. BLADE MODEL FC 8468D-6R	4. HUB SERIAL NO. CK3564 & CK3590
5. BLADE SERIAL NOS. D60802, D66964, D42662 and F29451, F29459, F29467	

SECTION IV – CERTIFICATION

I hereby certify that:

[X] 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 _____.
(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:

Installation of Merlyn Shrike Conversion which includes Lycoming engine TIO-540-J2B(D and intercoolers according to Merlyn Products, Inc. installation report30-1, dated September 1, 1991, Rev. C. (SA1158GL, SA5969NM, SA1332SW)

SIGNATURE OF CERTIFIER Hugh G. Evans	TITLE Agent
ORGANIZATION MERLYN PRODUCTS, INC.	DATE July 6, 1993

FAA Form 8130-9 (9-78) USE PREVIOUS EDITION

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

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.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

EXPERIMENTAL OPERATING LIMITATIONS DATE 11-20-92

Aircraft: Rockwell International Registration No.: N280MB
Model: 500-S Serial No: 3255

1. This operating limitation is a part of the Experimental Certificate of Airworthiness, FAA Form 8130-7, dated 11-20-92 and issued to expire 5-31-93 and must be displayed in the aircraft in accordance with FAR 91.27(b).

2. This aircraft is certificated in the experimental category for the purpose of: Show Compliance

3. All flights must be conducted within the following areas, boundaries, and corridors: Within the 11 western United States

4. No person may operate this aircraft for other than the purpose for which the special-purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules, FAR Part 91.

5. All flights shall be conducted to avoid areas having heavy air traffic, and when operating in the vicinity of cities, towns and congested areas, conducted in such a manner that the aircraft will not create hazardous exposure to persons or property on the ground.

6. The word "Experimental" shall be displayed at each entrance to the cockpit and the letters shall be no less than two inches in height.

7. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating into or out of airports with operating control towers.

8. All flights shall be conducted under VFR day only, unless appropriately equipped for night and/or instrument flight in accordance with FAR 91.33.

9. No person may operate this aircraft for carrying persons or property for compensation or hire.

10. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight.

11. Any major change to this aircraft will invalidate the special airworthiness certificate issued for this aircraft.

12. This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. This aircraft may not be operated over any foreign country without the special permission of that country.

13. An entry in the aircraft log book shall be made for each flight showing time and purpose of the flight.

Charlie Cotton
Aviation Safety Inspector A/W
SEA-MIDO, ANM-108S

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 9-22-93

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

Form Approved
O.M.B. No. 2120-0018

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: N280MB	2. AIRCRAFT BUILDER'S NAME (Make): Rockwell	3. AIRCRAFT MODEL DESIGNATION: 500S	4. YR MFR: 75
5. AIRCRAFT SERIAL NO.: 3255	6. ENGINE BUILDER'S NAME (Make): Lycoming	7. ENGINE MODEL DESIGNATION: TIO-540-J2B(D)	FAA CODING: 7630410 / 41533
8. NUMBER OF ENGINES: 2	9. PROPELLER BUILDER'S NAME (Make): Hartzell	10. PROPELLER MODEL DESIGNATION: HC-C3YR-2UF/FC8468-6R	11. AIRCRAFT IS (Check if applicable): IMPORT

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A	1		STANDARD AIRWORTHINESS CERTIFICATE (Indicate category)		NORMAL		UTILITY		ACROBATIC		TRANSPORT		GLIDER		BALLOON
B		XX	SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)												
	2		LIMITED												
	5		PROVISIONAL (Indicate class)	1		CLASS I									
				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)		5		PATROLLING		6		WEATHER CONTROL	
				7		CARRIAGE OF CARGO		0		OTHER (Specify)					
	4	XX	EXPERIMENTAL (Indicate operation(s) to be conducted)	1		RESEARCH AND DEVELOPMENT		2		AMATEUR BUILT		3		EXHIBITION	
				4		RACING		5		CREW TRAINING				MKT SURVEY	
				0	XX	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	6		MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE "Restricted Operation" and "Standard" or "Limited" as applicable)												

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on certificate of aircraft registration) — IF DEALER, CHECK HERE →

NAME: Aero-Metric Engineering, Inc.
ADDRESS: 4708 North 40th Street, Sheboygan, WI 53081

B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)

XX	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.): 6A1 Rev 45		AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.): 91-08-09
	AIRCRAFT LISTING (Give page number(s))		SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated): STC SA1158GL

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

XX	CHECK IF RECORDS IN COMPLIANCE WITH FAR 91	TOTAL AIRFRAME HOURS: 6350.3	3	EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed): 26.2

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 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	NAME AND TITLE (Print or type)	SIGNATURE
November 20, 1992	Hugh G. Evans, Agent	Hugh G. Evans

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.)	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 in items A and B)

A. I find that the aircraft described in Section I or VII meets requirements for: THE CERTIFICATE REQUESTED; 4 AMENDMENT OR MODIFICATION OF CURRENT AIRWORTHINESS CERTIFICATE

B. Inspection for a special flight permit under Section VII was conducted by: FAA INSPECTOR; FAA DESIGNEE

CERTIFICATE HOLDER UNDER: FAR 65; FAR 121, 127 or 135; FAR 145

DATE	DISTRICT OFFICE		DESIGNEE'S SIGNATURE AND NO.		FAA INSPECTOR'S SIGNATURE
Nov. 29 1992	SEA-M100 ANM-108S	4		1	Charlie Cotton, ASI (mfg)

FAA Form 8130-6 (11-88) SUPERSEDES PREVIOUS EDITION

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

*U.S.GPO:1989-241-672/90913

VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME	ADDRESS

B. PRODUCTION BASIS *(Check applicable item)*

- [ ] PRODUCTION CERTIFICATE *(Give production certificate number)*
- [ ] TYPE CERTIFICATE ONLY
- [ ] 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 — CUSTOMER DEMONSTRATION FLIGHTS ☐ *(Check if applicable)*

FROM	TO	
VIA	DEPARTURE DATE	DURATION

C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT

- [ ] PILOT
- [ ] CO-PILOT
- [ ] NAVIGATOR
- [ ] OTHER *(Specify)*

D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS

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)

- [X] A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable
- [X] B. Current Operating Limitations Attached
- [ ] C. Data, Drawings, Photographs, etc. *(Attach when required)*
- [X] D. Current Weight and Balance Information Available in Aircraft
- [ ] E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*
- [X] F. This Inspection Recorded in Aircraft Records
- [ ] G. Statement of Conformity, FAA Form 8130-9 *(Attach when required)*
- [ ] H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
- [ ] I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.191(a) CAR _____ *(Original Attached)*
- [X] J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191(b) _____ *(Copy attached)*

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	RECEARCH & DEVELOPMENT	
B	MANU-FACTURER	NAME	N/A
		ADDRESS	N/A
C	FLIGHT	FROM	N/A
		TO	N/A
D	N-280MB		SERIAL NO. 3255
	BUILDER ROCKWELL INTERNATIONAL		MODEL 500-S.
			EXPIRY 7-31-93
E	DATE OF ISSUANCE		ARE A PART OF THIS CERTIFICATE
	OPERATING LIMITATIONS DATED		DESIGNATION OR OFFICE NO.
	SIGNATURE OF FAA REPRESENTATIVE FLOYD W. GASTON		ANM-02

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.

SEE REVERSE SIDE

FAA FORM 8130-7 (10/82)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

U.S. GPO 1987-762-134

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

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

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	SHOW COMPLIANCE WITH FAR	
B	MANUFACTURER	NAME	N/A
		ADDRESS	N/A
C	FLIGHT	FROM	N/A
		TO	N/A
D	N- 280MB		SERIAL NO. 3255
	BUILDER Rockwell International		MODEL 500-S
E	DATE OF ISSUANCE November 20, 1992		EXPIRY May 31, 1993
	OPERATING LIMITATIONS DATED Nov. 20, 1992		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE Charlie Cotton CHARLIE COTTON, ASI (MFG)		DESIGNATION OR OFFICE NO. SEA-MIDO, ANM-108S

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 8130-7 (10/82)

SEE REVERSE SIDE

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

EXPERIMENTAL OPERATING LIMITATIONS DATE 8-4-92

Aircraft: ROCKWELL INTERNATIONAL
Model: 500-S

Registration No.: N-280MB
Serial No: 3255

1. This operating limitation is a part of the Experimental Certificate of Airworthiness, FAA Form 8130-7, dated 8-4-92 and issued to expire 7-31-93 and must be displayed in the aircraft in accordance with FAR 91.27(b).

2. This aircraft is certificated in the experimental category for the purpose of: RESEARCH & DEVELOPMENT.

3. All flights must be conducted within the following areas, boundaries, and corridors: WITHIN THE 48 CONTIGUOUS UNITED STATES.

4. No person may operate this aircraft for other than the purpose for which the special purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules, FAR Part 91.

5. All flights shall be conducted to avoid areas having heavy air traffic, and when operating in the vicinity of cities, towns and congested areas, conducted in such a manner that the aircraft will not create hazardous exposure to persons or property on the ground.

6. The word "Experimental" shall be displayed at each entrance to the cockpit and the letters shall be no less than two inches in height.

7. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating into or out of airports with operating control towers.

8. N/A

9. No person may operate this aircraft for carrying persons or property for compensation or hire.

10. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight.

11. Any major change to this aircraft will invalidate the special airworthiness certificate issued for this aircraft.

12. This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. This aircraft may not be operated over any foreign country without the special permission of that country.

13. An entry in the aircraft log book shall be made for each flight showing time and purpose of the flight.

Floyd W. Gaston

FLOYD W. GASTON
Aviation Safety Inspector A/W
ANM-02; SPOKANE, WA

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 3-2-93

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

Form Approved
O.M.B. No. 2120-0018

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	4. YR. MFR.	FAA CODING
N-280MB	ROCKWELL INTERNATIONAL	500-S	1975	7630410
5. AIRCRAFT SERIAL NO.	6. ENGINE BUILDER'S NAME (Make)	7. ENGINE MODEL DESIGNATION		47533
3255	LYCOMING	TIO-540-J2B		
8. NUMBER OF ENGINES	9. PROPELLER BUILDER'S NAME (Make)	10. PROPELLER MODEL DESIGNATION	11. AIRCRAFT IS (Check if applicable)	
TWO	HARTZELL	HC-C3YR-UF	IMPORT	

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A	1		STANDARD AIRWORTHINESS CERTIFICATE (Indicate category)	NORMAL	UTILITY	ACROBATIC	TRANSPORT	GLIDER	BALLOON			
B		XX	SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)									
	2		LIMITED									
	5		PROVISIONAL (Indicate class)	1		CLASS I						
				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)	5		PATROLLING	6		WEATHER CONTROL
				7		CARRIAGE OF CARGO	0		OTHER (Specify)			
	4	XX	EXPERIMENTAL (Indicate operation(s) to be conducted)	1	XX	RESEARCH AND DEVELOPMENT	2		AMATEUR BUILT	3		EXHIBITION
				4		RACING	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	6		MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE "Restricted Operation" and "Standard" or "Limited" as applicable)									

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on certificate of aircraft registration) — IF DEALER, CHECK HERE →

NAME	ADDRESS
AERO-METRIC ENGINEERING, INC.	4708 North 40th ST. Sheboygan, WI 53081

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.) 6A1 Revision 45	X	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) 92-15
	AIRCRAFT LISTING (Give page number(s)) N/A	X	SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated) SA1158GL

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

X	CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173	TOTAL AIRFRAME HOURS 6324	3 EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed) 3

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 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	NAME AND TITLE (Print or type)	SIGNATURE
8-4-92	HUGH G. EVANS (AGENT)	Hugh G. Evans

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.)	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 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: FAA INSPECTOR; CERTIFICATE HOLDER UNDER: FAA DESIGNEE; FAR 65; FAR 121, 127 or 135; FAR 145

DATE	DISTRICT OFFICE	4	DESIGNEE'S SIGNATURE AND NO.	1	FAA INSPECTOR'S SIGNATURE
8-4-92	ANM-02				FLOYD W. GASTON

FAA Form 8130-6 (11-89) SUPERSEDES PREVIOUS EDITION

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

*U.S.GPO:1989-241-672/90913

VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME	ADDRESS

B. PRODUCTION BASIS *(Check applicable item)*

- [ ] PRODUCTION CERTIFICATE *(Give production certificate number)*
- [ ] TYPE CERTIFICATE ONLY
- [ ] 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 — CUSTOMER DEMONSTRATION FLIGHTS ☐ *(Check if applicable)*

FROM	TO	
VIA	DEPARTURE DATE	DURATION

C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT

- [ ] PILOT
- [ ] CO-PILOT
- [ ] NAVIGATOR
- [ ] OTHER *(Specify)*

D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS

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)

X	A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable		G. Statement of Conformity, FAA Form 8130-9 *(Attach when required)*
X	B. Current Operating Limitations Attached		H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
X	C. Data, Drawings, Photographs, etc. *(Attach when required)*	X	I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.191(a) CAR _____ *(Original Attached)*
X	D. Current Weight and Balance Information Available in Aircraft		
	E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*	X	J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191(a) _____ *(Copy attached)*
X	F. This Inspection Recorded in Aircraft Records		

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION		EXPERIMENTAL		
	PURPOSE		RESEARCH & DEVELOPMENT		
B	MANU-FACTURER	NAME	N/A		
		ADDRESS	N/A		
C	FLIGHT	FROM	N/A		
		TO	N/A		
D	N-280MB			SERIAL NO.	3255
	BUILDER ROCKWELL INTERNATIONAL			MODEL	500-S
E	DATE OF ISSUANCE		8-4-92	EXPIRY	7-31-93
	OPERATING LIMITATIONS DATED		8-4-92	ARE A PART OF THIS CERTIFICATE	
	SIGNATURE OF FAA REPRESENTATIVE			DESIGNATION OR OFFICE NO.	
	FLOYD W. GASTON			ANM-02	

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.

SEE REVERSE SIDE

FAA FORM 8130-7 (10/82)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

U.S. GPO 1987-762-134

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

EXPERIMENTAL OPERATING LIMITATIONS DATE 8-4-92

Aircraft: ROCKWELL INTERNATIONAL
Model: 500-S

Registration No.: N-280MB
Serial No: 3255

1. This operating limitation is a part of the Experimental Certificate of Airworthiness, FAA Form 8130-7, dated 8-4-92 and issued to expire 7-31-93 and must be displayed in the aircraft in accordance with FAR 91.27(b).

2. This aircraft is certificated in the experimental category for the purpose of: RESEARCH & DEVELOPMENT.

3. All flights must be conducted within the following areas, boundaries, and corridors: WITHIN THE 48 CONTIGUOUS UNITED STATES.

4. No person may operate this aircraft for other than the purpose for which the special purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules, FAR Part 91.

5. All flights shall be conducted to avoid areas having heavy air traffic, and when operating in the vicinity of cities, towns and congested areas, conducted in such a manner that the aircraft will not create hazardous exposure to persons or property on the ground.

6. The word "Experimental" shall be displayed at each entrance to the cockpit and the letters shall be no less than two inches in height.

7. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating into or out of airports with operating control towers.

8. N/A

9. No person may operate this aircraft for carrying persons or property for compensation or hire.

10. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight.

11. Any major change to this aircraft will invalidate the special airworthiness certificate issued for this aircraft.

12. This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. This aircraft may not be operated over any foreign country without the special permission of that country.

13. An entry in the aircraft log book shall be made for each flight showing time and purpose of the flight.

FLOYD W. GASTON
Aviation Safety Inspector A/W
ANM-02, SPOKANE, WA

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	RESEARCH & DEVELOPMENT	
B	MANU-FACTURER	NAME	N/A
		ADDRESS	N/A
C	FLIGHT	FROM	N/A
		TO	N/A
D	N-280MB		SERIAL NO. 3255
	BUILDER ROCKWELL INTERNATIONAL		MODEL 500-S
E	DATE OF ISSUANCE 4-20-92		EXPIRY 7-31-92
	OPERATING LIMITATIONS DATED 4-20-92		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE		DESIGNATION OR OFFICE NO.
	FLOYD W. GASTON		ANM-02

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.

SEE REVERSE SIDE

FAA FORM 8130-7 (10/82)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

U.S. GPO 1987-762-134

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

EXPERIMENTAL OPERATING LIMITATIONS DATE 4-20-92

Aircraft: ROCKWELL INTERNATIONAL Registration No.: N-280MB
Model: 500-S Serial No: 3255

1. This operating limitation is a part of the Experimental Certificate of Airworthiness, FAA Form 8130-7, dated 4-20-92 and issued to expire 7-31-92 and must be displayed in the aircraft in accordance with FAR 91.27(b).

2. This aircraft is certificated in the experimental category for the purpose of: RESEARCH & DEVELOPMENT.

3. All flights must be conducted within the following areas, boundaries, and corridors: WITHIN600 NM FROM THE GEG VOR WITHIN WS AIRSPACE.

4. No person may operate this aircraft for other than the purpose for which the special purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules, FAR Part 91.

5. All flights shall be conducted to avoid areas having heavy air traffic, and when operating in the vicinity of cities, towns and congested areas, conducted in such a manner that the aircraft will not create hazardous exposure to persons or property on the ground.

6. The word "Experimental" shall be displayed at each entrance to the cockpit and the letters shall be no less than two inches in height.

7. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating into or out of airports with operating control towers.

8. All flights shall be conducted under ~~VFR~~ DAY OR NIGHT AND VFR OR IFR

9. No person may operate this aircraft for carrying persons or property for compensation or hire.

10. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight.

11. Any major change to this aircraft will invalidate the special airworthiness certificate issued for this aircraft.

12. This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. This aircraft may not be operated over any foreign country without the special permission of that country.

13. An entry in the aircraft log book shall be made for each flight showing time and purpose of the flight.

FLOYD W. GASTON
Aviation Safety Inspector A/W
NM-FSDO-02

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 DATE: 10-9-92

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

Form Approved
O.M.B. No. 2120-0018

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: N-280MB	2. AIRCRAFT BUILDER'S NAME (Make): ROCKWELL INTERNATIONAL	3. AIRCRAFT MODEL DESIGNATION: 500-S	4. YR. MFR.: 1975
5. AIRCRAFT SERIAL NO.: 3255	6. ENGINE BUILDER'S NAME (Make): LYCOMING	7. ENGINE MODEL DESIGNATION: TIO-540-J2B	FAA CODING: 763 0410 / 41533
8. NUMBER OF ENGINES: TWO	9. PROPELLER BUILDER'S NAME (Make): HARTZELL	10. PROPELLER MODEL DESIGNATION: HC-C3YR-UF	11. AIRCRAFT IS (Check if applicable): IMPORT -

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A	1		STANDARD AIRWORTHINESS CERTIFICATE (Indicate category)	NORMAL		UTILITY		ACROBATIC		TRANSPORT		GLIDER		BALLOON
B		XX	SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate item)											
	2		LIMITED											
	5		PROVISIONAL (Indicate class)	1		CLASS I								
				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)	5		PATROLLING	6		WEATHER CONTROL		
				7		CARRIAGE OF CARGO	0		OTHER (Specify)					
	4	XX	EXPERIMENTAL (Indicate operation(s) to be conducted)	1	XX	RESEARCH AND DEVELOPMENT	2		AMATEUR BUILT	3		EXHIBITION		
				4		RACING	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	6		MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE "Restricted Operation" and "Standard" or "Limited" as applicable)											

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on certificate of aircraft registration) — IF DEALER, CHECK HERE →

NAME: AERO-METRIC ENGINEERING, INC.
ADDRESS: 4708 NORTH 40th STREET, SHEBOYGAN, WI 53081

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.): 6A1, REVISION 45	X	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.): 92-07
	AIRCRAFT LISTING (Give page number(s)): N/A	X	SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated): SA1158GL

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

XX	CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173	TOTAL AIRFRAME HOURS: 6321	3 EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed): 18

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 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	NAME AND TITLE (Print or type)	SIGNATURE
4-20-92	HUGH G. EVANS (AGENT)	Hugh G Evans

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.)	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 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:
- FAA INSPECTOR
- FAA DESIGNEE
- CERTIFICATE HOLDER UNDER: FAR 65 / FAR 121, 127 or 135 / FAR 145

DATE	DISTRICT OFFICE	DESIGNEE'S SIGNATURE AND NO.	FAA INSPECTOR'S SIGNATURE
4-20-92	ANM-02		Floyd W. Gaston / FLOYD W. GASTON

FAA Form 8130-6 (11-88) SUPERSEDES PREVIOUS EDITION

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

*U.S.GPO:1989-241-672/90913

VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME	ADDRESS

B. PRODUCTION BASIS *(Check applicable item)*

- [ ] PRODUCTION CERTIFICATE *(Give production certificate number)*
- [ ] TYPE CERTIFICATE ONLY
- [ ] 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 — CUSTOMER DEMONSTRATION FLIGHTS ☐ *(Check if applicable)*

FROM	TO	
VIA	DEPARTURE DATE	DURATION

C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT

- [ ] PILOT
- [ ] CO-PILOT
- [ ] NAVIGATOR
- [ ] OTHER *(Specify)*

D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS:

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)

X	A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable		G. Statement of Conformity, FAA Form 8130-9 *(Attach when required)*
X	B. Current Operating Limitations Attached		H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
X	C. Data, Drawings, Photographs, etc. *(Attach when required)*	X	I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.191(a) CAR _____ *(Original Attached)*
X	D. Current Weight and Balance Information Available in Aircraft		
	E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*	X	J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191(a) _____ *(Copy attached)*
X	F. This Inspection Recorded in Aircraft Records		

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	RESEARCH & DEVELOPMENT	
B	MANU-FACTURER	NAME	N/A
		ADDRESS	N/A
C	FLIGHT	FROM	N/A
		TO	N/A
D	N-280MB		SERIAL NO. 3255
	BUILDER ROCKWELL INTERNATIONAL		MODEL 500-S
E	DATE OF ISSUANCE 4-20-92		EXPIRY 7-31-92
	OPERATING LIMITATIONS DATED 4-20-92		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE FLOYD W. GASTON		DESIGNATION OR OFFICE NO. ANM-02

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 8130-7 (10/82) SEE REVERSE SIDE

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

U.S. GPO 1987-762-134

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

EXPERIMENTAL OPERATING LIMITATIONS DATE 4-20-92

Aircraft: ROCKWELL INTERNATIONAL Registration No.: N-280MB
Model: 500-S Serial No: 3255

1. This operating limitation is a part of the Experimental Certificate of Airworthiness, FAA Form 8130-7, dated 4-20-92 and issued to expire 7-31-92 and must be displayed in the aircraft in accordance with FAR 91.27(b).

2. This aircraft is certificated in the experimental category for the purpose of: RESEARCH & DEVELOPMENT.

3. All flights must be conducted within the following areas, boundaries, and corridors: WITHIN600 NM FROM THE GEG VOR WITHIN WS AIRSPACE.

4. No person may operate this aircraft for other than the purpose for which the special purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules, FAR Part 91.

5. All flights shall be conducted to avoid areas having heavy air traffic, and when operating in the vicinity of cities, towns and congested areas, conducted in such a manner that the aircraft will not create hazardous exposure to persons or property on the ground.

6. The word "Experimental" shall be displayed at each entrance to the cockpit and the letters shall be no less than two inches in height.

7. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating into or out of airports with operating control towers.

8. All flights shall be conducted under ~~[illegible]~~ DAY OR NIGHT AND VFR OR IFR

9. No person may operate this aircraft for carrying persons or property for compensation or hire.

10. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight.

11. Any major change to this aircraft will invalidate the special airworthiness certificate issued for this aircraft.

12. This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. This aircraft may not be operated over any foreign country without the special permission of that country.

13. An entry in the aircraft log book shall be made for each flight showing time and purpose of the flight.

FLOYD W. GASTON
Aviation Safety Inspector A/W
NM-FSDO-02

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	RESEARCH & DEVELOPMENT	
B	MANU-FACTURER	NAME	N/A
		ADDRESS	N/A
C	FLIGHT	FROM	N/A
		TO	N/A
D	N-280MB		SERIAL NO. 3255
	BUILDER ROCKWELL INTERNATIONAL		MODEL 500-S
E	DATE OF ISSUANCE 2-20-92		EXPIRY 4-21-92
	OPERATING LIMITATIONS DATED 2-20-92		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE FLOYD W. GASTON		DESIGNATION OR OFFICE NO. ANM-02

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 8130-7 (10/82) *SEE REVERSE SIDE*

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

GPO: 1984—774-889

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

EXPERIMENTAL OPERATING LIMITATIONS DATE 2-20-92

Aircraft: ROCKWELL INTERNATIONAL Registration No.: N-280MB
Model: 500-S Serial No: 3255

1. This operating limitation is a part of the Experimental Certificate of Airworthiness, FAA Form 8130-7, dated 2-20-92 and issued to expire 4-21-92 and must be displayed in the aircraft in accordance with FAR 91.27(b).

2. This aircraft is certificated in the experimental category for the purpose of: ~~RESEARCH & DEVELOPMENT.~~

3. All flights must be conducted within the following areas, boundaries, and corridors: 600 NM FROM THE GEG VOR WITHIN US AIR SPACE.

4. No person may operate this aircraft for other than the purpose for which the special purpose airworthiness certificate was issued and the aircraft shall be operated in accordance with the applicable FAA Air Traffic and General Operating Rules, FAR Part 91.

5. All flights shall be conducted to avoid areas having heavy air traffic, and when operating in the vicinity of cities, towns and congested areas, conducted in such a manner that the aircraft will not create hazardous exposure to persons or property on the ground.

6. The word "Experimental" shall be displayed at each entrance to the cockpit and the letters shall be no less than two inches in height.

7. Operator of this aircraft shall notify the control tower of the experimental nature of this aircraft when operating into or out of airports with operating control towers.

8. All flights shall be conducted under VFR day ~~XXXX~~ OR NIGHT, VFR ORIFR.

9. No person may operate this aircraft for carrying persons or property for compensation or hire.

10. No person may be carried in the aircraft during flight unless that person is essential to the purpose of the flight.

11. Any major change to this aircraft will invalidate the special airworthiness certificate issued for this aircraft.

12. This aircraft does not meet the requirements of the applicable, comprehensive, and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation. This aircraft may not be operated over any foreign country without the special permission of that country.

13. An entry in the aircraft log book shall be made for each flight showing time and purpose of the flight.

FLOYD W. GASTON
Aviation Safety Inspector A/W

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

AW CERT. 7-15-75

Form Approved
O.M.B. No. 2120-0018

U.S. 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	4. YR. MFR.	FAA CODING
N280MB	Rockwell	500-S	75	46 3040
5. AIRCRAFT SERIAL NO.	**6. ENGINE BUILDER'S NAME (Make)**	**7. ENGINE MODEL DESIGNATION**		
3255	Lycoming	TIO-540-J2B		4153
8. NUMBER OF ENGINES	**9. PROPELLER BUILDER'S NAME (Make)**	**10. PROPELLER MODEL DESIGNATION**	**11. AIRCRAFT IS (Check if applicable)**	
2	Hartzell	HC-C3YR-2UF/FC8468-6R	IMPORT	

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A 1 STANDARD AIRWORTHINESS CERTIFICATE (Indicate category) — NORMAL | UTILITY | ACROBATIC | TRANSPORT | GLIDER | BALLOON

B XXX SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)

- 2 LIMITED
- 5 PROVISIONAL (Indicate class): 1 CLASS I; 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); 5 PATROLLING; 6 WEATHER CONTROL; 7 CARRIAGE OF CARGO; 8 OTHER (Specify)
- 4 XX EXPERIMENTAL (Indicate operation(s) to be conducted): 1 XX RESEARCH AND DEVELOPMENT; 2 AMATEUR BUILT; 3 EXHIBITION; 4 RACING; 5 CREW TRAINING; 6 MKT. SURVEY; 0 TO SHOW COMPLIANCE WITH FAR
- 6 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 8 MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE "Restricted Operation" and "Standard" or "Limited," as applicable.)

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on certificate of aircraft registration) — IF DEALER, CHECK HERE →

NAME: Aero-Metric Engineering, Inc.
ADDRESS: 4708 North 40th Street, Sheboygan, WI 53081

B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)

XXX AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.): 6A1 Rev 45

XX AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.): 91-08-09

AIRCRAFT LISTING (Give page number(s))

XX SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated): STC SA1158GL

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

XX CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173

TOTAL AIRFRAME HOURS: 6287.2

EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed): 0

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 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	NAME AND TITLE (Print or type)	SIGNATURE
12/13/91	Hugh G. Evans Agent	Hugh G. Evans

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)

1 FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.) — 5 CERTIFICATED MECHANIC (Give Certificate No.) — 6 CERTIFICATED REPAIR STATION (Give Certificate No.)

2 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: FAA INSPECTOR | FAA DESIGNEE

CERTIFICATE HOLDER UNDER: FAR 65 | FAR 121, 127 or 135 | FAR 145

DATE	DISTRICT OFFICE	DESIGNEE'S SIGNATURE AND NO.	FAA INSPECTOR'S SIGNATURE
12-17-91	ANM-1085 SEA-MIDO		Charlie Cotton

FAA Form 8130-6 (6-86) SUPERSEDES PREVIOUS EDITION

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME	ADDRESS

B. PRODUCTION BASIS *(Check applicable item)*

- [ ] PRODUCTION CERTIFICATE *(Give production certificate number)*
- [ ] TYPE CERTIFICATE ONLY
- [ ] 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 CUSTOMER DEMONSTRATION FLIGHTS ☐ *(Check if applicable)*

FROM	TO	
VIA	DEPARTURE DATE	DURATION

C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT

- [ ] PILOT
- [ ] CO-PILOT
- [ ] NAVIGATOR
- [ ] OTHER *(Specify)*

D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS:

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)

- [X] A. Operating Limitations and Markings in Compliance with FAR 91.9 as Applicable
- [X] B. Current Operating Limitations Attached
- [ ] C. Data, Drawings, Photographs, etc. *(Attach when required)*
- [X] D. Current Weight and Balance Information Available in Aircraft
- [ ] E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*
- [X] F. This Inspection Recorded in Aircraft Records
- [ ] G. Statement of Conformity, FAA Form 8130-9 *(Attach when required)*
- [ ] H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
- [X] I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.183(d) CAR _____ *(Original Attached)*
- [X] J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191(a) _____ *(Copy attached)*

☆ U.S. Government Printing Office: 1986—491-818/53357

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	RESEARCH AND DEVELOPMENT	
B	MANU-FACTURER	NAME	N/A
		ADDRESS	N/A
C	FLIGHT	FROM	N/A
		TO	N/A
D	N— 280MB		SERIAL NO. 3255
	BUILDER Rockwell		MODEL 500 S
E	DATE OF ISSUANCE 12/17/91		EXPIRY 02/19/92
	OPERATING LIMITATIONS DATED 12/17/91		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE Charlie Cotton (ASI) MFG		DESIGNATION OR OFFICE NO SEA-MIDO ANM-108S

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 8130-7 (10/82) SEE REVERSE SIDE

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

EXPERIMENTAL OPERATING LIMITATIONS

RESEARCH AND DEVELOPMENT

These operating limitations form a part of the Special Airworthiness Certificate issued for the aircraft described below, and must be displayed in the aircraft in accordance with Federal Aviation Regulation (FAR) 91.203(b).

MAKE: ROCKWELL MODEL: 500-S SERIAL NO.: 3255 REG. NO.: N280MB

1. No person may operate this aircraft for other than the purpose of Research and Development to accomplish the flight operations outlined in the applicant's letter, dated December 13, 1991, describing compliance with FAR 21.193(d), and made available to the pilot in the aircraft. Additionally, this aircraft shall be operated in accordance with applicable air traffic and general operating rules of FAR Part 91, and all additional limitations herein prescribed under the provisions of FAR 91.319(e).

2. All flights shall be conducted within the geographic boundaries of: 600 NM from the GEG VOR.

3. The pilot-in-command of this aircraft must, as applicable, hold an appropriate category/class rating and aircraft type rating or possess a "Letter of Authorization" issued by an FAA General Aviation or Air Carrier Operations Inspector.

4. This aircraft shall not be flown unless it is maintained and operated in accordance with applicable Rockwell Flight Manual and Rockwell Maintenance Instructions.

5. Day/Night VFR and IFR operation is authorized.

6. No person may be carried in this aircraft during flight unless that person is required for the purpose of the flight.

7. This aircraft shall contain the placards, markings, flight manual, etc. (or other operating instructions developed for the proposed STC modification) required by FAR 91.9.

8. This aircraft is prohibited from aerobatic flight; that is, an intentional maneuver involving an abrupt change in the aircraft's attitude, an abnormal attitude, or abnormal acceleration not necessary for normal flight.

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

EXPERIMENTAL OPERATING LIMITATIONS

MAKE: Rockwell MODEL: 500-S SERIAL NO.:3255 REG. NO.: N280MB

9. The cognizant FAA Flight Standards District Office must be notified and their response received in writing, prior to flying this aircraft after incorporating a major change as defined by FAR 21.93.

10. If aircraft, engine or propeller operating limitations are exceeded, an appropriate entry will be made in the historical records.

11. These limitations expire concurrently with the Special Airworthiness Certificate on February 18, 1992.

Charlie Cotton
Charlie Cotton
Aviation Safety Inspector
(Manufacturing)

December 17, 1991
Date

ANM-108S
Office

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

Merlyn Products, INC.

Suzanne C. Evans
President

December 13, 1991

Department of Tansportation
Federal Aviation Administration
Manufacturing Inspection District Office
1601 Lind Avenue SW
Renton, Washington 98055-4056

Attn: Mr. Charles Cotton

Dear Sir:

In Compliance with FAR 21.193, the following information is submitted and we hereby request that a special airworthiness certificate (experimental R & D) be issued for the aircraft described below:

BUILDER (MAKE): Rockwell MODEL: 500-S
SERIAL : 3255 REG. NO: N280MB

1. The purpose of the experiment is to flight test the aircraft. These tests will include flights to Flight Level 300.

2. The estimated time required is 60 days.

3. It is desired that flight operations should be permitted over the following area: 600 NM from the GEG VOR.

Signature: S. Evans
Title: AGENT
Address: E. 7500 Park Drive Road
Spokane, WA 99204
Telephone: 1-509-838-7500
1-800-828-7500

Enclosure:

7500 West Park Drive
Spokane, WA 99204-5726
(509) 838-7500
FAX (509) 838-7501

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

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
N280MB	Rockwell Commander	3255	Normal Utility

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, preventive maintenance, and alterations are performed in accordance with Parts 21, 43, 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
Replacement: 7-15-75	James M. Towery	7-2-04

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 GPO 1967—O-270 931

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 2/13/92

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 5-7-91

RECEIVED
FEB 27 1991

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
GL13

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: AERO COMMANDER	Model: 500-S
	Serial No.: 3255	Nationality and Registration Mark: N3801MB
2. Owner	Name (As shown on registration certificate): AERO METRIC ENGINEERING INC	Address (As shown on registration certificate): 4708 N. 40th. St. SHEBOYGAN WIS. 53081

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: STEVE BUTZEN, Rt. 1 County Trunk O, SHEBOYGAN FALLS WIS 53085

B. Kind of Agency:
- [X] U.S. Certificated Mechanic
- [ ] Foreign Certificated Mechanic
- [ ] Certificated Repair Station
- [ ] Manufacturer

C. Certificate No.: 397568310

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: 2/25/91

Signature of Authorized Individual: Steve Butzen 397568310

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: [X] APPROVED [ ] REJECTED

BY
- [ ] FAA Flt. Standards Inspector
- [ ] FAA Designee
- [ ] Manufacturer
- [X] Repair Station
- [ ] Inspection Authorization
- [ ] Person Approved by Transport Canada Airworthiness Group
- Other (Specify):

Date of Approval or Rejection: 2/25/91

Certificate or Designation No.: IA397568310

Signature of Authorized Individual: Steve Butzen IA397568310

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 5-7-91

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 WINGLETS IAW STC #SA1158GL
AND COMMANDER-AERO, & DRAWING # 900034.
CHANGED WEIGHT & BALANCE to Reflect WEIGHT
INCREASE of 4.78 lbs AT 177 INCHES

2/25/91 Steve Burger IA 347568310

END

☐ Additional Sheets Are Attached

★U.S.GPO:1989-0-683-171

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 N DATE: 5 - 29 - 90

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 GEORGIA FSDO 11
7-0-11

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: Rockwell International	Model: 500S
	Serial No.: 3255	Nationality and Registration Mark: N280MB
2. Owner	Name *(As shown on registration certificate)*: Aero Metric Engineering Inc.	Address *(As shown on registration certificate)*: 4708 North 40th Street Sheboygan, Wi. 53081

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

RECEIVED
APR 03 1990
MID-SOUTH FSDO
ATLANTA

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Garrett General Aviation Services Division Bush Field Airport 1550 Hangar Road Augusta, Georgia 30906-9684 RS 701-28	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	Airframe Class III RS 701-28

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
March 23, 1990	John B. League

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	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
March 23, 1990	RS 701-28	John B. League

FAA Form 337 (4-87)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2 N DATE: 5 - 29 - 90

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.)

Repaired right wing leading edge inboard damage. Fitted and installed a new Gulfstream Commander P/n 170045-44 inboard leading edge skin and a new .040" 2024T3 aluninum skin P/n 170045-304 on iaboard lower wing between leading edge skin and spar. Resealed repaired sections at fuselage and nacelle with PRC 1422 B2.

All work was accomplished per Gulfstream Aerospace Commander Division instructions, AC43.13-1A chapter 2 (section 3) And chacter 6.

Log Book entries were made. There was no weight change.

**********END**********

☐ Additional Sheets Are Attached

FAA AIRCRAFT REGISTRY
CAMERA NO. /14 DATE: 7-27-88

MCL

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION
SWFSDO-67

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: Rockwell	MODEL: 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: N280MB
2. OWNER	NAME *(As shown on registration certificate)*: Aero-Metric Engineering, Inc.	ADDRESS *(As shown on registration certificate)*: 4708 North 40th Street, Sheboygan, Wisconsin 53081

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.
Downtown Airpark, Inc. P. O. Box 26027 Okla. City, Okla. 73126	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Airframe and Powerplant RS2034

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
May 7, 1985	Billy R. Powers, Supt. of Maintenance

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER		INSPECTION AUTHORIZATION	OTHER *(Specify)*
	FAA DESIGNEE	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
5-7-85	RS2034	Billy R. Powers, Supt. of Maintenance

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1H DATE: 7-27-88

NOTICE

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

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

Modified camera ports for installation of LMK-9/15 and LMK-S per STC SA1332SW.

No weight change.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆ U.S. GPO: 1981 - 775-332/47

FAA AIRCRAFT REGISTRY
CAMERA NO. 14 DATE: 7-27-82

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION
AGL CADO 48

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: Aero-Commander	MODEL: 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: N 280 MB
2. OWNER	NAME (As shown on registration certificate): Michael Baker Jr., Inc.	ADDRESS (As shown on registration certificate): P. O. Box 280, Beaver, Pa. 15009

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: 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.
Laurence Aircraft Electronics, Akron-Fulton Inter'l A/P Inc, Akron, OH 44306	U.S. CERTIFICATED MECHANIC / FOREIGN CERTIFICATED MECHANIC / X CERTIFICATED REPAIR STATION / MANUFACTURER	CRS 106-13

I do 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: Sept 10, 1982

SIGNATURE OF AUTHORIZED INDIVIDUAL: Raymond F McClellan

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: [X] APPROVED [ ] REJECTED

FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	INSPECTION AUTHORIZATION	OTHER (Specify)
FAA DESIGNEE	X	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
10 Sept 82	CRS 106-13	L. A. Stabler

FAA Form 337 (7-67)

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

(8320)

SEP 14 1982

FAA AIRCRAFT REGISTRY
CAMERA NO. / DATE: 1-27-88

NOTICE

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

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

AIRCRAFT REGISTRATION NO. N 280 MB DATE 9-10-82

FOSTER AIRDATA R/NAV IFR CERTIFICATION

Reference Foster Airdata 511G R/NAV System, s/n 2135 with 51DSA Steering Adapter, s/n 1778, as shown on aircraft paperwork dated 11-25-81, interconnected with King KN-65 DME, using a Foster Airdata 304A0112 and number one DME Adapter Nav Receiver KX-175B with KI-525A Indicator. R/NAV System bench checked in accordance with AC-90-45A, Appendix "A" Par 2, 3b and 3c. System checked in accordance with AC-90-45A, Appendix "D" Table 2, 3, and 4.

Wiring diagram interconnected as per Foster Airdata Maintenance Manual Part AD009A0211. This installation System has been checked in accordance with AC-43.13-1A and 43.13-2A. Equipment list and new weight and balance revised.

A flight check of R/NAV System installed in this aircraft as referenced in FAA Form 337, were conducted in the Cleveland area on 9-9-82.

Two (2) R/NAV approaches were made to the Cuyahoga County Airport using the published Cuyahoga County Airport R/NAV approach procedure to runway 23.

All R/NAV Tract errors were well within the accuracies established in Table 2, 3, and 4, or Appendix "A", Advisory Circular 90-45A.

If any component of the R/NAV System is repaired or recalibrated, the R/NAV System's accuracy should be rechecked to show compliance with original certification.

All maintenance of R/NAV System will be performed as outlined in Appendix "E" of AC-9045A.

Removal of 51DSA Steering Adapter renders Nav One KI-525A inoperative.

The System as installed and functioning is approved for IFR R/NAV operation.

The following placard has been installed and MUST remain in the aircraft and remain legible.

"Area Navigation use approved for IFR Enroute and Approach categories. See Flight Manual Supplement or equivalent for operation information."

**********E N D**********

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 11 DATE: 9-27-83

NOV 28 1980
OCT 16 1980

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved
Budget Bureau No. 04-R060.1

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

FOR FAA USE ONLY
OFFICE IDENTIFICATION

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE: Rockwell Commander	MODEL: 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: U.S.A. N280MB
2. OWNER	NAME (As shown on registration certificate): Michael Baker, Jr. Inc.	ADDRESS (As shown on registration certificate): 4301 Dutch Ridge Road, Beaver, Pennsylvania 15009

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.
Chris Passero Chippewa Village Beaver Falls, Pennsylvania 15010	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P 1468367

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
10-11-80	Chris Passero

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 [X] APPROVED [ ] REJECTED

BY					
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
10-11-80	1468367 AI	Chris Passero

FAA Form 337 (7-67) ☆ U.S. Government Printing Office 1977—772-546/141 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

NOTICE

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

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

1. Removed Shark 7 ELT
2. Installed Narco ELT 10 at same station
3. Negligible weight & balance change
4. Radio interference check completed
5. All work done in accordance with AC 43 13 2.

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

SEP. 25 1978

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.4
FOR FAA USE ONLY
OFFICE IDENTIFICATION ACO-14

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: Aero Commander	MODEL: 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: N280HB
2. OWNER	NAME (As shown on registration certificate): Michael Baker Jr., Inc.	ADDRESS (As shown on registration certificate): 4301 Dutch Ridge Road, Beaver, PA 15009

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
David D. Johnson 233 E. Maine Street Evans City, PA 16033	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P 153-48-3416

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: 9/01/78
SIGNATURE OF AUTHORIZED INDIVIDUAL: David D. Johnson

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE		REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
9/01/78	A&P 1825010 IA	Warren E. Hall

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

NOTICE

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

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

1. Repaired lower fuselage section from station -25 to +37. Spliced web part #310039-101 L.H. and web part #310038-115 R.H. from +5 to +20. Spliced angle #310185-7 station -12 to 0. Spliced angle #310186-7 station -12 to 0. Spliced hinges part #330052-101 from station #-29 to -4 R.& L. side. Replaced landing gear door and hinge aft. L. & R. Replaced Doubler L.H. 310038-59 and Doubler R.H. 310038-60. Spliced web #310042-41 and web #310042-55 with new part. Spliced bulbed angle center section 0 to +15 (stringer).Left & Right. Repaired stringers station +23 to +37 center section, repaired and/or fabricated clips and brackets where needed. Replaced bulkhead aft nosewheel part #320000-627. Replaced lower fuselage skin from station -12 to +37. Replaced D.M.E. antenna part #DMN-170-1.

2. All rivet patterns and method of repairs made in accordance with 43.13-1 Section 3.

3. Rebuilt and resealed nose gear retract cylinder and retracted gear several times in accordance with Aero Commander service manual #500S.

4. Secured and adjusted nose steering sequence valve, replaced hold down bolts in nose wheel steering cylinder.

5. Log book entry made.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. G.P.O. 1972/720-694/545/1303

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

W.O. 32867 cst

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

JUN 10 1977

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION
GL-GADO-7
~~Columbus, Ohio~~

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: Commander	MODEL: 500S
	SERIAL NO.: 5255	NATIONALITY AND REGISTRATION MARK: 280MB
2. OWNER	NAME (As shown on registration certificate): Michael Baker Jr., Inc.	ADDRESS (As shown on registration certificate): 4301 Dutch Ridge Road, Beaver, Pa. 15009

3. FOR FAA USE ONLY

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
ElectroSonics Division AiRadio Corporation 4885 Sawyer Road Columbus, Ohio 43219	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC x CERTIFICATED REPAIR STATION MANUFACTURER	Repair Station 1009 Radio Class 1, 2, & 3 Limited Instruments Limited Specialized Services

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
June 3, 1977	

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	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
6/3/77	1009	

FAA Form 337 (7-67) (8320)

GPO : 1971 O - 410-878

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

NOTICE

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

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

1. The following equipment was installed under throttle console in accordance with A.C. 43.13-2 Chapter 2 and 11: King KI-240, Indicator

2. The following equipment was installed in the nose compartment in accordance with A.C. 43.13-2 Chapter 2: KT-44, Rec. Transmitter

3. The following equipment was installed on forward bulkhead in accordance with A.C. 43.13-2 Chapter 2: King KA-49, Antenna.

4. All wires, fuses, circuit breakers, and method of installation was in accordance with A.C. 43.13-1 Chapter 11, Section 2 and 3.

5. Electrical load check completed per A.C. 43.1302 Chapter 2, Paragraph 27 and found to be within limits.

6. Operational check completed per E.A. 8310.7.

Moment 906008.60 = New E.W.CG 171.86 = New Useful Load 1478.3
Weight 5271.7

END

C. Brown
L. Minor

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION SRC GADO
2-0-09

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: Rockwell Commander	MODEL: 500S
	SERIAL NO.: 3255	NATIONALITY AND REGISTRATION MARK: N280MB
2. OWNER	NAME (As shown on registration certificate): Michael Baker, Jr., Inc.	ADDRESS (As shown on registration certificate): 4301 Dutch Ridge Road, Beaver, Pa. 15009

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				

BETHANY RECEIVED FAA NOV 30 1976 SW-GADO-9 OKLAHOMA

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Downtown Airpark, Inc. P.O. Box 94846 Oklahoma City, Oklahoma 73109	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Airframe & Power-Plant 2034

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
Nov. 26, 1976	Troy E. Detamore Troy E. Detamore, Supt. of Maint.

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	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
11-26-76 11-26-76	RS 2034	Troy E. Detamore Troy E. Detamore, Supt. Of Maint.

FAA Form 337 (7-67) ☆ U.S. GOVERNMENT PRINTING OFFICE: 1974 — 773-230/134/7 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

NOTICE

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

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

Installed auxiliary outboard fuel system per STC SA 976 SW, modified fuselage for installation of dual aerial survey cameras per STC SA 1182 SW. Installed king KCS-55 compass system, king KN-73 glideslope reciever and flite-tronics PC-16 inverter.

All installations made in accordance with manufacturers instructions and part 43 of FAR.

Weight & Balance data and equipment list revised

- E N D -

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

Form Approved
Budget Bureau No: 04-R0058

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	4. YR. MFG.	FAA CODING
N12RS 280MB	Rockwell Commander	500S (CAR 3)	1975	763041Ø
5. AIRCRAFT SERIAL NO.	6. ENGINE BUILDER'S NAME (make)	7. ENGINE MODEL DESIGNATION		41533
3255	Lycoming	IO-540-E1B5		
8. NUMBER OF ENGINES	9. PROPELLER BUILDER'S NAME (make)	10. PROPELLER MODEL DESIGNATION		11. AIRCRAFT IS
Two	Hartzell	HC-C3YR-2F/		

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items) FC8468-6R

A 1 X STANDARD AIRWORTHINESS CERT. (Indicate category) X NORMAL X UTILITY ACROBATIC TRANSPORT GLIDER BALLOON

B SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)

2	LIMITED							
5	PROVISIONAL (Indicate class)	1	CLASS I					
		2	CLASS II					
3	RESTRICTED (Indicate operation(s) to be conducted)	1	AGRICULTURE & PEST CONTROL	2	AERIAL SURVEYING	3	AERIAL ADVERTISING	
		4	FOREST (Wild life conservation)	5	PATROLLING	6	WEATHER CONTROL	
		0	OTHER (Specify)					
4	EXPERIMENTAL (Indicate operation(s) to be conducted)	1	RESEARCH AND DEVELOPMENT	2	AMATEUR BUILT	3	EXHIBITION	
		4	RACING	5	CREW TRAINING	6	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 MAX. CERTIFICATED TAKE-OFF WEIGHT					
		4	DELIVERING OR EXPORT	5	PRODUCTION FLIGHT TESTING			

C 6 MULTIPLE AIRWORTHINESS CERTIFICATE (Check appropriate Restricted Operation and Standard or Limited as applicable above)

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration) IF DEALER, CHECK HERE → X

NAME: General Aviation Division, Rockwell International
ADDRESS: 5001 North Rockwell Avenue, Bethany, Oklahoma 73008

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.) 6A1 Rev. 33 & Proposed Rev

X AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) January 1, 1974 75-9

AIRCRAFT LISTING (Give page No(s).) dated 5-8-75

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— XXX 6.7

3 EXPERIMENTAL ONLY—Enter hours flown since last certificate issued or renewed N/A

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	NAME AND TITLE (Print or type)	SIGNATURE
7-15-75	K. L. Hale, Quality Assurance Mgr.	K L Hale

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.)	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: [X] The certification requested, or [4] Amendment or modification of its current airworthiness certificate. Inspection for a special flight permit under Section VII was conducted by: [ ] FAA Inspector; certificate holder under [ ] FAR 65, [ ] FAR 121 or 127, or [ ] FAR 145.

DATE	DISTRICT OFFICE		DESIGNEE'S SIGNATURE AND NO.		FAA INSPECTOR'S SIGNATURE
7-15-75	SW-EMDO-41	4	Dennis R. Haile Dennis R. Haile, DOA PC-203	1	

FAA Form 8130-6 (7-70)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

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VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME	ADDRESS

B. PRODUCTION BASIS *(Check applicable item)*

- [ ] PRODUCTION CERTIFICATE *(Give production certificate number)*
- [ ] TYPE CERTIFICATE ONLY
- [ ] 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

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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

- [ ] PILOT
- [ ] CO-PILOT
- [ ] NAVIGATOR
- [ ] OTHER *(Specify)*

D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS:

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)

X	A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable		G. Statement of Conformity, FAA Form 317 *(Attach when required)*
	B. Current Operating Limitations Attached		H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
	C. Data, Drawings, Photographs, etc. *(Attach when required)*		I. Previous Airworthiness Certificate Issued in Accordance with FAR ____ CAR ____ *(Original attached)*
X	D. Current Weight and Balance Information Available in Aircraft		
	E. Major Repair and Alteration, FAA 337 *(Attach when required)*	X	J. Current Airworthiness Certificate Issued in Accordance with FAR 21.183(a) *(Copy attached)*
X	F. This Inspection Recorded in Aircraft Records		

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FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83

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
N12RS	Rockwell Commander 500S	3255	Normal Utility

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

DUPLICATE

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 Parts 21, 43, 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
7-15-75	Dennis R. Haile	DOA PC-203

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 GPO : 1967—O-270-931

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 9-27-83