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
SO-FSDO-19

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This 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: Boeing	Model: 727-100
	Serial No.: 20115	Nationality and Registration Mark: USA N908JE
2. Owner	Name *(As shown on registration certificate)*: J.E.G.E, Inc.	Address *(as shown on registration certificate)*: [redacted]

3. For FAA Use Only

The data identified herein complies with the applicable airworthines requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

OCT 2 2006
Date

SO-FSDO-17
Signature of FAA Inspector

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.
BANYAN AIR SERVICE AVIONICS DIVISION [redacted]		U.S. Certificated Mechanic	SD4R514M Radio Class 1,2,3 Limited Airframe
		Foreign Certificated Mechanic	
	☒	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: 24 OCTOBER 2006

Signature of Authorized Individual: Steve Ouellette

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
24 OCTOBER 2006	SD4R514M	Steve Ouellette

FAA Form 337 (12-88)

EFTA00277580

NOTICE

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

8. Description of Work Accomplished

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

The purpose of this 337 is for the work performed on N908JE under Banyan Air Service; Avionics Division work order #71301 completed on 10/23/06.

A. Installed an AirCell Iridium ST-3100 P/N 400-10680-001 and removed a previously installed AirCell AGT.01 P/N 900001-2. Minor wiring changes were made at the mating connector IAW installation manual P/N 800-10680 Rev. B dated June 2005.

B. The above installation was performed in accordance with AC43.13-1B, Chapter 7, sections 1-5, AC43.13-1B Chapter 11, sections 3-17, AC43.13-2A Chapter 1, AC43.13-2A Chapter 2, paragraphs 24 & 25 and the aircraft's maintenance manual.

C. A functional test of the above equipment has been performed FAR25.1309 and FAR25 .1431 for proper operation and did not adversely affect any other aircraft systems. An electrical load analysis was conducted and it was confirmed that this installation would not exceed 80% of the generator output.

D. A log book entry and equipment list was generated to reflect the above installation. The weight change is negligible. the equipment list was updated to reflect this change.

E. Instructions for continued airworthiness is attached..

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

☐ Additional Sheets are Attached

Instruction for Continued Airworthiness

for

AirCell ST 3100 Aircraft Subscriber Equipment System

Installed on

Boeing 727-100
N908JE
S/N 20115

Revision O.

Dated: 9/17/2006

APPLICATION			REVISIONS			
DESC.	NEXT ASSY	USED ON	REV	DESCRIPTION	DATE	APPROVED
ST 3100	ASE SYSTEM	BARON 95-B55	A	BASELINE RELEASE	2002-10-16	K. FRANTZ
			B	SEE DCN 00179	2002-10-25	K. FRANTZ

ALL SHEETS CARRY THE SAME REVISION LETTER

UNLESS OTHERWISE SPECIFIED
DIMENSIONING & TOLERANCING IAW ASME Y14.5M-1994
DIMENSIONS ARE IN INCHES
STANDARD TOLERANCES:
.X = ±. .1 .XX = ± .02 .XXX = ± .010

AirCell®
AirCell, Inc.
1172 Century Drive
Suite 280, Building B
Louisville, CO 80027

APPROVED	DATE
PREPARED BY K. FRANTZ	YEAR-MO-DA 2002-10-16
MECH DESIGN Z. HOH	YEAR-MO-DA 2002-10-16
ELEC DESIGN B. SOUKUP	YEAR-MO-DA 2002-10-16
TECH SUPPORT B. NIELSON	YEAR-MO-DA 2002-10-16
SYSTEMS K. FRANTZ	YEAR-MO-DA 2002-10-16
ENGINEERING J. POLSON	YEAR-MO-DA 2002-10-16

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

ST 3100 ASE SYSTEM

SIZE	CAGE CODE	DRAWING NUMBER	REV
A	1NQ67	820-10680-001	B

FILE FORMAT: Microsoft Word 2000
FILENAME: 820-10680-001-B.doc

SCALE: NONE | WEIGHT: NA | SH 1 of 8

699-10077: A-SIZE SPEC TEMPLATE.DOC

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1 GENERAL INFORMATION

1.1 SCOPE OF THIS DOCUMENT

This manual defines the instructions for continued airworthiness (ICAW) for an AirCell 3000 Series Aircraft Subscriber Equipment (ASE) system. The manual is written to demonstrate compliance with FARs 23.1529 and 25.1529. Specifically, this manual defines the instructions for the Model 3100 Satellite Telephone System (ST 3100).

This manual is subdivided into sections to support the general operation, inspection and maintenance of the ST 3100 system. Section 1 defines general information for the maintenance and airworthiness of the ASE system. Section 2 provides general information on the configuration and operation of AirCell ASE systems. Section 3 presents a discussion of the scheduled maintenance and operational time limits for the system. Section 4 and Appendix A provide instructions for system operational checks, troubleshooting, unscheduled maintenance and component replacement. Section 5 provides a brief statement addressing airworthiness limitations for the ST 3100 system.

1.2 TECHNICAL SUPPORT CONTACT INFORMATION

Technical support for AirCell products is available from 08:00 to 17:00 United States Mountain Time (Time Zone GMT –7 hours) Monday through Friday. The contact information for AirCell Technical Support is as follows:

From a landline:

Phone (in the US):	1.888.286.9876	(toll free)
Phone (outside the US):	001.303.379.0278	(toll call)

From an AirCell phone:

From an Air Mode/AMPS phone (in the US):	611	(toll free)
From a SAT Mode (Iridium) phone (worldwide):	2471	(toll free)

Email: customerservice@aircell.com

Note: The toll free numbers for AirCell phones will only work for AirCell provided phones and services.

1.3 GENERAL NOTES

- All pages in this document carry the same revision level. Revision status is indicated by a letter printed on each page of this manual.
- The material in this manual is subject to change. Before planning or performing any installation or maintenance operation, check with AirCell Technical Support to verify that this manual is complete and has the latest revision.
- AirCell, Inc. welcomes your comments, suggestions, and corrections concerning this manual. Please include in your correspondence the publication number, equipment part number, page or figure number, and a brief description of any problem or consideration you noted. Please send your comments to:

AirCell, Inc.
Corporate Publication Coordinator
1172 Century Drive Suite 280, Building B
Louisville, Colorado 80027
cpc@aircell.com

1.4 ADVISORIES

WARNING

Statements in this section contain critical safety information. Read these statements carefully before installing this unit.

WARNING

Observe standard safety precautions and wear safety glasses to prevent personal injury while performing maintenance on this unit in the aircraft.

WARNING

Shut off power before connecting or disconnecting the ST 3100 system, as voltage transients may damage the unit or the interface wiring.

WARNING

Components or subassemblies found in this unit may contain materials such as beryllium oxide, acids, lithium, radioactive material, mercury, etc. that can be hazardous to your health. If the component enclosure seal is broken, precautions must be taken against personal contact or inhalation in accordance with OSHA requirements 29CFR 1910.1000 or superseding documents. AirCell strongly discourages the opening or disassembly of sealed components.

WARRANTY AND CERTIFICATIONS

Any alteration of this product voids the FAA or FCC certification and the AirCell warranty.

2 SYSTEM DESCRIPTION

The ST 3100 ASE system provides access to a range of two way communication options from an aircraft, including voice and data applications. With the ST 3100 system these services are available when the aircraft is in the air or on the ground. The AirCell satellite mode communications link is provided using the 1600 MHz Iridium LEO (Low Earth Orbit—485 miles altitude) satellite network, which provides coverage from the ground up over the entire surface of the earth.

2.1 TOP LEVEL SYSTEM CONFIGURATION

The ST 3100 system consists of a number of primary system components. The heart of the system is the ST 3100 ASE Transceiver, which includes internal electronics to support operation in the Iridium satellite network. Other system components include the externally mounted antenna, a low loss coaxial cable, and various user interfaces including multiple ASE handsets (up to 9), an RS-232 data port, and an audio panel interface.

The primary components of an ASE system include Line Replaceable Units (LRUs) and AirCell specified assemblies (such as coaxial cables or wiring harnesses) that are manufactured or purchased by the system installer. A list of the LRUs and specified assemblies is provided in Table 2.1-1, and a representative block diagram is provided in Figure 2.1-1 to demonstrate the interconnection of a typical ST 3100 system. For detailed information on the system components, please refer to ST 3100 ASE System installation manual (AirCell document 800-10680), or contact AirCell Technical Support for assistance.

Table 2.1-1 System Component Definition

System Component	Designation	Description	AirCell PN	Approved Alternate(s)	AirCell PN of Alternate
System Transceiver	LRU	ST 3100 ASE Transceiver	400-10680-001	none	
Transceiver Mounting Tray	LRU	3/8 ATR Width Mounting Tray	800007-1	3000 Series Mounting Rails	151-10689-001
System Wiring Harness	Specified Assembly	26 wire System Harness	NA		
ASE Handset	LRU	Flush Mount ASE Handset	400-10001-10X*	Standard ASE Handset Portable Coilcord ASE Handset Custom Retractable ASE Handset	400-10035-00X* 400-10015-00X* 400-10019-00X*
Satellite ASE Antenna	LRU	1600 MHz Satellite ASE Antenna, Patch Style	015-10306-001	1600 MHz Satellite ASE Antenna, Blade Style	015-10683-001
Satellite Channel Coaxial Cable	Specified Assembly	Low Loss Coaxial Cable	NA (vendor item)**		

* "X" designates the color of the ASE handsets.

** The system coaxial cable is a required item that is not provided by AirCell. The system installer will need to purchase this item from an approved vendor as defined later in this document.

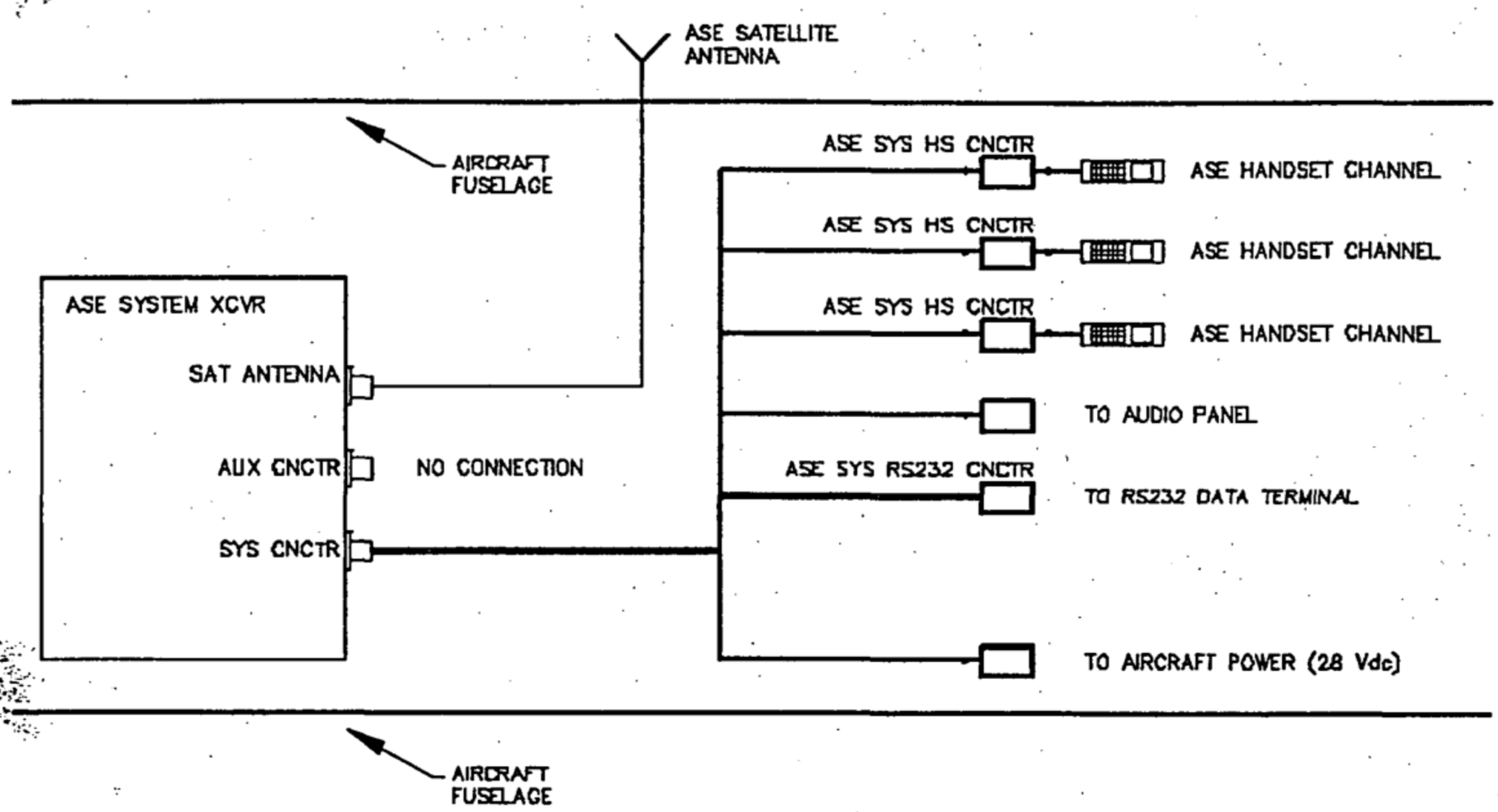


Figure 2.1-1 Block Diagram of ST 3100 ASE System

Note: Each 'Handset Channel' listed above is capable of supporting up to 3 ASE handsets, making it possible to integrate up to 9 handsets in the ST 3100 system.

2.2 OPERATION OF THE SYSTEM

The user interface and operation of the ST 3100 system is designed to be very similar to the operation of a terrestrial cellular or PCS phone. Some key features of the ST 3100 system are as follows:

- The system will power up when the avionics master switch for the aircraft is powered on. The AirCell system is always on when the avionics master is powered on.
- The Satellite mode network provides coverage anywhere on (or above) the surface of the earth with a clear view of the sky in all directions.
- To place a call from the system handset, the user must verify that the system is 'in service'. SAT mode calls are typically dialed as international long distance calls (00 + country code + phone number). After dialing, the user must press the " SND " key on the handset, and the phone call will proceed as a typical cellular or PCS call. At the completion of a call, the user may press the " END " key to terminate the call.
- The user may receive incoming (ground to air) phone calls depending on the in service condition. The user can answer these calls by pressing the " SND " key on the handset.
- Data calls can be made from Air to Ground over the ST system by connecting a Data Terminal Equipment device (such as a PC) to the RS-232 port of the system. The ST system has a built in modem function, so some user setup of the DTE will be required.

More detailed operating instructions are provided for this system in the ST 3100 User's manual (AirCell document 810-10680).

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3 OPERATIONAL TIME LIMITS AND SCHEDULED MAINTENANCE

The ST 3100 system is designed and manufactured to be maintenance free after installation. As a result of this design, there are no operational time limits or periodic maintenance checks or procedures that must be performed for the system. Inspections and/or system verification checks are only required in the event of a system failure (On Condition), as defined in Section 4 of this document.

As an option, the system operator may perform a visual inspection of the various system components at the aircraft annual inspection, or other periodic maintenance interval as defined by the aircraft manufacturer.

4 UNSCHEDULED MAINTENANCE

The ST 3100 system is designed for "On Condition" maintenance only. In the event of a system failure, the system user/aircraft operator is advised to follow the troubleshooting procedure defined in Appendix A of this manual. After performing the basic procedure, the user will either have returned the system to normal operation, or should contact AirCell technical support for additional guidance.

Note that, in the process of performing the troubleshooting procedure, authorized field service personnel are permitted to perform repairs to wiring harnesses, RF cable assemblies, mounting interfaces, or (with prior approval from AirCell Technical Support) to remove and replace any of the primary system Line Replaceable Units (LRUs). AirCell does not, under any circumstances, authorize field repair or subassembly level maintenance on any LRU. Sealed LRUs should always be returned to the AirCell FAA Repair Station for evaluation and repair.

4.1 TROUBLESHOOTING PROCEDURE

Appendix A provides a guide to identify simple problems that may be identified and/or resolved with simple field inspection and test processes. It is advised that the procedure in this appendix should be performed before contacting AirCell Technical Support for additional instruction. No specialized tools or equipment are required to perform this procedure.

In the event that a step in this procedure is not clear, or the results of a procedure are not conclusive, the test operator should feel free to contact Technical Support for assistance.

5 AIRWORTHINESS LIMITATIONS

The AirCell ST 3100 ASE system is a non-critical communications system. In accordance with FAR 23.1529 (with Part 23 Appendix G) and FAR 25.1529 (with Part 25 Appendix H) this system has no Airworthiness Limitations for either Part 23 or Part 25 aircraft.

The airworthiness limitations section is FAA approved and specifies maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been approved.

Appendix A

ST 3100 ASE System Troubleshooting Procedure

AirCell® AirCell, Inc. 1172 Century Drive Suite 280, Building B Louisville, CO 80027	SIZE A	CAGE CODE 1NQ67	DRAWING NUMBER 820-10680-001	REV B
	FILE FORMAT: Microsoft Word 2000			SH 8 of 8
	FILE NAME: 820-10680-001-B.doc			

699-10077: A-SIZE SPEC TEMPLATE.DOC

Symptom	Possible Cause	Discussion	Verification Step(s)
Symptom 1 Handset Display is not illuminated (One or more handsets integrated in system, no handset displays are illuminated)	Power is not available to ASE System	The handset display should always be illuminated when power is applied to the ASE transceiver. Because the failure of a handset display is unlikely, a 'dead' display suggests that there is a problem with the input power to the ASE system. In the event that the one or more handset display(s) are not illuminated, the user/operator should verify that aircraft power is on and available to the ASE transceiver.	❑ Verify that the aircraft power system (master avionics switch) is on. ❑ Verify that the ASE system circuit breaker is closed. ❑ Visually inspect the displays of all installed handsets in the system. If all handsets are off, proceed to the next bullet in this list. If most handsets are illuminated, but one is not, then proceed to Symptom 2. ❑ If all handset displays are dead, the problem is likely in the power system wiring before the ASE transceiver. Visually check the system connections and the wiring harness leads between the transceiver and the aircraft power system. Repair or reconnect any obvious problems. ❑ If needed, ring out the power lines per the system wiring diagram. Repair any broken wires or rework to match the system wiring diagram. ❑ If this procedure does not resolve the problem, contact AirCell Technical Support for additional guidance.
Symptom 2 Handset Display is not illuminated (ASE System has multiple handsets, and the displays of most handsets are on, but one handset is not illuminated.)	Bad connection or faulty wiring between handset and transceiver. or Bad handset	In a system with multiple handsets, if some handsets are operating and some are not, then it is likely that either the handset is bad or the wiring between the handset and the transceiver is faulty.	❑ Some ASE systems integrate multiple handsets. If more than one handset is installed on the system, check the display on all handsets. If only one of multiple handsets is not illuminated, then the problem is either a bad handset or in the handset connection / wiring harness between that handset cradle and the transceiver. ❑ Perform a visual inspection to verify that all connections are made in accordance with the system wiring diagram. Correct any obvious problems. ❑ If all system connections are correct, then switch the 'dead' handset with a known good handset and retest the system. If the handset is still dead in the new location, then the handset is bad. Contact AirCell Technical Support for repair/replacement instructions. ❑ If the known good handset is now dead, then the problem is in the system wiring/connections between the handset and the transceiver. Ring out the lines per the system wiring diagram. Specifically check for 9V power and ground leads on the HS power line from the transceiver system connector. Repair any broken wires or rework the system wiring harness to match the wiring diagram. ❑ If this procedure does not resolve the problem, contact AirCell Technical Support for additional guidance.

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EFTA00277602

Symptom	Possible Cause	Discussion	Verification Step(s)
Symptom 3 Handset Display is illuminated and display indicates no signal for Satellite (SAT) mode.	Possible Cause 3A System antenna does not have Line of Sight (LOS) view to satellite.	The ST 3100 transceiver operates in Satellite (SAT) mode. When in coverage the ST system should detect and register for SAT mode service. If the system does not register, then it is likely that either the antenna does not have a LOS to a satellite (3A), or there is a problem with the RF channel in the aircraft (3B). In this condition, it is unlikely that there is a problem with the system transceiver.	Verification Test 3A ❑ Verify that the system SAT antenna has a clear LOS to the sky in all directions. A clear LOS is defined to exist when there are no obstructions (such as buildings, trees, vehicles etc) that are higher than 30 degrees above aircraft horizon in any direction. This should never be a problem in flight. ❑ Use the handset to enter the SAT lock mode (FCN, 3, 3) keys on the handset. The handset will display the word "IRIDIUM" when the SAT mode is locked. ❑ Once the LOS has been established the system should register on the SAT network within 60 seconds. The system is registered when the "NO SVC" indicator is not visible on the handset display. ❑ If the "NO SVC" indicator extinguishes, then the SAT mode is engaged, and the problem is resolved. The user may choose to make a test call and verify the operation the system. ❑ If the "NO SVC" indicator stays illuminated, then the system cannot register, and it is likely that there is an installation or equipment problem. Either contact AirCell Technical Support for additional guidance, or proceed to Verification Test 3B.
No Satellite mode signal	Possible Cause 3B There is a problem with the Satellite RF channel.		Verification Test 3B ❑ While the aircraft is on the ground, perform a visual inspection of the ASE system satellite antenna. Verify that the antenna is installed to the aircraft fuselage in accordance with the system antenna installation drawings. Verify the mechanical integrity of the antenna, and that the antenna is reasonably free of dirt, oil, ice and other undesired coatings. ❑ Visually inspect the RF satellite channel, including the coaxial connections to the antenna and the system transceiver. Inspect the coaxial connectors to verify that they are connected in accordance with the system wiring diagram, and that they are not damaged. Look for breaks, kinks or other damage to the coaxial cable. ❑ The user is authorized to correct installation errors (such as cabling errors), or to repair minor damage (such as broken coaxial connections, damaged coaxial cables, etc). The user is not authorized to open or modify sealed LRUs. ❑ If these steps do not resolve the problem, contact AirCell Technical Support for additional guidance.
Other conditions			For all other conditions, contact AirCell Technical Support for guidance.

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
SO-FSDO-19

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This 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: Boeing	Model: 727-100
	Serial No.: 20115	Nationality and Registration Mark: USA N908JE
2. Owner	Name *(As shown on registration certificate)*: J.E.G.E, Inc.	Address *(as shown on registration certificate)*: 103 Foulk Road STE 202 Wilmington, DE. 19803-3742

3. For FAA Use Only

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

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
BANYAN AIR SERVICE AVIONICS DIVISION 1635 NW 51st Place Ft. Lauderdale, FL 33309		U.S. Certificated Mechanic	SD4R514M Radio Class 1,2,3 Limited Airframe
		Foreign Certificated Mechanic	
	☒	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
October 10, 2006	Steve Ouellette

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
October 10, 2006	SD4R514M	Steve Ouellette

FAA Form 337 (12-88)

EFTA00277604

NOTICE

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

8. Description of Work Accomplished

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

The purpose of this 337 is for the work performed on N908JE under Banyan Air Service; Avionics Division work order #71301 completed on October 4, 2006.

A. Installed an AirCell Iridium Antenna P/N S67-1575-109 in accordance with DER Services drawing number 2006-173-1 approved per FAA form 8130-3 signed by Robert Belgau DERT designation number DERT-510024-CE.

B. The above installation was performed in accordance with AC43.13-1B, Chapter 7, sections 1-5, AC43.13-1B Chapter 11, sections 3-17, AC43.13-2A Chapter 1, AC43.13-2A Chapter 3, paragraphs 43 & 44 and the aircraft's maintenance manual.

C. A log book entry and equipment list was generated to reflect the above installation. The weight change is negligible. the equipment list was updated to reflect this change.

D. Instructions for Continued Airworthiness is "on condition only."

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

☒ Additional Sheets are Attached

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE
October 07, 2006

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	727-31	Airplane	Banyan Air Services

LIST OF DATA

IDENTIFICATION	TITLE
DER Services Drawing: 2006-173-1 Rev. I/R Dtd. 27-Sep-06 ___END___END___	**Effectivity:** **S/N: 20115, T/N: N908JE** **Iridium Antenna Installation STA 515 - BTWN S-2R & S-3R** ___END___END___END___END___END___END___END___END___END___END___ **Note: This aircraft is effected by AD 98-11-03 R1. Certification to FAR 25.571, Damage - tolerance and fatigue evaluation of structure may be required. Per Advisory Circular 25.1529-1 Instructions for Continued Airworthiness of Structural Repairs on Transport Category Airplanes, the damage tolerance and fatigue evaluation of the structure must be performed before 4/11/2003.** Notes: 1) The structural aspects only of the above listed data are approved herein. This approval is only for the engineering design data and is not installation approval. (Ref. 8110.45 8/30/02 for more info) 2) This approval is valid for the aircraft model and serial number listed below 3) This approval is based on FAA Approved structural analysis on file at DER Services office in Ft. Lauderdale, FL. or DER Services, Inc. office in Birmingham AL. Model No. 727-31 Serial No. 20115

PURPOSE OF DATA: Approve data for low profile antenna installation (structural aspects only, Static Analysis)

APPLICABLE REQUIREMENTS *(LIST SPECIFIC SECTIONS)*

CAR 4b.200, 4b.201, 4b.202, 4b.260, 4b.301, 4b.302, 4b.303, 4b.306

CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with condition and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed 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
- ☑ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Robert J. Belgau	DERT-510024-CE	Structures

FAA FORM 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

DER SERVICES PROJECT NO. F2006-173

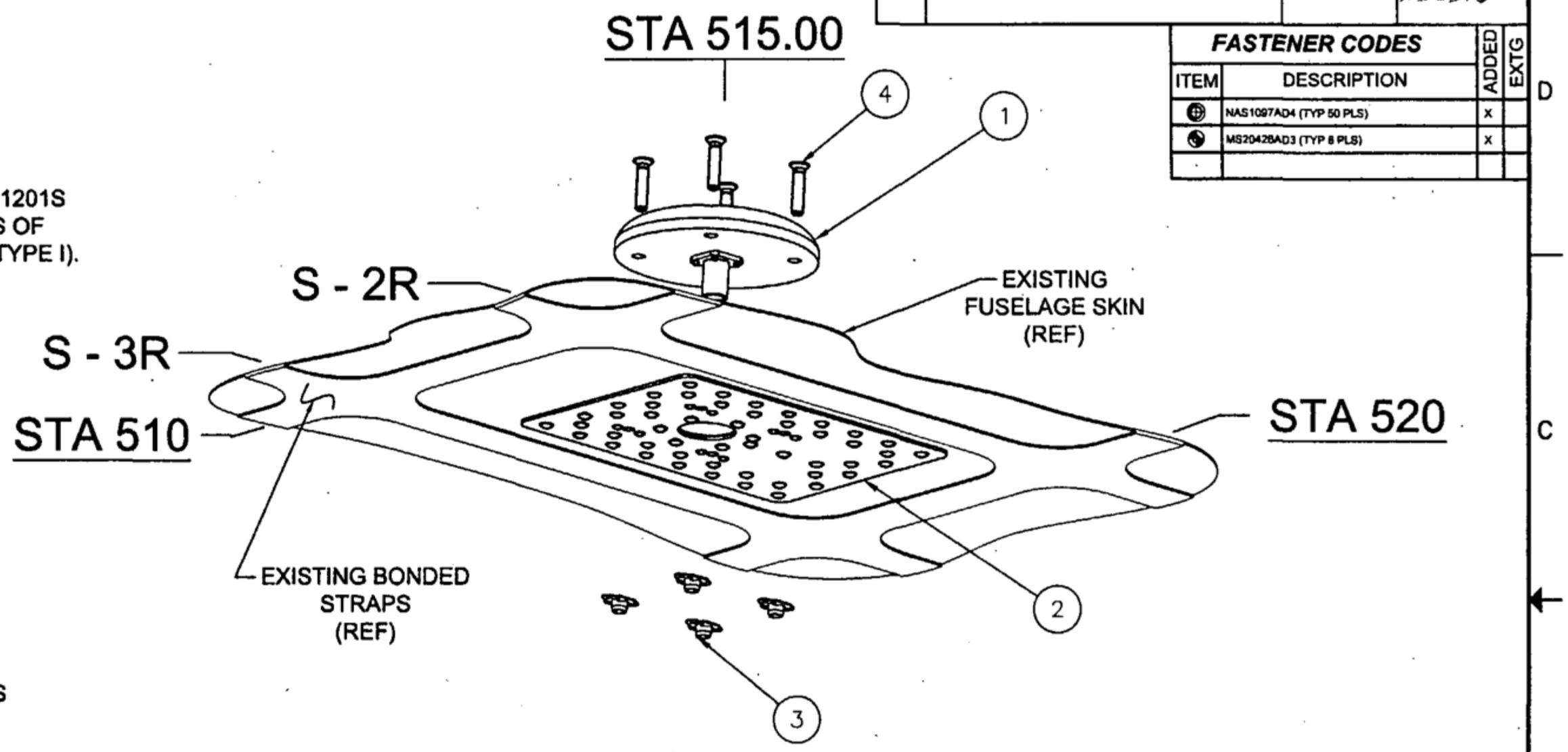
EFTA00277606

EFTA00277608

#	DESCRIPTION	DATE	APPROVED
I/R	INITIAL RELEASE	09-27-2006	

GENERAL NOTES:

1. FABRICATE PART(s) AS SHOWN.
2. BEFORE INSTALLATION OF DOUBLER, ROLL TO MATCH AIRCRAFT MOLD LINE RADIUS.
3. BREAK ALL SHARP EDGES .020/.030 R.
4. TREAT ALL REWORKED AREAS USING ALODINE 1201S (PER MIL-C-5541, CLASS 1A) AND TWO (2) COATS OF EPOXY POLYAMIDE PRIMER (PER MIL-P-233377, TYPE I).
5. FINISH ALUMINUM PARTS USING ALODINE 1201S AND TWO (2) COATS OF EPOXY PRIMER.
6. MAINTAIN MINIMUM 2D + 1/16" EDGE DISTANCE FOR ALL FASTENERS ON DETAILS; MINIMUM 2D EDGE DISTANCE ON ASSEMBLY.
7. ALL FASTENERS ARE TO BE INSTALLED IN TRANSITION-FIT HOLES. HOLE TOLERANCE PER NAS618.
8. ALL FASTENER LENGTHS ARE TO BE VERIFIED FOR TOLERANCE PRIOR TO INSTALLATION.
9. INSTALL ALL PARTS AND THREADED FASTENERS WET USING PR1436G TYPE III SEALANT ON ALL FAYING SURFACES.
10. RESTORE ORIGINAL FINISH PER B727 M.M. 51-21.
11. PROTECT REWORKED AREA AGAINST CORROSION PER B727 SRM, CHAPTER 51-10-2.
12. REFERENCE B727 S.R.M, CHAPTER 51-30 FOR FASTENER REMOVAL AND INSTALLATION PROCEDURES.
13. REINSTALL ALL ADJACENT STRUCTURE REMOVED TO FACILITATE ANTENNA INSTALLATION.
14. BEAD SEAL ANTENNA WITH PRC 1422 SEALENT.
15. REVISE AIRCRAFT RECORDS TO REFLECT INSTALLATION.



FASTENER CODES		ADDED	EXTG
ITEM	DESCRIPTION		
⊕	NAS1097AD4 (TYP 50 PLS)	x	
⊕	MS20426AD3 (TYP 8 PLS)	x	

ITEM	QTY	NAME	PART NUMBER	MATERIAL	MIL-SPEC	VENDOR
	50	COUNTERSUNK RIVET	NAS1097AD4-2			QPL
	8	RIVET - NUTPLATE	MS20426AD3-2			QPL
4	4	SCREW	MS24694C55			QPL
3	4	NUTPLATE	NAS1473A3			QPL
2	1	DOUBLER - INTERNAL		0.050" 2024-T3	QQ-A-250/5	QPL
1	1	L1 GPS-IRIDIUM ANTENNA	S67-1575-109			QPL

Parts List

DRAWING CREATED FOR: BANYAN AIR SERVICE

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
UNSPECIFIED TOLERANCE

FRACTIONS	ANGLES	DECIMALS
±1/32	±5 MACH. ±2 FORMED	.X ± .1 .XX ± .03 .XXX ± .010

DRAWING SIZE: B

DATE APPROVED: 09-27-2006

DRAWN BY: W.D.OLIVERI
CHECKED BY: R.J.BELGAU
STRESS BY: W.D.OLIVERI
APPROVED BY: R.J.BELGAU

DER SERVICES
2700 N.W. 62nd STREET, Suite C-109, FT. LAUDERDALE, FL. 33309, (954)971-3832, FAX(954)971-3059

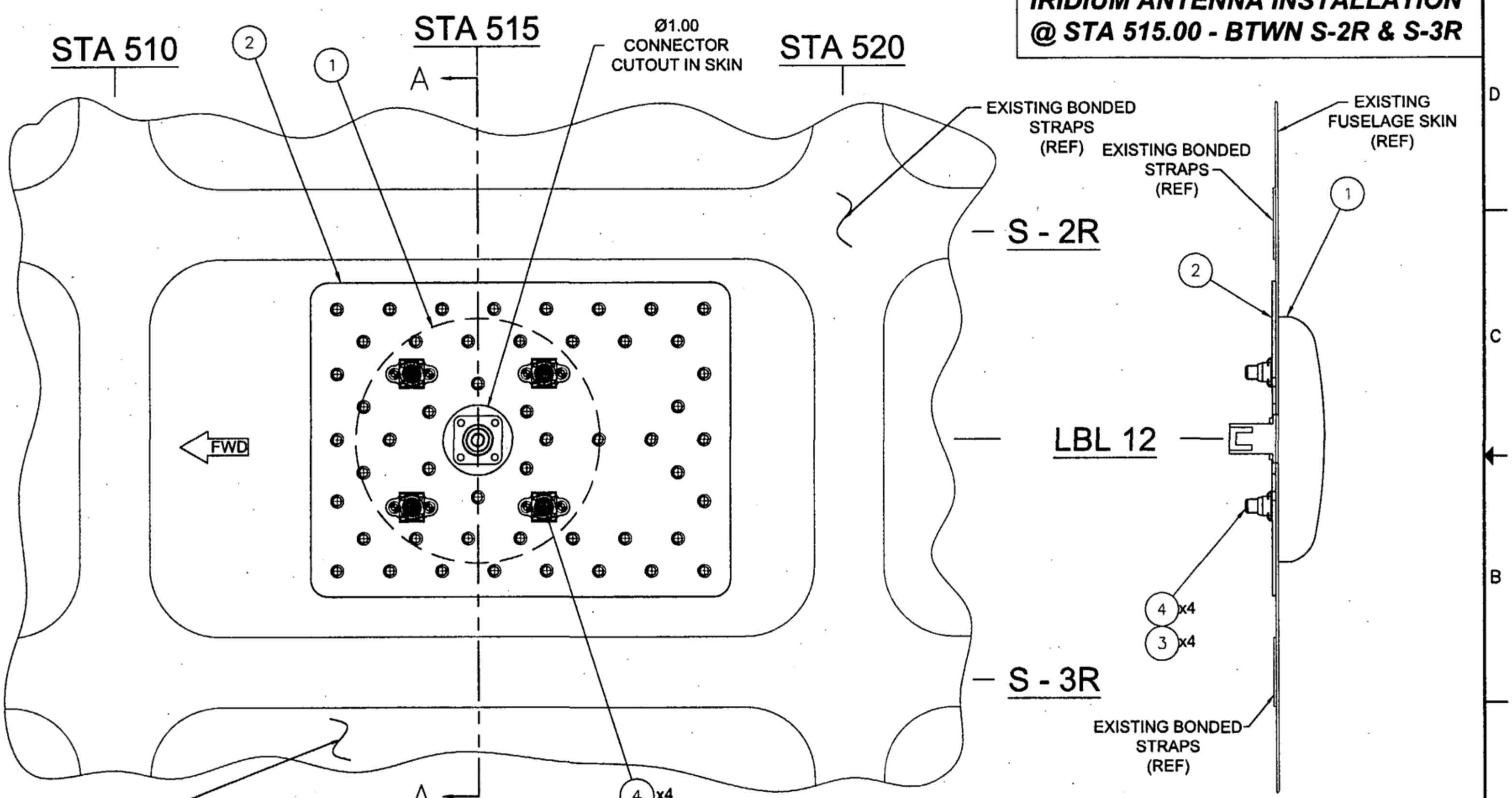
TITLE: IRIDIUM ANTENNA INSTALLATION
STA 515 - BTWN S-2R & S-3R

A/C Type: BOEING
Mod. No.: 727-31
TAIL No.: N908JE
SERIAL No.: 20115

DWG NO: 2006-173-1
REV: I/R
PROJ. #: 2006-173
SCALE: N.A.
STRL INSTL
SHEET 1 OF 3

EFTA00277610

IRIDIUM ANTENNA INSTALLATION @ STA 515.00 - BTWN S-2R & S-3R



VIEW LOOKING UP

SECTION A–A

SOME STRUCTURE REMOVED FOR CLARITY

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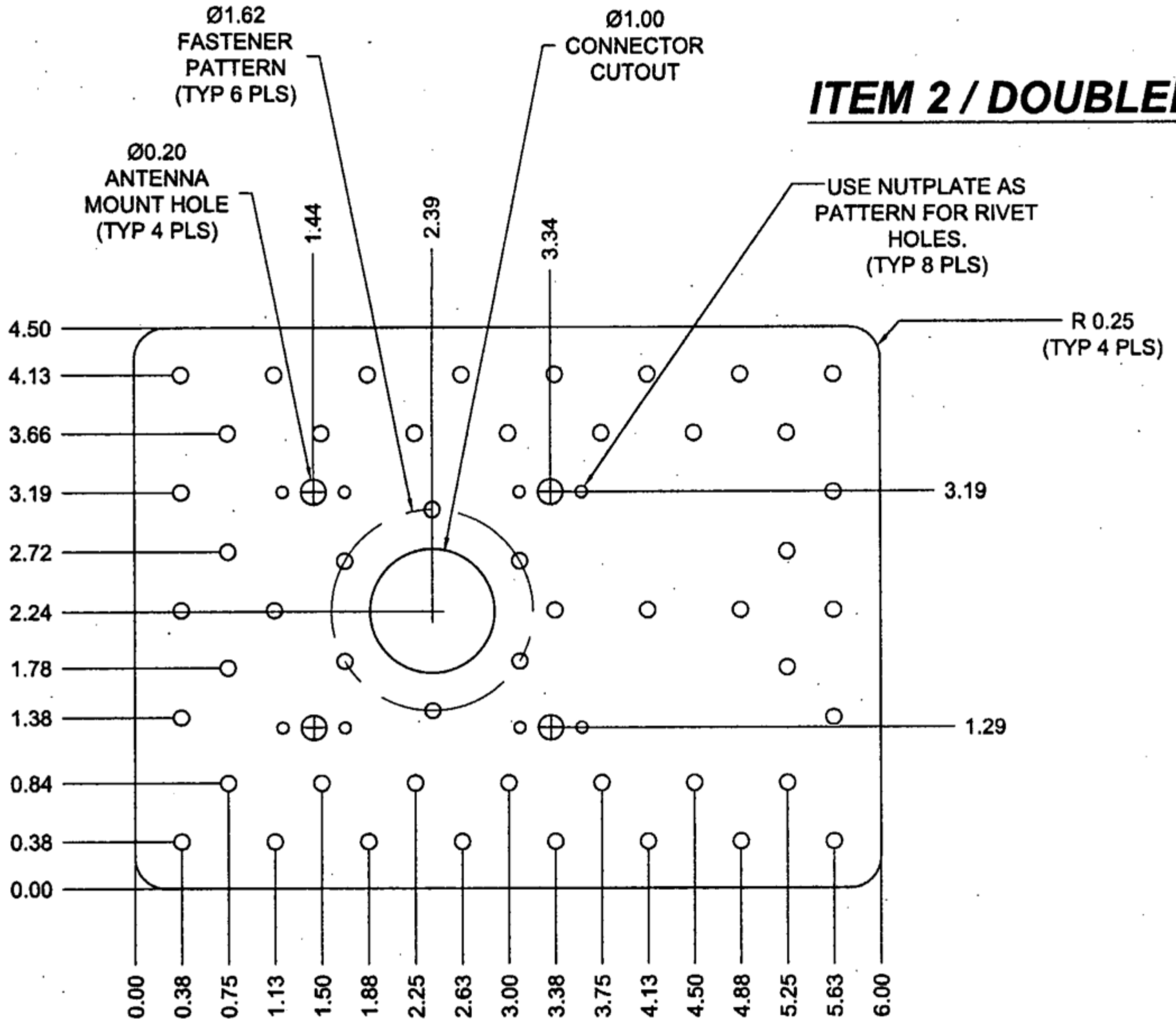
DWG NO 2006-173-1

SIZE B | DRAWN BY: W.D.OLIVERI | REV I/R

SERIAL No. 20115 | SCALE 3 = 4 | SHEET 2 OF 3

EFTA00277612

ITEM 2 / DOUBLER FABRICATION



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at the time of report compilation. Any additional data, which becomes available, may result in amending the conclusion(s) expressed herein.

DER SERVICES
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FT. LAUDERDALE, FL 33309.
(954) 971-3832, FAX (954) 971-3059

DWG NO	2006-173-1	
SIZE B	DRAWN BY: W.D.OLIVERI	REV I/R
SERIAL No. 20115	SCALE 0.5 = 1	SHEET 3 OF 3

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

SO-FSDO-17

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This 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: Boeing	Model: 727-100
	Serial No.: 20155	Nationality and Registration Mark: USA N908JE
2. Owner	Name *(As shown on registration certificate)*: J.E.G.E. Inc.	Address *(as shown on registration certificate)*: 103 Foulk Road, Ste 202 Wilmington, DE. 19803-3742

3. For FAA Use Only

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

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
BANYAN AIR SERVICE AVIONICS DIVISION 1635 NW 51st Place Ft. Lauderdale, FL 33309		U.S. Certificated Mechanic	SD4R514M Radio Class 1,2,3 Limited Airframe
		Foreign Certificated Mechanic	
	☒	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
8 November 2004	S L Ouellette Steve Ouellette

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
19 November 2004	SD4R514M	S L Ouellette Steve Ouellette

FAA Form 337 (12-88)

EFTA00277614

NOTICE

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

8. Description of Work Accomplished

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

The purpose of this 337 is for the FAA approval of the new flight manual supplement on N908JE under Banyan Air Servive, Avionics Division work order #68062.

A. Removed existing TDR-94 transponders P/N 622-9210-003 and routed to the manufacture for upgrade to P/N 6252-9210-007 to provide flight ID. System ground and flight checked good.

B. The weight & balance is not affected and equipment list was updated.

C. Instructions for continued airworthiness are "on condition only".

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

RECEIVED BY
MAY 20 2004
FEDERAL AVIATION ADMIN
FSDO
FT. LAUDERDALE

☐ Additional Sheets are Attached

US Department Of Transportation

Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
So-FSDO-17

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. *This 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: Boeing	Model: 727-100
	Serial No.: 20115	Nationality and Registration Mark: USA N908JE
2. Owner	Name *(As shown on registration certificate)*: J.E.G.E, Inc.	Address *(as shown on registration certificate)*: 103 Foulk Road STE 202 Wilmington, DE. 19803-3742

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)~~~~~~~~				☒
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
BANYAN AIR SERVICE AVIONICS DIVISION 1635 NW 51st Place Ft. Lauderdale, FL 33309		U.S. Certificated Mechanic	SD4R514M Radio Class 1,2,3 Limited Airframe
		Foreign Certificated Mechanic	
	☒	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: 8 NOVEMBER 2004

Signature of Authorized Individual: S. Ouellette Steve Ouellette

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
19 NOVEMBER 2004	SD4R514M	S. Ouellette Steve Ouellette

FAA Form 337 (12-88)

EFTA00277616

NOTICE

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

8. Description of Work Accomplished

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

The purpose of this 337 is for the work performed on N908JE under Banyan Air Service, Avionics Division work order #68062.

A. Installed a Universal Avionics Systems Corp. Terrain Avoidance and Warning System in accordance with SIP Technical Services, Inc. data list 7280-DL-001-501, Rev. H dated December 5, 2002 or later. (STC# ST09951SC)

B. The above installation was performed in accordance with AC43.13-1B, Chapter 7, sections 1-5, AC43.13-1B Chapter 11, sections 3-17, AC43.13-2A Chapter 1, AC43.13-2A Chapter 2, paragraphs 24, 25, and 28, AC25-23 and the aircraft's maintenance manual.

C. A functional test of the above equipment has been performed FAR25.1309 and FAR25 1431 for proper operation and did not adversely affect any other aircraft systems. An electrical load analysis was conducted and it was confirmed that this installation would not exceed 80% of the generator output.

D. A log book entry and equipment list was generated to reflect the above installation. A weight & balance was calculated. An FAA approved flight manual supplement provided with the above STC, Document No. 7280-FM-001, dated December 13, 2002 or later

E. Instructions for continued airworthiness provided by SIP Technical Services Report No. 7280-ICA-001 Rev. F dated June 6, 2002.

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

☐ Additional Sheets are Attached

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number ST09951SC

This Certificate issued to SIP Technical Services, Inc.
10107 McAllister Freeway
San Antonio, TX 78216

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 4b *of the* Civil Air *Regulations.*

Original Product Type Certificate Number: A3WE

Make: Boeing

Model: 727-100 Series

Description of Type Design Change: Installation of a Universal Avionics Systems Corporation Terrain Awareness and Warning System in accordance with SIP Technical Services, Data List 7280-DL-001-501, Revision H, dated December 5, 2002, or later FAA approved revision. FAA approved Airplane Flight Manual Supplement Document Number 7280-FM-001, dated December 13, 2002, or later FAA approved revision is required.

Limitations and Conditions: Compatibility of this design change with previously approved modifications must be determined by the installer. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

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

Date of application: August 02, 2001

Date of issuance: December 13, 2002

Date reissued:

Date amended:

FEDERAL AVIATION ADMINISTRATION

By direction of the Administrator

(*Signature*)

S. Frances Cox
Manager, Special Certification Office
Southwest Region

(*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.

EFTA00277618

Banyan Air Service
Avionics Division
1635 NW 51st Place
Ft. Lauderdale, FL 33309

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR
BOEING 727-100

WITH
UNIVERSAL AVIONICS SYSTEMS CORPORATION

DUAL MULTISENSOR UNS-1D+

FLIGHT MANAGEMENT SYSTEMS

REG #. N908JE
SERIAL #. 20115

This supplement must be attached to the FAA Approved Airplane Flight Manual when the Universal Avionics System Corporation UNS-1D+ Flight Management System (FMS) is installed in accordance with field approved 337 dated 8 Nov 2004. The information contained herein supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this supplement; consult the basic Airplane Flight Manual.

FAA APPROVED Gary T Justice

Gary Justice

Principal Avionics Inspector

Federal Aviation Administration

Flight Standards District Office #17

Ft. Lauderdale, FL 33315

Date: NOV 8 2004

EFTA00277620

Banyan Air Service
Avionics Division
1635 NW 51st Place
Ft. Lauderdale, FL 33309

Flight Manual Supplement
UNS-1D+ FMS
N908JE BOEING 20115

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RECORD OF REVISIONS

Revision	Pages	Description	Approved
0	All	Initial Release	NOV 8 2004

EFTA00277621

SECTION I – GENERAL

1. INSTALLATION DESCRIPTION.

The Universal Avionics Systems Corporation dual FMS's use inputs from their integral GPS Receivers, Navigation Receivers and DME Transceivers to provide a blended position for navigation. Each FMS contains an internal TSO C129a GPS sensor (GNSS 2400), which is cross-wired to the other FMS such that both systems have GPS 1 and GPS 2 data as inputs. The FMS's receive air data parameters from an Air Data Computer. A Data Transfer Unit (DTU100) is used to load periodic navigation data base updates via zip disks.
The systems provide navigation and steering data to the flight director/autopilot system. Refer to the appropriate Operator's Manuals as applicable.
The FMS's contain software SCN 802/902 which provides capability for point-to-point navigation, as well as SIDs, STARs, holding patterns and GPS approaches. These SCN's comply with requirements of TSOs C115b and C129a Class A1 when interfaced to the internal GPS sensors which are TSO C129a Class A1/B1/C1 certified The UNS-1D+ FMS may contain either a GLONASS sensor or a GPS sensor, depending on hardware configuration. Lateral and Vertical deviations are provided for En Route, Terminal Area and Approach operations, including GPS overlay approaches. Approaches may be FCS coupled both laterally and vertically. Multi-Mission search patterns are available with SCN 902.

2. LATERAL NAVIGATION APPROVALS.

Provided the FMS multi-sensor navigation system is receiving usable signals, it has been demonstrated capable of and has been shown to meet the accuracy specifications of: VFR/IFR En Route domestic, Terminal and Instrument Approach (LOC, BC, GPS and GPS-overlay NDB, VOR, VOR-DME and RNAV) operations within the U.S.National Airspace System using the WGS-84 coordinate reference datum in accordance with the criteria of Advisory Circular AC 20-130A and AC 25-15. Satellite navigation data is based upon use of only the Global Positioning System (GPS) operated by the United States. Additionally, Russian GLONASS satellites provide increased accuracy but are not used for integrity or Receiver Autonomous Integrity Monitoring (RAIM) calculations or predictions. The dual FMS installation with dual internal GPS sensors, as installed, complies with the requirements of FAA Notice 8110.60 for GPS primary means of Class II navigation in oceanic and remote airspace (including NAT MNPS in accordance with AC 120-33 and 91-49), when used in conjunction with the Universal Flight Planning Program, PN 10751 with SCN 24.0 or later FAA approved version. *This does not constitute an operational approval.*

EFTA00277622

SECTION I – GENERAL (cont.)

RNP- Approvals
The dual multi-sensor FMS installation integrates dual GPS sensors and complies with equipage and accuracy requirements of FAA Order 8400.12A paragraph 12b(4), for operations in RNP-10 airspace. *This does not constitute an operational approval.* This installation also complies with equipage and accuracy requirements of AC 90-96 paragraph 7b(1), 7d(3)(a) 2, 7d(3)(e) for BRNAV (RNP-5) when operating in Class I airspace, without time limits. The table details time limitations placed on RNP-10 and BRNAV operations with minimum sensors in NAV mode.

Sensors Available	RNP-10 Limitations (minimum dual FMS's required)	RPN-5 (BRNAV) Limitations (minimum single FMS required)
1 GPS only	N/A	No time limitation when used in Conjunction with UFP
VOR/DME only	N/A	No time limitation
DME/DME only	N/A	No time limitation

3. VERTICAL NAVIGATION APPROVAL

The dual Flight Management Systems, as installed, meet the requirements for VFR/IFR En Route, Terminal Area and Approach VNAV operations in accordance with the criteria of AC 20-129 and AC 90-97, paragraph 7.a (2).

SECTION II – LIMITATIONS

1. The FMS Operator's Manual, Report Nos. 2423sv802/902 Dated 9/16/03 (or later revision) must be available to the flight crew whenever navigation is predicated upon the use of the Universal Avionics Flight Management System.
2. The system must utilize software version SCN 802/902.X, where X represents FAA approved minor changes.
4. IFR En Route and Terminal navigation are prohibited unless the pilot verifies the currency of the database or verifies each selected Waypoint for accuracy by reference to current approved data.

EFTA00277623

SECTION II – LIMITATIONS (cont.)

4. Instrument approaches must be accomplished in accordance with approved instrument approach procedures that are retrieved from the FMS database. The FMS database must incorporate the current update cycle.
   a. Instrument approaches must be conducted in the Approach-mode, and GPS Integrity monitoring (when using GPS for approach guidance) must be available at the Final Approach Fix, as indicated to the pilot by the 'GPS INTEG' amber annunciator being off.
   b. When an alternate airport is required by the applicable operating rules, it must be served by an approach based on other than GPS navigation, the aircraft must have operational equipment capable of using that navigation aid, and the required navigation aid must be operational.
   c. GPS can only be used for approach guidance if the reference coordinate datum system for the approach is WGS-84 or NAD 83.
   d. GPS will remain selected for all GPS approaches and any approach with a "G" suffix to the approach identifier in the navigation database. GPS will be deselected for any pilot-defined VOR or VOR/DME" RNAV approaches.
   e. Pilot-defined IFR approaches must be defined using Waypoint coordinates from FMS's navigation data base.
   f. The FMS's are approved for pilot-defined VFR approaches as a VFR pilot aid only. NOTE: All sensors remain selected for VFR approaches.
5. When operating in other than oceanic and remote regions, the aircraft must have other approved navigation equipment installed and operating appropriate for the route of flight.
6. Displayed FMS navigation parameters are referenced to Magnetic North, and operation of the aircraft is limited to latitudes between N73° and S60°, unless magnetic variation is manually entered by the flight crew.
7. When using VNAV, the Altimeter on each pilot's panel must be used as the altitude reference for all operations.
8. Fuel display parameters are advisory only and do not replace primary fuel quantity or fuel flow gauges for fuel load and range planning.

SECTION III - EMERGENCY PROCEDURES

NO CHANGE TO AFM.

EFTA00277624

SECTION IIIA - ABNORMAL PROCEDURES

1. If 'GPS RAIM' becomes unavailable (as indicated by a Message and 'GPS INTEG' (amber annunciation), continue navigating using the GPS equipment or revert to an alternate means of navigation appropriate to the route and phase of flight, as necessary. When continuing to use GPS navigation, position should be verified every fifteen minutes using another IFR-approved navigation system.
2. Should an FMS system component fail, in most cases the CDU will go blank or the 'FMS MSG' light will flash. Depressing the MSG key will display the Message Page, which will indicate the component which has failed.
3. If sensor information is intermittent or lost, utilize remaining operational navigation equipment as required.
3. The FMS and associated components are protected by the following circuit breakers:

C/B Name	Amps	Location	Bus
FMS No. 1	5	Pilot 28VDC Avionics	Bus No. 1 (Triple-Fed)
FMS No. 2	5	Copilot 28VDC Avionics	Bus No. 2 (L GEN)
FMS DTU	1	Pilot 28VDC Avionics	Bus No. 1 (Triple-Fed)

SECTION IV - NORMAL PROCEDURES

1. OPERATION
   Normal operating procedures are outlined in the FMS Operator's Manual, Report No. 2423sv802/902.

2. NAVIGATION DATABASE VERIFICATION.
   After power-on self tests have been completed, the INITIALIZATION page will appear. The term 'NAV DATABASE EXPIRES' followed by a date will be displayed. If the actual date is later than that which is displayed, the FMS will notify the pilot with a 'DATABASE EXPIRED'-message. Refer to the Operator's Manual for navigation database update instructions.

3. SYSTEM ANNUNCIATORS
   Each FMS has the following annunciations presented on the Universal Electronic Flight Instrument (EFI) displays (refer to the EFI Operator's Manual, as applicable) :

MSG	Illuminates and flashes in conjunction with the CDU to indicate a message is to be acknowledged on the MESSAGE page.
SXTK	Illuminates to indicate that selected crosstrack is active.
FHDG	Illuminates to indicate that the FMS is in Heading sub-mode.
APPR	Illuminates to indicate that an Approach has been activated. GPS
INTEG	Illuminates to indicate GPS Integrity is outside of the allowable limit for phase of flight (2.0nm En Route, 1.0 nm Terminal and Approach transition, and 0.3 nm Final Approach segment).

EFTA00277625

SECTION IV - NORMAL PROCEDURES (cont)

4. AIRCRAFT INTEGRATION
   a. Universal Avionics EFI display of FMS information

      1) FMS information is displayed on the Universal Electronic Flight Instrument (EFI) displays. The associated EFI Control Panel provides control of each
      display. See the appropriate Operator's Manual, as applicable, for each EFI display system.
      2) Lateral deviation display scaling meets with requirements of TSO C129a and AC 20-130A (5.0 nm full scale for En Route, 1.0 nm for Terminal operations, and 0.3 nm for Approach operations).
      3)

   b. En Route and Terminal Area Flight Control System Operation

      1) With 'FMS'-mode selected by using the EFI Control Panel, the respective FMS information can be presented as Flight Director steering commands by pressing the [NAV] button of the FCP-65 Flight Control Panel.
      2) With reasonable navigation data being displayed, the steering information can be Autopilot-coupled, to the pilot's or copilot's Flight Director system, by pressing the 'AP ENGAGE' - button on the APP-65A Autopilot Control Panel.

   c. Approach Operations

NOTE: ILS approaches can be retrieved from the Jeppesen database and linked to the flight plan, but cannot be armed or activated as FMS approaches. The FMS can be used to provide navigation up to the final approach course, at which point the EFI must be changed to display raw ILS data which can be coupled to the Flight Control System (FCS).

NOTE: GPS will remain selected for GPS and GPS-overlay approved approaches from the navigation database, as well as pilot-defined VFR approaches. Refer to Operator's Manual, Section V, Approach Procedures.

EFTA00277626

SECTION IV - NORMAL PROCEDURES (cont)

c. Approach Operations (cont.)

LOC, B/C, GPS, NDB, RNAV, VOR, VOR/DME, and VFR approaches may be linked into the flight plan and then laterally and vertically coupled to the FCS as follows:

1) Approach Transition: When an entire approach transition (e.g., procedure turn, DME arc, etc.) is to be flown, first arm the approach on the FMS (ARM APPR). If the FMS is not armed manually it will arm automatically at 30nm from the airport. With the desired DIRECT TO or FROM/TO Waypoints selected, or the desired FMS Heading selected with INTERCEPT ACTIVE, select FCS 'NAV'- mode by pressing the [NAV] button of the appropriate FCP-65 Flight Control Panel. When the FMS has automatically activated the approach, denoted by the 'APPR' annunciator displayed in the associated EFI display, press the [APPR] button of the Flight Control Panel. When the FCS has captured the "APPR" – mode, a white "VNAV" will appear on the PFD and a white VN on the ADI signifying the 'arming" of the VNAV mode. The "VNAV" and "VN" annunciation will turn to green in color when the FCS has captured the VNAV glideslope. See the EFI operator's manual for specific display annunciations. Continue monitoring both lateral and vertical deviations throughout the duration of the approach. If required, initiate 'Missed Approach Procedures' as described in the Universal Avionics Operator's Manual.

2) Heading Vectors: If given heading vectors by ATC to the final approach course, manually activate the approach on FMS NAV page 1/3. The FMS will enter the "FHDG" mode, the EFI display will now display final approach course data, and the INTERCEPT prompt on Nav page 1/3 will be active. When cleared to intercept final, press the "INTERCEPT "line select key to intercept final. Ensure that commanded heading mode is canceled. Select [APPR] on the FCS Flight Control Panel to capture and track the final approach lateral and vertical information.

NOTE: Guidance is provided to the runway threshold or missed approach point. It is the pilot's responsibility to level out at MDA if the runway environment is not in sight.

EFTA00277627

SECTION IV - NORMAL PROCEDURES (cont)

3) Press the APP-65A Autopilot Control Panel [AP ENG]-button to couple the AP to the selected FD. The Autopilot will track pseudo-Localizer and pseudo-Glideslope signals from the FMS.

b. Advanced Approach Operations

1) Advanced approaches may be identified in the data base by the prefix "A" to the approach listed in the "ARRIVAL" page and in the navigation data base They are characterized by course changes on the final approach segment of greater than 6 degrees and/or having multiple flight path angles. To avoid excessive deviations from course and flight path, these approaches may need to be flown in FCS [NAV] mode until on the final leg of the approach. Select FCS [APPR] sequencing the final waypoint to engage vertically.

c. Vertical Navigation

1) Vertical Navigation (VNAV) information is displayed on the EFI display and is available for enroute, terminal or approach descents. Pitch steering commands for enroute and terminal VNAV operations are not provided to the Flight Control System.

SECTION V - PERFORMANCE DATA
NO CHANGE TO AFM.

EFTA00277628

EFTA00277629

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 AC43.9-1 (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: Boeing	Model: 727-100
	Serial No.: 20115	Nationality and Registration Mark: USA N908JE
2. Owner	Name *(As shown on registration certificate)*: J.E.G.E, Inc.	Address *(as shown on registration certificate)*: 103 Foulk Road STE 202 Wilmington, DE. 19803-3742

3. For FAA Use Only

The data identified herein complies with the applicable airworthines requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

OCT 19 2004 — Date

Signature of FAA Inspector — SO-FSDO-17

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.
BANYAN AIR SERVICE AVIONICS DIVISION 1635 NW 51st Place Ft. Lauderdale, FL 33309		U.S. Certificated Mechanic	SD4R514M Radio Class 1,2,3 Limited Airframe
		Foreign Certificated Mechanic	
	☒	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: 8 NOVEMBER 2004

Signature of Authorized Individual: Steve Ouellette — Steve Ouellette

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
19 NOVEMBER 2004	SD4R514M	Steve Ouellette

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.

9. Description of Work Accomplished

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

The purpose of this 337 is for the work performed on N908JE under Banyan Air Service, Avionics Division work order #68062.

A. Installed an Artex ELT406-2HM per Artex installation document number 570-5000, Rev. A, dated 12/10/02 mounted in unpressurized aft compartment. The antenna is mounted in the aft tail section. A remote switch is mounted in cockpit in the copilot's insrtument panel. An aural activation monitor is mount within the vacinity of the ELT per the installation document listed above.

B. The above installation was performed in accordance with AC43.13-1B, Chapter 7, sections 1-5, AC43.13-1B Chapter 11, sections 3-17, AC43.13-2A Chapter 1, AC43.13-2A Chapter 2, paragraphs 24, 25, and 28, AC43.13-2A, Chapter 3, paragraph 38 and the aircraft's maintenance manual.

C. A functional test of the above equipment has been performed FAR25.1309 and FAR25 .1431 for proper operation and did not adversely affect any other aircraft systems. An electrical load analysis was conducted and it was confirmed that this installation would not exceed 80% of the generator output.

D. A log book entry and equipment list was generated to reflect the above installation. No Weight and balance was generated as the aircraft was weighed.

E. Instructions for continued airworthiness is a battery due time change. This due date is reflected on the log book entry. Annual inspection is required per FAR 91-207 (d).

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

☐ Additional Sheets are Attached

US Department
Of Transportation

Federal
Aviation
Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This 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: Boeing	Model: 727-100
	Serial No.: 20155	Nationality and Registration Mark: USA N908JE
2. Owner	Name *(As shown on registration certificate)*: J.E.G.E. Inc.	Address *(as shown on registration certificate)*: 103 Foulk Road, Ste 202, Wilmington, DE. 19803-3742

3. For FAA Use Only

The data identified herein complies with the applicable airworthines requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

NOV 8 2004 — Date

SD-FSDO-17 — Signature of FAA Inspector

4. Unit Identification

Unit	Make	Model	Serial No.	**5. Type** 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.
BANYAN AIR SERVICE AVIONICS DIVISION 1635 NW 51st Place Ft. Lauderdale, FL 33309		U.S. Certificated Mechanic	SD4R514M Radio Class 1,2,3 Limited Airframe
		Foreign Certificated Mechanic	
	☒	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: 8 NOVEMBER 2004

Signature of Authorized Individual: Steve Ouellette

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
19 NOVEMBER 2004	SD4R514M	Steve Ouellette

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.)

The purpose of this 337 is for the FAA approval of the new flight manual supplement on N908JE under Banyan Air Servive, Avionics Division work order #68062.

A. Removed existing UNS-1D Flight Management System (FMS) control display/computer units and routed to the manufacture for upgrade to UNS-1D+. Reinstalled UNS-1D+ FMS CDU computers. System ground checked good.

B. A flight manual supplement has been generated, approved and incorportated into the existing flight manual. A weight & balance and equipment list update are not required.

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

Signature of FAA Inspector _____ Date _____

☐ Additional Sheets are Attached

Doc. No. 7280-FM-001, Rev A
Issue 092401
S.I.P. Technical Services Inc.
10107 McAllister Freeway
San Antonio, TX 78216

FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT

UNIVERSAL AVIONICS
TERRAIN AWARENESS WARNING SYSTEM
(TAWS)

AIRPLANE MAKE: BOEING

AIRPLANE MODEL: 727-100

AIRPLANE SERIAL NO.: N985E

REGISTRATION NO.: 20115

This supplement must be attached to the FAA Approved Airplane Flight Manual when the airplane is modified by the installation of a Universal Avionics Terrain Awareness Warning System (TAWS) in accordance with FAA STC number **ST09951SC**.

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

APPROVED: [signature]
FOR S. Frances Cox, Manager
Special Certification Office
Federal Aviation Administration
Ft. Worth, Texas 76193-0190

DATE: October 25, 2004

EFTA00277634

LOG OF REVISIONS

REV.	DESCRIPTION	REVISED PAGES	APPRD. BY	DATE
IR	New supplement	All	S. Frances Cox	12-13-2002
A	Allow use of CDU or MFD display. Format and editorial corrections throughout.	All	See cover page	10-25-2004

EFTA00277636

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EFTA00277638

SECTION I – GENERAL

This Supplement provides general information for the Enhanced Ground Proximity Warning System installation.

The aircraft is equipped with a Universal Avionics TAWS system. The system uses inputs from the air data computer No. 1, navigation receiver No. 1, radio altimeter, and the Universal Avionics UNS-1 Flight Management System (FMS) , and an internal terrain database to provide basic GPWS alerts and terrain alerts

The TAWS alerts provide the crew with aural and visual indications of possible inadvertent flight into terrain. TAWS alerts are generated if one or a combination of the airplane's: 1) vertical speed, 2) rate of closure to terrain, 3) accumulated altitude loss, 4) airspeed, flap and /or gear configurations or 5) glideslope deviation is unsafe given the airplane's radar altitude and phase of flight. Terrain alerts are generated by comparing aircraft position and altitude to the EGPWS terrain database. This system also provides "Flight Plan Look Ahead" terrain alerts and warnings by comparing the FMS flight plan to the terrain database

SECTION II – LIMITATIONS

The TAWS display will be used for situational awareness only. Navigation must not be predicated upon the use of the TAWS. *The 3-D view provides no attitude information.*

To avoid giving unwanted terrain alerts, the TAWS terrain alerts must be inhibited by pressing the **TERR INHIB** switch when landing at airports that are not included in the airport database or when landing at an airport other than the airport in the FMS flight plan.

Deviation from Air Traffic Control Clearances is authorized to the extent necessary to comply with TAWS warning.

The use of terrain awareness warning and terrain display function is prohibited during QFE operations.

The current local altimeter setting must be entered in the pilot's altimeter for proper terrain alerting.

The TAWS database and alerting algorithms do not account for man made obstructions

EFTA00277640

SECTION III – NORMAL PROCEDURES

1. Operation

All aircraft crew interface is conducted through the Universal Avionics display, either multi-function display (MFD) or FMS control display unit (CDU), and system annunciator switches. TAWS terrain information may be presented on either an MFD or a CDU. The TAWS requires inputs from the following systems: radio altimeter, air data computer, VHF navigation receiver, FMS, gear position and flap position.

2. Cold Temperature Operations

TAWS uses baro-corrected altitude as the reference for Forwared Looking Terrain Alerts (FLTA). TAWS does NOT compensate the baro altitude input for non-standard temperature lapse rates that may be encountered in extreme cold conditions, causing degraded FLTA operation. Basic ground proximity warning modes (1 through 6), as well as Premature Descent Alert (PDA), are radio altitude based and not affected.

In extreme cold conditions, the aircraft will be operating at a lower altitude than indicated, thus resulting in TAWS alerts being delayed or missing. The color-banding on the TAWS display will be offset by the cold temperature altitude error. When operating into and out of airports where cold temperatures exist, the crew should be aware of the difference between the indicated baro altitude and the true altitude and the effect this has on FLTA and the terrain display. To determine the effect on FLTA warnings consult the Airman's Information Manual Chapter 7 paragraphs 7-2-3d and 7-2-3e.

3. System Tests

BUILT IN TEST

TAWS has a Built-In-Test (BIT) function which includes Power-Up Self Tests, Initiated Tests and Continuous Tests. Where there has been degradation in capabilities that result in TAWS being unavailable, BIT annunciates the fact to the flight crew via a **GPWS FAIL** or **TERR INOP** Lamp.

PRE-FLIGHT TESTS

A TAWS Self Test should be conducted prior to each flight. Momentarily press the **GPWS TEST** annunciator. The following indications confirm proper TAWS operation:

PULL-UP Annunciator	Illuminated
TERR Annunciator	Illuminated
BELOW G/S Annunciator	Illuminated
G/S INHIBIT Annunciator	Illuminated
TERR INHIBIT Annunciator	Illuminated

EFTA00277642

SECTION III – NORMAL PROCEDURES (Continued)

GPWS FAIL Annunciator	Illuminated
GPWS TEST Annunciator	Illuminated
TAWS Terrain Display	Test Image (Colored Bars)
Aurel Annunciations	**"TERRAIN, TERRAIN"** **"PULL UP, PULL UP"** **"DON'T SINK"** **"SINK RATE"** **"GLIDESLOPE"** **"TOO LOW TERRAIN"** **"TOO LOW GEAR"** **"TOO LOW FLAPS"** **"FIVE HUNDRED"**

Once the test is complete, TAWS will reboot. During this time the **GPWS FAIL** and **TERR INOP** annunciators will remain lit and a **TAWS FAIL** message will be generated on the MFD until the system is operational. (approx one min)

NOTE: As a result of pressing the **GPWS TEST** annunciator again within five seconds of initiating this test, the test will cancel and the TAWS computer will continue to operate without rebooting.

4. Pop-Up Terrain Display

In the event of terrain alert, the map view of the TAWS display will "pop-up" on the MFD or CDU. Pressing any function key on the display will remove the pop-up and revert to the selected display function.

Prospective terrain conflicts are depicted by a star shaped Terrain Threat Symbol. Both Warnings and Cautions are annunciated with this symbol. Terrain warnings are a flashing red symbol while Terrain cautions are depicted by a flashing yellow symbol. Terrain threats along the flight plan are depicted by a white symbol and represent the predicted first point of conflict between the flight plan and terrain

RED threat "stars" on the TAWS display indicate a Terrain Alert (30-second warning).

YELLOW threat "stars" on the TAWS display indicate a Terrain Caution(60-second warning).

EFTA00277644

SECTION III – NORMAL PROCEDURES (Continued)

WHITE advisory alert " stars" on the TAWS display indicate a flight plan terrain conflict. These alerts are annunciated by a "star" on the display shortly after a VNAV altitude is entered into the flight plan or when a procedure (STAR or approach) containing altitudes is linked to the flight plan. Flight plan terrain advisories do not require immediate action but indicate that adhering to the flight plan as entered will cause a future terrain alert. Waypoints and altitudes should be checked for accuracy.

5. System Annunciators

The following system annunciators are provided for the system;

A. PULL UP

Red **PULL UP** annunciators are located on the Captain's and First Officer's instrument panel. This annunciator illuminates whenever TAWS has detected terrain in the aircraft's immediate flight path. The annunciator will remain illuminated until the terrain has been cleared.

Aural annunciations of **"TERRAIN, TERRAIN, PULL UP"** or **"PULL UP, PULL UP"** are also provided whenever the red **PULL UP** annunciator illuminates.

B. BELOW GS

Amber **BELOW GS** annunciators are located on the Captain's and First Officer's instrument panel. This annunciator illuminates on approach whenever the TAWS has detected that the aircraft is at least 1.3 dots below the glideslope. This annunciator remains illuminated until the aircraft has returned to within less than one dot of the glideslope. Aural warnings of **"GLIDESLOPE-GLIDESLOPE-GLIDESLOPE"** sound until the aircraft has returned to within less than one dot below the glidepath. The aural annunciation may be canceled by pressing the **BELOW GS** annunciator/switch. However, the **BELOW GS** annunciators will remain illuminated. If the aircraft goes below the glideslope after the aural warning and light annunciation has gone out, the light and aural warning will again sound.

C. GPWS FAIL

Amber **GPWS FAIL** annunciators are located on the Captain's and First Officer's instrument panel. This annunciator illuminates if the TAWS has failed.

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SECTION III – NORMAL PROCEDURES (Continued)

D. GPWS TEST

GPWS TEST switches are located on the Captain's and First Officer's instrument panel shared with the **GPWS FAIL** annunciator. This switch is utilized to perform a self-test of the TAWS system.

E. TERR

Amber **TERR** annunciators are located on the Captain's and First Officer's instrument panel. The **"TERRAIN, TERRAIN"** aural warning paired with a visual alert is indication of reduced terrain clearance.

F. TERR INOP

Amber **TERR INOP** annunciators are located on the Captain's and First Officer's instrument panel. This annunciator illuminates when the terrain function is inhibited by **TERR INHIB** switch, terrain database is invalid or failed, terrain alert function is inoperative due to hardware failure or lack of a required input such as position or altitude.

G. TERR INHIB

Blue **TERR INHIB** annunciator/switch is located on the Captain's instrument panel adjacent to the **TERR INOP** annunicator. This annunciator/switch is illuminated white visible only when the **TERR INHIB** is active.

EFTA00277648

SECTION IV – EMERGENCY/ABNORMAL PROCEDURES

EMERGENCY PROCEDURES

No change to basic Airplane Flight Manual

ABNORMAL PROCEDURES

1. **Circuit Breakers**

The TAWS system is protected by the following trip-free circuit breakers:

NAME	LOCATION	AMPS	BUS
GPWS	P-18	5	28 VDC Ess.

2. **Use of TERR INHIB switch.**

The Terrain Awareness Display inhibit switch (**TERR INHIB**) must be placed in the **INHIB** position in the following conditions:

1-Whenever the FMS in the Dead Reckoning (DR) mode

2-Within 15 nm of approach or landing at an airport not contained in the TAWS database.

NOTE: When an off airport landing is required the FLTA and PDA functions should be inhibited by activation of the **TERR INHIB** switch.

3. **Response to TAWS Warnings**

When an aural **'TERRAIN, TERRAIN, PULL UP"** or a red **PULL UP** warning light annunciates, execute a positive pull up maneuver, apply maximum rated thrust, and ascend to at least the best climb angle until the warning ceases. Notify ATC if action requires deviation of ATC cleared flight plan.

When an aural **"CAUTION TERRAIN", "TOO LOW TERRAIN," "SINKRATE" "DON'T SINK," "TOO LOW FLAPS"** or **'TOO LOW GEAR"** caution annunciates, initiate corrective action to remove the cause of the warning.

4. **Response to Glideslope Deviation Alerts**

When the **BELOW GS** annunciator illuminates and an aural **"GLIDESLOPE"** annunciation alert occurs, initiate corrective action to fly the airplanc back to the glideslope centerline.

To inhibit the **"GLIDESLOPE"** annunciation on back course approaches, select the **BELOW GS** warning light/switch. The glideslope inhibit function is only available below 2000 ft AGL when the **BELOW GS** annunciator illuminates.

EFTA00277650

SECTION IV – EMERGENCY/ABNORMAL PROCEDURES (Continued)

5. Use of Flap Override Switch

When landing with less than normal flaps, the FLAP OVERRIDE switch should be usesd to prevent the **'TOO LOW FLAPS"** aurel annunciation.

SECTION V - PERFORMANCE

No change to basic Airplane Flight Manual.

SECTION VI - WEIGHT AND BALANCE

Refer to applicable weight and balance document.

EFTA00277652

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
SO-FSDO-17

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC	Address *(As shown on registration certificate)*: 103 FOULK RD STE 202 WILMINGTON DE 19803-3742

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 AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**		U.S. Certified Mechanic	CRS EYKR782D
		Foreign Certified Mechanic	AIRFRAME 1,3.
	X	Certificated Repair Station	RADIO 1,2,3.
		Manufacturer	LIMITED A/F & ENG.

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
6/12/02	Christopher Houseworth. Inspector.

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
6/12/02	**EYKR782D**	John K. Urso. Inspector.

FAA Form 337 (12-88)

EFTA00277654

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 accomplished.)

N908JE, BOEING 727-31, S/N 20115, W.O. 18046

REFERENCE F.A.A. FORM 337 DATED 7/2/01 INSTALLING A UNIVERSAL AVIONICS CORP. UNS-1D FLIGHT MANAGEMENT SYSTEMS (FMS) WITH INTEGRAL GPS SENSORS. RECONFIGURED AIRCRAFT WIRING TO PROVIDE V-NAV DISPLAY INFORMATION ONLY, FROM THE EXISTING # 1 AND # 2 UNS-1D FLIGHT MANAGEMENT SYSTEMS. THIS MODIFICATION AS ACCOMPLISHED PER THE FOLLOWING JET AVIATION DRAWINGS, WHICH ARE SUBSTANTIATED BY F.A.A. FROM 8110-3 RESPECTIVELY:

WIRING DRAWINGS:

- B727-16236-410, REV A, DATED 4/16/02, SHEETS 1 THRU 5, TITLED – NO. 1 FLIGHT MANAGEMENT SYSTEM.
- B727-16236-411, REV A, DATED 4/16/02, SHEETS 1 THRU 5, TITLED – NO. 2 FLIGHT MANAGEMENT SYSTEM.

REFERENCE F.A.A. FORM 8110-3 DATED 4/19/02 BY SYSTEMS AND EQUIPMENT DER NO. DERT510087-NM.

ACCOMPLISHED OPERATIONAL CHECKS PER UNIVERSAL AVIONICS CORP. RETURN TO SERVICE MAINTENANCE AND CHECKOUT PROCEDURES MANUAL NO. 34-60-21, DATED 19 MARCH 2001 WITH NO DISCREPANCIES NOTED.

AN EMI TEST, REPORT NO.: B727-16236-080 REV IR, SHEETS 1 OF 5, DATED 06/19/2001, WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT. MAGNETIC DIRECTION INDICATORS WERE CHECKED FOR ACCURACY AND COMPENSATED AS NECESSARY PER AC 43.13-1B, CHAPTER 12, SECTION 3, PARAGRAPH 12-37 AND AC 43.13-2A, CHAPTER 2 PARAGRAPH 23f.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK.

THE REQUIRED F.A.A. APPROVED FLIGHT MANUAL SUPPLEMENT DOC NUMBER B727-16236-100, REV A, SHEETS 1 THRU 9, DATED 5/8/02 HAS BEEN INSERTED INTO THE AIRCRAFT FLIGHT MANUAL.

END

☐ Additional Sheets Are Attached

☆ U.S. G.P.O 1990-761-753

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: April 19, 2002

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-410, Revision A, dated April 16, 2002	NO. 1 FLIGHT MANAGEMENT SYSTEM
B727-16236-411, Revision A, dated April 16, 2002	NO. 2 FLIGHT MANAGEMENT SYSTEM

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections) CFR TITLE 14, CHAPTER 1, SUBCHAPTER C

FAR 25.581 (a)(b)(1)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(c)(d)(e)(g)
FAR 25.1322 (b)(c)
FAR 25.1329 (h)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)(d)(e)
FAR 25.1381 (a)(b)
FAR 25.1431 (a)(b)(c)
FAR 25.1529
FAR 25.1581 (a)(b)(d)

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.

☐ Recommend approval of these data

I (~~We~~) Therefore

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-FMS-REVA.DOC

Jet Aviation Associates Ltd.
Bldg. 1515 Perimeter Rd.
Palm Beach Int'l Airport
West Palm Beach, FL 33406
FAA CRS EYKR782D

Document No. B727-16236-100

AFM Supplement to
The Boeing Company 727-31
Serial No. 20115
FAA Form 337

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR

BOEING 727-31

REGISTRATION NO.: N908JE

SERIAL NO.: 20115

WITH

DUAL UNIVERSAL AVIONICS FLIGHT MANAGEMENT SYSTEMS

(UNS1-D) INSTALLED

This supplement must be attached to the FAA approved Airplane Flight Manual when the airplane is modified by the installation of dual Universal Avionics Systems Corp. (UASC) (UNS-1D) Flight Management Systems (FMS), with Frequency Management via a UASC Radio Tuning Unit (RTU), receiving navigation inputs from Triple Honeywell Inertial Reference Sensors (IRS), dual internal GPS sensors, and VOR/DME from the Collins No. 1 and No. 2 VOR/DME systems in accordance with manufacture's Installation and Checkout Manual No. 34-60-09, Rev. 2, dated August 15, 1997 or later approved revision and FAA Form 337, dated June 26, 2001.

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

FAA Approved: _____

Federal Aviation Administration
Flight Standard District Office - 17
1050 Lee Wagener Blvd.
Ft. Lauderdale, Florida 33315

FAA Approved Date: June 21, 2001
Revision A, Dated: 5/8/2002

EFTA00277658

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
SO-FSDO-17

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**	( ) U.S. Certificated Mechanic ( ) Foreign Certificated Mechanic (X) Certificated Repair Station ( ) Manufacturer	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.

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
1/14/02	John K. Urso. Inspector.

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	( )	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
1/14/02	EYKR782D	Ronald K. Bystrom. Manager Quality Assurance.

FAA Form 337 (12-88)

EFTA00277660

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 17454.

ACCOMPLISHED AN ALTERATION TO THE CABIN INTERIOR FURNISHING ARRANGEMENT PREVIOUSLY INSTALLED UNDER PAGE AVJET STC SA3137SO, DATED 1/17/92, BY REMOVING THE FOLLOWING INTERIOR FURNISHINGS:

DESCRIPTION	POSITION	P/N	S/N	F.S.
R/H O/B AFT FACING SEAT.	FORWARD SALON	303413-2	4350	401.94
R/H I/B AFT FACING SEAT.	FORWARD SALON	303413-10	4351	401.94
FORWARD R/H TABLE AND PEDESTAL	FORWARD SALON	A727-2531-001	NSN	438.50
L/H AFT FACING SEAT	CENTER LOUNGE	303413-1	4354	732.00
COFFEE TABLE AND PEDESTAL	CENTER LOUNGE	727-2535-003	NSN	772.50

THIS ALTERATION WAS ACCOMPLISHED PER JET AVIATION DRAWING B727-17454-200, REV IR, DATED 1/2/02, SHEETS 1 & 2, TITLED – MINOR DEVIATION TO STC SA3137SO, THE LIMITED 727-100 GENERAL ARRANGEMENT. REFERENCE F.A.A. FORM 8110 DATED 1/6/02 BY STRUCTURES D.E.R. NO. DERT-810028-NE.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

THERE ARE NO FLIGHT MANUAL SUPPLEMENTS OR COCKPIT PROCEDURAL CHANGES REQUIRED FOR THIS ALTERATION.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

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
2A-CI

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: **Boeing**	Model: **727-31**
	Serial No.: **20115**	Nationality and Registration Mark: **N908JE**
2. Owner	Name *(As shown on registration certificate)*: **JEGE Inc.**	Address *(As shown on registration certificate)*: **103 Foulk RD STE 202 Wilmington, DE 19803-3742**

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.
Gary K Palmer **6 Hyacinth Lane** **Holbrook, NY 11741**	X	U.S. Certified Mechanic	**#84544584AP**
		Foreign Certified Mechanic	
		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
08/01/01	Gary K Palmer *Gary K Palmer*

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
08/01/01	**84544584IA**	Gary K Palmer *Gary K Palmer*

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.

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

Fireblocked and upholstered existing, one (1) cabin single chair (Erda S/N 4359) in Townsend: Leather Lambskin Paris Alligator Embossed/Tipped Gold/Black, leather and two (2) cabin chairs (Erda S/N 4357 and 4358) in Clarence House: 10379BIS-37 Velours Mohair, fabric. D.E.R. Identification 62326-01.
Fireblocked and upholstered existing, two (2) cabin single chair (Erda S/N 4360 and 4361) in Old World Weavers: Edmond Petit FMPOO 10004 Zoom, fabric. D.E.R. Identification 64318-01.
Fireblocked and upholstered existing, one (1) cabin single seat (Erda S/N 4354) and one (1) three section divan (Dettmers S/N 520, 521, and 522) in Geltman Ind.: Tiburon Tweed, fabric and one (1) divan (Dettmer S/N 516) in Clarence House: 10379BIS-37 Velours Mohair, fabric. D.E.R. Identification 65624-01.
Fireblocked and upholstered existing six (6) single cabin seats (Erda S/N 4350, 4351, 4352, 4353, 4355, 4356), one (1) LH forward sidefacing divan (Dettmers S/N 517), and two (2) 3-place reclining divans (Dettmers S/N 518 and 519) in Old Weavers: EA81340013 Alfa Check, fabric and ETS J. Tassin S.A.: Mastic #19075, leather. D.E.R. Identification 66059-01.
All materials meet FAR 25.853(a) Appendix F, Part I(a)(1)(ii).
Aircraft seat cushions have been fireblocked as per the requirements of FAR 25.853(c) Appendix F, Part II, Amendment 25 - 83. Results of sample burn tests are documented on S.A.I.'s Test Plan #7428, #7617, #7722, and #7759 and on attached DER approved 8110-3, Identification 62326-01, 64318-01, 65624-01, and 66059-01. Seat cushions have been tagged as being in compliance with the applicable regulatory requirements.
Aircraft seatbelts were sent to Aircraft Belts, Inc. Repair Station YB1R632K for rewebbing, work order number 0046395 and reinstalled on the seats and divans.
Replaced 19 each P.L. Porter SLO2300-28 seat recline Hydrolok and 6 each P.L. Porter SLO2300-21 divan recline Hydrolok. Hydroloks were replaced using standard interior practices.
Installed Erda Hydro Legrest P/N 302617-3 and mechanical control single P/N MC15-36 on two (2) cabin single seats Erda seat S/N 4360 and 4361 in accordance with Erda drawing 302617 Rev B.

Attached: FAA approved Townsend: Leather Lambskin Paris Alligator Embossed/Tipped Gold/Black, leather and Clarence House: 10379BIS-37 Velours Mohair, fabric. Test Plan #7428, form FAA 8110-3 dated 04/16/01, Judy Boggs, DERY-405020-CE. Identification 62326-01.
Attached: FAA approved Old World Weavers: Edmond Petit FMPOO 10004 Zoom, fabric. D.E.R. Identification 64318-01. Test Plan #7617, form FAA 8110-3 dated 06/20/01, Judy Johnson, DERY-405020-CE. Identification 64318-01.
Attached: FAA approved Geltman Ind.: Tiburon Tweed, fabric and Clarence House: 10379BIS-37 Velours Mohair, fabric. Test Plan #7722, form FAA 8110-3 dated 07/12/01, Donna J. Parrish, DERY-410100-CE. Identification 65624-01.
Attached: FAA approved Old World Weavers: EA81340013 Alfa Check, fabric and ETS J. Tassin S.A.: Mastic #19075, leather. Test Plan #7759, form FAA 8110-3 dated 07/24/01, Donna J. Parrish, DERY-410100-CE. Identification 66059-01.
Attached: Aircraft Belts, Inc.: Certification/Packing List, work order number 0046395 consisting of 11 sheets.
Attached: FAA form 8130-3 from P.L. Porter Controls, Inc.: SLO2300-21 and SLO2300-28 Hydrolocs tracking number 7723, 6751, 7176, 6759, 9495, 7367, 7368, and 9292.
Pertinent data on file at International Jet Interiors, Inc. under W.O.#: 01119.
Customer to install seats and divans in aircraft.
Log entry has been made.

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

☐ Additional Sheets Are Attached

☆ U.S. G.P.O 1990-761-753

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
ASO FSDO-15

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 Avia tion Act of 1958).

1. Aircraft	Make Boeing	Model 727-31
	Serial No. 20115	Nationality and Registration Mark N908JE
2. Owner	Name (As shown on registration certificate) JEGE INC.	Address (as shown on registration certificate) 103 FOULK RD STE 202 WILMINGTON DE. 19803-3742

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.
TIMCO Lake City Municipal Airport Lake City, FL 32025	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	DU4R141M

D. I certify that the repair and/or alteration made to the units identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with 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 August 1, 2001

Signature of Authorized Individual Owen H. Pritchard II

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	X	Repair Station		Person Approved by Transport Canada Airworthiness Group

Other (*Specify*)

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
August 1, 2001	DU4R141M	Scott L. Palm

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.)

BOEING S/N 20115 REG. NO. N908JE Page 1 August 1, 2001

The following major repairs were accomplished:

NR# 27754

Repaired delaminated R/H Mid Flap Trailing Edge wedge by removing the delaminated section and fabricating and installing a new T/E wedge and strips IAW TIMCO REO-L00464 dated 7/17/01 FAA Form 8110-3 approved by DER Richard C. Saltivan DER # DERT-405157-CE dated June 19, 2001.

NR# 27918

Repaired the delaminated and corroded Left Hand Inboard Mid Flap bottom upper Rock-shield panel by removing Rock-shield and corrosion, treated and primed area to be bonded, impregnated fiberglass overlays as required, applied conductive coating and installed panel IAW B727 SRM 57-50-2, 51-40-8, MM 51-20-0 & SB 727-32-247 R1 dated June 5, 1981.

SUMMARY

1. All work accomplished IAW Boeing SRM, TIMCO REO, FAA Form 8110-3 and Service Bulletin.
2. Records of all work accomplished is on file at this repair station under work order 185003.
3. Aircraft Weight and Balance updated accordingly.

----------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

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC	Address *(As shown on registration certificate)*: 103 FOULK RD STE 202 WILMINGTON DE 19803-3742

3. For FAA Use Only

The data identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

JUN 2 1 2001 — Date

SO-FSDO-17 — 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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**		U.S. Certified Mechanic	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.
		Foreign Certified 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
7/2/01	John K. Urso. Inspector.

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7/2/01	EYKR782D	Ronald K. Bystrom. Manager Quality Assurance.

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 accomplished.)

AIRCRAFT: BOEING, TYPE: 727-31, S/N 20115, DATE: 06/14/2001, W.O. 16236, PAGE 1 OF 2

INSTALLED A SINGLE EVENTIDE AVIONICS ARGUS 5000/CE MOVING MAP DISPLAY SYSTEM (TSO C113). THIS MODIFICATION WAS COMPLETED USING JET AVIATION DRAWING NO. B727-16236-270, ARGUS 5000 C/E MOVING MAP DISPLAY, REV. A, DATED 06/19/01. REFERENCE FAA FORM 8110-3, DATED 6/20/01, BY SYSTEMS AND EQUIPMENT DER NO. DERT-510087-NM. THE EXISTING LASERTRAK WIRING WAS RE-BUSSED DUE TO RELOCATION OF LASERTRAK C.D.I. THIS MODIFICATION WAS COMPLETED USING JET AVIATION DRAWING NO. 34-61-32-1, LAZERTRAK SYSTEM MODIFICATION, REV IR, DATED 5/24/01.

THE STRUCTURAL INSTALLATION OF THE ARGUS 5000/CE MOVING MAP DISPLAY SYSTEM AND THE RELOCATION OF THE LASERTRAK C.D.I. WAS COMPLETED USING JET AVIATION DRAWING NO. B727-16236-1270, ARGUS 5000/CE MOVING MAP EQUIPMENT INSTALLATION, REV. IR, DATED 05/29/01. REFERENCE FAA FORM 8110-3, DATED 06/03/2001, BY STRUCTURES DER NO. DERT-810028-NE.

THE EVENTIDE AVIONICS ARGUS 5000/CE MOVING MAP DISPLAY IS A PICTORIAL NAVIGATION INSTRUMENT, WHICH PROVIDES VISUAL REFERENCE OF AIRCRAFT POSITION RELATIVE TO LANDING FACILITIES, NAVIGATIONAL AIDS AND SPECIAL USE AIRSPACE. THE ARGUS 5000/CE RECEIVES GEODETIC POSITION AND OTHER NAVIGATION INFORMATION FROM THE NO. 1 UNS-1D FMS THROUGH AN EVENTIDE AVIONICS ARINC 419/429 ADAPTER UNIT AND THE AIRCRAFT'S NO. 3 HONEYWELL "LASERREF" INERTIAL REFERENCE SENSOR (IRS) DIRECTIONAL HEADING SYSTEM WHICH, PROVIDES MAP GRAPHICS AND BEARING ORIENTATION.

THE FOLLOWING SWITCHES ARE LOCATED ON P16 FORWARD CONTROL STAND, BELOW THE ARGUS 5000/CE MOVING MAP DISPLAY:

ARGUS INFO — MOMENTARILY DEPRESSING THE **ARGUS INFO** ILLUMINATED (BLUE) SWITCH BRINGS UP INFORMATION ABOUT MAP OBJECTS ON THE ARGUS 5000/CE MOVING MAP DISPLAY. IF THE **ARGUS INFO** SWITCH IS PUSHED IN FOR 1 SECOND, THE ARGUS 5000/CE WILL RETURN TO THE MAP DISPLAY IN THE SAME MODE AND AT THE SAME RANGE SET, WHEN INFO WAS ENTERED.

ARGUS SEL — MOMENTARILY DEPRESSING THE **ARGUS SEL** ILLUMINATED (BLUE) SWITCH CYCLES THE ARGUS 5000/CE DISPLAY THROUGH THE VARIOUS MAP OBJECTS.

ARGUS TEST — MOMENTARILY DEPRESS THE **ARGUS TEST** SWITCH TO ENABLE DISPLAY SIMULATION TEST.

THE ARGUS 5000/CE MOVING MAP DISPLAY IS APPROVED FOR IFR ENROUTE NAVIGATION ONLY WHEN RECEIVING NAVIGATION INFORMATION FROM AN IFR APPROVED GPS, LORAN, OR OTHER LONG-RANGE NAVIGATION SYSTEM. THE ARGUS 5000/CE DATABASE MUST BE CURRENT (NOT EXPIRED). THE ARGUS 5000/CE IS APPROVED FOR USE AS A SUPPLEMENTAL NAVIGATION DISPLAY FOR VFR AND IFR OPERATIONS BUT IS LIMITED TO THE APPROVAL OF THE LORAN C OR GPS NAVIGATION SYSTEM.

THE ARGUS 5000/CE MOVING MAP DISPLAY HAS BEEN SHOWN TO MEET THE CRITERIA OF FAA TSO-C113, AIRBORNE MULTIPURPOSE ELECTRONIC DISPLAYS, AND HAS BEEN PREVIOUSLY INSTALLED UNDER EVENTIDE INC. FAA APPROVED STC SA0054NY, IN AN AIRCRAFT AND MEETS THE FAA REQUIREMENTS FOR OPERATION IN THE AIRCRAFT DURING INSTRUMENT FLIGHT AND CAN BE USED AS A REQUIRED INSTRUMENT.

THE NEW EQUIPMENT AND ASSOCIATED SYSTEMS WERE FUNCTIONALLY TESTED PER EVENTIDE AVIONICS INSTALLATION MANUAL NO. 5003, REVISION 03.07, DATED JULY 10, 1995 WITH NO DISCREPANCIES.

AN EMI TEST, REPORT NO.: B727-16236-080 REV IR, SHEETS 5, DATED 06/19/01 WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT. MAGNETIC DIRECTION INDICATORS WERE CHECKED FOR ACCURACY AND COMPENSATED AS NECESSARY PER AC 43.13-1B, CHAPTER 12, SECTION 3, PARAGRAPH 12-37 AND AC 43.13-2A, CHAPTER 2 PARAGRAPH 23f.

THE STATIC LOADING OF THE INSTALLED EQUIPMENT MEETS THE REQUIREMENTS OF AC 43.13-2A, CHAPTER 1, PARAGRAPH 3 AND WAS FOUND TO MEET THE REQUIREMENTS OF PARAGRAPH 2. MATERIALS AND PRACTICES COMPLY WITH PARAGRAPHS 4 THROUGH 12. THE ELECTRICAL LOAD ANALYSIS UPDATE REPORT NO. B727-16236-041, REV IR, SHEETS 1 THRU 21, DATED 06/11/2001 WAS COMPLETED IN ACCORDANCE WITH AC43.13-1B, CHAPTER 11, SECTION 3, PARAGRAPH 11-37.

☒ Additional Sheets Are Attached

EFTA00277667

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 accomplished.)

AIRCRAFT: BOEING, TYPE: 727-31, S/N 20115, DATE: 06/14/2001, W.O. 16236, PAGE 2 OF 2

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED IN THE INSTALLATION CONFORM TO AC43.13-1B, CHAPTER 7, SECTIONS 1- 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURER OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLIES WITH AC43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH AC43.13-1B SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND AC43.13-2A, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

MAINTENANCE FOR CONTINUED AIRWORTHINESS IS OUTLINED IN EVENTIDE AVIONICS DRAWING NO. 140003, REV. B, DATED JUNE JUNE 4, 1999, AND STATES THAT THE ARGUS 5000/CE MOVING MAP DISPLAY SYSTEM IS "ON CONDITION".

THE REQUIRED F.A.A. APPROVED FLIGHT MANUAL SUPPLEMENT DOC NUMBER B727-16236-101, REV IR, PAGES 1 THRU 6 DATED June 21, 2001 HAS BEEN INSERTED INTO THE AIRCRAFT FLIGHT MANUAL.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

Jet Aviation Associates Ltd.
Bldg. 1515 Perimeter Rd.
Palm Beach Int'l Airport
West Palm Beach, FL 33406
FAA CRS EYKR782D

Document No. B727-16236-101

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR

BOEING 727-31

REGISTRATION NO.: N908JE

SERIAL NO.: 20115

WITH A

SINGLE EVENTIDE AVIONICS ARGUS 5000/CE MOVING MAP DISPLAY

This supplement must be attached to the FAA approved Airplane Flight Manual when the airplane is modified by the installation of a single Eventide Avionics Argus 5000/CE Moving Map Display receiving navigation inputs from the No. 1 UNS-1D Flight Management System (FMS) in accordance with manufacture's Installation Manual No. 5003 Revision 03.07, dated July 10, 1995 or later approved revision and FAA Form 337, dated 7/2/01.

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

FAA Approved: Gale T Justice

Federal Aviation Administration
Flight Standard District Office – 17
1050 Lee Wagener Blvd.
Ft. Lauderdale, Florida 33315

FAA Approved Date: JUN 2 1 2001

EFTA00277670

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 06/20/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-270, Revision A, dated 06/19/01	ARGUS 5000/CE MOVING MAP DISPLAY

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529
FAR 25.1581 (a)(b)(d)

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

☐ Recommend approval of these data

I (We) Therefore

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-MVNGMAP_A.DOC

JET AVIATION

CRS-EYKR782D

MODIFICATION DRAWING

JET AVIATION ASSOCIATES, LTD
1515 PERIMETER ROAD
PALM BEACH INT'L AIRPORT
WEST PALM BEACH, FLORIDA 33406-1493
561-233-7262 FAX 561-233-7279

PROPRIETARY NOTES
This drawing contains specifications and/or data, technical material, proprietary designs and information that are the sole property of JET AVIATION ASSOCIATES, LTD. to be held and treated by its recipient on a confidential basis and is not to be shown or disclosed to any unauthorized organization or person without the written authorization of JET AVIATION ASSOCIATES, LTD.

TITLE: LASERTRAK SYSTEM MODIFICATION

DWG NO.: 34-61-32-1

REASON: RE-BUSS LASERTRAK INSTRUMENT LIGHTING FROM CENTER PANEL TO CAPTAINS INSTRUMENT PANEL DUE TO RELOCATION OF INSTRUMENT

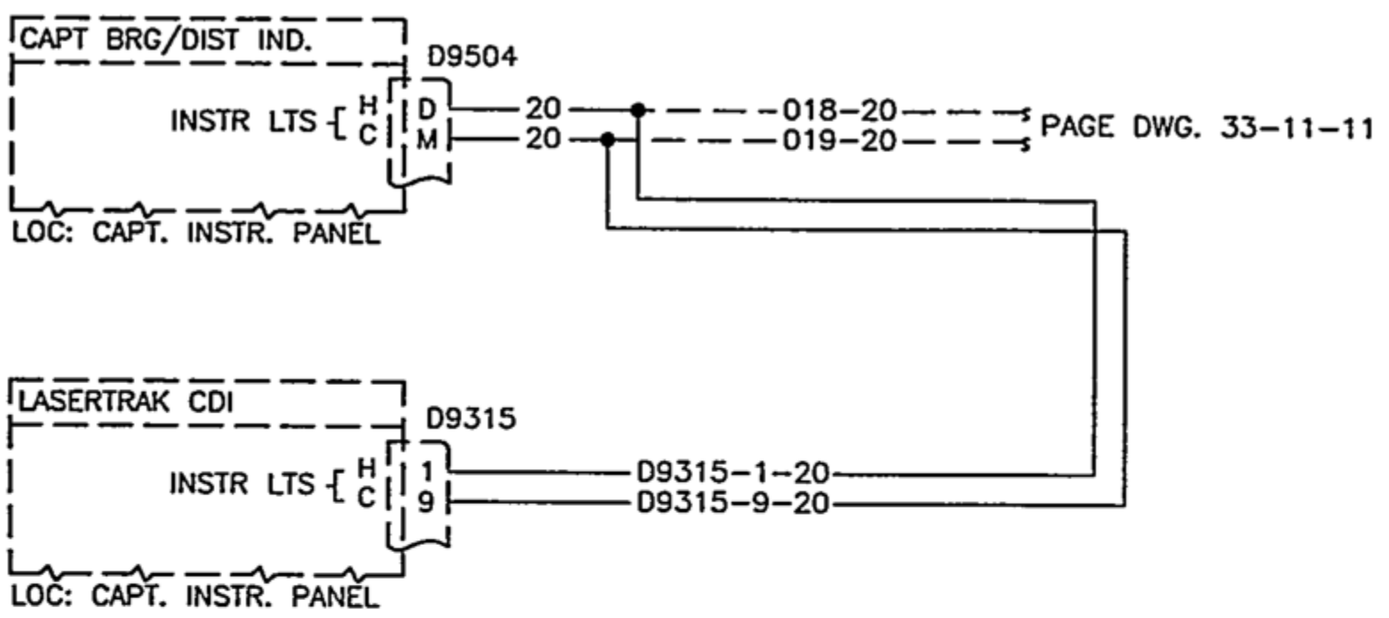
△ NOTES:

1. AIRCRAFT WIRING INSTALLATION IAW FAA A.C. 43.13-1B, CHAPTER 11, SECTIONS 1, AND 3-20.
2. ALL WIRE PER MIL-W-22759 UNLESS SHIELDED.
3. ALL SHIELDED WIRE PER MIL-C-27500TG.
4. ALL WIRE 20 AWG UNLESS SPECIFIED OTHERWISE.
5. ALL CIRCUIT BREAKERS PER MS36574.
6. ALTERNATE TWISTED WIRE COLORS MAY BE SUBSTITUTED:

	PRIMARY		SUB	
TRIPLE TWISTED:	RED	(R)	WHITE	(W)
	BLUE	(B)	BLUE	(B)
	YELLOW	(Y)	ORANGE	(O)
TWISTED PAIR:	RED	(R)	WHITE	(W)
	BLUE	(B)	BLUE	(B)

7. LOWER CASE LETTERS ARE SHOWN UNDERLINED. I.E. o.

8. THIS MODIFICATION DRAWING ONLY CHANGES THE EXISTING LASERTRAK SYSTEM PER THE WIRING SHOWN, FOR ALL OTHER INFORMATION REGARDING THE LASERTRAK SYSTEM REFER TO ORIGINAL PAGE AVJET DWG. 34-61-32. THIS MODIFICATION DRAWING SHALL BE ATTACHED TO THE ORIGINAL PAGE AVJET DRAWING FOR REFERNCE.



○ SYMBOL AND NUMBER REFERS TO PARTS LIST ITEM NUMBER.

△ SYMBOL AND NUMBER REFERS TO INSTALLATION NOTES.

⬡ SYMBOL AND LETTER REFERS TO LIKE LETTER IN SYMBOL ON THIS DWG. NO.

GROUND NOTES: D =DC GND; A =AC GND; S =SHLD GND; C =CHASSIS GND

WIRE TYPE NOTES: NEW WIRE (————); REMOVED WIRE (· · · · ·); EXISTING WIRE (— — — —)

DWG. SCALE: NONE	SER. NO.: 20115	PREPARED BY: G.L. KARR	APPROVED BY: T. JARDINE
A/C MODEL: 727-100	REG. NO.: N908JE	DATE: 05/24/01	DATE: 05/24/01

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 3, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter,etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1270	Argus 5000/CE Moving Map Equipment Installation Sht 1-5, Rev IR
B727-16236-1331	Aircell Equipment Installation, Sht 1-6, Rev IR

Note:

1. This approval is for structural aspects only.
2. This approval is based on drawing review and inspection.
3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA
To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.561
	25.601	25.603	25.605(a)	25.609	25.611	25.613
	25.789					

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 0 have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I (☒) Therefore ☐ Recommend approval of these data. ☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson David E. Haralson	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ER01207.doc

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 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC	Address *(As shown on registration certificate)*: 103 FOULK RD STE 202 WILMINGTON DE 19803-3742

3. For FAA Use Only

The data identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

JUN 2 1 2001 — Date

SO-PSDO-17 — Signature of FAA Inspector

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 AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**	[ ] U.S. Certified Mechanic [ ] Foreign Certified Mechanic [X] Certificated Repair Station [ ] Manufacturer	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.

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
7/2/01	John K. Urso. Inspector.

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
7/2/01	EYKR782D	Ronald K. Bystrom. Manager Quality Assurance

FAA Form 337 (12-88)

EFTA00277678

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 accomplished.)

AIRCRAFT: BOEING, TYPE: 727-31, S/N 20115, DATE: 06/14/2001, W.O. 16236, PAGE 1 OF 2

REMOVED THE EXISTING NO. 1 AND 2 HONEYWELL NZ-920 FMS SYSTEMS AND THE DL-900 DATA LOADER UNIT, AND INSTALLED DUAL UNIVERSAL AVIONICS CORP. UNS-1D FLIGHT MANAGEMENT SYSTEMS (FMS) WITH INTEGRAL GPS SENSORS, A UNIVERSAL AVIONICS CORP. RADIO TUNING UNIT (RTU), AND A UNIVERSAL AVIONICS CORP. DTU-100 DATA TRANSFER UNIT (DTU). THIS MODIFICATION WAS COMPLETED USING JET AVIATION DRAWING NO. B727-16236-410, NO. 1 FLIGHT MANAGEMENT SYSTEM, REV IR, DATED 04/10/01 AND B727-16236-411, NO. 2 FLIGHT MANAGEMENT SYSTEM, REV. IR, DATED 04/15/01. THE RTU WAS INSTALLED USING JET AVIATION DRAWING NO. B727-16236-293, FLIGHT MANAGEMENT SYSTEM RADIO TUNING UNIT, REV IR, DATED 04/16/01. REFERENCE FAA FORM 8110-3 DATED 05/29/2001 BY SYSTEMS AND EQUIPMENT DER NO. DERT-510087-NM.

THE STRUCTURAL INSTALLATION OF EACH FMS, THE DTU, AND THE RTU WERE COMPLETED USING JET AVIATION DRAWING NO. B727-16236-1410, DUAL FMS W/RTU EQUIPMENT INSTALLATIONS, REV. IR, DATED 05/17/01, REFERENCE FAA FORM 8110-3, DATED JUNE 1, 2001 BY STRUCTURES DER NO. DERT-810028-NE. THE DUAL GPS ANTENNAS WERE INSTALLED USING JET AVIATION DRAWING NO. B727-16236-1441, GPS ANTENNA INSTALLATION, REV. A, DATED 05/29/01, REFERENCE FAA FORM 8110-3, DATED 6/18/01 BY STRUCTURES DER NO. DERT-510024-CE.

THE UNS-1D SYSTEMS RECEIVE BARO-CORRECTED ALTITUDE AND TAS INFORMATION FROM THE NO. 1 AND NO. 2 AIR DATA COMPUTERS RESPECTIVELY, VOR/DME BEARING AND DISTANCE INFORMATION FROM THE NO. 1 AND NO. 2 COLLINS VIR-432 AND DME-442 SYSTEMS, AND CROSS SIDE GPS INFORMATION AS WELL AS EACH UNITS INDEPENDENT GPS SENSOR DATA, FUEL FLOW DATA FROM THE AIRCRAFT FUEL FLOW SYSTEM AND IRS INFORMATION FROM THE EXISTING NO. 1, 2, AND 3 HONEYWELL "LASERREF" SYSTEMS. THE UNS-1D FMS HAS BEEN PREVIOUSLY INSTALLED UNDER UNIVERSAL AVIONICS SYSTEMS CORP. FAA APPROVED STC SA5072NM, IN AN AIRCRAFT AND CERTIFIED FOR VFR AND IFR NAVIGATION WHICH QUALIFIES THIS INSTALLATION AS A "FOLLOW ON" INSTALLATION PER AC 20-130A.

THE UNS-1D FMS SYSTEMS HAVE BEEN SHOWN TO MEET ALL OF THE REQUIREMENTS OF AC-20-130A FOR VFR-IFR NAVIGATION ENROUTE, TERMINAL, OVER WATER AND IN REMOTE AREAS, AND FOR NON-PRECISION APPROACHES.

THE NO.1 AND 2 FMS SYSTEMS ARE DIGITALLY INTEGRATED TO THE EXISTING HONEYWELL FIVE-TUBE ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS). THE PILOT AND COPILOT'S EFIS SYMBOL GENERATOR'S HAVE HONEYWELL SERVICE BULLETIN A21-2000-028 AND THE MULTI-FUNCTION GENERATOR HAS HONEYWELL SERVICE BULLETIN A21-2000-029 TO INCORPORATE NON-PRECISION GPS SCALING VIA GAMA ARINC 429 LRN INTERFACE WHICH MEETS REQUIREMENTS OF TSO C129A AND AC 20-130A.

THE FMS SYSTEMS ARE CROSS-COUPLED TO EITHER THE PILOT OR COPILOT EFIS FOR DISPLAY AND NAVIGATION. THE EFIS CONVERTS THE DIGITAL TO ANALOG OUTPUTS AND PROVIDES ALL LATERAL STEERING TO THE AUTOPILOT AND FLIGHT DIRECTOR SYSTEM. VERTICAL NAVIGATION (VNAV) FROM EITHER FMS SYSTEM IS NOT DISPLAYED OR COUPLED IN THIS INSTALLATION. THE FOLLOWING REQUIRED ANNUNCIATORS FOR THE FMS SYSTEMS ARE DISPLAYED ON THE EFIS DISPLAYS:

FMS MSG	INDICATES A MESSAGE IS TO BE ACKNOWLEDGED ON THE MSG PAGE. (COLOR: AMBER) LOCATED ON EADI.
XTK	SELECTED CROSSTRACK IS ACTIVE. (COLOR: CYAN) LOCATED ON EHSI.
WPT	INDICATES WAYPOINT ALERT TWO MINUTES PRIOR TO WAYPOINT IN EN ROUTE MODE, AND 15 SECONDS PRIOR IN APPROACH MODE. WHEN THIS ANNUNCIATOR FLASHES, IT INDICATES THAT AN UPCOMING VERTICAL FLIGHT PATH ANGLE (FPA) CHANGE IS WITHIN TWO MINUTES. (COLOR: AMBER) LOCATED ON EHSI.
APP	AN APPROACH HAS BEEN ACTIVATED. (COLOR: CYAN) LOCATED ON EHSI.

☒ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

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 accomplished.)

AIRCRAFT: BOEING, TYPE: 727-31, S/N 20115, DATE: 06/14/2001, W.O. 16236, PAGE 2 OF 2.

THE FOLLOWING REQUIRED ANNUNCIATORS WERE LOCATED ON THE EXISTING PILOT AND COPILOT'S INSTRUMENT PANEL ADJACENT TO THE EADI UNITS:

FMS HDG	THE FMS IS IN HEADING SUB-MODE. (COLOR: BLUE)
GPS INTEG	GPS INTEGRITY IS OUTSIDE OF THE ALLOWABLE LIMIT FOR A PHASE OF FLIGHT (2.0-NM EN ROUTE, 1.0-NM TERMINAL AND APPROACH TRANSITION, AND 0.3-NM FINAL APPROACH SEGMENT). SEE SECTION III, ABNORMAL PROCEDURES. (COLOR: AMBER).

THE ADDED ANNUNCIATORS ARE DIMMED AND TESTED USING THE EXISTING PILOT AND COPILOT ANNUNCIATOR COUPLERS. THESE UNITS HAVE BEEN MODIFIED USING JET AVIATION MODIFICATION NO. 33-39-02-1, CAPT. AND F/O ANNUNCIATOR COUPLER MODIFICATION, DATED 04/12/01, REFERENCE FAA FORM 8110-3, DATED 05/29/2001 BY SYSTEMS AND EQUIPMENT DER NO. DERT-510087-NM.

THE NEW EQUIPMENT AND ASSOCIATED SYSTEMS WERE FUNCTIONALLY TESTED PER UNIVERSAL AVIONICS CORP. RETURN TO SERVICE MAINTENANCE AND CHECKOUT PROCEDURES MANUAL NO. 34-60-21, DATED 19 MARCH 2001 WITH NO DISCREPANCIES NOTED.

AN EMI TEST, REPORT NO.: B727-16236-080 REV IR, SHEETS 1 OF 5, DATED 06/19/2001, WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT. MAGNETIC DIRECTION INDICATORS WERE CHECKED FOR ACCURACY AND COMPENSATED AS NECESSARY PER AC 43.13-1B, CHAPTER 12, SECTION 3, PARAGRAPH 12-37 AND AC 43.13-2A, CHAPTER 2 PARAGRAPH 23f.

THE STATIC LOADING OF THE INSTALLED EQUIPMENT MEETS THE REQUIREMENTS OF AC 43.13-2A, CHAPTER 1, PARAGRAPH 3 AND WAS FOUND TO MEET THE REQUIREMENTS OF PARAGRAPH 2. MATERIALS AND PRACTICES COMPLY WITH PARAGRAPHS 4 THROUGH 12. THE ELECTRICAL LOAD ANALYSIS UPDATE REPORT NO. B727-16236-041, REV IR, SHEETS 1 THRU 21, DATED 06/11/2001 WAS COMPLETED IN ACCORDANCE WITH AC43.13-1B, CHAPTER 11, SECTION 3, PARAGRAPH 11-37.

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED IN THE INSTALLATION CONFORM TO AC43.13-1B, CHAPTER 7, SECTIONS 1- 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURER OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLY WITH AC43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH AC43.13-1B SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND AC43.13-2A, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

MAINTENANCE FOR CONTINUED AIRWORTHINESS AS REQUIRED BY FAR 25.1529 IS DETAILED IN THE UNIVERSAL AVIONICS CORP. UNS-1D FLIGHT MANAGEMENT SYSTEM TECHNICAL MANUAL NO. 34-60-09, DATED AUG 15/97. STRUCTURAL CONTINUING AIRWORTHINESS INSPECTION REQUIREMENTS ARE CONTAINED IN A.T.E. INC. STRUCTURAL REPORT ATE6112001 DATED 6/12/01, SUBSTANTIATED BY F.A.A. FORM 8110-3 DATED 6/12/01 BY STRUCTURES DER NO. DERT-510333-CE.

THE REQUIRED F.A.A. APPROVED FLIGHT MANUAL SUPPLEMENT DOC NUMBER B727-16236-100, REV IR, SHEETS 1 THRU 9, DATED June 21, 2001 HAS BEEN INSERTED INTO THE AIRCRAFT FLIGHT MANUAL.

END

☐ Additional Sheets Are Attached

Jet Aviation Associates Ltd.
Bldg. 1515 Perimeter Rd.
Palm Beach Int'l Airport
West Palm Beach, FL 33406
FAA CRS EYKR782D

Document No. B727-16236-100

AFM Supplement to
The Boeing Company 727-31
Serial No. 20115
FAA Form 337

FAA APPROVED

AIRPLANE FLIGHT MANUAL SUPPLEMENT

FOR

BOEING 727-31

REGISTRATION NO.: N908JE

SERIAL NO.: 20115

WITH

DUAL UNIVERSAL AVIONICS FLIGHT MANAGEMENT SYSTEMS

(UNS1-D) INSTALLED

This supplement must be attached to the FAA approved Airplane Flight Manual when the airplane is modified by the installation of dual Universal Avionics Systems Corp. (UASC) (UNS-1D) Flight Management Systems (FMS), with Frequency Management via a UASC Radio Tuning Unit (RTU), receiving navigation inputs from Triple Honeywell Inertial Reference Sensors (IRS), dual internal GPS sensors, and VOR/DME from the Collins No. 1 and No. 2 VOR/DME systems in accordance with manufacture's Installation and Checkout Manual No. 34-60-09, Rev. 2. dated August 15, 1997 or later approved revision and FAA Form 337, dated 7/2/01.

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

FAA Approved: Gale F. Jenkins

Federal Aviation Administration
Flight Standard District Office - 17
1050 Lee Wagener Blvd.
Ft. Lauderdale, Florida 33315

FAA Approved Date: JUN 2 1 2001

EFTA00277682

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 05/29/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-293, Initial Release, dated 04/16/01	FLIGHT MANAGEMENT SYSTEM RADIO TUNING UNIT
B727-16236-410, Initial Release, dated 04/10/01	NO. 1 FLIGHT MANAGEMENT SYSTEM
B727-16236-411, Initial Release, dated 04/15/01	NO. 2 FLIGHT MANAGEMENT SYSTEM
33-39-02-1, Initial Release, dated 04/12/01	CAPT AND F/O ANNUNCIATOR COUPLER MODIFICATION

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.581 (a)(b)(1)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(c)(d)(e)(g)
FAR 25.1322 (b)(c)
FAR 25.1329 (h)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)(d)(e)
FAR 25.1381 (a)(b)
FAR 25.1431 (a)(b)(c)
FAR 25.1529
FAR 25.1581 (a)(b)(d)

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.

☐ Recommend approval of these data

I (~~We~~) Therefore

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-FMS.DOC

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 1, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1261	AT-855/RTA-880 Antenna Installations, Sht 1-7, Rev A
B727-16236-1410	Dual FMS W/ RTU Equipment Installations, Sht 1-6, Rev IR

Note:

1. This approval is for structural aspects only.
2. This approval is based on drawing review and inspection.
3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA
To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.601
	25.603	25.605(a)	25.609	25.611	25.613	

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 ____0____ 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. ☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson *David E. Haralson*	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ER01202.doc

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE
June 18, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	B727-31	Airplane	Jet Aviation

LIST OF DATA

IDENTIFICATION	TITLE
Jet Aviation Engineering Drawing No. B727-16236-1441, Dtd. 5/29/2001, Rev. A ___END___END___	GPS Antenna Installation Beoing B727-31, N908JE, S/N 20115 ___END___END___END___END___END___END___END___END___ **Note: The certification basis of this aircraft includes FAR 25.571 Damage - tolerance and fatigue evaluation of structure. Per Advisory Circular 25.1529-1 Instructions for Continued Airworthiness of Structural Repairs on Transport Category Airplanes, the damage tolerance and fatigue evaluation of the structure must be performed before 6/18/2002.** Notes: 1) The structural aspects only of the above listed data are approved herein. 2) This approval is valid for the aircraft model and serial number listed below 3) This approval is based on structural analysis on file at DER Services corporate office in Ft. Lauderdale, FL. Model No. B727-31 Serial No. 20115

PURPOSE OF DATA — Approve data for antenna installation (Structures Only)

APPLICABLE REQUIRMENTS *(LIST SPECIFIC SECTIONS)*

25.301, 25.303, 25.305, 25.307, 25.601, 25.603, 25.605, 25.609, 25.613

CERTIFICATION - Under authority vested by dir ection of the Administrator and in accordance with condition and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed above and on attached sheets numbered _____ 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
- ☑ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICA TION(S)
Robert J. Belgau	DERT-510024-CE	Structures

FAA FORM 8110-3 (11-70) SUPERSEDES PREVIOUS EDITIO N

DER SERVICES PROJECT NO. 2001-082

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
SO-RSDO-17 970

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**	( ) U.S. Certified Mechanic ( ) Foreign Certified Mechanic (X) Certificated Repair Station ( ) Manufacturer	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.

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
7/2/01	John K. Urso. Inspector.

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7/2/01	EYKR782D	Ronald K. Bystrom. Manager Quality Assurance

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 16236.

INSTALLED 2 EA NEW GARMIN GPS ANTENNAS P/N 011-00134-00 (TSO C129A). 1 EA AT FUSELAGE STATION 284.8, BL 0.0, AND 1 EA FUSELAGE STATION 934.3 RBL 4.56, PER JET AVIATION DRAWING B727-16236-1413, REV IR, DATED 6/5/01 TITLED – DUAL AUXILIARY GPS ANTENNAS INSTALLATION. REF F.A.A. FORM 8110-3 DATED 6/6/01 BY STRUCTURES D.E.R. NO. DERT-510394-CE.

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED IN THE INSTALLATION CONFORM TO AC43.13-1B, CHAPTER 7, SECTIONS 1- 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURER OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLIES WITH AC43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH AC43.13-1B SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND AC43.13-2A, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

MAINTENANCE FOR CONTINUED AIRWORTHINESS IS CONTAINED IN ENGINEERING REPORT JMER-836, REV IR, DATED 6/10/01. REFERENCE FAA FORM 8110-3 DATED 6/11/01 BY STRUCTURES DER NO. DERT-510394-CE.

THERE ARE NO FLIGHT MANUAL SUPPLEMENTS OR COCKPIT PROCEDURAL CHANGES DUE TO THIS MODIFICATION.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 6, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane. Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	B727-31	Airplane	Jet Aviation Associates, Ltd.

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1413 IR Sheets 1 – 3 (6/5/01)	DRAWING – DUAL AUXILIARY GPS ANTENNAS INSTALLATION NOTE: Approval for the structural aspects related to the above design data will be covered by a separate Form 8110-3 which will be issued for the Proof of Structure and will include required inspection item(s) to ensure Continued Airworthiness associated with this modification.
END	END END

PURPOSE OF DATA

To provide a record of design approval of the above data applicable to B727-31, S/N 20115, Registration No. N908JE, for manufacturing and conformity. See NOTE above.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.6601 FAR 25.609
FAR 25.603 FAR 25.611
FAR 25.605 FAR 25.613

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 N/A 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

☒ Approve these data (See NOTE above)

SIGNATURE(S) OF DESIGNATED REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Kenneth W. Thompson Kenneth W. Thompson	DERT – 510394 - CE	STRUCTURES

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

EFTA00277692

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 11, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	B727-31	AIRPLANE	Jet Aviation Associated, Ltd.

LIST OF DATA

IDENTIFICATION	TITLE
JMER-836 IR Dated 06/10/01	ENGINEERING REPORT – STRUCTURAL SUBSTANTIATION - DUAL AUXILIARY GPS ANTENNA INSTALLATION ON A BOEING B727-31 AIRCRAFT, S/N 20115

NOTE:
The operator of B727-31 aircraft S/N 20115 modified by drawing B727-16236-1413 dated 6/5/01 issued at no revision, is required to incorporate in the Airworthiness Limitations Section of the Instructions for Continued Airworthiness applicable to the existing Maintenance Program, an inspection item at a frequency **not to exceed 3700 flights** to detect signs of distress (0.25 inch or smaller crack and/or working rivets) common to the GPS antenna installation as detailed in drawing B727-16236-1413. Refer to FAR PART 25 Appendix H and Report JMER-836 IR page 4.1 **(CONCLUSIONS)** for instructions.

PURPOSE OF DATA: To provide a record of design approval of the above data as applicable to B727-31 S/N 20115 and to show compliance to the following FAR's:

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.301	FAR 25.307	FAR 25.605	FAR 25.613
FAR 25.303	FAR 25.571	FAR 25.609	FAR 25.625
FAR 25.305	FAR 25.603	FAR 25.611	

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 N/A 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

☒ Approve these data (Structural aspects only)

SIGNATURE(S) OF DESIGNATED REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Kenneth W. Thompson	DERT – 510394 - CE	STRUCTURES
Kenneth W. Thompson		

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

EFTA00277694

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 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**		U.S. Certified Mechanic	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.
		Foreign Certified 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
7/2/01	John K. Urso. Inspector.

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
7/2/01	**EYKR782D**	Ronald K. Bystrom. Manager Quality Assurance

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 16236.

INSTALLED A NEW KGS ELECTRONIC MODEL UC-28-14, 28 VDC TO 14 VDC CONVERTER AND THREE POWER OUTLETS IN THE COCKPIT IN ACCORDANCE WITH KGS ELECTRONIC MODEL UC-28-14 INSTALLATION MANUAL AND ADVISORY CIRCULAR 25-10 (INSTALLATION OF MISCELLANEOUS NON REQUIRED ELECTRICAL EQUIPMENT) USING THE FOLLOWING JET AVIATION DRAWINGS SUBSTANTIATED BY F.A.A. FORM 8110-3 RESPECTIVELY

WIRING DRAWING:
- B727-16236-352, REV IR, DATED 5/25/01, SHEETS 1 & 2, TITLED – 28-14 VDC CONVERTER WIRING DIAGRAM.

REFERENCE F.A.A. FORM 8110-3 DATED 6/7/01 BY SYSTEMS AND EQUIPMENT DER NO. DERT-510087-CE.

STRUCTURAL DRAWING:
- B727-16236-1352, REV IR, DATED 6/6/01, SHEETS 1 THRU 5, TITLED – 28-14 VDC CONVERTER EQUIPMENT INSTALLATION.

REFERENCE F.A.A. FORM 8110-3 DATED 6/10/01 BY STRUCTURES DER NO. DERT-810028-NE.

THE NEW EQUIPMENT AND ASSOCIATED SYSTEMS WERE FUNCTIONALLY TESTED PER KGS ELECTRONIC MODEL UC-28-14 INSTALLATION MANUAL WITH NO DISCREPANCIES.

AN EMI TEST, REPORT NO.: B727-16236-080 REV IR, SHEETS 5, DATED 06/19/01 WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT. MAGNETIC DIRECTION INDICATORS WERE CHECKED FOR ACCURACY AND COMPENSATED AS NECESSARY PER AC 43.13-1B, CHAPTER 12, SECTION 3, PARAGRAPH 12-37 AND AC 43.13-2A, CHAPTER 2 PARAGRAPH 23f.

THE STATIC LOADING OF THE INSTALLED EQUIPMENT MEETS THE REQUIREMENTS OF AC 43.13-2A, CHAPTER 1, PARAGRAPH 3 AND WAS FOUND TO MEET THE REQUIREMENTS OF PARAGRAPH 2. MATERIALS AND PRACTICES COMPLY WITH PARAGRAPHS 4 THROUGH 12. THE ELECTRICAL LOAD ANALYSIS UPDATE REPORT NO. B727-16236-041, REV IR, SHEETS 1 THRU 21, DATED 06/11/20011 WAS COMPLETED IN ACCORDANCE WITH AC43.13-1B, CHAPTER 11, SECTION 3, PARAGRAPH 11-37.

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED IN THE INSTALLATION CONFORM TO AC43.13-1B, CHAPTER 7, SECTIONS 1- 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURER OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLIES WITH AC43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH AC43.13-1B SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND AC43.13-2A, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

THERE IS NO CHANGE TO THE MANUFACTURERS MAINTENANCE FOR CONTINUED AIRWORTHINESS DUE TO THIS MODIFICATION.

THERE ARE NO FLIGHT MANUAL SUPPLEMENTS OR COCKPIT PROCEDURAL CHANGES DUE TO THIS MODIFICATION.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 06/07/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-352, Initial Release, dated 05/25/01	28-14 VDC CONVERTER WIRING DIAGRAM
B727-16236-580, Initial Release, dated 05/25/01	CABIN NO. 2 60 Hz SYSTEM
B727-16236-600, Initial Release, dated 05/25/01	SPARE WIRING (PROVISIONS)

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25. 1322 (b)
FAR 25.1351 (a)
FAR 25.1353 (a)(b)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529

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.

☐ Recommend approval of these data

I (~~We~~) Therefore

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-CAB-PWR.DOC

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 10, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter,etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1352	28-14 VDC Converter Equipment Installation, Sht 1-5, Rev IR Note: 1. This approval is for structural aspects only. 2. This approval is based on drawing review and inspection. 3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA
To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.601
	25.603	25.605(a)	25.609	25.611	25.613	

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 0 have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I (☒) Therefore

☐ Recommend approval of these data.
☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson David E. Haralson	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

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US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
SO-FSDO-17 8-10

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**		U.S. Certified Mechanic	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.
		Foreign Certified 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
7/2/01	John K. Urso. Inspector.

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
7/2/01	EYKR782D	Ronald K. Bystrom. Manager Quality Assurance.

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 16236.

INSTALLED A UNITRON 60 HZ CONVERTER P/N PS-62-66D AND 26 EA CABIN OUTLETS PER UNITRON 60 HZ CONVERTER INSTALL MANUAL NO. PS-62-66D-6. THIS MODIFICATION WAS ACCOMPLISHED PER THE FOLLOWING JET AVIATION DRAWINGS WHICH ARE SUBSTANTIATED BY F.A.A. FORM 8110-3 RESPECTIVELY

WIRING DRAWING:

- B727-13236-580, REV IR, DATED 5/25/01, SHEETS 1 THRU 5, TITLED – CABIN NO. 2 60 HZ SYSTEM

REFERENCE FAA FORM 8110-3 DATED 6/7/01, BY SYSTEMS & EQUIPMENT D.E.R. NO. DERT-510087-NM.

STRUCTURAL DRAWINGS:

- B727-16236-1580, REV IR, DATED 6/11/01, SHEETS 1 THRU 7, TITLED - CABIN NO. 2 60 HZ EQUIPMENT INSTALLATION.

REFERENCE F.A.A. FORM 8110-3, DATED 6/13/01, BY STRUCTURAL D.E.R. NO. DERT-810028-NE.

AN EMI TEST, REPORT NO.: B727-16236-080 REV IR, SHEETS 5, DATED 06/19/01 WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT. MAGNETIC DIRECTION INDICATORS WERE CHECKED FOR ACCURACY AND COMPENSATED AS NECESSARY PER AC 43.13-1B, CHAPTER 12, SECTION 3, PARAGRAPH 12-37 AND AC 43.13-2A, CHAPTER 2 PARAGRAPH 23f.

THE STATIC LOADING OF THE INSTALLED EQUIPMENT MEETS THE REQUIREMENTS OF AC 43.13-2A, CHAPTER 1, PARAGRAPH 3 AND WAS FOUND TO MEET THE REQUIREMENTS OF PARAGRAPH 2. MATERIALS AND PRACTICES COMPLY WITH PARAGRAPHS 4 THROUGH 12. THE ELECTRICAL LOAD ANALYSIS UPDATE REPORT NO. B727-16236-041, REV IR, SHEETS 1 THRU 21, DATED 06/11/2001 WAS COMPLETED IN ACCORDANCE WITH AC43.13-1B, CHAPTER 11, SECTION 3, PARAGRAPH 11-37.

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED IN THE INSTALLATION CONFORM TO AC43.13-1B, CHAPTER 7, SECTIONS 1- 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURER OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLIES WITH AC43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH AC43.13-1B SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND AC43.13-2A, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

THERE IS NO CHANGE TO THE MANUFACTURERS MAINTENANCE FOR CONTINUED AIRWORTHINESS DUE TO THIS MODIFICATION.

THERE ARE NO FLIGHT MANUAL SUPPLEMENTS OR COCKPIT PROCEDURAL CHANGES DUE TO THIS MODIFICATION.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 06/07/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-352, Initial Release, dated 05/25/01	28-14 VDC CONVERTER WIRING DIAGRAM
B727-16236-580, Initial Release, dated 05/25/01	CABIN NO. 2 60 Hz SYSTEM
B727-16236-600, Initial Release, dated 05/25/01	SPARE WIRING (PROVISIONS)

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25. 1322 (b)
FAR 25.1351 (a)
FAR 25.1353 (a)(b)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529

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.

☐ Recommend approval of these data

I (We) Therefore

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

AA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-CAB-PWR.DOC

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 13, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter,etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1580	Cabin #2 60 Hz Equipment Installation, Sht 1-7, Rev IR Note: 1. This approval is for structural aspects only. 2. This approval is based on drawing review and inspection. 3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA
To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.601
	25.603	25.605(a)	25.609	25.611	25.613	

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 0 have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I (☒) Therefore

☐ Recommend approval of these data.
☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson *David E. Haralson*	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ER01210.doc

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
SO-FSDO-17

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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: **JET AVIATION ASSOCIATES LTD. 1515 PERIMETER RD. WEST PALM BEACH. FL. 33406**

B. Kind of Agency:

	U.S. Certified Mechanic
	Foreign Certified Mechanic
X	Certificated Repair Station
	Manufacturer

C. Certificate No.: CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.

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: 7/2/01

Signature of Authorized Individual: John K. Urso. Inspector.

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	X	Repair Station		Person Approved by Transport Canada Airworthiness Group

Other *(Specify)*

Date of Approval or Rejection: 7/2/01

Certificate or Designation No.: EYKR782D

Signature of Authorized Individual: Ronald K. Bystrom. Manager Quality Assurance

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 16236.

INSTALLED AN AIRCELL ATG.01 FLIGHT PHONE SYSTEM CONSISTING OF AN ANTENNA P/N CI-5000, A TRANSCEIVER P/N 900002-2, and AN ANTENNA MATCHING UNIT P/N 83518, 4 EA HANDSETS P/N 400-10035-001 AND 4 EA HANDSET CRADLES P/N 400-10038-001. THESE MODIFICATIONS WERE COMPLETED USING THE FOLLOWING JET AVIATION DRAWINGS, WHICH ARE SUBSTANTIATED BY FAA 8110-3 FORMS RESPECTIVELY:

WIRING DRAWING:

- B727-13236-330, REV. IR, DATED 4/30/01, SHEETS 1 THRU 3, TITLED – AIRCELL ATG.01 AIR / GROUND TELEPHONE

REFERENCE FAA FORM 8110-3 DATED 5/29/01, BY SYSTEMS & EQUIPMENT D.E.R. NO. DERT-510087-NM.

STRUCTURAL DRAWINGS AND REPORTS:

- B727-16236-1330, REV. A, DATED 5/29/01, SHEETS 1 THRU 4, TITLED – AIRCELL ATG.01 AIR / GROUND TELEPHONE ANTENNA INSTALLATION

REFERENCE F.A.A. FORM 8110-3, DATED 6/18/01, BY STRUCTURAL D.E.R. NO. DERT-510024-CE.

- B727-16236-1331, REV. IR, DATED 5/24/01, SHEETS 1 THRU 6, TITLED –AIRCELL EQUIPMENT INSTALLATION

REFERENCE F.A.A. FORM 8110-3, DATED 6/3/01, BY STRUCTURAL D.E.R. NO. DERT-810028-NE.

THE NEW EQUIPMENT AND ASSOCIATED SYSTEMS WERE FUNCTIONALLY TESTED PER AIRCELL ATG.01 FLIGHT PHONE SYSTEM INSTALLATION MANUAL REV IR, DATED 6/11/99 WITH NO DISCREPANCIES.

AN EMI TEST, REPORT NO.: B727-16236-080 REV IR, SHEETS 5, DATED 06/19/01 WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT. MAGNETIC DIRECTION INDICATORS WERE CHECKED FOR ACCURACY AND COMPENSATED AS NECESSARY PER AC 43.13-1B, CHAPTER 12, SECTION 3, PARAGRAPH 12-37 AND AC 43.13-2A, CHAPTER 2 PARAGRAPH 23f.

THE STATIC LOADING OF THE INSTALLED EQUIPMENT MEETS THE REQUIREMENTS OF AC 43.13-2A, CHAPTER 1, PARAGRAPH 3 AND WAS FOUND TO MEET THE REQUIREMENTS OF PARAGRAPH 2. MATERIALS AND PRACTICES COMPLY WITH PARAGRAPHS 4 THROUGH 12. THE ELECTRICAL LOAD ANALYSIS UPDATE REPORT NO. B727-16236-041, REV IR, SHEETS 1 THRU 21, DATED 06/11/2001 WAS COMPLETED IN ACCORDANCE WITH AC43.13-1B, CHAPTER 11, SECTION 3, PARAGRAPH 11-37.

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED IN THE INSTALLATION CONFORM TO AC43.13-1B, CHAPTER 7, SECTIONS 1- 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURER OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLIES WITH AC43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH AC43.13-1B SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND AC43.13-2A, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

PER THE AIRCELL ATG.01 FLIGHT PHONE SYSTEM MANUAL ALL COMPONENTS ARE CONSIDERED LINE REPLACEABLE UNITS AND DO NOT AFFECT THE MANUFACTURERS INSTRUCTIONS FOR CONTINUING AIRWORTHINESS. STRUCTURAL CONTINUING AIRWORTHINESS INSPECTION REQUIREMENTS ARE CONTAINED IN A.T.E. INC. STRUCTURAL REPORT ATE6112001 DATED 6/12/01, SUBSTANTIATED BY F.A.A. FORM 8110-3 DATED 6/12/01 BY STRUCTURES DER NO. DERT-510333-CE.

THERE ARE NO FLIGHT MANUAL SUPPLEMENTS OR COCKPIT PROCEDURAL CHANGES REQUIRED FOR THIS INSTALLATION.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 05/29/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-330, Initial Release, dated 04/30/01	AIRCELL AGT.01 AIR/GROUND TELEPHONE

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections)
FAR 25.581 (a)(b)(1)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529

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

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-AIRCELL.DOC

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE
June 18, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	B727-31	Airplane	Jet Aviation

LIST OF DATA

IDENTIFICATION	TITLE
Jet Aviation Engineering Drawing No. B727-16236-1330, Dtd. 5/29/2001, Rev. A ___END___END___	**Aircell AGT.01 Air/Ground Telephone Antenna Installation Beoing B727-31, N908JE, S/N 20115** ___END___END___END___END___END___END___END___END___ **Note: The certification basis of this aircraft includes FAR 25.571 Damage - tolerance and fatigue evaluation of structure. Per Advisory Circular 25.1529-1 Instructions for Continued Airworthiness of Structural Repairs on Transport Category Airplanes, the damage tolerance and fatigue evaluation of the structure must be performed before 6/18/2002.**

Notes:

1) The structural aspects only of the above listed data are approved herein.

2) This approval is valid for the aircraft model and serial number listed below

3) This approval is based on structural analysis on file at DER Services corporate office in Ft. Lauderdale, FL.

Model No. **B727-31** **Serial No.** **20115**

PURPOSE OF DATA — **Approve data for antenna installation (Structures Only)**

APPLICABLE REQUIRMENTS *(LIST SPECIFIC SECTIONS)*

25.301, 25.303, 25.305, 25.307, 25.601, 25.603, 25.605, 25.609, 25.613

CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with condition 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

☑ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Robert J. Belgau	DERT-510024-CE	Structures

FAA FORM 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

DER SERVICES PROJECT NO. 2001-082

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 3, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter,etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1270	Argus 5000/CE Moving Map Equipment Installation Sht 1-5, Rev IR
B727-16236-1331	Aircell Equipment Installation, Sht 1-6, Rev IR

Note:

1. This approval is for structural aspects only.
2. This approval is based on drawing review and inspection.
3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA

To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.561
	25.601	25.603	25.605(a)	25.609	25.611	25.613
	25.789					

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 ____0____ have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I (~~W~~) Therefore

☐ Recommend approval of these data.
☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson *David E. Haralson*	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ER01207.doc

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: JUNE 12, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	JET AVIATION

LIST OF DATA

IDENTIFICATION	TITLE
A.T.E. INC. STRUCTURAL REPORT No. ATE6112001	BOEING 727-31 S/N 20115, AERO-M SATCOM ANTENNA INSTL., UPPER B.S. 360-390; GPS ANTENNA INSTL., UPPER B.S. 312-328; AIRCELL AGT.01 ANTENNA INSTL., LOWER B.S. 400-420 DAMAGE TOLERANCE ANALYSIS; SH. 1-31, REV. (IR)
	NOTE: REQUIRED INSPECTIONS ATTACHED
	THESE DATA APPLY ONLY TO BOEING 727-31 S/N 20115

PURPOSE OF DATA

TO APPROVE DATA FOR DAMAGE TOLERANCE ANALYSIS, B-727-31 S/N 20115

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.571 (STRUCTURAL ASPECTS ONLY)

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 ___1 of 1_____ _____ 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 ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Hugh M. Roberts	DERT-510333-CE	STRUCTURAL

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

GPO 901-613

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
SO-PSDO-17 (J761)

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.

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
7/2/01	John K. Urso. Inspector.

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
	[ ]	FAA Designee	[X]	Repair Station	[ ]	Person Approved by Transport Canada Airworthiness Group

Other *(Specify)*

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7/2/01	EYKR782D	Ronald K. Bystrom. Manager Quality Assurance.

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 16236.

ACCOMPLISHED AN UP-GRADE TO THE EXISTING HONEYWELL WEATHER RADAR SYSTEM FROM PRIMUS 870 TO PRIMUS 880. REMOVED THE # 1 & 2 WC-870 CONTROLLERS P/N 7008471-803 AND INSTALLED WC-880 CONTROLLERS P/N 7008471-405 (TSO C63c), REMOVED THE WU-870 ANTENNA & RECEIVER / TRANSMITTER UNIT P/N 7012640-902 AND INSTALLED NEW WU-880 ANTENNA & RECEIVER / TRANSMITTER UNIT P/N 7021450-801 (TSO C63c). INSTALLED A HONEYWELL LSZ-860 LIGHTNING SENSOR SYSTEM CONSISTING OF AN LP-860 PROCESSOR P/N 7011822-904 (TSO C110) AND AN AT-855 ANTENNA P/N 7014062-901 (TSO C110). THE LIGHTNING SENSOR SYSTEM INTERFACES WITH THE PRIMUS 880 RADAR SYSTEM THRU THE # 1 & 2 WC-880 CONTROLLERS. RELOCATED EXISTING SECURITY SYSTEM ANTENNA P/N DMC57-1 TO THE TOP OF THE RADAR ANTENNA & RECEIVER / TRANSMITTER UNIT. THESE MODIFICATIONS WERE COMPLETED USING THE FOLLOWING JET AVIATION DRAWINGS, WHICH ARE SUBSTANTIATED BY FAA 8110-3 FORMS RESPECTIVELY:

<u>WIRING DRAWING:</u>

- B727-16236-260, REV. IR, DATED 5/29/01, SHEETS 1& 2, TITLED – WEATHER RADAR SYSTEM UPGRADE (PRIMUS 880) REFERENCE FAA FORM 8110-3 DATED 6/7/01, BY SYSTEMS & EQUIPMENT D.E.R. NO. DERT-510087-NM.
- B727-16236-261, REV. IR, DATED 4/10/01, SHEETS 1THRU 3, TITLED – HONEYWELL LSZ-860 LIGHTNING SENSOR SYSTEM REFERENCE FAA FORM 8110-3 DATED5/29/01, BY SYSTEMS & EQUIPMENT D.E.R. NO. DERT-510087-NM.

<u>STRUCTURAL DRAWINGS AND REPORTS:</u>

- B727-16236-1261, REV. A, DATED 5/30/01, SHEETS 1 THRU 7, TITLED – AT-855/RTA-880 ANTENNA INSTALLATIONS REFERENCE F.A.A. FORM 8110-3, DATED 6/1/01, BY STRUCTURAL D.E.R. NO. DERT-810028-NE.
- B727-16236-1262, REV. IR, DATED 5/21/01, SHEETS 1 & 2, TITLED – LSZ-860 LIGHTNING SENSOR EQUIPMENT INSTALLATION.

REFERENCE F.A.A. FORM 8110-3, DATED5/28/01, BY STRUCTURAL D.E.R. NO. DERT-810028-NE.

THE NEW EQUIPMENT AND ASSOCIATED SYSTEMS WERE FUNCTIONALLY TESTED PER HONEYWELL PRIMUS 880 RADAR SYSTEM INSTALLATION MANUAL NO. 34-42-12, REV 3, DATED 2/15/00 AND THE HONEYWELL LSZ-860 LIGHTNING SENSOR SYSTEM INSTALLATION MANUAL NO. 34-41-50, REV 5, DATED 2/15/01 WITH NO DISCREPANCIES.

AN EMI TEST, REPORT NO. B727-16236-080, REV IR, DATED 6/19/01 WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT.

THE STATIC LOADING OF THE INSTALLED EQUIPMENT MEETS THE REQUIREMENTS OF AC 43.13-2A, CHAPTER 1, PARAGRAPH 3 AND WAS FOUND TO MEET THE REQUIREMENTS OF PARAGRAPH 2. MATERIALS AND PRACTICES COMPLY WITH PARAGRAPHS 4 THROUGH 12. THE ELECTRICAL LOAD ANALYSIS UPDATE REPORT B727-16236-041, REV IR, SHEETS 1 THRU 21, DATED 06/11/2001 WAS COMPLETED IN ACCORDANCE WITH 43.13-1B, CHAPTER 11, SECTION 3, PARAGRAPH 11-37.

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED IN THE INSTALLATION CONFORM TO AC43.13-1B, CHAPTER 7, SECTIONS 1- 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURER OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLIES WITH AC43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH AC43.13-1B SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURER'S INSTRUCTIONS AND AC43.13-2A, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

MAINTENANCE FOR CONTINUED AIRWORTHINESS IS CONTAINED IN HONEYWELL PRIMUS 880 RADAR SYSTEM INSTALLATION MANUAL NO. 34-42-12, REV 3, DATED 2/15/00 AND THE HONEYWELL LSZ-860 LIGHTNING SENSOR SYSTEM INSTALLATION MANUAL NO. 34-41-50, REV 5, DATED 2/15/01.

THERE ARE NO FLIGHT MANUAL SUPPLEMENTS OR COCKPIT PROCEDURAL CHANGES DUE TO THIS MODIFICATION

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: **06/07/2001**

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	**727-31**	**Airplane**	**Jet Aviation Associates West Palm Beach, FL**

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-260, Initial Release, dated 05/29/01	**WEATHER RADAR SYSTEM UPGRADE (PRIMUS 880)**

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N980JE.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.581 (a)(b)(1)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25.1316 (b)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529

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

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	**DERT-510087-NM**	**Systems & Equipment**

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-RDR.DOC

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 06/07/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-260, Initial Release, dated 05/29/01	WEATHER RADAR SYSTEM UPGRADE (PRIMUS 880)

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N980JE.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.581 (a)(b)(1)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25.1316 (b)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529

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

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-RDR.DOC

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 05/29/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-261, Initial Release, dated 04/10/01	HONEYWELL LSZ-860 LIGHTNING SENSOR SYSTEM

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.581 (a)(b)(1)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529

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.

☐ Recommend approval of these data

I (We) Therefore

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-LTGSNSR.DOC

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: June 1, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1261	AT-855/RTA-880 Antenna Installations, Sht 1-7, Rev A
B727-16236-1410	Dual FMS W/ RTU Equipment Installations, Sht 1-6, Rev IR

Note:

1. This approval is for structural aspects only.
2. This approval is based on drawing review and inspection.
3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA
To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.601
	25.603	25.605(a)	25.609	25.611	25.613	

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 0 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.
- ☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson *David E. Haralson*	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ER01202.doc

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: May 28, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1262	LSZ-860 Lighting Sensor Equipment Installation, Sht 1-2, Rev IR
B727-16236-1342	Aero-M SATCOM Equipment Installation, Sht 1-7, Rev IR

Note:

1. This approval is for structural aspects only.
2. This approval is based on drawing review and inspection.
3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA

To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.561(b)(c)
	25.601	25.603	25.605(a)	25.609	25.611	25.613
	25.789					

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 0 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.

☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson *David E. Haralson*	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

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DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: May 28, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1262	LSZ-860 Lighting Sensor Equipment Installation, Sht 1-2, Rev IR
B727-16236-1342	Aero-M SATCOM Equipment Installation, Sht 1-7, Rev IR

Note:

1. This approval is for structural aspects only.
2. This approval is based on drawing review and inspection.
3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA

To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.561(b)(c)
	25.601	25.603	25.605(a)	25.609	25.611	25.613
	25.789					

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 0 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.
- ☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson David E. Haralson	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ER01205.doc

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
SO-FSDO-17

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**		U.S. Certified Mechanic	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.
		Foreign Certified 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
7/2/01	John K. Urso. Inspector.

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
7/2/01	**EYKR782D**	Ronald K. Bystrom. Manager Quality Assurance.

FAA Form 337 (12-88)

EFTA00277732

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 16236.

ACCOMPLISHED A TCAS CHANGE 7 UPGRADE TO THE EXISTING HONEYWELL TCAS II SYSTEM PREVIOUSLY INSTALLED UNDER PAGE AVJET CORPORATION STC SA3094SO DATED 8/24/93. REFERENCE F.A.A. FORM 337 DATED 8/25/93.

THE TCAS PROCESSOR P/N 4066010-904 WAS MODIFIED TO P/N 4066010-910 (CUSTOMERS UPGRADED UNIT) IN ACCORDANCE WITH TIMCO MASTER DRAWING LIST 01T012L001, REV IR, DATED 5/21/01. REFERENCE F.A.A. FORM 8110-3 DATED 5/21/01 BY SYSTEMS AND EQUIPMENT DER NO.DERT-510239-CE.

THE TCAS II CHANGE 7 PROCESSOR WAS INSTALLED AND TESTED IN ACCORDANCE WITH TIMCO ENGINEERING ORDER DOCUMENT 01T012E006, REV IR, DATED 5/21/01 WITH NO DISCREPANCIES.

A LOGBOOK ENTRY REFLECTING THIS INSTALLATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE AIRCRAFT EQUIPMENT LIST WAS AMENDED AND ENTERED IN THE AIRCRAFT RECORDS.

AIRWORTHINESS DIRECTIVE 94-01-04 AMENDMENT 39-8786 IS N/A TO THIS INSTALLATION BY PROCESSOR P/N.
THERE IS NO CHANGE TO THE AIRCRAFT WEIGHT AND BALANCE.

THERE IS NO CHANGE TO THE AIRCRAFTS MAINTENANCE FOR CONTINUED AIRWORTHINESS REQUIREMENTS DUE TO THIS INSTALLATION.

THE REQUIRED F.A.A. APPROVED HONEYWELL INC, TCAS II FLIGHT MANUAL SUPPLEMENT DOCUMENT TCAS-APPS-0294, REV A, DATED 3/21/00 HAS BEEN INSERTED INTO THE AIRCRAFT FLIGHT MANUAL.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

communications

Aviation Communications & Surveillance Systems
21111 N. 19th Avenue Phoenix, AZ 85027-2708
602-436-7070 Fax: 602-436-6899

May 16, 2001

TIMCO
623 Radar Road
Greensboro, NC 274

Attn.: Mr. Gregg Stutes

Re: Letter of Authorization to use technical data

Dear Mr. Stutes,

This letter is to authorize TIMCO ("Recipient") to use the following technical data owned by L-3 Communications Corporation – Aviation Communications & Surveillance Systems (L-3) for the limited purpose indicated here below.

The technical data subject to this Letter of Authorization ("Data") is the L-3 developed data used to apply for the following FAA certifications:

Supplemental Type Certificate STC SA4834NM, as defined by ML4070349, for B727 aircraft.

L-3 Authorization to use Data is limited to the following B727 aircraft tail number, namely:

- B727 S/N 20115

L-3 Authorization to use Data is granted hereby for the sole purpose to provide the Recipient with technical information for its internal use and engineering review purposes. The Recipient recognizes L-3's proprietary rights in Data and will limit its disclosure to a need-to-know basis for its employees. The Recipient will not use Data for any other purposes than the internal use and engineering review purpose established for this Authorization. The Recipient will not sell, license, rent, market, transfer, assign, distribute, or otherwise disclose to any third party, exploit or permit any other use of Data.

L-3 does not provide any warranty whatsoever on Data, whether express, or implied, or implied by law, including but not limited to merchantability and fitness for any particular purpose.

In no event shall L-3 be liable for:

- Any direct, incidental, indirect, special or consequential damages including but not limited to loss of use, revenue or profit, even if L-3 has been advised, knew or should have known of the possibility of such damages; or
- Damages caused by the Recipient's failure to perform its obligations and responsibilities; or
- Claims, demands or actions against the Recipient by any other party.

The term of this Authorization is one (1) calendar year from its date. If during such term L-3 believes that its proprietary rights in Data are being infringed or injured or otherwise are at risk, L-3 reserves the right to terminate Authorization hereunder and, upon notice to Recipient, request the Recipient to discontinue any further use of Data.

Upon termination of Authorization hereunder, the Recipient will either destroy or return Data in its possession and notify L-3 that no further use of Data will take place.

For any communication concerning this Authorization, please contact F.W. (Bill) Lynch, Certification Engineer:
Phone: (602) 436.2421
Fax: (602) 436.6899
E-mail: bill.lynch@L-3com.com

Please, countersign this Letter of Authorization and return it to us as follows:
original by mail (with the original signature of your authorized representative);
a copy by fax to the undersigned.

Thank you for your interest.

Sincerely,

F.W. (Bill) Lynch
Agent for L-3 Communications, ACSS

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA3094SO

This certificate, issued to Page Avjet Corporation
9809 Tradeport Drive
Orlando, Florida 32827

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 25 *of the* Federal Aviation *Regulations.*

Original Product — Type Certificate Number: A3WE

Make: Boeing

Model: 727-100 Series

Description of Type Design Change: Installation of Provisions only for a Honeywell TCZ-910 TCAS II System in accordance with Page Avjet Master Drawing List MDL-91-41, Initial Release, dated November 19, 1991, or later FAA approved revisions.

Limitations and Conditions: This approval should not be extended to other airplanes of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will produce no adverse effect upon the airworthiness of that airplane.

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: October 21, 1991

Date reissued:

Date of issuance: January 15, 1992

Date amended:

By direction of the Administrator

Paul Dorgen

by John Tigue *(Signature)*
Manager, Atlanta 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 Form 8110-2 (10-68)

EFTA00277738

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 5/21/01

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(AIRPLANE, RADIO, HELICOPTER, ETC.)*	NAME OF APPLICANT
Boeing	727-100	Airplane	TIMCO

LIST OF DATA

IDENTIFICATION	TITLE
TIMCO Master Data List, 01T012L001 Rev IR Dated 5/21/01	Honeywell TCAS II Change 7 Software Upgrade for a Boeing 727-100 ----------END OF DATA----------

PURPOSE OF DATA
To document and approve the installation of a TCAS Change 7 in a Boeing 727-100 aircraft. STC SA4834NM is the approval basis for this installation.

APPLICABLE REQUIREMENTS *(List specific sections)*
FAR 25.1301 (a), (c)

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 _____ 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
☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Robert McClellan	DERT-510239CE	System & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

GPO 901-613

TIMCO ENGINEERED SYSTEMS, INC.
AN AVIATION SALES COMPANY

MASTER DATA LIST

FORM NO.: EN-0003
DATE: 01/01/00

TITLE: HONEYWELL TCAS II CHANGE 7 SOFTWARE UPGRADE

MDL NO. 01T012L001
REV/DATE: IR / 5/21/01

STC / FAA PROJECT NO.: SA4834NM / 650259

AIRCRAFT TYPE: BOEING 727-100

ENGINEER: P. FERGUS

APPROVAL: ROBERT MCCLELLAN

SHEET 1 OF 1

DOCUMENT NUMBER	REVISION LTR	REVISION DATE	TITLE	SHT
01T012C002	IR	5/21/01	HONEYWELL TCAS II CHANGE 7 SOFTWARE UPGRADE FOR A BOEING 727-100	1

ISSUED
MAY 22 2001
DOCUMENT CONTROL

This data is the property of, and proprietary to, TIMCO Engineered Systems, Inc and is restricted for use by designated persons, firms or corporations with whom contracts have been entered into. User agrees to indemnify TIMCO Engineered Systems, Inc. and to hold it harmless against any claim arising by reason of the possession or use thereof. Its unauthorized use and duplication is prohibited, and it is protected under an unpublished copyright."

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EFTA00277742

TIMCO ENGINEERED SYSTEMS, INC.
AN AVIATION SALES COMPANY

CONFIGURATION DOCUMENT

Form No.: EN-0008
Date: 01/01/00

TITLE: HONEYWELL TCAS II CHANGE 7 SOFTWARE UPGRADE FOR A BOEING 727-100

CFG NO. 01T012C002
REV/DATE: IR / 5/21/01

ENGINEER: **P. Fergus** **APPROVAL: Robert McClellan** SHEET 1 OF 1

I. CONFIGURATION DATA

A. APPLICABLE MDL: HONEYWELL TCAS II CHANGE 7 SOFTWARE UPGRADE # 01T012L001

B. EFFECTIVITY

1. BOEING 727-100 SERIAL NO. 20115

C. DESCRIPTION

1. THIS INSTALLATION WILL CONSIST OF USING STC SA4834NM AS THE APPROVAL BASIS TO PERFORM THE TCAS CHANGE 7 MODIFICATION TO THE TCAS COMPUTER UNIT.

D. DEVIATION FROM PREVIOUSLY APPROVED DATA

1. NONE

ISSUED
MAY 22 2001
DOCUMENT CONTROL

Items marked with an asterisk (*) are for manufacturing and certification and will not be supplied. If required, the documents will be sent directly to the customer's certification authority only after TIMCO receives assurance that their confidentiality will be protected.

DOCUMENT NUMBER	REVISION LTR	REVISION DATE	TITLE	SHT
01T012E006	IR	5/21/01	Installation of a Honeywell TCAS II CU with Change 7 in a Boeing 727-100	6
01T012R007	IR	5/21/01	Description and Substantiation of a TCAS II Change 7 Installation	2

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EFTA00277744

ENGINEERING ORDER

E.O. TITLE: Installation of a Honeywell TCAS II CU with Change 7 in a Boeing 727-100

E.O. NO.: 01T012E006

AIRCRAFT: Boeing 727-100 **REV:** IR **DATE:** 5/21/01

ISSUED
MAY 22 2001
DOCUMENT CONTROL

INITIAL RELEASE REVIEWS
P. Fergus
PREPARED BY
David Thornton
CHECKED BY
Richard Cunningham
QA REVIEW
Robert McClellan
APPROVED BY

TIMCO ENGINEERED SYSTEMS, INC.
623 Radar Road
Greensboro, North Carolina 27410
Telephone: (336) 668-4410

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FAA APPROVED
WHEN EQUIPPED WITH HONEYWELL
TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM

(TCAS II)

This supplement must be attached to the FAA Approved Airplane Flight Manual for aircraft that have been modified by installation of the Honeywell Traffic Alert and Collision Avoidance System (TCAS II) in accordance with a Honeywell STC (see SECTION I). The information contained in this document supplements and supersedes the basic manual only in those areas listed. For limitations, procedures, and performance information not contained in this supplement, consult the basic Airplane Flight Manual.

FAA APPROVED Donald Ausherman

Manager, Flight Test Branch, ANM-160L
Federal Aviation Administration
Los Angeles Aircraft Certification Office
Transport Airplane Directorate

Date Mar. 21, 2000

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
SO-FSDO-17

INSTRUCTIONS: Print or type all entries. See FAR 43.9 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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: U.S.A. N908JE
2. Owner	Name *(As shown on registration certificate)*: JEGE INC.	Address *(As shown on registration certificate)*: 103 FOULK RD. STE 202 WILMINGTON DE. 19803-3742

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.
JET AVIATION ASSOCIATES LTD. **1515 PERIMETER RD.** **WEST PALM BEACH. FL. 33406**		U.S. Certified Mechanic	CRS EYKR782D AIRFRAME 1,3. RADIO 1,2,3. LIMITED A/F & ENG.
		Foreign Certified 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
7/2/01	John K. Urso. Inspector.

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7/2/01	**EYKR782D**	Ronald K. Bystrom. Manager Quality Assurance

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 accomplished.)

BOEING 727-31, S/N 20115, N908JE, W/O 16236.

INSTALLED A UNIVERSAL AVIONICS TT-3000 SERIES AREO-M SATCOM SYSTEM PER UNIVERSAL AVIONICS AIRBORNE SATELLITE TELECOMMUNICATIONS SYSTEM INSTALLATION MANUAL NO. 23-15-02 DATED 3/7/01. SYSTEM CONSISTS OF 2 EA HANDSETS, 1 EA ANTENNA, 1 EA HIGH POWER / LOW NOISE AMP AND THE SATELLITE DATA UNIT. THESE MODIFICATIONS WERE COMPLETED USING THE FOLLOWING JET AVIATION DRAWINGS, WHICH ARE SUBSTANTIATED BY FAA 8110-3 FORMS RESPECTIVELY:

WIRING DRAWING:

- B727-13236-340, REV. IR, DATED 4/30/01, SHEETS 1 THRU 3, TITLED - TT-3000 AERO-M AIRBORNE SATELLITE TELECOMMUNICATIONS SYSTEM.

REFERENCE FAA FORM 8110-3 DATED 5/29/01, BY SYSTEMS & EQUIPMENT D.E.R. NO. DERT-510087-NM.

STRUCTURAL DRAWINGS AND REPORTS:

- B727-16236-1340, REV. A, DATED 5/29/01, SHEETS 1 THRU 5, TITLED – AERO-M SATCOM ANTENNA INSTALLATION

REFERENCE F.A.A. FORM 8110-3, DATED 6/18/01, BY STRUCTURAL D.E.R. NO. DERT-510024-CE.

- B727-16236-1342, REV. IR, DATED 5/21/01, SHEETS 1 THRU 7, TITLED – AERO-M SATCOM EQUIPMENT INSTALLATION

REFERENCE F.A.A. FORM 8110-3, DATED 5/28/01, BY STRUCTURAL D.E.R. NO. DERT-810028-NE.

SYSTEM TESTED PER UNIVERSAL AVIONICS INSTALLATION MANUAL FOR TT-3000 SERIES AERO-M, DOCUMENT 23-15-02, DATED 3/7/01 WITH NO DEFECTS NOTED. NOTE: UNIVERSAL AVIONICS SERVICE BULLETIN NUMBER 10101.00-23-2669, BLOCKING OF BREATHING HOLES IN SATCOM ANTENNA P/N 10101-00, DATED 7/25/00, WAS INCORPORATED AT ANTENNA INSTALLATION. THIS HAS NO EFFECT OF THE STRUCTURAL OR MECHANICAL INSTALLATION OF THE ANTENNA.

AN EMI TEST, REPORT NO. B727-16236-080, REV IR, DATED 6/19/01 WAS CONDUCTED AND THE INSTALLED EQUIPMENT DOES NOT INTERFERE WITH ANY OTHER INSTALLED EQUIPMENT.

THE STATIC LOADING OF THE INSTALLED EQUIPMENT MEETS THE REQUIREMENTS OF AC 43.13-2A, CHAPTER 1, PARAGRAPH 3 AND WAS FOUND TO MEET THE REQUIREMENTS OF PARAGRAPH 2. MATERIALS AND PRACTICES COMPLY WITH PARAGRAPHS 4 THROUGH 12. THE ELECTRICAL LOAD ANALYSIS UPDATE REPORT B727-16236-041, REV IR, SHEETS 1 THRU 21, DATED 06/11/2001 WAS COMPLETED IN ACCORDANCE WITH 43.13-1B, CHAPTER 11, SECTION 3, PARAGRAPH 11-37.

AIRCRAFT METAL WORK INVOLVING METAL REPAIR OR ALTERATION COMPLIES WITH AC 43.13-1B, CHAPTER 4, SECTIONS 1, 2, 3 AND 4, CHAPTER 6, SECTIONS 3 AND 8. HARDWARE AND MATERIALS USED THE INSTALLATION CONFORM TO AC 43.13-1B, CHAPTER 5, SECTIONS 1 AND 2, CHAPTER 7, SECTIONS 1, 2,4 AND 5 AS APPLICABLE. CIRCUIT BREAKERS, SWITCHES AND CONNECTORS ARE OF THE TYPE RECOMMENDED BY THE AIRCRAFT MANUFACTURE OR ARE MIL SPEC APPROVED FOR AIRCRAFT USE AND MEET THE REQUIREMENTS OF AC 43.13-1B, CHAPTER 11, SECTION 4. ELECTRICAL/ELECTRONIC WIRING WAS SELECTED AND INSTALLED IAW AC 43.13-1B, CHAPTER 11, SECTIONS 5-8, 13, 15, 17-19 AND AC 43.13-2A CHAPTER 2, PARAGRAPHS 21, 22 & 27. ROUTING, LACING AND TYING COMPLIES WITH AC 43.13-1B, CHAPTER 11, SECTIONS 9-12. WIRE MARKING COMPLIES WITH SECTION 16. ELECTRONIC EQUIPMENT INSTALLATION COMPLIES WITH THE AIRCRAFT AND EQUIPMENT MANUFACTURE'S INSTRUCTIONS AND AC 43.13-2B, CHAPTER 2, PARAGRAPHS 21 THROUGH 26 AND CHAPTER 3, PARAGRAPH 44.

A LOGBOOK ENTRY REFLECTING THIS MODIFICATION WAS COMPLETED PER F.A.R. 43.9 AND ENTERED INTO THE AIRCRAFT LOGBOOK. THE EQUIPMENT LIST WAS AMENDED AND THE NEW WEIGHT AND BALANCE WAS COMPUTED AND ENTERED IN THE AIRCRAFT RECORDS IAW AC 43.13-1B, CHAPTER 10, SECTION 2 AND AC 43.13-2A, CHAPTER 1 PARAGRAPH 9.

PER THE AERO-M SATCOM INSTALLATION MANUAL ALL COMPONENTS ARE CONSIDERED LINE REPLACEABLE UNITS AND DO NOT AFFECT THE MANUFACTURERS INSTRUCTIONS FOR CONTINUING AIRWORTHINESS. STRUCTURAL CONTINUING AIRWORTHINESS INSPECTION REQUIREMENTS ARE CONTAINED IN A.T.E. INC. STRUCTURAL REPORT ATE6112001 DATED 6/12/01, SUBSTANTIATED BY F.A.A. FORM 8110-3 DATED 6/12/01 BY STRUCTURES DER NO. DERT-510333-CE.

THERE ARE NO COCKPIT PROCEDURAL CHANGES OR FLIGHT MANUAL SUPPLEMENTS REQUIRED FOR THIS INSTALLATION.

END

☐ Additional Sheets Are Attached

★ U.S. G.P.O 1990-761-753

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 05/29/2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates West Palm Beach, FL

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-340, Initial Release, dated 04/30/01	TT-3000 SERIES AERO-M AIRBORNE SATELLITE TELECOMMUNICATIONS SYSTEM

PURPOSE OF DATA
In support of major alteration to Boeing 727-31, serial number 20115, registration number N908JE.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.581 (a)(b)(1)
FAR 25.869 (a)(4)
FAR 25.1301 (a)(b)(c)(d)
FAR 25.1309 (a)(b)(g)
FAR 25.1316 (b)
FAR 25.1351 (a)
FAR 25.1357 (a)(c)
FAR 25.1431 (a)(b)(c)
FAR 25.1529

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.

☐ Recommend approval of these data

I (We) Therefore

☒ Approve these data (Systems & Equipment Aspects, Design Approval Only, Does Not Constitute Installation Approval)

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Norman J. Curran	DERT-510087-NM	Systems & Equipment

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613 FILENAME: SC-727-SATCOM.DOC

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE
June 18, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	B727-31	Airplane	Jet Aviation

LIST OF DATA

IDENTIFICATION	TITLE
Jet Aviation Engineering Drawing No. B727-16236-1340, Dtd. 5/29/2001, Rev. A ___END___END___	Aero-M Satcom Antenna Installation Boeing 727-31 / S/N: 20115 / N908JE ___END___END___END___END___END___END___END___END___ **Note: The certification basis of this aircraft includes FAR 25.571 Damage - tolerance and fatigue evaluation of structure. Per Advisory Circular 25.1529-1 Instructions for Continued Airworthiness of Structural Repairs on Transport Category Airplanes, the damage tolerance and fatigue evaluation of the structure must be performed before 6/18/2002.** Notes: 1) The structural aspects only of the above listed data are approved herein. 2) This approval is valid for the aircraft model and serial number listed below 3) This approval is based on structural analysis on file at DER Services corporate office in Ft. Lauderdale, FL. Model No. B727-31 Serial No. 20115

PURPOSE OF DATA — Approve data for antenna installation (Structures Only)

APPLICABLE REQUIRMENTS *(LIST SPECIFIC SECTIONS)*

25.301, 25.303, 25.305, 25.307, 25.601, 25.603, 25.605, 25.609, 25.613

CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with condition 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
- ☑ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTIVE	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Robert J. Belgau *Robert J. Belgau*	DERT-510024-CE	Structures

FAA FORM 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

DER SERVICES PROJECT NO. 2001-082

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: May 28, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
Boeing	727-31	Airplane	Jet Aviation Associates- WPB

LIST OF DATA

IDENTIFICATION	TITLE
B727-16236-1262	LSZ-860 Lighting Sensor Equipment Installation, Sht 1-2, Rev IR
B727-16236-1342	Aero-M SATCOM Equipment Installation, Sht 1-7, Rev IR

Note:

1. This approval is for structural aspects only.
2. This approval is based on drawing review and inspection.
3. After the alteration, the aircraft must be returned to service by FAA authorized personnel.

PURPOSE OF DATA

To approve structural aspects of a major alteration to Boeing 727-31, S/N: 20115

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR	25.301	25.303	25.305(a)	25.307(a)	25.321(a)	25.561(b)(c)
	25.601	25.603	25.605(a)	25.609	25.611	25.613
	25.789					

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 0 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.
- ☑ Approve these data.

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
David E. Haralson *David E. Haralson*	DERT-810028-NE	Structural

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ER01205.doc

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: JUNE 12, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	JET AVIATION

LIST OF DATA

IDENTIFICATION	TITLE
A.T.E. INC. STRUCTURAL REPORT No. ATE6112001	BOEING 727-31 S/N 20115, AERO-M SATCOM ANTENNA INSTL., UPPER B.S. 360-390; GPS ANTENNA INSTL., UPPER B.S. 312-328; AIRCELL AGT.01 ANTENNA INSTL., LOWER B.S. 400-420 DAMAGE TOLERANCE ANALYSIS; SH. 1-31, REV. (IR)

NOTE: REQUIRED INSPECTIONS ATTACHED

THESE DATA APPLY ONLY TO BOEING 727-31 S/N 20115

PURPOSE OF DATA

TO APPROVE DATA FOR DAMAGE TOLERANCE ANALYSIS, B-727-31 S/N 20115

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.571 (STRUCTURAL ASPECTS ONLY)

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 ___1 of 1_____ _____ 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 ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Hugh M. Roberts	DERT-510333-CE	STRUCTURAL

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

GPO 901-613

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
N908JE	BOEING 727-31	20115	TRANSPORT

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 provide by Annex 8 to the Convention of 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
R May 17 2001	JOHN A. DIAZ	SO17

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) AFS Electronic Forms System - JetForm FormFlow - 12/1998

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
N505LS	BOEING 727-31	20115	TRANSPORT

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
R 07-23-90	JAY C. WILKINS	GL07

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)

☆ U.S.G.P.O.: 1994-568-762

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
FSDO-16

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N505LS
2. Owner	Name (As shown on registration certificate): NORTHWEST DELAWARE CORP	Address (as shown on registration certificate): 1105 N. MARKET ST WILMINGTON DE 19899

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) ~~~~~~~			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type / Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
TIMCO Lake City Municipal Airport Lake City, FL 32025	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	DU4R141M

D. I certify that the repair and/or alteration made to the units identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with 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
August 23, 1999	Arthur E. Saylor

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
August 23, 1999	DU4R141M	Scott L. Palm

FAA Form 337 (12-88)

This 337 supersedes 337 dated August 7, 1999

EFTA00277764

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.)

Boeing 727-31 Reg. No. N505LS S/N 20015 August 23, 1999 Page 1

The following major repairs were accomplished:

1. 060N1-0059

   Repaired corroded seat track at sta. 662 RBL 56 IAW TIMCO E.O. 99-1190 Rev. I/R dated 12 JUL 99

   Approved per FAA Form 8110-3 by DER Wayne Fink DER #DERT-510117-CE dated July 12, 1999.

2. 060O1-0066

   Repaired corroded and delmainated skin above #2 engine pylon L/H side at stations 1342.4, 1371.5 and 1387.85 IAW TIMCO E.O. 99-1191 Rev. I/R dated 23 Jul 99 approved per FAA Form 8110-3 by DER D. Joynes DER #DERY-635317-NM dated 21 July 99.

3. 060H1-0027

   Repaired cracked and disbonded #2 engine upper skin on aft fairing assembly IAW ROHR Engineering Repair Data Sheet and FAA Form 8110-3 by DER Jeffrey D. Shutrump DER #DERY-605526-NM dated August 3, 1999.

SUMMARY

1. All work accomplished IAW TIMCO E.O.'s, ROHR Engineering Repair Data Sheet and FAA Form 8110-3's.
2. Records of all work accomplished is on file at this repair station under work order 060/T-361.

----------end----------

☐ Additional Sheets Are Attached

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

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
FSDO-15 17

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N505LS
2. Owner	Name (As shown on registration certificate): NORTHWEST DELAWARE CORP	Address (as shown on registration certificate): 1105 N. MARKET ST WILMINGTON DE 19899

3. For FAA Use Only

4. Unit Identification

Unit	Make	Model	Serial No.	5. Type: 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.
TIMCO Lake City Municipal Airport Lake City, FL 32025	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	DU4R141M

D. I certify that the repair and/or alteration made to the units identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with 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 August 7, 1999

Signature of Authorized
Gregory A Christman

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
August 7, 1999	DU4R141M	Scott L. Palm

FAA Form 337 (12-88)

EFTA00277766

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.)

Boeing 727-31 Reg. No. N505LS S/N 20115 August 7, 1999 Page 1

The following major repairs were accomplished:

1. 060N1-0059
   Repaired corroded seat track at sta. 662 RBL 45.5 IAW TIMCO E.O. 99-1190 Rev. I/R dated 12 JUL 99 approved per FAA Form 8110-3 by DER Wayne Fink DER #DERT-510117-CE dated July 12, 1999.
2. 060O1-0066
   Repaired corroded and delaminated skin above #2 engine pylon L/H side at stations 1342.4, 1371.5 and 1387.85 IAW TIMCO E.O. 99-1191 Rev. I/R dated 23 Jul 99 approved per FAA form 8110-3 by DER D. Joynes DER #DERY-635317-NM dated 21 July 99.
3. 060H1-0027
   Repaired cracked and disbonded #2 engine upper skin on aft fairing assembly IAW ROHR Engineering Repair Data Sheetand FAA Form 8110-3 by DER Jeffrey D. Shutrump DER #DERY-605526-NM dated August 3, 1999.

SUMMARY

1. All work accomplished IAW TIMCO E.O.'s , ROHA Engineering Repair Data Sheet and FAA Form 8110-3's.
2. Records of all work accomplished are on file at this repair station under work order 060/T361.

----------end----------

☐ Additional Sheets Are Attached

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

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: July 21st 1999

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	727	Airplane	Boeing Commercial Airplane Group

LIST OF DATA

IDENTIFICATION	TITLE
CPZ-LRK-99-0204TR Dated 9 Jul 1999 CPZ-LRK-99-00006H Dated 12 Jul 1999 CPZ-LRK-99-0208TR Dated 19 Jul 1999	Subject: Center Engine Support Skin Panel Corrosion, Delamination Requestor: TIMCO (CPZ) for The Limited (LII) Part Number / Serial Number: 65-17556 Model No.: 727-100 Serial No.: 20115 Basic No.: E2218 Registry No.: N500LS Variable No.: E3704 Line No.: 735 Flight Cycles: 21643 Hours: 31835 Service Bulletin / AD: N/A TIMCO telex with description of blendout and doubler repairs to corrosion and delamination areas at Stations 1371.5, 1387.85, and 1342.4. Boeing reply that repairs are structurally satisfactory with provisions. TIMCO telex with statement that repair has been completed per disposition and request for 8110-3 form.

PURPOSE OF DATA: Structural Substantiation of Repair Plan

APPLICABLE REQUIREMENTS *(List specific sections)*:
CAR 4b
Subpart C: 4b.200 through 4b.202, 4b.270
Subpart D: 4b.300 through 4b.304(a), 4b.306(a)&(b)

CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with conditions and limitations of appointment under Part 183 of the Federal Regulations, data listed above and on attached sheets numbered _____ 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
- ☒ Approve these data

SIGNATURE(s) OF DESIGNATED ENGINEERING REPRESENTATIVE(s)	DESIGNATION NUMBER(s)	CLASSIFICATION(s)
D. Joynes D Joynes	DERY-635317-NM	Structures

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

EFTA00277768

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: July 12, 1999

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	727	Airplane	TIMCO

LIST OF DATA

IDENTIFICATION	TITLE
TIMCO E.O. 99-1190, Rev. I/R, Dated 12 JUL 99	B727; SEAT TRACK: STATION 662, RBL 56 CORROSION BLENDOUT REPAIR.
TIMCO REPORT NO. S.A. 99-1190, Rev. I/R, Dated 12 JULY 99	STRESS ANALYSIS; SEAT TRACK CORROSION REPAIR AT STA 663 RBL 54

END

NOTES:

1. This approval is for Northwest Delaware aircraft N505LS, S/N 20115 only.

PURPOSE OF DATA

In support of a Major Repair accomplished on aircraft S/N 20115. This approval is for design and static analysis only and is not installation approval.

APPLICABLE REQUIREMENTS *(List specific sections)*

FAR 25.301, 25.305, 25.601, 25.603, 25.605, 25.609 and 25.613.

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 N/A 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
- ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBERS(S)	CLASSIFICATION(S)
Wayne Fink Wayne Fink	DERT-510117-CE	STRUCTURES

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

ELECTRONIC FORMAT (4-99)

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS**	DATE August 3, 1999

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	727	Airplane	Rohr, Inc.

LIST OF DATA

IDENTIFICATION	TITLE
	(Ref. ERDS C1036)
ERDS C1036 dated August 3, 1999	Engineering Repair Data Sheet, Definition of discrepancy and repair design for P/N VA545300-1 (Aft Skin - Upper Skin Assembly)
B. Cox Stress Analysis Dated August 3, 1999	Skin Disbond VA545300-1

PURPOSE OF DATA

To submit substantiating data for a repair. This constitutes approval of the repair design only.

APPLICABLE REQUIREMENTS *(List Specific Sections)*

(1)	FAR 25.301	(1)	FAR 25.307(a)	(1)	FAR 25.605(a)	(1)	FAR 25.619
(1)	FAR 25.303	(1)	FAR 25.601(a)	(1)	FAR 25.609(a)		
(1)	FAR 25.305(a)(b)	(1)	FAR 25.603	(1)	FAR 25.613(a)-(d)		

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
- ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVES	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
(1) Jeffrey D.Shutrump	DERY-605526-NM	Structures

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION (Computer Generated by Rohr, Inc.)

ROHR, INC.
850 Lagoon Drive
Chula Vista, California 91910 - 2098

ENGINEERING REPAIR DATA SHEET (ERDS)

☒ FORM 8110-3 REQUIRED

CLASS: ☐ MAJOR ☒ MINOR

ERDS NO. C1036 | REV. | PAGE 1 OF 2

S.O. NO. N/A | REV.

PART NO.	PART SERIAL NO.	MODEL	COMPONENT	SERVICE HOURS	CUSTOMER
VA545300-1	N/A	V727RE	AFT FAIRING -UPPER SKIN ASSY	UNK	THE LIMITED

DISCREPANCY: (BE SPECIFIC - PRINT CLEARLY)

ITEM A. The upper skin on the AFT fairing assembly, P/N VA545300-1, on the #1 Engine position shows a disbonded condition on approximately 50% of the AFT surface, including two crescent shaped cracks on an existing repair (fiberglass?). On this same are on the lower surface of the panel, an area of material is also missing and filled as above. The lower repair stops before transitioning to pan down of honeycomb. See page 2 for sketch of location and description.

MATERIALS:

Upper Skin	.032	2024-T3	QQ-A-250/5
Lower Skin	.016	2024-0	QQ-A-250/5
		Heat treated to –T42 per MIL-H-6088	
Honeycomb	.310-3/16-10 (5052)		MIL-C-7438

REPAIR:

ITEM A. Repair.

UPPER SKIN REPAIR

1. Remove discrepant upper skin from assy. Care should be taken not to disbond the lower skin of the assy.
2. Fabricate a new upper skin from .032 gauge 2024-T3 per QQ-A-250/5.
3. Remove lower surface Clad (bonding side). Do not thin below .029.
4. Make sure all remaining "old" adhesive is removed from core. Clean and prep skin (using PAA or Pasa-Jell 105) and exposed core (using Pasa-Jell 105) on panel. Clean repair area per 727 SRM 51-40-6, Par. G(2) (SRM 51-40-5).
5. Prime bond side of skin and core with BR-127 adhesive primer, per manufacturer specifications.
6. Apply two coats of FM-73 adhesive material, per manufacturer specifications.
7. Bond replacement upper skin to core and lower skin per 727 SRM, 51-40-6, paragraphs E, J & K.
8. Perform Post Bond inspection by visually inspection of periphery for evidence of adhesive bead, and tap test the whole panel for voids.

ORIGINAL When this stamp is in red ink | INITIALS

PREPARED BY	DATE	AIRWORTHINESS APPROVAL	DATE
Don Adams	8-02-99	E. Hanse E. HANSE	8-3-99

FORM NO. E6667-5

8-3-99 4:55 PM ;SUPER 27 PROGRAM
6196912232;# 3/ 8
EFTA00277774

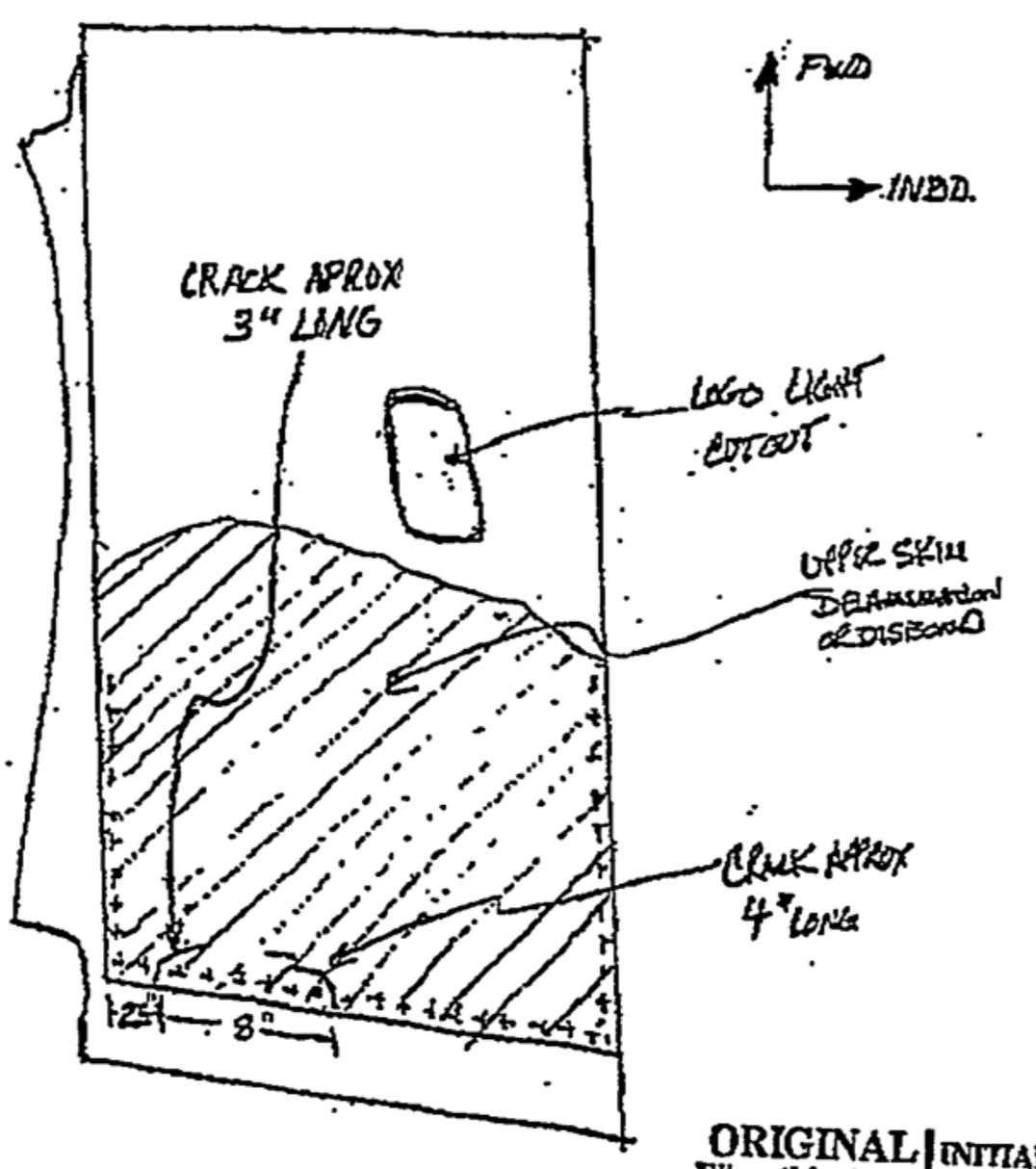
ROHR

ROHR, INC.
650 Lagoon Drive
Chula Vista, California 91910 - 2098

ENGINEERING REPAIR DATA SHEET (ERDS) SUPPLEMENT SHEET

ERDS NO.	REV.	PAGE
C1036		2 OF 2
S.O. NO. N/A	REV.	

(DISCREPANCY CONTINUED)



ORIGINAL When this stamp is in red ink | INITIALS

(DISPOSITION CONTIUNUED)

LOWER SKIN REPAIR

1. Remove existing repair (fiberglass) from discrepant area on lower surface.
2. Cut filler to size of discrepant area from .016 gauge 2024-T3 per QQ-A-250/5.
3. Fabricate doubler from .020 gauge 2024-0, per QQ-A-250/5 to cover filler. Doubler to overlap filler periphery by 1.50 min. Optional to use 2024-T3, no heat treatment required.
4. Form doubler to match lower skin contour per BAC 5300. Heat treat to -T42 per BAC 5602 or MIL-H-6088. Verify hardness per SRM requirements.
5. Inboard and outboard edges of doubler to be tapered to .010 min. Care should be taken so the edges of the doubler land mid spaced between existing assembly fasteners.
6. Install doubler using steps 3 through 8 above.

7. Install new panel, filler & doubler using B/P fasteners to complete assembly. Apply sealant to edge of logo light cut out , and seal all gaps at assembly.

8. Clear Alodine all external clad surfaces per MIL-C-5541, Class 3.

STRESS

FORM NO. E7983-1

8- 3-99 4:55 PM ;SUPER 27 PROGRAM
6196912232;# 4/ 8

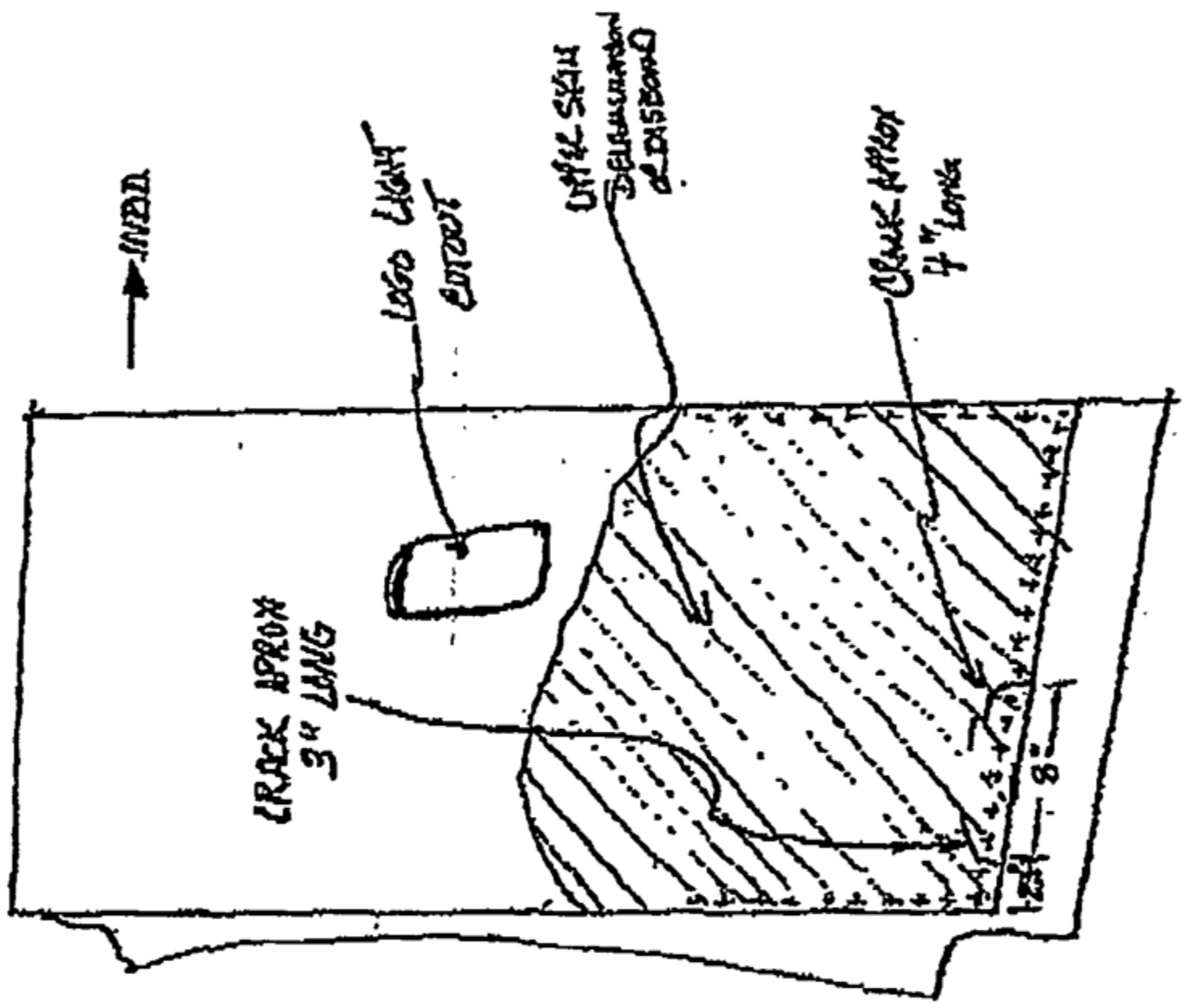
BY B. COX	DATE 08/02/99	ROHR, INC.	PAGE 1 of 4
CHK'D J SHUTRUMP	DATE 8/3/99		TITLE Skin Disbond
ERDS C1036			VA545300-1

Use or disclosure of this information is subject to the restriction on the title page or on the first page of this document

Super 27

I. Discrepancy:

The outer skin of the upper skin assembly of the aft fairing is disbonded and the aft edge of the outer skin has two cracks. See sketch below from ERDS.



II. Proposed Disposition:

Remove the outer skin of the upper skin assembly and bond on a new outer skin using FM 73 adhesive and BR 127 adhesive primer. The cracks at the aft edge have been reported to be along a previous repair that was filled with a fiberglass patch repair. The fiberglass patch will be removed and replaced with a metallic patch and doubler. All metallic materials will be the same as BP materials.

III. Static Analysis:

The aft fairing is analyzed in section 10 of Reference [1]. In section 10 of Reference [1], the substructure has been analyzed to withstand all the aerodynamic loading without using any of the skin as affective. Therefore, this analysis will only investigate the capability of the adhesive to carry the shear stress to the core conservatively assuming that the skin will carry the aerodynamic loading.

---

[1] Strut Stress Analysis (VA-CR154 Rev. C)

BY B. COX DATE 08/02/99 CHK'D DATE ERDS C1036	ROHR, INC.	PAGE 2 of 4 TITLE Skin Disbond VA545300-1

Use or disclosure of this information is subject to the restriction on the title page or on the first page of this document

The noted adhesive primer is compatible with the adhesive as shown in the excerpt of MIL-HDBK-337 at the end of this analysis.

Conservatively assume all the aerodynamic load is reacted by a 1.0-inch wide by 30 inches long beam that is simply supported between the fuselage and outboard edge.

The core shear stress (f_c) is expressed by $f_c = V / hb$

where V is the vertical load being reacted at the supported end
h is the centroid distance of the sandwich panel $h = t_i/2 + t_o/2 + t_c$
b is the beam width

From page 10.7 of Reference [1], the aerodynamic pressure (P) on the aft fairing is .5 psi limit (.75 psi ult). Therefore the ultimate vertical load at one end of a simply supported beam is V = .75(30)(1.0)/2 = 11.25 lbs (ult).

From VA545300, $t_i = .016$, $t_o = .032$ and $t_c = .30$. $h = .016/2 + .032/2 + .30 = .324$ in

$f_c = V / hb = 11.25 / .324(1.0) = 34.7$ lbs/in^2

From the certification sheet shown at the end of this analysis, the allowable lap shear for the FM 73 adhesive is 6,523 psi at 75° F.

Since there is no test data readily available for this adhesive system for core bond, a comparison of this adhesive system will be made to EA9649R (RMS 058). From figure 3.3.2 of Reference [2], aluminum core and face sheet with EA9649R adhesive has an allowable of 220 psi for the BP core configuration. Since the lap shear for the repair adhesive is significantly higher than EA9649R (2,838 psi at 75° F), it is reasonable to assume that 34.7 psi core shear is acceptable for this adhesive system.

The repair at the aft end of the fairing is acceptable by inspection since the aerodynamic load is very little to nil at this location.

IV. Fatigue Analysis:

Repair is acceptable for fatigue strength by inspection since the ultimate margin is high and there are no additional stress concentrations compared to the type design.

---

[2] Mechanical Design Allowables (RHR 85-013)

BY B. COX DATE 08/02/99 CHK'D DATE ERDS C1036	ROHR ROHR, INC.	PAGE 3 of 4 TITLE Skin Disbond VA545300-1

Use or disclosure of this information is subject to the restriction on the title page or on the first page of this document

Table 4-1.—Preferred Repair Materials List

Material	Type	Maximum service temp	Cure temp	Manufacturer's designation	Manufacturer	Federal stock no.	Remarks
Adhesives (metal-to-metal and metal-to-core)	I	140° F	RT	EA 9309	The Dexter Corp.		Two-component epoxy paste
				EA 9320	The Dexter Corp.		Two-component epoxy paste
				AS 401-1	Adhesive Engineering		Two-component epoxy paste
	II	180° F	200° to 250° F	AF 127-3	3M		Supported film
				AF 126	3M		
				FM 73	American Cyanamid		Supported film
				EA 9628	The Dexter Corp.		Corrosion-inhibiting primer
				BR 127[b]	American Cyanamid		Corrosion-inhibiting primer
				EC 3950[b]	3M		Two-component adhesive
	III	350° F	RT	EA 934	3M		Supported film adhesive; used with or without primer
	IV	350° F	270° to 350° F	AF 130			

[a]The number after the slash indicates the non corrosion-inhibiting primer system normally used with that adhesive.
[b]A corrosion-inhibiting primer, compatible for use with Type II adhesives.

EFTA00277782

BY B. COX DATE 08/02/99 CHK'D DATE ERDS C1036	ROHR ROHR, INC.	PAGE 4 of 4 TITLE Skin Disbond VA545300-1

Use or disclosure of this information is subject to the restriction on the title page or on the first page of this document

CytecFiberite
1500 Revolution Street
Havre de Grace, Maryland 21078

CytecFiberite

CERTIFICATION

SOLD TO: TIMCO-LAKE CITY
P.O. BOX 1909
LAKE CITY
FL.
32056

SHIP TO: TIMCO-LAKE CITY
HIGHWAY 90 EAST
ROUTE 19, BOX 1029
LAKE CITY
FL
32025

CUSTOMER ORDER: 598376

SERIAL NUMBER:
OUR ORDER: 0023439/001

DATE SHIPPED: 06/17/99

PRODUCT NUMBER	DESCRIPTION	QUANTITY SHIPPED
4902 MSDS:01202	FM 73M .06 PSF 36" ADH FILM	500.00 SF
RECOMMENDED STORAGE-- 12 Months FROM DATE OF SHIPMENT STORE AT OR BELOW 0 Degrees F		

BEG BATCH/UNIT NUMBER	END BATCH/UNIT NUMBER		DATE MANUFACTURED	QUANTITY	U/M
2742-0037			JUN.13,1999	500.00	SF
* 2742		TOTAL = 1*	BATCH QTY =	500.00	*
		TOTAL = 1**	TOTAL QTY	500.00	**

THIS CERTIFIES THE MATERIAL AT TIME OF SHIPMENT CONFORMS TO APPLICABLE DRAWINGS AND SPECIFICATIONS NOTED BELOW.
SPECIFICATIONS:
MMM-A-132 REV B, TIAW-2
TYPE I CLASS 2 FORM F GROUP 3
"THIS ADHESIVE OR PRIMER MEETS ACCEPTANCE REQUIREMENTS AS PART OF A TWO PART ADHESIVE SYSTEM. THEY ARE ONLY TO BE USED WITH THE MATCHING ADHESIVE OR PRIMER TO RETAIN CERTIFICATION. SEE CYTEC FOR ASSISTANCE."

JUN 18 1999

TEST DATA

75 F LAP SHEAR @ 180 F
6584, 6582, 6704, 6622, 6122 PSI 4538, 4378, 4698, 4268, 4516 PSI

WEIGHT
.061, .061, .061 PSF

AUTHORIZED SIGNATURE C. McNutt

FORM NO. 1360-3

8- 2-99 3:34 PM ;SUPER 27 PROGRAM 6196912232;# 3/ 8

FAA

Work Order 43736

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 GL07

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N505LS
2. Owner	Name (As shown on registration certificate): Northwest Delaware Corporation	Address (As shown on registration certificate): 1105 N Market St, Wilmington, DE 19899

3. For FAA Use Only

"The data identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7

Date: 4/28/99 — Signature of FAA Inspector: Jesus Zubia — GL-CMH FSDO

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

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
ElectroSonics 4391 International Gateway Port Columbus International Airport Columbus, OHIO 43219		U. S. Certificated Mechanic	Repair Station AE1R005K
		Foreign Certificated Mechanic	Radio Class 1,2 & 3; Instrument
	X	Certificated Repair Station	Class 3, Accessory Class 3
		Manufacturer	Limited Altimeter

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

Date: April 28, 1999

Signature of Authorized Individual

7. Approval for Return to Service

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

BY							
		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
4-28-99	AE1R005K	

FAA Form 337 (...98)

EFTA00277786

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 removed from the aircraft:

PART NUMBER	QTY	MAKE/MODEL/DESCRIPTION		STATION
622-7293-101	3	Collins VHF-422b Comm	C37c, C38c	450.0

2. The following equipment was installed in the aircraft.

PART NUMBER	QTY	MAKE/MODEL/DESCRIPTION	TSO	STATION	INSTALLATION DATA
822-1115-001	3	Collins VHF-422c Comm	C37c, C38c	450.0	523-0772719

3. The above work was accomplished IAW FAA Advisory Circular AC 43.13-1B, Chapter 11,12 and AC 43.13-2A, Chapters 1, 2.

4. This work has been accomplished under ElectroSonics Work Order **43736.**

5. Removed existing Collins VHF-422b com's to accomplish 8.33Khz modifications Collins S.B.17. Following modification, reinstalled as VHF-422c and performed a complete operational check.

6. A complete test of the installation of the modified units has been conducted to confirm that other aircraft systems are free of interference as a result of this installation. All tests found to be satisfactory.

7. Collins does not specify any new continued airworthiness instructions for the above equipment. The owner/operator should consult the Boeing maintenance manuals for general avionics continued airworthiness requirements.

8. The owner/operator must comply with manufacturer's maintenance instructions to ensure continued airworthiness any time the above equipment is removed and/or repaired and reinstalled.

9. The aircraft Weight and Balance is unchanged and Equipment List has been amended.

10. The aircraft must be loaded IAW the prescribed loading information from the manufacturer.

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

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3		RECEIVED						A-3	
0-4		APR 28 1999						A-4	
0-5								A-5	
0-6		CMH FSDO		COLUMBUS, OH				A-6	
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3		RECEIVED						A-3	
0-4		MAY - 3 1999						A-4	
0-5								A-5	
0-6		CMH-FSDO		COLUMBUS, OH				A-6	
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

☐ Additional Sheets Are Attached

U.S. GPO:1991-0-568-012/40035

FAA

Work Order 43736

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 GL07

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	Model
Boeing	727-31
Serial No.	**Nationality and Registration Mark**
20115	N505LS

2. Owner

Name (As shown on registration certificate)	Address (As shown on registration certificate)
Northwest Delaware Corporation	1105 N Market St Wilmington, DE 19899

3. For FAA Use Only

"The data identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7

4/28/99 — Date

Signature of FAA Inspector Jesus Zubia — GL-CMH FSDO

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

Unit	Make	Model	Serial No.	5. Repair	5. 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.
ElectroSonics 4391 International Gateway Port Columbus International Airport Columbus, OHIO 43219		U. S. Certificated Mechanic	Repair Station AE1R005K.
		Foreign Certificated Mechanic	Radio Class 1,2 & 3; Instrument
	X	Certificated Repair Station	Class 3, Accessory Class 3
		Manufacturer	Limited Altimeter

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
April 28, 1999	

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
4-28-99	AE1R005K	

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.)

1. The following equipment was removed from the aircraft:

PART NUMBER	QTY	MAKE/MODEL/DESCRIPTION		STATION
622-6520-005	2	Collins	CTL-22	200.0
622-6520-005	1	Collins	CTL-22	259.5

2. The following equipment was installed in the aircraft.

PART NUMBER	QTY	MAKE/MODEL/DESCRIPTION		TSO	STATION	INSTALLATION DATA
822-1120-005	2	Collins	CTL-22c	C37c, C38c	200.0	523-0072719
822-1120-005	1	Collins	CTL-22c	C37c, C38c	259.5	"

3. The above work was accomplished IAW FAA Advisory Circular AC 43.13-1B, Chapter 11,12 and AC 43.13-2A, Chapters 1, 2.

4. This work has been accomplished under ElectroSonics Work Order **43736.**

5. Removed existing CTL-22 to accomplish the 8.33KHZ spacing modifications Collins S.B. 31. Following modification, reinstalled units and performed a complete operational check.

6. A complete test of the installation of the modified units has been conducted to confirm that other aircraft systems are free of interference as a result of this installation. All tests found to be satisfactory.

7. Collins does not specify any new continued airworthiness instructions for the above equipment. The owner/operator should consult the Boeing maintenance manuals for general avionics continued airworthiness requirements.

8. The owner/operator must comply with manufacturer's maintenance instructions to ensure continued airworthiness any time the above equipment is removed and/or repaired and reinstalled.

9. The aircraft Weight and Balance is unchanged and Equipment List has been amended.

10. The aircraft must be loaded IAW the prescribed loading information from the manufacturer.

END

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	#2
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

RECEIVED
APR 28 1999
CMH FSDO COLUMBUS, OH

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	#2
0-5								A-5	
0-6								A-6	#2
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

RECEIVED
MAY - 3 1999
CMH FSDO COLUMBUS, OH

☐ Additional Sheets Are Attached

U.S. GPO:1991-0-568-012/40035

EFTA00277789

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 ASW-05

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 form 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: **Boeing**	Model: **727-31**
	Serial No.: **20115**	Nationality and Registration Mark: **N505LS**
2. Owner	Name *(As shown on registration certificate)*: **Northwest Delaware Corp.**	Address *(As shown on registration certificate)*: **1105 N Market St Wilmington, DE 19899** RECEIVED

3. For FAA Use Only

AUG 10 1998
FAA-DALLAS
SW05

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Associated Air Center **8201 Lemmon Avenue** **Dallas, Texas 75220**		U.S. Certificated Mechanic	**TX2R203L** **Airframe Class 3 & 4** **Radio Class 1, 2 & 3**
		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
8/4/98	Mark D. Watson

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 Canadian Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8/4/98	**TX2R203L**	Mark D. Watson

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.)

Aircraft: Boeing 727-31
Registration #: N505LS
Serial #: 20115

Aircraft Total Time: 31,675.6
Aircraft Total Cycles: 21,567
August 4, 1998

The following alteration was accomplished at Associated Air Center, Dallas, Texas under Work Order 1565.

1) Mode "S" Transponder ICAO Code Strapping Change in accordance with AAC Drawing 1565-001 Rev A dated July 28, 1998, 8110-3 approved by D.E.R. SW-997, David A. Kimbrell July 29, 1998.

The following repair was accomplished at Associated Air Center, Dallas, Texas under Work Order 1565.

1) Repair - L/H Horizontal Stabilizer Trailing Edge Beam at Elevator Station 156 in accordance with AAC Repair Drawing 1565-002 dated July ---, 1998, 8110-3 approved by D.E.R. SW-810, Robert M. Manashi August 4, 1998.

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

☐ Additional Sheets Are Attached

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

DAK-98-089

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE
JULY 29, 1998

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER DALLAS, TEXAS

LIST OF DATA

IDENTIFICATION	TITLE
1565-001 REV. A 07/28/98	MODE S TRANSPONDER ICAO CODE STRAPPING CHANGE

NOTES : TC DATA SHEET A3WE.
ELECTRICAL DESIGN ASPECTS OF THIS DATA IS APPROVED.
THIS APPROVAL APPLICABLE TO B727-31 S/N 20115 ONLY.
THIS 8110-3 FORM IS IN SUPPORT OF FAA FORM 337.

PURPOSE OF DATA
TO SUPPORT THE AVIONICS/ELECTRICAL MODIFICATIONS.

APPLICABLE REQUIREMENTS *(List specific sections)*
FAR 25.1301(a)(b)(c)

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 ____ 0 ____ 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
- ☑ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
DAVID A. KIMBRELL	SW-997	AVIONICS/ELECTRICAL
David A. Kimbrell		SYSTEMS

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION((COMPUTER GENERATED)

GPO 901-613

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE #98421
AUGUST 04, 1998

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, radio, helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE (N500LS)	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
ASSOCIATED AIR CENTER DRAWING NO. 1565-002 REV. "IR", DATED 07-29-1998	REPAIR - L/H HORIZONTAL STABILIZER T/E UPPER BEAM - ELEV STA 196. (SHEET 1, 2 AND 3 OF 3). NOTES: 1. THE STRUCTURAL ASPECTS ONLY OF THE ABOVE LISTED DATA ARE APPROVED HEREIN. THIS APPROVAL IS FOR THE ENGINEERING DESIGN DATA ONLY. 2. THIS APPROVAL IS VALID ONLY FOR BOEING MODEL NO. 727-31, AIRCRAFT S/N 20115 AND IS ISSUED IN SUPPORT OF A MAJOR REPAIR OF THE SUBJECT AIRCRAFT.

PURPOSE OF DATA

IN SUPPORT OF A MAJOR REPAIR ON BOEING MODEL NO. 727-31, AIRCRAFT S/N 20115.

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.200(a), (b), 4b.201(a), (b), (c), 4b.202, 4b.300, 4b.301, 4b. 302, 4b.303, 4b.304(a), (b), 4b.306(a), (b), (d).

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 _XXXXXXXXXXXXXXXXXX_ 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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Robert M Manashi ROBERT M. MANASHI	SW-810	STRUCTURES

FAA FORM 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

GPO 901-613

AUG-04-1998 10:39

TOTAL P.01

EFTA00277794

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
N505LS	BOEING 727-31	20115	TRANSPORT

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
R 07-23-90	JAY C. WILKINS	GL07

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)

☆ U.S.G.P.O.: 1994-568-762

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AUG 0 5 1997
FAA-DALLAS SW05

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

US Department of Transportation
Federal Aviation Administration

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

Kwc

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 form 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: **Boeing**	Model: **727-31**
	Serial No.: **20115**	Nationality and Registration Mark: **N500LS**
2. Owner	Name *(As shown on registration certificate)*: **Northwest Delaware Corp.**	Address *(As shown on registration certificate)*: **1105 N Market St. Wilmington, DE 19899**

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	X
POWERPLANT					
PROPELLER					
APPLIANCE	Type:				
	Manufacturer:				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No:
Associated Air Center **8201 Lemmon Avenue** **Dallas, Texas 75220**		U.S. Certificated Mechanic	**TX2R203L** **Class 3 & 4**
		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
8/2/97	

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8/2/97	**TX2R203L**	

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.)

Aircraft: Boeing: 727-31
Registration #: N500LS
Serial #: 20115

Aircraft Total Time:31,471.2
Aircraft Total Cycles: 21,468
August 2, 1997

The following work was accomplished at Associated Air Center, Dallas, Texas under Work Order 1476.

1) **Repair - Airstair Door Actuator Attach Clip** in accordance with AAC Repair Drawing 1476-001 IR dated July 16, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 22, 1997.

2) **Repair - #1 & #3 Pylon Corrosion on Forward Engine Mounts** in accordance with AAC Repair Drawing 1476-002 IR dated July 17, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 22, 1997.

3) **Repair - #8 Leading Edge Slat Crack at I/B Slat Guide** in accordance with AAC Repair Drawing 1476-003 IR dated July 17, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 22, 1997.

4) **Repair - Corrosion on R/H Wing Upper Surface at WBL 70.5 Between Str. 1 - 14** in accordance with AAC Repair Drawing 1476-004 IR dated July 21, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 22, 1997.

5) **Repair - Floor Beam BS 600, RBL 25 Figure 8 Hole** in accordance with AAC Repair Drawing 1476-005 IR dated July 22, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 22, 1997.

6) **Repair - Aft B/B Door Interior Structure Cracked** in accordance with AAC Repair Drawing 1476-006 IR dated July 22, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 22, 1997.

7) **Repair - Wing to Body Fairing Damaged Dome Nut** in accordance with AAC Repair Drawing 1476-007 IR dated July 25, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 25, 1997.

8) **Repair of Center Engine Exhaust Nozzle** in accordance with Rohr, Inc. Engineering Repair Data Sheet No. C0625 Rev. A dated July 23, 1007, 8110-3 approved by D.E.R.(s) NM-2731, Jeffrey D. Shutrump for Structures, NM-738, Tony Bradlaugh-Dredge for Powerplant and NM-2182, Michael August for Special Administrative July 23, 1997 and AAC Repair Drawing 1476-008 IR dated July 25, 1997, 8110-3 approved by D.E.R. SW-916, Jim Martin July 25, 1997.

☒ Additional Sheets Are Attached

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

Aircraft: Boeing: 727-31
Registration #: N500LS
Serial #: 20115

Aircraft Total Time:31,471.2
Aircraft Total Cycles: 21,468
August 2, 1997

9) **Autopilot Interface Unit Modification** in accordance with AAC Drawing 97-2211-210 IR dated July 28, 1997, 8110-3 approved by D.E.R. SW-880, John W. Goswick July 28, 1997.

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

AAC-97-1E

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/22/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-001 ✓ REV. IR 7-16-97	REPAIR - AIRSTAIR DOOR ACTUATOR ATTACH CLIP

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.200	.301	.305
.201	.302	.306
.202	.303	.307(c)
.300	.304	

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 ✓ ✓ ✓ 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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION)

GPO 901-613

AAC-97-157

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/22/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-002 ✓ REV. IR 7-17-97	REPAIR - # 1 & # 3 PYLON CORROSION ON FWD ENGINE MOUNTS

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.200	.301	.305
.201	.302	.306
.202	.303	.307(c)
.300	.304	

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 1 2 3 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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
J. Martin JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION) GPO 901-613

AAC-97-158

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/22/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-003 ✓ REV. IR 7-17-97	REPAIR - # 8 L/E SLAT CRACK AT I/B SLAT GUIDE

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.200	.301	.305
.201	.302	.306
.202	.303	.307(c)
.300	.304	

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 ✓ ✓ ✓ 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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION) GPO 901-613

AAC-97-15

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/22/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-004 ✓ REV. IR 7-21-97	REPAIR CORROSION ON R/H WING UPPER SURFACE AT WBL 70.5 BETWEEN STR. 1 - 14

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.200	.301	.305
.201	.302	.306
.202	.303	.307(c)
.300	.304	

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 1 2 3 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

☑ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION) GPO 901-613

AAC-97-160

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/22/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-005 ✓ REV. IR 7-22-97	REPAIR - FLOOR BEAM STA. 600 RBL 25 FIGURE 8 HOLE
REPORT NO. 1476-005 ✓ REV. IR 7-22-97	STRUCTURAL SUBSTANTIATION - REPAIR - FLOOR BEAM STA. 600 RBL 25 FIGURE 8 HOLE

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.200, .201, .202, .300, .301, .302, .303, .304, .305, .306, .307(c)

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 ✓ ✓ ✓ 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

☑ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION) GPO 901-613

AAC-97-161

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/22/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-006 ✓ REV. IR 7-22-97	REPAIR - AFT B/B DOOR INTERIOR STRUCTURE CRACKED
REPORT NO. 1476-006 ✓ REV. IR 7-22-97	SRUCTURAL SUBSTANTIATION - REPAIR - AFT B/B DOOR INTERIOR STRUCTURE CRACKED

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.200	.301	.305
.201	.302	.306
.202	.303	.307(c)
.300	.304	

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 ✓ ✓ ✓ 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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION) GPO 901-613

AAC-97-16.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/25/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-007 ✓ REV. IR 7-25-97 ✓	REPAIR - WING TO BODY FAIRING DAMAGED DOME NUT

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.300
.304
.305

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 1 2 3 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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION) GPO 901-613

AAC-97-166

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: 7/25/97

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	ASSOCIATED AIR CENTER

LIST OF DATA

IDENTIFICATION	TITLE
REPAIR DWG. 1476-008 ✓ REV. IR 7-25-97	REPAIR - OUTER SKIN NOZZLE CENTER ENGINE

THE ABOVE DATA IS APPROVED FOR THE STRUCTURAL DESIGN ASPECT ONLY. FOR AIRCRAFT S/N 20115

INSPECTION

PURPOSE OF DATA

IN SUPPORT OF REPAIR

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.300
.304
.305

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 1 2 3 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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
JIM MARTIN	SW-916	STRUCTURES

FAA Form 8110-3 (11-70 SUPERSEDES PREVIOUS EDITION) GPO 901-613

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: JULY 28, 1997

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (*Airplane, Radio, Helicopter, etc.*)	NAME OF APPLICANT
Boeing	727-100	Airplane	Associated Air Center

LIST OF DATA

IDENTIFICATION	TITLE
Drawing No. 97-2211-210 ✓ Rev -- Date: 7/28/97	Autopilot Interface Unit Modification W/D.
----------	----------END----------

Note:
(1) The above data is approved for the electrical/ electronic and avionics design aspects only.

PURPOSE OF DATA

To Support Major Alteration on S/N 20115 Only.

APPLICABLE REQUIREMENTS (*List specific sections*)

FAR 25.869(a), 25.1301, 25.1431(c).

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 ___ XXXXXXXXX have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I ([redacted]) Therefore
- ☐ Recommend approval of these data
- ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
John W. Goswick	SW-880[redacted]	Systems & Equipment

COMPUTER GENERATED FAA Form 8110-3

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS	DATE July 23, 1997

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Boeing	727-31	Airplane	Rohr, Inc.

LIST OF DATA

IDENTIFICATION	TITLE
Rohr Inc., ERDS C0625 ✓ Revision A dated July 23, 1997	Engineering Repair Data Sheet

INSPECTION

PURPOSE OF DATA

To submit substantiating data for a repair. This constitutes approval of the repair design only.

APPLICABLE REQUIREMENTS *(List Specific Sections)*

(1)(3) FAR 25.301
(1)(3) FAR 25.303
(1)(3) FAR 25.305 (a)(b)
(2)(3) FAR 25.605 (a)
(2)(3) FAR 25.609

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
- ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVES	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
(1) Jeffrey D. Shutrump	NM-2731	Structures
(2) Tony Bradlaugh-Dredge	NM-738	Powerplant
(3) Michael August	NM-2182	Special Administrative

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION (Computer Generated by Rohr, Inc.)

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
N500LS	BOEING 727-31	20115	TRANSPORT

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
(Replacement) 07-23-90	LEE H. THIEL	GL07

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

EFTA00277822

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
ACE 5207

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: BOEING	Model: 727-100RE
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: NORTHWEST DELAWARE CORPORATION	Address *(As shown on registration certificate)*: 1105 NORTH MARKET ST. SUITE 1300 WILMINGTON, DE. 19899

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.
THE LIMITED INC. 4387 INTERNATIONAL GATEWAY COLUMBUS, OHIO 43219	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	IA301541619

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 11, 1998	Richard K Cady II

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
March 11, 1998	IA2185934	T.W. RITCHIE

FAA Form 337 (12-88)

EFTA00277824

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 FOLLOWING EQUIPTMENT:
2EA. HONEYWELL DIGITAL AIR DATA COMPUTERSP/N 7000700--962.

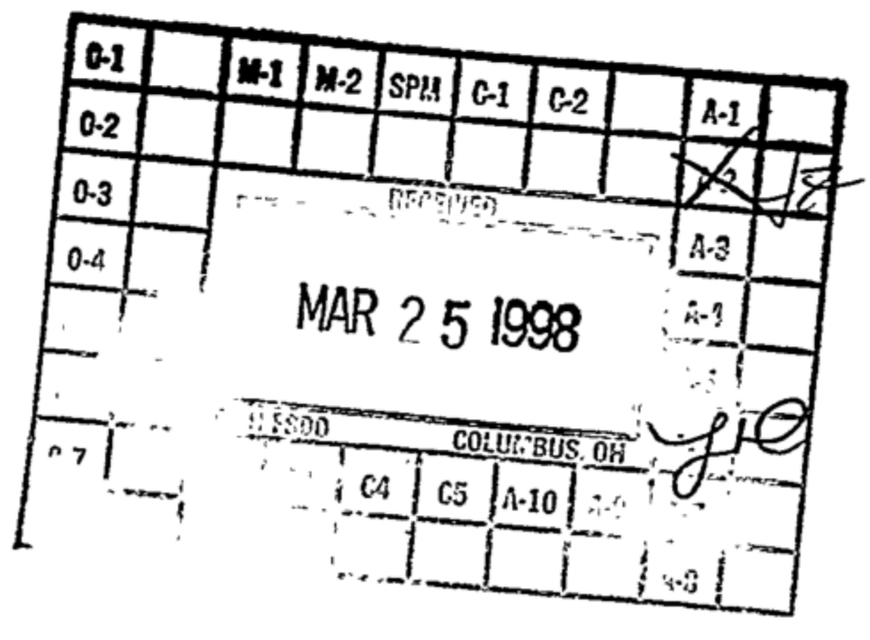
INSTALLED THE FOLLOWING EQUIPTMENT:
2 EA. HONEYWELL DIGITAL AIR DATA COMPUTERS P/N 7000700-662 WITH STATIC SOURCE ERROR CORRECTION CURVE INSTALLED IN ACCORDANCE WITH AES DRAWING LIST NO. 97-727-500 REV. B, DATED NOVEMBER 3, 1997 PER SUPPLEMENTAL TYPE CERTIFICATE ST09364sc.

FAA APPROVED FLIGHT MANUAL SUPPLEMENT, DATED OCTOBER 27, 1997 IS REQUIRED AND INSTALLED ON THIS AIRCRAFT.
WEIGHT & BALANCE NEGLIBLE.

COPY OF STC ST09364SC AND MASTER DRAWING LIST ATTACHED.

CONTINUED MAINTENANCE PRACTICES INCLUDED IN THIS PACKAGE.

END



☒ Additional Sheets Are Attached

★U.S.GPO:1991-0-568-012/40035

EFTA00277825

THE LIMITED
UR0859

RECEIVED
NOV 25 1996
FAA-DALLAS
SW05 KWC

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

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	Model
Boeing	727-31
Serial No.	**Nationality and Registration Mark**
20115	N500LS

2. Owner

Name (As shown on registration certificate)	Address (As shown on registration certificate)
Northwest Delaware Corp	1105 N. Market St Wilmington, DE 19899

3. For FAA Use Only

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

Unit	Make	Model	Serial No.	5. Repair	5. Alteration
AIRFRAME	----------(As described in item 1 above)----------				
POWERPLANT	PRATT & WHITNEY Turbo Fan Engine	JT8D-7B	P654373	X	
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Greenwich Air Services - Texas, LP 9311 Reeves Street Dallas, Texas 75235		U.S. Certificated Mechanic	RA1R445K Powerplant Class 3 Accessory Class 1,2 and 3
		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
10-30-96	

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
10-30-96	RA1R445K	

FAA Form 337 (12-88)

EFTA00277826

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.)***

Engine S/N P654373 was removed due to "SERVICE BULLETIN COMPLIANCE."

Engine was disassembled, inspected, repaired as required in accordance with Pratt & Whitney JT8D Engine Manual (P/N 481672), and Greenwich Specialized Unit Repair Workscope which are data approved by the Administrator.

Inspected/reinstalled Combustion Chamber Outer Case P/N 542155, S/N 243, T.T. & T.C. Unknown, in accordance with P&W Alert S/B 6228, Part I and Part II and AD's 87-11-07 & 95-08-15. Ps4/Drain bosses require reinspection within 6000 cycles and at each Engine shop visit. Rear flange requires reinspection within 12000 cycles and at each Engine shop visit. Case meets inspection requirements of Part III of P&W ASB 6228.

Continue timed combustion chambers.

Complied with P&W Alert S/B 5729R2 and AD 87-14-01R1; immersion ultrasonic inspect C2 fan blades.

Complied with P&W Alert 6038R5 and AD 94-20-01; corrosion inspect high pressure compressor disks.

Complied with Pratt & Whitney Alert S/B 6196R5; #5 bearing seal assembly. Improved oil return & compartment sealing configuration.

Complied with P&W Alert S/B 6110 and Alert S/B 6131, AD 94-20-08. This terminates reinspection requirements for P&W Alert S/B 5913R6, AD 93-06-05.

Engine was preserved forshort term storage IAW Pratt & Whitney JT8D Engine Manual (P/N 481672).

Engine was subjected to a test run; a post-test borescope inspection was performed and Engine was accepted as serviceable.

Engine TT: 32939.0, TC: 22557, TSR 00:00 CSR 0000.

Pertinent details of this repair are on file at this Agency under W.O. UR0859

☐ ADDITIONAL SHEETS ARE ATTACHED

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
SO-FSDO-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. 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: Boeing	Model: B727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: Northwest Delaware Corporation	Address *(As shown on registration certificate)*: 1105 N. Market Street, Wilmington, DE 19899

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.
ST Mobile Aerospace Engineering, Inc. 2100 9th. Street, Brookley Complex Mobile, AL 36615	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	MZAR013L Limited Airframe

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
November 25, 1995	Clarence Spencer

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
November 25, 1995	MZAR013L	Christopher J. Hill

FAA Form 337 (12-88)

EFTA00277828

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 DeVore Aviation Corporation tail flood light installation in engine pylons in accordance with De Vore STC ST09113AC dated 26 May 95. DeVore Top Drawing List #72700003DL Rev "A" dated 5-30-95.

Installed Valsan Winglet Modification in Accordance with Valsan Master Drawing List #VA000007, Rev "N" dated 17 April 1995. STC SA5938NM.

Aircraft Inboard and Outboard Aft Flaps and Ailerons rigged to endure functionality and conformity.

Aircraft weighed after modification. Weight and balance data provided to customer.

Aircraft total time = 31,197 hours. Total cycles = 21,345.

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

☐ Additional Sheets Are Attached

★U.S.GPO:1990-0-568-012/40004

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4/4/95

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
ID GC-07

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: BOEING	Model: B727-100
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name (*As shown on registration certificate*): NORTHWEST HOLDING CORP.	Address (*As shown on registration certificate*): P.O. Box 7138 WILMINGTON DE. 19803

3. For FAA Use Only

4. Unit Identification / 5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in Item 1 above)				
POWERPLANT					
PROPELLER					
APPLIANCE	Type: TCAS COMPUTER Manufacturer: HONEYWELL	P/N 4066010-904 (MOD. 6)	91050384		X

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
THE LIGHTER INC 4387 INTL. GATEWAY COLUMBUS, OHIO 43219	X U.S Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	IA2185934

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
7/19/94.	

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
7/19/94	IA2185934	

FAA Form 337 (12-88)

EFTA00277830

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4/4/95

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.)

TCAS COMPUTER P/N 4066010 - XXX HAS BEEN UPGRADED TO A P/N 4066010-904 (MOD. G) BY INCORPORATING HONEYWELL S/B 4066010-34-SW16 AS OUTLINED IN THE ATTACHED AIRWORTHINESS DIRECTIVE AD 94-01-04.

SYSTEM HAS BEEN OPERATIONALLY CHECKED PER S.B. 4066010-34-SW16 REV 1 DATED 2/17/94. WHICH PROVIDES AN ACCEPTABLE LEVEL OF SAFETY I.A.W. PARAGRAPH C OF AD 94-01-04 AMD. 39-8786.

PARAGRAPH B(2) OF THE ATTACHED A.D. BY (HAS BEEN FOLLOWED INCORPORATING A COPY OF THIS A.D. IN THE AIRCRAFT FLIGHT MANUAL SUPPLEMENT.

PLEASE SEE ATTACHED FAA LETTER AUTHORIZING THE APPROVAL OF AN ALTERNATE MEANS OF COMPLIANCE.

END

☐ Additional Sheets Are Attached

U.S.GPO:1991-0-568-012/40035

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4/4/95

U.S. Department of Transportation
Federal Aviation Administration

TRANSPORT AIRPLANE DIRECTORATE
AIRCRAFT CERTIFICATION SERVICE
LOS ANGELES AIRCRAFT CERTIFICATION OFFICE
3229 EAST SPRING STREET
LONG BEACH, CALIFORNIA 90806-2425

MAR 01 1994

Honeywell Inc.
Air Transport Systems Division
ATTN: Mr. F. W. (Bill) Lynch
21111 North 19th Avenue
Phoenix, Arizona 85027

References: a) Honeywell letter, dated February 17, 1994
b) Honeywell letter, dated March 1, 1994

Dear Mr. Lynch:

" Approval of an Alternate Means of Compliance "

In response to your letter of March 1, 1994, our review of the data submitted in support of a proposed alternate means of compliance with paragraph C. of AD 94-01-04 regarding Conversion of Honeywell TCAS II part No. 4066010-901, -902 and -903 (Any Mod) to part No. 4066010-904 (Mos G), has been completed.

We concur that method and procedures outlined in your revised Service Bulletin 4066010-34-SW16 Revision 1, dated February 17, 1994 provides an acceptable level of safety in accordance with paragraph C. of AD 94-01-04 Docket No. 93-NM-68-AD; Amendment 39-8786.

If there are any further question, please contact Mr. Abby Malmir at (310) 988-5351.

Sincerely,

Alan T. Shinseki
Manager, Systems and Equipment Branch

EFTA00277833

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4/4/95

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4/4/95

AIRWORTHINESS DIRECTIVE

FLIGHT STANDARDS SERVICE
REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department
of Transportation
Federal Aviation
Administration

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Federal Aviation Regulations, Part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference FAR Subpart 39.3).

94-01-04 HONEYWELL: Amendment 39-8786. Docket 93-NM-68-AD.

Applicability: Traffic Alert and Collision Avoidance System (TCAS) II computer units; part numbers 4066010-901, -902, and -903; as installed on, but not limited to, the following airplanes, certificated in any category:

Airbus Industrie Model A300-600, A310-200, A310-300, A320-200, and A340 series airplanes;

Boeing Model 727-100 and -200; 737-100, -200, -300, -400, and -500; 747-100, -200, -300, -400 and 747SP; 757-200; and 767-200 and -300 series airplanes;

Cessna Citation Model C550 and C560 series airplanes, and Cessna Citation III and VII series airplanes;

Canadair Challenger Model CL-600-2B16 and -2A12 series airplanes;

British Aerospace Model 125-800A;

Gulfstream Model GII, GIIB, GIII, and GIV series airplanes;

Lockheed Model L-1011 series airplanes;

McDonnell Douglas Model DC-9-10, -20, -30-, -40, and -50; DC-10-10, -15, -30, and -40; MD-11; and DC-9-80 series airplanes; and Model MD-88 airplanes;

Dassault Aviation Model Mystere-Falcon 50 and 900 series airplanes;

Short Brothers Model SD3-60 series airplanes;

de Havilland Model DHC-8-100 and DHC-7 series airplanes;

Fokker Model F27 series airplanes; and

Corporate Jets Limited Model BAe 125-800A and BAe 125-1000A series airplanes.

Compliance: Required as indicated, unless accomplished previously.

To prevent collisions or near misses caused by incompatibility between the TCAS II processors and the current air traffic control system, accomplish the following:

(a) Before December 31, 1994, accomplish the requirements of paragraphs (a)(1) and (a)(2) of this AD in accordance with Honeywell Service Bulletin 4066010-34-SW16, dated December 20, 1993.

(1) Remove existing Honeywell TCAS II computer units, part numbers 4066010-901, -902, and -903, and replace those units with new units that incorporate updated collision avoidance system (CAS) logic, identified as Version 6.04A in Mitre letter F046-L-0069, dated September 21, 1993.

(2) Modify the computer surveillance logic on Honeywell TCAS II computer units, part numbers 4066010-901, -902, and -903, to ensure that these units accommodate Mode C altitude input of 100-foot increments and that the system will be tracked and coordinated by intruding aircraft when the Mode S transponder CA field is set at CA=7.

(b) Prior to further flight after accomplishing the requirements of paragraph (a) of this AD, revise the Airplane Flight Manual (AFM) or AFM Supplement by accomplishing either paragraph (b)(1) or (b)(2) of this AD:

(1) Revise the Normal Procedures Section of the AFM to include the appropriate TCAS operating characteristic relative to the modifications required by paragraph (a) of this AD, in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Or

(2) Revise the Normal Procedures Section of the AFM to include the following TCAS operating characteristic relative to the modification required by paragraph (a) of this AD. This may be accomplished by inserting a copy of this AD in the AFM or AFM Supplement:

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 4/4/95

"All Resolution Advisory (RA) and Traffic Advisory (TA) aural messages are inhibited at a radio altitude of less than 1,100 feet above ground level (AGL) climbing, and less than 900 feet AGL descending."

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Avionics Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(d) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The replacement and modification shall be done in accordance with Honeywell Service Bulletin 4066010-34-SW16, dated December 20, 1993. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from Honeywell Inc., Commercial Flight Systems Group, Air Transport Systems Division, P.O. Box 21111, Phoenix, Arizona 85036. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on February 4, 1994.

FOR FURTHER INFORMATION CONTACT:

Abby Malmir, Aerospace Engineer, Systems and Equipment Branch, ANM-132L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California 90806-2425; telephone (310) 988-5351; fax (310) 988-5210.

Tail No.	Prod. No.	Aircraft/APU Hours	Aircraft Flights	Date
Code No.	GI ___ GII ___ GIII ___ GIV X			
999405				

— NOT APPLICABLE
— COMPLIED WITH
— DEFERRED UNTIL _____

THE ABOVE ITEM IS DUE ON _____

PLEASE COMPLETE THIS FORM AND SEND IT IN WHEN THE ITEM IS COMPLIED WITH.

SIGNATURE _____

CERTIFICATE NUMBER _____

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 10-12-94

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: ASO-FSDO-15

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: BOEING	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: NORTHWEST HOLDING CORP.	Address *(As shown on registration certificate)*: 1105 N. MARKET STREET WILMINGTON, DE 19899

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.
PAGE AVJET CORPORATION 9809 TRADEPORT DRIVE ORLANDO, FLORIDA 32827	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	OS4R425M

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
2 SEPT. 1994	ROBERT CLAMBAU

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
9/2/94	OS4R425M	GARY R. GOUTERMAN

FAA Form 337 (12-88)

EFTA00277836

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 10-12-94

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.)

727-31 S/N 20115 N500LS

1. INSTALLED A DORNE & MARGOLIN EMERGENCY LOCATION TRANSMITTER (ELT) SYSTEM IN ACCORDANCE WITH PAGE AVJET REPORT PR 91-22 REV. A, DATED 8/15/94 AND MDL-91-02 REV. B, DATED 8/10/94 AND APPROVED PER 8110-3 BY DER MARION SHIN, SO-339, DATED AUGUST 16, 1994.

SUMMARY:

1. PROVIDED WEIGHT & BALANCE UPDATE.
2. EQUIPMENT LIST UPDATED ACCORDINGLY.
3. ALL SYSTEMS OPS CHECKED AND DO NOT INTERFERE WITH OTHER SYSTEMS.
4. ALL PERTINET DETAILS OF WORK ACCOMPLISHED ARE ON FILE AT THIS REPAIR STATION OS4R425M UNDER WORK ORDER 60298, DATED SEPTEMBER 2, 1994.

END

☐ Additional Sheets Are Attached

★U.S.GPO:1991-0-568-012/40035

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 10-12-94

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 ASO-FSDO-15

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: NORTHWEST HOLDING CORP.	Address *(As shown on registration certificate)*: 1105 N. Market Street, Wilmington, DE 19899

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.
Page Avjet Corporation 9809 Tradeport Drive Orlando, Florida 32827	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	OS4R425M

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 SEPTEMBER 1994

Signature of Authorized Individual: ROBERT CLAMAN

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
2 SEPT. 94	OS4R425M	GARY R. GONTERMAN

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 10-12-94

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.)

727-31 S/N 20115 N500LS

1. REPAIRED CORROSION ON THE LOWER FORWARD CORNER OF THE AFT CARGO DOOR BEAR STRAP IN ACCORDANCE WITH PAGE AVJET E.O. NO. 53-30-02838 DATED 8/11/94 AND APPROVED PER 8110-3 BY DER MARION SHIN, SO-339, DATED AUGUST 22, 1994.

2. REPAIRED DOUBLE DRILLED HOLES IN B.S. 940 MOD KIT BRACKET IN ACCORDANCE WITH PAGE AVJET E.O. NO. 53-10-02839 DATED 8/10/94 AND APPROVED PER 8110-3 BY DER MARION SHIN, SO-339 DATED AUGUST 22, 1994.

SUMMARY:

1. ALL PERTINENT DETAILS OF WORK ACCOMPLISHED ARE ON FILE AT THIS REPAIR STATION OS4R425M UNDER WORK ORDER 80298, DATED 2 SEPT. 94.

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

☐ Additional Sheets Are Attached

★U.S GPO:1991-0-568-012/40035

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 10-12-94

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: ASO-FSDO-15

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	Model
Boeing	727-31
Serial No. 20115	**Nationality and Registration Mark** N500LS

2. Owner

Name *(As shown on registration certificate)*	Address *(As shown on registration certificate)*
NORTHWEST HOLDING CORP.	1105 N. Market Street Wilmington, DE 19899

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.
Page Avjet Corporation 9809 Tradeport Drive Orlando, Florida 32827	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	OS4R425M

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
2 SEPTEMBER 1994	ROBERT CLAMAN

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
2 SEPT. 94	OS4R425M	GARY R. GONTERMAN

FAA Form 337 (12-88)

- FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 10-17-94

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.)

727-31 S/N 20115 N500LS

1. RELOCATED ACCESS PANEL FROM B.S. 1183 TO B.S. 1350 LH AND RH BETWEEN STRINGERS S4 TO S7 IN ORDER TO FACILITATE ACCESS FOR FREQUENT INSPECTION TO TERMINAL FITTING IN ACCORDANCE WITH PAGE AVJET E.O. NO. 53-30-02837 DATED 7/28/94 AND APPROVED PER 8110-3 BY DER MARION SHIN, SO-339 DATED AUGUST 22, 1994.

SUMMARY:

1. ALL PERTINENT DETAILS OF WORK ACCOMPLISHED ARE ON FILE AT THIS REPAIR STATION OS4R425M UNDER WORK ORDER 60298, DATED 2 SEPT. 94.

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

☐ Additional Sheets Are Attached

★U.S.GPO:1991-0-568-012/40035

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 10-1-93

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 SO-FSDO-15

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: NORTHWEST HOLDING CORP.	Address *(As shown on registration certificate)*: 1105 N. Market Street, Wilmington, DE 19899

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.
Page Avjet Corporation 9809 Tradeport Drive Orlando, FL 32827	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	OS4R425M

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
8/25/93	ANTHONY V. BARONI

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
8/25/93	OS4R425M	GARY R. GONTERMAN

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 10-1-93

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.

21.8023.0

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

B727-31 S/N 20115 N500LS

1. INSTALLED HONEYWELL TCAS II SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3094SO.

SUMMARY:

1. AIRCRAFT WEIGHT AND BALANCE UPDATED ACCORDINGLY.
2. EQUIPMENT LIST UPDATED ACCORDINGLY.
3. ALL SYSTEMS INSTALLED OPERATIONALLY CHECKED AND DO NOT INTERFERE WITH ANY OTHER SYSTEMS.
4. ALL ENGINEERING AND WORK ACCOMPLISHED AT PAGE AVJET CORPORATION REPAIR STATION UNDER WORK ORDERS 7492, 8112 AND 9301.
5. AIRCRAFT TEST FLOWN BY FAA FLIGHT TEST ACO ATLANTA. ALL SYSTEMS CHECKED NORMAL. ALL WORK ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE DATA.

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

☐ Additional Sheets Are Attached

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

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 11-6-92

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 SO-FSDO-15

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: Northwest Holding Corporation	Address *(As shown on registration certificate)*: P.O. Box 7138 Wilmington, DE 19803

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.
Page Avjet Corporation 9809 Tradeport Drive Orlando, Florida 32827	___ U.S. Certificated Mechanic ___ Foreign Certificated Mechanic X Certificated Repair Station ___ Manufacturer	OS4R425M

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: 31, August 1992

Signature of Authorized Individual: James F. Wright

7. Approval for Return To Service

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

BY	___	FAA Standards Inspector		Manufacturer		Inspection Authorization
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group

Other *(Specify)*

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
31 August 1992	OS4R425M	David H Latimer DAVID H LATIMER

Form

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 11-6-92

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.)

B727-31 S/N 20115 N500LS

1. MODIFIED SECOND BATTERY SYSTEM PER PAGE AVJET CORPORATION STC SA3092SO, MASTER DRAWING LIST MDL-91-37, REV. A.

2. MODIFIED EDZ-805 EFIS PER PAGE AVJET CORPORATION STC SA3085SO, MASTER DRAWING LIST MDL-91-44, REV. A.

3. MODIFIED FMS-800 FLIGHT MANAGEMENT SYSTEM PER PAGE AVJET CORPORATION STC SA3089S0, MASTER DRAWING LIST MDL-91-43, REV. A (NZ-9112 SOFTWARE).

SUMMARY:

1. PROVIDED WEIGHT AND BALANCE UPDATE.

2. EQUIPMENT LIST UPDATED ACCORDINGLY.

3. ALL SYSTEMS OPS CHECKED AND DO NOT INTERFERE WITH OTHER SYSTEMS.

4. ALL PERTINENT DETAILS OF WORK ACCOMPLISHED ARE ON FILE AT PAGE AVJET CORPORATION UNDER WORK ORDER 9286, DATED AUGUST 31, 1992.

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

☐ Additional Sheets Are Attached

*U.S.GPO:1989-0-003-171

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 6-9-92

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 SO-FSDO-15

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: Northwest Holding Corporation	Address *(As shown on registration certificate)*: P.O. Box 7138, Wilmington, DE 19803

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.
Page Avjet Corporation 9809 Tradeport Drive Orlando, Florida 32827	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	OS4R425M

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: 27 Jan 92

Signature of Authorized Individual: John Keating JOHN F KEATING

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
22 JAN 1992	OS4R425M	David H Latimer DAVID H LATIMER

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 6-9-92

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.)

B727-31 S/N 20115 N500LS

1. INSTALLED SUNDSTRAND MARK VII WINDSHEAR DETECTION/GROUND PROXIMITY WARNING SYSTEM (GPWS) IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3133SO.

SUMMARY:

1. AIRCRAFT WEIGHED AND NEW WEIGHT AND BALANCE COMPUTED.
2. EQUIPMENT FURNISHING LIST UPDATED ACCORDINGLY.
3. ALL SYSTEMS INSTALLED. OPERATIONALLY CHECKED AND DO NOT INTERFERE WITH ANY OTHER SYSTEMS.
4. ALL WORK ACCOMPLISHED AT PAGE AVJET CORPORATION REPAIR STATION AND IS ON FILE UNDER WORK ORDERS 4784 AND 8112.
5. AIRCRAFT TEST FLOWN BY CUSTOMER AND ALL SYSTEMS CHECKED NORMAL.
6. AIRCRAFT TEST FLOWN BY FAA FLIGHT TEST ACO ATLANTA. ALL SYSTEMS CHECKED NORMAL. ALL WORK ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE DATA.

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

☐ Additional Sheets Are Attached

*U.S.GPO:1989-0-663-171

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 6-9-92

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 SO-FSDO-15

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: Boeing	Model: 727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: Northwest Holding Corporation	Address *(As shown on registration certificate)*: P.O. Box 7138, Wilmington, DE 19803

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.
Page Avjet Corporation 9809 Tradeport Drive Orlando, Florida 32827	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	OS4R425M

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: 22, JANUARY 1992

Signature of Authorized Individual: James F. Wright Jr.

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
22 JAN 1992	OS4R425M	DAVID H LATIMER

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 6-9-92

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.)

B727-31 S/N 20115 N500LS

1. INSTALLED EXECUTIVE INTERIOR IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3137SO.

2. INSTALLED HONEYWELL EDZ-805 ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS) IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3085SO.

3. INSTALLED MODE "S" TRANSPONDER IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3095SO.

4. INSTALLED JAMCO SMOKE DETECTORS IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3132SO.

5. INSTALLED DUAL HONEYWELL AA-300 RADIO ALTIMETER SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3087SO.

6. INSTALLED HONEYWELL PRIMUS 870 RADAR SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3086SO.

7. INSTALLED HONEYWELL FMZ-800 FLIGHT MANAGEMENT SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3089SO.

8. INSTALLED DUAL COLLINS PROLINE II COMMUNICATION AND NAVIGATION SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3090SO.

9. INSTALLED HONEYWELL TCAS II SYSTEM PROVISIONS IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3094SO.

10. RELOCATED FIRE "T" HANDLES IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3111SO.

11. INSTALLED FAIRCHILD II PARAMETER FLIGHT DATA RECORDER IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3091SO.

12. INSTALLED DUAL 40 AMP HR NICKEL CADMIUM BATTERY SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3092SO.

13. INSTALLED DUAL HONEYWELL ADZ-800 DIGITAL AIR DATA SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3088SO.

14. INSTALLED AES AUTOPILOT INTERFACE UNIT IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3093SO.

Additional Sheets Are Attached

★U.S.GPO:1989 O 663-171

FAA AIRCRAFT REGISTRY
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15. INSTALLED HYDRAULIC ACOUSTICAL FILTER IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA3136SO.

16. INSTALLED ESSENTIAL POWER SELECTION SYSTEM IN ACCORDANCE WITH PAGE AVJET CORPORATION STC SA2590SO.

SUMMARY:

1. AIRCRAFT WEIGHED AND NEW WEIGHT AND BALANCE COMPUTED.

2. EQUIPMENT FURNISHING LIST UPDATED ACCORDINGLY.

3. ALL SYSTEMS INSTALLED. OPERATIONALLY CHECKED AND DO NOT INTERFERE WITH ANY OTHER SYSTEMS.

4. ALL WORK ACCOMPLISHED AT PAGE AVJET CORPORATION REPAIR STATION AND IS ON FILE UNDER WORK ORDERS 4784 AND 8112.

5. AIRCRAFT TEST FLOWN BY CUSTOMER AND ALL SYSTEMS CHECKED NORMAL.

6. AIRCRAFT TEST FLOWN BY FAA FLIGHT TEST ACO ATLANTA. ALL SYSTEMS CHECKED NORMAL. ALL WORK ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE DATA.

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

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 6-9-92

FAA AIRCRAFT REGISTRY
CAMERA NO 3 N DATE: 9 - 27 - 91

43 JAN 28 1991

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

US Department of Transportation
Federal Aviation Administration

APPLICATION FOR AIRWORTHINESS CERTIFICATE

500L 9

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
N505C	BOEING	727-31	1969	1384010
5. AIRCRAFT SERIAL NO. 20115	6. ENGINE BUILDER'S NAME (Make) PRATT & WHITNEY	7. ENGINE MODEL DESIGNATION JT8D-7B (1EA) JT8D-29C (2EA)		52053
8. NUMBER OF ENGINES 3	9. PROPELLER BUILDER'S NAME (Make) N/A	10. PROPELLER MODEL DESIGNATION N/A	11. AIRCRAFT IS (Check if applicable) IMPORT	

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A 1 [X] STANDARD AIRWORTHINESS CERTIFICATE (Indicate category) — [ ] NORMAL [ ] UTILITY [ ] ACROBATIC [X] 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)

NAME: NORTHWEST HOLDING CORP. — IF DEALER, CHECK HERE →

ADDRESS: 1409 FOULK RD. PO. BOX 7138 WILMINGTON DELAWARE 19803

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.): A3WE

[X] AIRWORTHINESS DIRECTIVES (Check all applicable AD's complied with and give latest AD No.): AD90-12-11

[ ] AIRCRAFT LISTING (Give page number(s)): N/A

[X] SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated): SA4363NM July 23, 1990

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

[X] CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173.

TOTAL AIRFRAME HOURS: 29916.1

[X] EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed): 94.7 HRS.

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: July 23, 1990

NAME AND TITLE (Print or type): TIMOTHY W. RITCHIE Timothy W. Ritchie CHIEF OF MAINT.

SIGNATURE: Timothy W. Ritchie

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 [X] 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
7/23/90	8	4	WMC DAR-41-F5-NM	1	

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

FAA AIRCRAFT REGISTRY
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*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)*
- ✓ D. Current Weight and Balance Information Available in Aircraft
- ✓ E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*
- ✓ 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 21.183 (d) FAR 91.(a)(1) *(Original Attached)*
- ✓ J. Current Airworthiness Certificate Issued in Accordance with FAR 21.183(d) *(Copy attached)*

EFTA00277853

FAA AIRCRAFT REGISTRY
CAMERA NO 3 N DATE: 9 - 27 - 91

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
N505C	BOEING 727-31	20115	TRANSPORT

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
7/23/90	WING C. CHIN	DAR-41-FS-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
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FAA AIRCRAFT REGISTRY
CAMERA NO 3 N DATE: 9 - 27 - 91

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 NM-FSPO-01

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. 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	Model
BOEING	727-100
Serial No.	**Nationality and Registration Mark**
20115	N505C

2. Owner

Name (As shown on registration certificate)	Address (As shown on registration certificate)
NORTHWEST HOLDING CORPORATION	1409 Foulk Road, P.O. Box 7138 Foulkstone Plaza, Suite 102 Wilmington, Delaware 19803

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
North American Aircraft
Rockwell International Corporation
2825 E. Avenue P
Palmdale, Ca. 93550

B. Kind of Agency

	U.S. Certificated Mechanic
	Foreign Certificated Mechanic
X	Certificated Repair Station
	Manufacturer

C. Certificate No.
Airframe Class 4
Limited Powerplant
Class 3
NXAR688K

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: July 20, 1990

Signature of Authorized Individual: D. A. Perazzo

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
July 20, 1990	NXAR688K	D. A. Perazzo

FAA Form 337

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NOTICE

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

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

A. Modified Boeing Model 727-100 , Serial Number 20115, in accordance with supplemental type certificate SA4363NM, amended September 1, 1989 as follows:
1. Valsan-Boeing 727-200 Re-engining Document VA000001, Revision F, dated January 15, 1990.
2. The following drawings and engineering orders (EO's) are in addition to the above document:

NOTE: "VA" denotes Valsan Drawing.

a. Chapter 24 ELECTRICAL POWER

VA240000	A	Electrical System Instl. - Strut E.O.: 003A, 101
VA240007	E	Panel-Load Control Center Modification E.O.: 003A, 004, 005, & 006

b. Chapter 28 FUEL SYSTEM INSTALLATION, STRUT

VA280001	B	Tube Assy - Fuel Strut Feed Thru E.O.: 100

c. Chapter 48 MISC

VA481100	A	Pressure Buldhead Reinforcement Sect. 48-727 E.O.: 101, 102
VA481200	C	Frame Assy Sta 1263 E.O.: 101, 103
VA481300	C	Fuselage Skin E.O.: 106, 114A, 114, 116
VA481324	NC	Intercostal Assy - BSTA 1223 to BSTA 1243 W/L244.39 E.O: 106
VA481325	NC	Intercostal Assy - BSTA 1223 to BSTA 1243 W/L234.06 E.O: 105

d. Chapter 53 FUSELAGE STRUCTURE

VA530001	B	Ballast Weight Installation E.O: 100, 102
VA530003	C	Ballast Weight, Support Structure Assy. E.O.: 002,100
VA530004	NC	Ballast Weight Instl. STA 312 - 360 E.O.: 002, 100

e. Chapter 54 NACELLES & PYLONS

VA543000	C	Main Strut Assy (Sh. 1, 2, & 5) E.O.: 003
VA543100	D	Firewall Rib, Side Engine E.O: 36A, 003A

f. Chapter 71 POWER PLANT

VA710000	NC	Power Plant Instl. - Engine Pod V727RE E.O.: 002, 105B, 109, 108, 001A, 104A, 005A, 004, 110, 003, 111, 006A

g. Chapter 73 ENGINE FUEL AND CONTROL

VA732301	K	Approach Idle Solenoid Wiring Diagram E.O: 002(Rev L), 002 (Rev. M), 003(Rev. M)
VA732303	D	Relay Instl. - Approach Idle Solenoid E.O.: 103, 003, 100B
VA732304	D	Switch/IND Light Instl - Approach Idle E.O.: 002,
VA732310	A	Switch Instl. - Nose Gear Position Approach Idle E.O.: 103
VA732315	NC	Relay Instl. Pilots Overhead Panel E.O.: 100, 002, 101

h. Chapter 76 ENGINE CONTROL

VA760000	A	Engine Controls Instl. - Strut E.O.: 002A
VA760014	A	Drum Instl. - Eng. Controls E.O.: 100, 101
VA760015	A	Bracket Assy - Pulley ESTA 100 E.O.: 105

☒ Additional Sheets Are Attached

★U.S.GPO:1989-0-663-171

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DESCRIPTION OF WORK ACCOMPLISHED (Continued)

Serial No. 20115

i. Chapter 77 ENGINE INDICATING

VA771005	NC	Indicator Engine Pressure Ratio EPR, E.O.: 001

j. Chapter 78 ENGINE EXHAUST

VA780000	B	Engine Strut Controls Instl. E.O.: 002
VA783010	E	Flt Deck Indicator Instl. T/R Sys. E.O.: 003, 004
VA783011	F	Thrust Reverser System Wiring Diagram E.O.: 002 (Rev. G)
VA783013	D	Support Bracket Assy - T/R Control Valve R/S E.O.: 100 (Rev. E
VA783017	J	Placards E.O.: 007, 008
VA783024	B	Relay Instl. - Thrust Reverser Control E.O.: 003
VA783028	A	Mixer, Exhaust - Instl. 727E E.O.: 100
VA783101	C	No. 2 Engine T/R Wiring Deactiviation E.O.: 002

k. Chapter 91 CHARTS

VA910002	A	Instl. - Electrical Wire Harness E.O.: 003, 004, 005,006, 007
* VA910008	NC	Wire List V727RE E.O.: 001, 002, 003

*NEW DRAWINGS ADDED TO MODIFICATION

B. Boeing 727 Service Bulletin 727-53A0171, dated December 14, 1989.
Subject: Fuselage - Station 1182
Pressure Bulkhead web,
Crack Repair and Preventive
Modification

C. The aircraft empty weight and center of gravity was revised in accordance with Boeing Weight and Balance Manual D6-21100. Weight and Blanace Manual Supplement, VA-CR279 is attached.

D. VA000003, Rev. A, Dated 4-4-90 is equivalent to VA000001, Rev. F, dated 1-15-90.

END

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FUSELAGE ECCO11

WEIGHING RECORD & CHECK LIST

STATION PAE DATE 2/15/90

AIRCRAFT MODEL B727-100 REG. NO. N505C SER. NO. 20115

A/C INTERIOR CONFIGURATION AIRESEARCH EXECUTIVE

1. PERSONNEL ACCOMPLISHING THE CHECK LIST WILL INITIAL EACH ITEM IN THE APPLICABLE BLOCK FOR PARTS A THROUGH D. N/A BLOCKS NOT APPLICABLE TO A/C BEING WEIGHED.
2. ALL BOTTLES (O_2, CO_2, H_2O) SHOULD BE IN NORMAL OPERATIONAL CONDITION.
3. ANY DEVIATION FROM THIS LIST MUST BE COORDINATED WITH CHIEF INSPECTOR OR HIS DESIGNEE.
4. ON COMPLETION OF PARTS A THROUGH D THE FOREMAN/LEAD MECHANIC OR ASSIGNED INSPECTOR WILL CHECK & SIGN FORM BEFORE PROCEEDING WITH WEIGHING.

		Checked By			Checked By
A.	**FLUIDS**				
1.	FILL ENG. OIL SYSTEMS & TANKS FULL		6.	LAVATORIES CLEANED & VACUUMED	
2.	ALL FUEL TANKS DRAINED USING DRAIN PLUGS WITH AIRCRAFT LEVEL		7.	ALL MAGAZINES, NEWSPAPERS & SEAT BACK LITERATURE REMOVED	
3.	DRINKING & WASH WATER TANKS DRAINED [✓] FILLED [ ]		8.	PROTECTIVE ENTRY, AISLE & STAIR COVERS REMOVED	
4.	HYDRAULIC SYSTEMS FULL		9.	WINDSCREEN STOWAGE EMPTY & CLEAN	
5.	TOILETS SERVICED TO NORMAL QUANTITY		10.	STOWAGE COMPARTMENTS ON FWD. & AFT. LAV. BULKHEADS EMPTY	
6.	SEAPLANES: DRAIN HULL & WING FLOATS COMPLETELY				
B.	**CONTROL CABIN**		D.	**CARGO, LANDING GEAR & POWERPLANT**	
1.	ALL INSTRUMENT PANELS COMPLETE		1.	ENGINE FIRE BOTTLES CHARGED	
2.	ALL MANUALS, CHECKLISTS, LOG BOOKS, FORMS & OTHER WRITTEN MATERIAL REMOVED		2.	ALL ENGINES COMPLETE I.E., ACCESSORIES, PLUMBING, ETC.	
3.	ALL CREW SEATS COMPLETE WITH SEAT BELTS & HARNESSES INSTALLED		3.	ALL COWLING & PANELS IN PLACE & SECURED	
4.	FLIGHT ENGINEERS TABLE EMPTY & CLEAN EXCEPT FOR STRETCHER KIT		4.	BRAKE AIR BOTTLE CHARGED	
C.	**PASSENGER CABIN**		5.	ALL AVIONICS EQUIPMENT INSTALLED	
1.	REMOVE ALL ITEMS FROM HATRACKS EXCEPT MEGAPHONES, FIRST AID KIT, MOUNTED OXY. BOTTLES, DEMO OXY. MASK & LIFE VEST IN POUCH		6.	FWD. & AFT. CARGO COMPARTMENT EMPTY & CLEANED	
2.	ALL PASSENGER SERVICE EQUIPMENT REMOVED FROM GALLEY		7.	MAIN OXYGEN SYSTEM SERVICED FULL	
3.	ALL SERVICE EQUIPMENT REMOVED FROM FWD. & AFT. LAVATORIES		8.	MAIN BATTERY & AUX. BATTERY (IF USED) INSTALLED	
4.	ALL GALLEY AREAS CLEANED & VACUUMED		9.	CARGO DOORS & FAIRINGS CLOSED & LATCHED	
5.	PASSENGER CABIN CLEANED & VACUUMED		10.	ALL TIRES INFLATED TO OPERATING PRESSURE	

1. PARTS (A.) THROUGH (D.) CHECKED & COMPLETE

2. STANDARD INTERIOR CONFIG. EQUIP. LIST COMPLETED

AIRCRAFT READY FOR WEIGHING

J. A
OES AUDIT * Not Applicable

PETERSON
OES AUDIT

.972
Foreman/Lead Mech. Or Inspector

.972
Foreman/Lead Mech. Or Inspector

.972
Foreman/Lead Mech. Or Inspector

SIGN OFF COPY

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AIRCRAFT WEIGHING

SCALES: MAKE EVERGREEN MODEL 830C

SERIAL NO. 1069 CALIBRATION DATE 5-3-90

FIRST WEIGH

REACTION	SCALE READING	CALIBRATION CORRECTION	CELL DRIFT	TARE	NET WEIGHT
LEFT (MLG) WING 1/	47735	-20	Ø	Ø	47715
RIGHT (MLG) WING 1/	48800	-50	Ø	Ø	48750
(NOSE) TAIL	4345	+10	Ø	Ø	4355
				NET WEIGHT TOTAL	100,820

1/ CIRCLE REACTION USED

SECOND WEIGH

REACTION	SCALE READING	CALIBRATION CORRECTION	CELL DRIFT	TARE	NET WEIGHT
LEFT MLG / WING	47950	-50	Ø	Ø	47900
RIGHT MLG / WING 1/	48410	+10	Ø	Ø	48420
NOSE/TAIL	4365	Ø	Ø	Ø	4365
				NET WEIGHT TOTAL	100,685

1/ CIRCLE REACTION USED

1. WEIGHING COMPLETED D. Fred 972
Foreman/Lead Mech. Or Inspector

2. WITNESSED & ACCEPTED Warren E Stewart 434
Chief Inspector Or Designee

NOTE: PART F. AND SUBSEQUENT PARTS TO BE ACCOMPLISHED BY THE QUALITY CONTROL SECTION.

F. NET WEIGHT AVERAGE

	LEFT MLG / WING	RIGHT MLG / WING	NOSE/TAIL
FIRST WEIGH	47715	48750	4355
SECOND WEIGH	47900	48420	4365
TOTAL	95615	97170	8720
AVERAGE	47807.5	48585	4360

COMPUTED BY Warren E. Stewart 434 CHECKED BY Fred Litteric 1588

EFTA00277864

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BASIC EMPTY WEIGHT COMPUTATION

N 505C DATE 7-14-90

	REACTION	NET WEIGHT	ARM	MOMENT
1. CIRCLE REACTIONS USED. 2. ENTER AVERAGED NET WEIGHTS FROM PART F.	LEFT (MLG) WING	47,807.5	950.2	45,426,686.5
	RIGHT (MLG) WING	48,585	950.2	46,165,467
	(NOSE) TAIL	4,360	183.2	798,752
	- BALAST	-1,200	231.2	-277,440
(1)	TOTAL AS WEIGHED	99,552.5	925.27	92,113,465.5
BEW ITEMS NOT ON AIRCRAFT AT WEIGHING. ATTACH SUPPLEMENT IF ADDITIONAL SPACE IS REQUIRED				
(2)	SUB TOTAL (+)			
ITEMS WEIGHED BUT NOT TO BE INCLUDED IN BEW. ATTACH SUPPLEMENT IF ADDITIONAL SPACE IS REQUIRED				
(3)	SUB TOTAL (-)			
(1) + (2) - (3) = BASIC EMPTY WEIGHT		99,552.5	925.27	92,113,465.5

PREPARED BY Wayne E Stewart 434 CHECKED BY Fred L Harig 1508

EFTA00277866

FAA AIRCRAFT REGISTRY
CAMERA NO 3 N DATE: 9 - 27 - 91



FAA AIRCRAFT REGISTRY
CAMERA NO 3 N DATE: 9 - 27 - 91

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	SHOW COMPLIANCE WITH FAR / MARKET SURVEY	
B	MANU-FACTURER	NAME N/A	
		ADDRESS N/A	
C	FLIGHT	FROM N/A	
		TO N/A	
D	N- 505C		SERIAL NO. 20115
	BUILDER BOEING		MODEL 727-31
E	DATE OF ISSUANCE 05-01-90		EXPIRY 08-01-90
	OPERATING LIMITATIONS DATED 05-01-90		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE Michael J. Larson		DESIGNATION OR OFFICE NO. SEA-MIDO, ANM-108S
	MICHAEL J. LARSON		

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. 3 N DATE: 9 - 27 - 91

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 N DATE: 9 - 27 - 91

U.S. Department of Transportation
Federal Aviation Administration

Manufacturing Inspection District Office
7300 Perimeter Road South
Seattle, WA 98108

May 1, 1990

EXPERIMENTAL - SHOW COMPLIANCE WITH FAR's/MARKET SURVEY

MAKE: Boeing MODEL: 727-31 SERIAL NO. 20115 REG. NO. N505C

THESE OPERATING LIMITATIONS SHALL BE ACCESSIBLE TO THE PILOT

This aircraft must be operated in accordance with the following limitations:

1. No person may operate this aircraft for other than the purpose of Show Compliance with the FAR's and Market Survey to accomplish the tests outlined in the applicant's program letter dated May 1, 1990 describing compliance with FAR 21.193(d). Additionally, this aircraft shall be operated in accordance with applicable air traffic and general operating rules of FAR 91, and all additional limitations herein prescribed under the provisions of FAR 91.42(e).

2. All flights shall be conducted within the geographical areas described as follows:

   1. Western United States of America bounded on the East by the Mississippi River, on the North by the U.S.A./Canadian border, on the South by the U.S.A./Mexico border, and bounded on the West by no more than 200 miles from the West Coast of the United States of America.

   2. Base of operations is Palmdale/Lancaster Airport, Palmdale, California and secondary base of operation to be Moses Lake Airport, Moses Lake, Washington.

3. The pilot-in-command of aircraft must, as applicable, hold an appropriate category/class rating, have an aircraft type rating, have a flight instructor's log book endorsement 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 Boeing Low Utilization Program, I/A/W FAR 91.169(f)(4).

5. Upon changing between operating purposes of a Multiple Purpose Certificate, the operator shall determine that the aircraft is in a condition appropriate for the purpose intended and has documented that finding in the aircraft log.

6. This aircraft shall contain the placards, markings, etc. required by FAR 91.31.

FAA AIRCRAFT REGISTRY
CAMERA NO 3 N DATE: 9 - 27 - 91

FAA AIRCRAFT REGISTRY
CAMERA NO 3 N DATE: 9 - 27 - 91

7. The cognizant FAA 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.

8. This aircraft approved for day/night VFR/IFR only.

9. No operations shall be conducted over densely populated areas or in congested airways except for takeoffs and landings, and when under ATC control.

10. No person may be carried in this aircraft during flight unless that person is essential for the purpose of the flight while in the Show Compliance category.

11. 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 unless approved by the cognizant FAA office.

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

13. After the aircraft has been re-engined, the pilot-in-command must make a log book entry stating the aircraft complies with FAR 91.42(a) and FAR 91.42(b).

Michael J. Larson
Aviation Safety Inspector (Mfg)
SEA-MIDO, ANM-108S

These limitations will expire on August 1, 1990.

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 N DATE: 9 - 27 - 91

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

M6 Cpa

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
VNY 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).

RECEIVED FAA
JUL 24 1990
VNY FSDO

1. Aircraft	Make: BOEING	Model: 727-100
	Serial No.: 20115	Nationality and Registration Mark: N505C
2. Owner	Name *(As shown on registration certificate)*: NORTHWEST HOLDING CORPORATION	Address *(As shown on registration certificate)*: 1409 Foulk Road, P.O. Box 7138 Foulkstone Plaza, Suite 102 Wilmington, Delaware 19803

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.
North American Aircraft Rockwell International Corporation 2825 E. Avenue P Palmdale, Ca. 93550	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	Airframe Class 4 Limited Powerplant Class 3 NXAR688K

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 20, 1990	D. A. Perazzo

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
July 20, 1990	NXAR688K	D. A. Perazzo

FAA Form 337 (12-88)

EFTA00277874

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

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)

A. Modified Boeing Model 727-100 , Serial Number 20115, in accordance with supplemental type certificate SA4363NM, amended September 1, 1989 as follows:
1. Valsan-Boeing 727-200 Re-engining Document VA000001, Revision F, dated January 15, 1990.
2. The following drawings and engineering orders (EO's) are in addition to the above document:

NOTE: "VA" denotes Valsan Drawing.

a. Chapter 24 ELECTRICAL POWER

VA240000	A	Electrical System Instl. - Strut E.O.: 003A, 101
VA240007	E	Panel-Load Control Center Modification E.O.: 003A, 004, 005, & 006

b. Chapter 28 FUEL SYSTEM INSTALLATION, STRUT

VA280001	B	Tube Assy - Fuel Strut Feed Thru E.O.: 100

c. Chapter 48 MISC

VA481100	A	Pressure Buldhead Reinforcement Sect. 48-727 E.O.: 101, 102
VA481200	C	Frame Assy Sta 1263 E.O.: 101, 103
VA481300	C	Fuselage Skin E.O.: 106, 114A, 114, 116
VA481324	NC	Intercostal Assy - BSTA 1223 to BSTA 1243 W/L244.39 E.O: 106
VA481325	NC	Intercostal Assy - BSTA 1223 to BSTA 1243 W/L234.06 E.O: 105

d. Chapter 53 FUSELAGE STRUCTURE

VA530001	B	Ballast Weight Installation E.O: 100, 102
VA530003	C	Ballast Weight, Support Structure Assy. E.O.: 002, 100
VA530004	NC	Ballast Weight Instl. STA 312 - 360 E.O.: 002, 100

e. Chapter 54 NACELLES & PYLONS

VA543000	C	Main Strut Assy (Sh. 1, 2, & 5) E.O.: 003
VA543100	D	Firewall Rib, Side Engine E.O: 36A, 003A

f. Chapter 71 POWER PLANT

VA710000	NC	Power Plant Instl. - Engine Pod V727RE E.O.: 002, 105B, 109, 108, 001A, 104A, 005A, 004, 110, 003, 111, 006A

g. Chapter 73 ENGINE FUEL AND CONTROL

VA732301	K	Approach Idle Solenoid Wiring Diagram E.O: 002(Rev L), 002 (Rev. M), 003(Rev. M)
VA732303	D	Relay Instl. - Approach Idle Solenoid E.O.: 103, 003, 100B
VA732304	D	Switch/IND Light Instl - Approach Idle E.O.: 002,
VA732310	A	Switch Instl. - Nose Gear Position Approach Idle E.O.: 103
VA732315	NC	Relay Instl. Pilots Overhead Panel E.O.: 100, 002, 101

h. Chapter 76 ENGINE CONTROL

VA760000	A	Engine Controls Instl. - Strut E.O.: 002A
VA760014	A	Drum Instl. - Eng. Controls E.O.: 100, 101
VA760015	A	Bracket Assy - Pulley ESTA 100 E.O.: 105

☒ Additional Sheets Are Attached

*U.S GPO:1989-0-663-171

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

DESCRIPTION OF WORK ACCOMPLISHED (Continued)

Serial No. 20115

i. Chapter 77 ENGINE INDICATING

VA771005	NC	Indicator Engine Pressure Ratio EPR, E.O.: 001

j. Chapter 78 ENGINE EXHAUST

VA780000	B	Engine Strut controls Instl. E.O.: 002
VA783010	E	Flt Deck Indicator Instl. T/R Sys. E.O.: 003, 004
VA783011	F	Thrust Reverser System Wiring Diagram E.O.: 002 (Rev. G)
VA783013	D	Support Bracket Assy - T/R Control Valve R/S E.O.: 100 (Rev. E)
VA783017	J	Placards E.O.: 007,, 008
VA783024	B	Relay Instl. - Thrust Reverser Control E.O.: 003
VA783028	A	Mixer, Exhaust - Instl. 727E E.O.: 100
VA783101	C	No. 2 Engine T/R Wiring Deactiviation E.O.: 002

k. Chapter 91 CHARTS

	VA910002	A	Instl. - Electrical Wire Harness E.O.: 003, 004, 005, 006, 007
*	VA910008	NC	Wire List V727RE E.O.: 001, 002, 003

*New drawings added to modification.

B. Boeing 727 Service Bulletin 727-53A0171, dated December 14, 1989.
Subject: Fuselage - Station 1182
Pressure Bulkhead Web,
Crack Repair and Preventive
Modification

C. The aircraft empty weight and center of gravity was revised in accordance with Boeing Weight and Balance Manual D6-21200. Weight and Balance Manual Supplement, VA-CR279 is attached.

END

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

13 JAN 29 1991

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

US Department of Transportation
Federal Aviation Administration

APPLICATION FOR AIRWORTHINESS CERTIFICATE

500LS

INSTRUCTIONS — Print or type. Do not write in shaded areas; these are for FAA use only. Submit original only to an authorized FAA Representative. If additional space is required, use an attachment. For special flight permits complete Sections II and VI or VII as applicable.

I. AIRCRAFT DESCRIPTION

1. REGISTRATION MARK	2. AIRCRAFT BUILDER'S NAME (Make)	3. AIRCRAFT MODEL DESIGNATION	FAA CODING
N505C	BOEING	727-100C-31 DM	4138010
4. AIRCRAFT SERIAL NO.	5. ENGINE BUILDER'S NAME (Make)	6. ENGINE MODEL DESIGNATION	52053
20115	P&W	JT8D-7A/219	
7. NUMBER OF ENGINES	8. PROPELLER BUILDER'S NAME (Make)	9. PROPELLER MODEL DESIGNATION	10. AIRCRAFT IS (Check if applicable)
3	N/A	N/A	☐ 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		X	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	8		OTHER (Specify)						
	4	X	EXPERIMENTAL (Indicate operation(s) to be conducted)	1		RESEARCH AND DEVELOPMENT	2		AMATEUR BUILT	3		EXHIBITION			
				4		RACING	5		CREW TRAINING		X	MKT. SURVEY			
				8	X	TO SHOW COMPLIANCE WITH FAR									
	5		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	ADDRESS
✓ NORTHWEST HOLDING CORPORATION	FOULKSTONE PLAZA, SUITE 102, 1049 FOULK ROAD P.O. BOX 7138 WILMINGTON, DELAWARE 19803

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

	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.)		AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.)
	AIRCRAFT LISTING (Give page number(s))		SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated)

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

✓	CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173	TOTAL AIRFRAME HOURS 29,851.2	EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed) 19.8

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
5/1/90	T.J. WRIGHT, PILOT	

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)

12	FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.)	13	CERTIFICATED MECHANIC (Give Certificate No.)	14	CERTIFICATED REPAIR STATION (Give Certificate No.)
15	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				
			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
05-01-90	SEA-MIDO ANM-108S		Michael J Larson

FAA Form 8130-6 (12-83) SUPERSEDES PREVIOUS EDITION

EFTA00277878

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

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)*
- ✓ D. Current Weight and Balance Information Available in Aircraft
- ☐ E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*
- ✓ 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(b) CAR _____ *(Original Attached)*
- ☐ J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191(b) and (f) *(Copy attached)*

EFTA00277879

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	SHOW COMPLIANCE WITH FAR / MARKET SURVEY	
B	MANU-FACTURER NAME	N/A	
	ADDRESS	N/A	
C	FLIGHT FROM	N/A	
	TO	N/A	
D	N— 505C	SERIAL NO. 20115	
	BUILDER BOEING	MODEL 727-31	
		EXPIRY 08-01-90	
E.	DATE OF ISSUANCE 05-01-90		
	OPERATING LIMITATIONS DATED 05-01-90	ARE A PART OF THIS CERTIFICATE	
	SIGNATURE OF FAA REPRESENTATIVE Michael J Larson MICHAEL J. LARSON	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.

SEE REVERSE SIDE

FAA FORM 8130-7 (10/82)

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

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. IN DATE: 2-8-91

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	FAA CODING
N505C	BOEING	727-100	
4. AIRCRAFT SERIAL NO.	**5. ENGINE BUILDER'S NAME (Make)**	**6. ENGINE MODEL DESIGNATION**	
20115	P&W	JD8D-7A/219	
7. NUMBER OF ENGINES	**8. PROPELLER BUILDER'S NAME (Make)**	**9. PROPELLER MODEL DESIGNATION**	**10. AIRCRAFT IS (Check if applicable)**
3	N/A	N/A	☐ 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 9 X 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	X	EXPERIMENTAL (Indicate operation(s) to be conducted)	1	☐	RESEARCH AND DEVELOPMENT	2	☐	AMATEUR BUILT	3	☐	EXHIBITION
			4	☐	RACING	5	☐	CREW TRAINING		X	MKT SURVEY
			0	X	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			
			5	☐	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: NORTHWEST HOLDING CORPORATION

ADDRESS: FOULKSTONE PLAZA, SUITE 102, 1649 FOULK ROAD P.O. BOX 7138 WILMINGTON, DELAWARE 19803

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

☐	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.)	☐	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.)
☐	AIRCRAFT LISTING (Give page number(s))	☐	SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated)

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

✓	CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173	TOTAL AIRFRAME HOURS: 29,851.2	3 EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed): 19.8

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
5/1/90	T.J. WRIGHT, PILOT	

IV. INSPECTION AGENCY VERIFICATION

A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY: (Complete this section only if FAR 21.183(d) applies)

2 ☐	FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.)	3 ☐	CERTIFICATED MECHANIC (Give Certificate No.)
4 ☐	AIRCRAFT MANUFACTURER (Give name of firm)	5 ☐	CERTIFICATED REPAIR STATION (Give Certificate No.)

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:
- ☐ 1 X THE CERTIFICATE REQUESTED
- ☐ 2 ☐ AMENDMENT OR MODIFICATION OF CURRENT AIRWORTHINESS CERTIFICATE

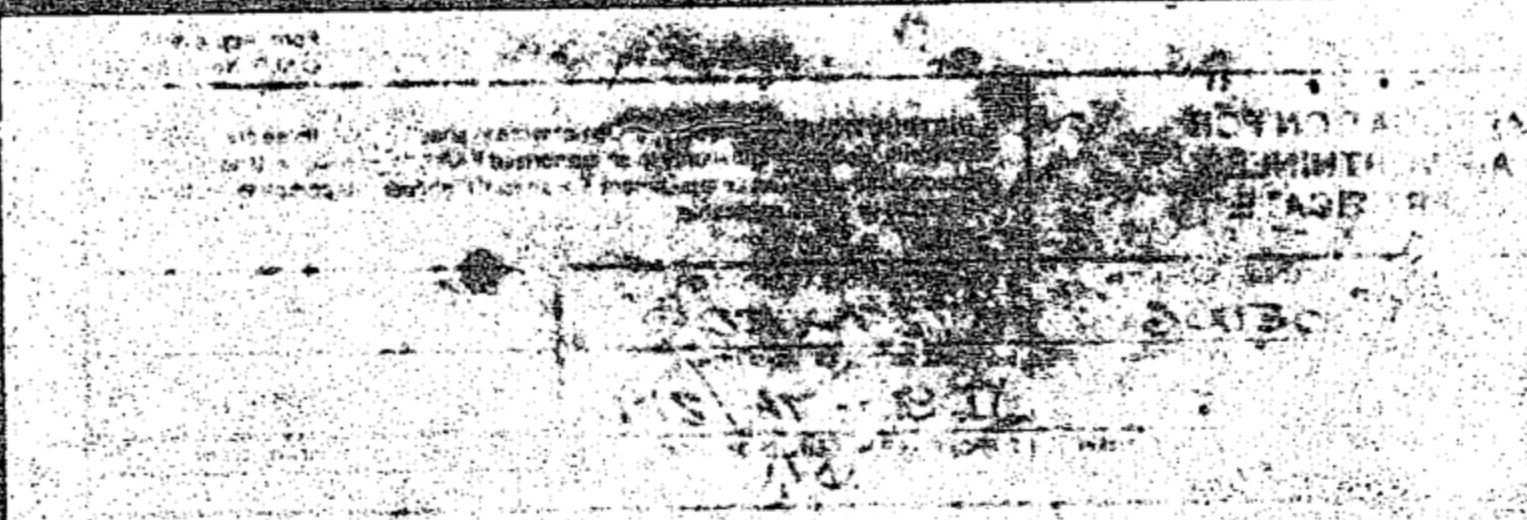
B. Inspection for a special flight permit under Section VII was conducted by:
- ☐ FAA INSPECTOR ☐ FAA DESIGNEE
- CERTIFICATE HOLDER UNDER: ☐ FAR 65 ☐ FAR 121, 127 or 135 ☐ FAR 145

DATE	DISTRICT OFFICE	6 DESIGNEE'S SIGNATURE AND NO.	7 FAA INSPECTOR'S SIGNATURE
05-01-90	SEA-MIDO ANM-1085		Michael J. Larson

FAA Form 8130-6 (12-83) SUPERSEDES PREVIOUS EDITION

EFTA00277882

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91



FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

VALSAN PARTNERS
3014 Westchester Avenue
Purchase, N.Y. 10577
(914) 694-3600

May 1, 1990
FAA, ANM--1085
7300 Perimeter Rd.
Seattle, WA 98108

Dear Sir,

Attached is FAA form 8130-6, Application for Airworthiness Certificate, for adding "Market Survey" to the authorized operations of our Experimental Airworthiness Certificate.

The aircraft is a Boeing 727-100 which has been retrofitted with P & W JT8D-219 engines on the POD positions and -7B in the center position. We have flown the aircraft approximately 17 hours under the presently issued Experimental Certificate.

We are requesting "Market Survey" so that we may take a TV reporter and cameraman from Paine Field, Everett, Washington to Grant County Airport, Moses Lake, Washington on 1 May 1990 for demonstration of the Stage IIV Noise Characteristics.

The duration of the "Market Survey" portion of this Experimental Certificate will be only for the one flight from Paine Field to Grant County Airport. The certificate will then revert to "Show Compliance with FAR's" until expiration of the certificate on 1 August, 1990.

Sincerely yours,

Cheryl Floyd for T.J. Wright

Cheryl Floyd for T.J. Wright
Valsan Project Pilot

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

U.S. Department of Transportation
Federal Aviation Administration

Manufacturing Inspection District Office
7300 Perimeter Road South
Seattle, WA 98108

May 1, 1990

EXPERIMENTAL - SHOW COMPLIANCE WITH FAR's/MARKET SURVEY

MAKE: Boeing MODEL: 727-31 SERIAL NO. 20115 REG. NO. N505C

THESE OPERATING LIMITATIONS SHALL BE ACCESSIBLE TO THE PILOT

This aircraft must be operated in accordance with the following limitations:

1. No person may operate this aircraft for other than the purpose of Show Compliance with the FAR's and Market Survey to accomplish the tests outlined in the applicant's program letter dated May 1, 1990 describing compliance with FAR 21.193(d). Additionally, this aircraft shall be operated in accordance with applicable air traffic and general operating rules of FAR 91, and all additional limitations herein prescribed under the provisions of FAR 91.42(e).

2. All flights shall be conducted within the geographical areas described as follows:

   1. Western United States of America bounded on the East by the Mississippi River, on the North by the U.S.A./Canadian border, on the South by the U.S.A./Mexico border, and bounded on the West by no more than 200 miles from the West Coast of the United States of America.

   2. Base of operations is Palmdale/Lancaster Airport, Palmdale, California and secondary base of operation to be Moses Lake Airport, Moses Lake, Washington.

3. The pilot-in-command of aircraft must, as applicable, hold an appropriate category/class rating, have an aircraft type rating, have a flight instructor's log book endorsement 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 Boeing Low Utilization Program, I/A/W FAR 91.169(f)(4).

5. Upon changing between operating purposes of a Multiple Purpose Certificate, the operator shall determine that the aircraft is in a condition appropriate for the purpose intended and has documented that finding in the aircraft log.

6. This aircraft shall contain the placards, markings, etc. required by FAR 91.31.

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

7. The cognizant FAA 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.

8. This aircraft approved for day/night VFR/IFR only.

9. No operations shall be conducted over densely populated areas or in congested airways except for takeoffs and landings, and when under ATC control.

10. No person may be carried in this aircraft during flight unless that person is essential for the purpose of the flight while in the Show Compliance category.

11. 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 unless approved by the cognizant FAA office.

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

13. After the aircraft has been re-engined, the pilot-in-command must make a log book entry stating the aircraft complies with FAR 91.42(a) and FAR 91.42(b).

Michael J. Larson
Aviation Safety Inspector (Mfg)
SEA-MIDO, ANM-108S

These limitations will expire on August 1, 1990.

FAA AIRCRAFT REGISTRY
CAMERA NO. IN DATE: 2-8-91

VALSAN PARTNERS
3014 Westchester Avenue
Purchase, N.Y. 10577
(914) 694-3600

May 1, 1990
FAA, ANM--1085
7300 Perimeter Rd.
Seattle, WA 98108

Dear Sir,

Attached is FAA form 8130-6, Application for Airworthiness Certificate, for adding "Market Survey" to the authorized operations of our Experimental Airworthiness Certificate.

The aircraft is a Boeing 727-100 which has been retrofitted with P & W JT8D-219 engines on the POD positions and -7B in the center position. We have flown the aircraft approximately 17 hours under the presently issued Experimental Certificate.

We are requesting "Market Survey" so that we may take a TV reporter and cameraman from Paine Field, Everett, Washington to Grant County Airport, Moses Lake, Washington on 1 May 1990 for demonstration of the Stage IIV Noise Characteristics.

The duration of the "Market Survey" portion of this Experimental Certificate will be only for the one flight from Paine Field to Grant County Airport. The certificate will then revert to "Show Compliance with FAR's" until expiration of the certificate on 1 August, 1990.

Sincerely yours,

Cheryl Floyd for T.J. Wright

Cheryl Floyd for T.J. Wright
Valsan Project Pilot

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 2-8-91



FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 2-8-91

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

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	TO SHOW COMPLIANCE WITH F.A.R.'S	
B	MANUFACTURER — NAME	N/A	
	MANUFACTURER — ADDRESS	N/A	
C	FLIGHT — FROM	N/A	
	FLIGHT — TO	N/A	
D	N- 505C		SERIAL NO. 20115
	BUILDER Boeing		MODEL 727-31
E	DATE OF ISSUANCE Feb 8, 1990		EXPIRY 8/01/90
	OPERATING LIMITATIONS DATED 2/02/90		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE ROBERT STAGG		DESIGNATION OR OFFICE NO. DAR-48-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 8130-7 (7-79) USE PREVIOUS EDITION

SEE REVERSE SIDE

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 2-8-91

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. IN DATE: 2-8-91

U.S. Department of Transportation
Federal Aviation Administration

Manufacturing Inspection District Office
16501 Sherman Way, Suite 200
Van Nuys, CA 91406

February 2, 1990

EXPERIMENTAL - SHOW COMPLIANCE WITH FAR's

MAKE: Boeing MODEL: 727-31 SERIAL NO. 20115 REG. NO. N505C

THESE OPERATING LIMITATIONS SHALL BE ACCESSIBLE TO THE PILOT

This aircraft must be operated in accordance with the following limitations:

1. No person may operate this aircraft for other than the purpose of Show Compliance with the FAR's to accomplish the tests outlined in the applicant's program letter dated February 2, 1990 describing compliance with FAR 21.193(d). Additionally, this aircraft shall be operated in accordance with applicable air traffic and general operating rules of FAR 91, and all additional limitations herein prescribed under the provisions of FAR 91.42(e).

2. All flights shall be conducted within the geographical areas described as follows:

   1. Western United States of America bounded on the East by the Mississippi River, on the North by the U.S.A./Canadian border, on the South by the U.S.A./Mexico border, and bounded on the West by no more than 200 miles from the West Coast of the United States of America.

   2. Base of operations is Palmdale/Lancaster Airport, Palmdale, California and secondary base of operation to be Moses Lake Airport, Moses Lake, Washington.

3. The pilot-in-command of aircraft must, as applicable, hold an appropriate category/class rating, have an aircraft type rating, have a flight instructor's log book endorsement 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 Boeing Low Utilization Program, I/A/W FAR 91.169(f)(4).

5. This aircraft shall contain the placards, markings, etc. required by FAR 91.31.

6. The cognizant FAA 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.

7. This aircraft approved for day/night VFR/IFR only.

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 2-8-91

8. No operations shall be conducted over densely populated areas or in congested airways except for takeoffs and landings, and when under ATC control.

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

10. 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 unless approved by the cognizant FAA office.

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

12. After the aircraft has been re-engined, the pilot-in-command must make a log book entry stating the aircraft complies with FAR 91.42(a) and FAR 91.42(b).

Robert Stagg
DAR-48-AC-NM

These limitations will expire on August 1, 1990.

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 12-21-90

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
SO-FSDO-15

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: Boeing	Model: B727-31
	Serial No.: 20115	Nationality and Registration Mark: N500LS
2. Owner	Name *(As shown on registration certificate)*: Northwest Holding Corporation	Address *(As shown on registration certificate)*: P.O. Box 7138 Wilmington, DE 19803

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.
Page Avjet Corporation 9809 Tradeport Drive Orlando, Florida 32827	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	OS4R425M

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: 14 SEPT. 1990

Signature of Authorized Individual: Robert J. 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	[ ]	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
14 SEPT. 90	OS4R425M	David A Latimer

FAA Form 337 (12-88)

EFTA00277894

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 12-21-90

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.)

B727-31 N500LS S/N 20115

1. MODIFIED POWERPLANT INSTALLATION TO FACILITATE RE-ENGINE PRODUCTION FOR AIRCRAFT HAVING REMOTE ENGINE OIL REFILL SYSTEM IN ACCORDANCE WITH VA 71000, REV. B; DRAWINGS PER DER THOMAS F. CURRAN NM-383, APPROVED BY 8110 DATED SEPTEMBER 4, 1990.

2. PERFORMED AIRSTAIR INSTALLATION IN ACCORDANCE WITH REPORT 442 (STRUCTURAL SUBSTANTIATION OF EXTERNAL DOUBLER AND MISCELLANEOUS COMPONENTS FOR INSTALLATION OF FORWARD AIRSTAIR) AND REPORT 444 (INSTALLATION INSTRUCTIONS, BOEING 727-100 FORWARD AIRSTAIR) AND IN ACCORDANCE WITH M.D.L. 750-1-002 DATED 9-10-1990 BY D.E.R. BOYD SMITH SO-351.

SUMMARY:

1. PROVIDED WEIGHT AND BALANCE UPDATE.
2. EQUIPMENT LIST UPDATED ACCORDINGLY.
3. ALL SYSTEMS OPS CHECKED AND DO INTERFERE WITH OTHER SYSTEMS.
4. ALL PERTINENT DETAILS OF WORK ACCOMPLISHED ARE ON FILE AT PAGE AVJET CORPORATION UNDER WORK ORDERS 4706 AND 6778, DATED 14 SEPT 1990.

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

☐ Additional Sheets Are Attached

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 12-21-90

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
N500LS	BOEING 727-31	20115	TRANSPORT

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.

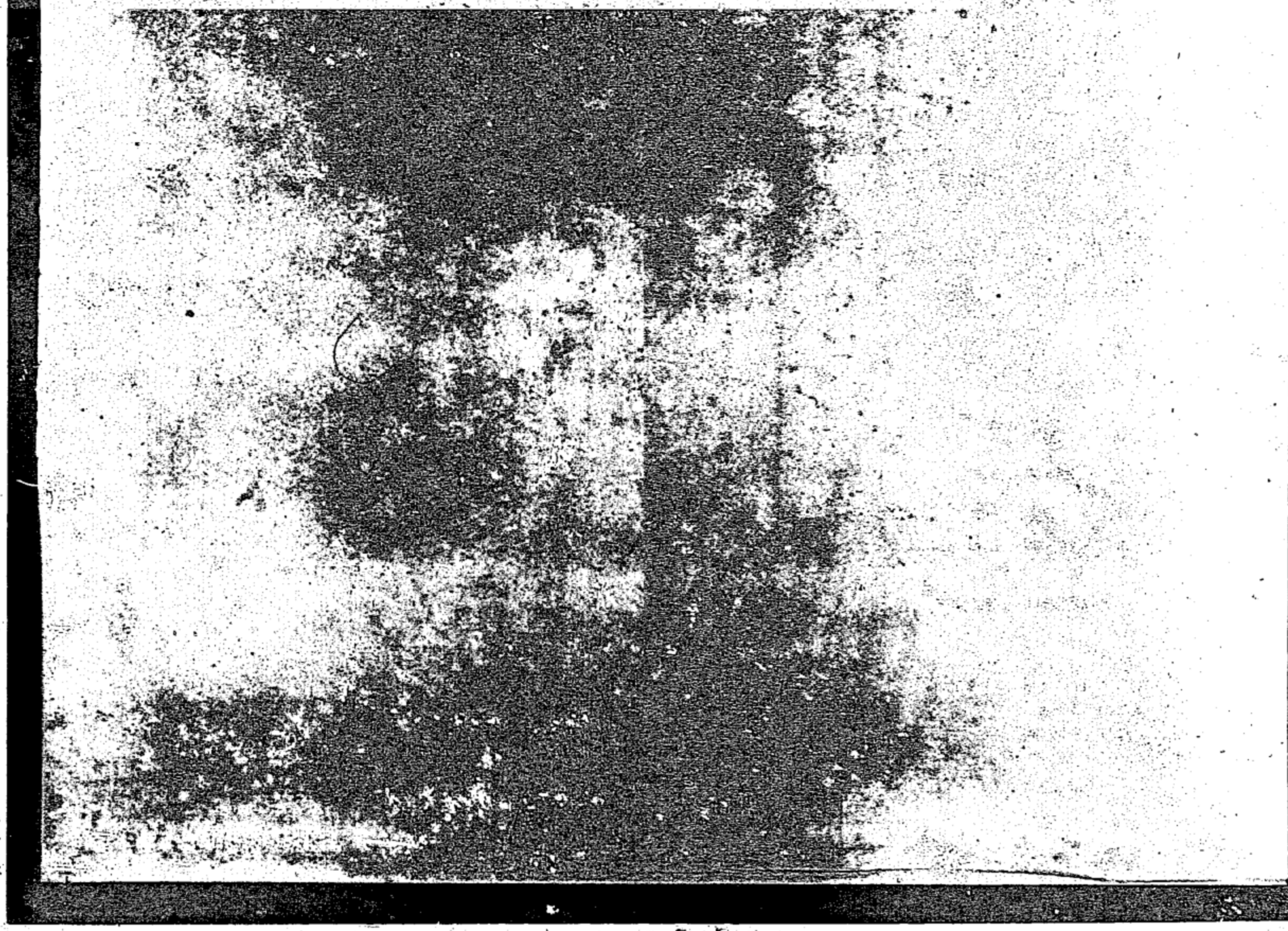
DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
(Replacement) 07-23-90	LEE H. THIEL	GL07

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 892-810

EFTA00277896

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 12-21-90



FAA AIRCRAFT REGISTRY
CAMERA NO. / N DATE: 12-21-90

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
N505C	BOEING 727-31	20115	TRANSPORT

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
7/23/90	WING C. CHIN	DAR-41-FS-NM

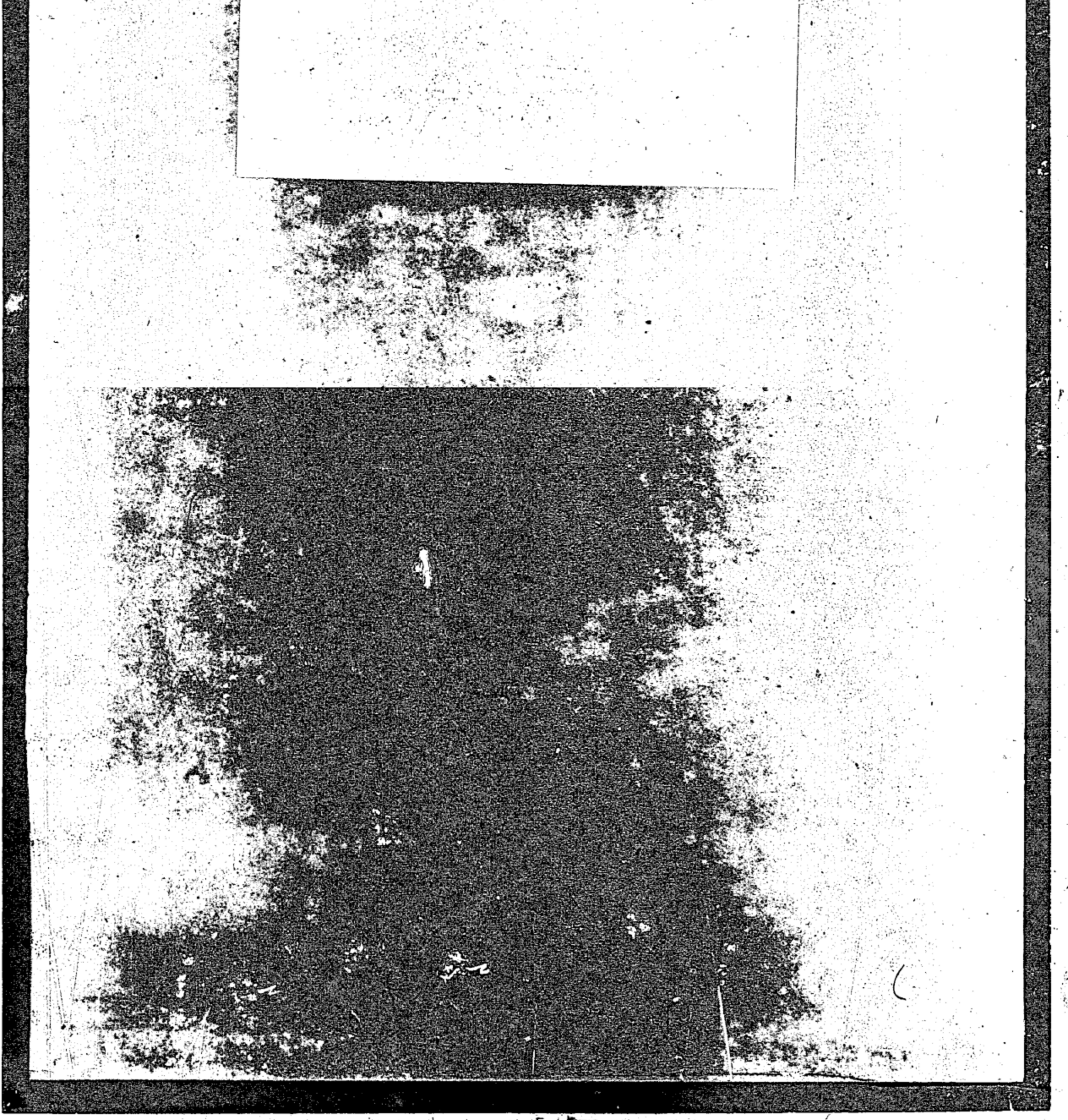
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding $1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

FAA Form 8100-2 (8-82)

GPO 892-811-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 12-21-90





FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

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
N505C	Boeing	727-31	69	1384010 4
5. AIRCRAFT SERIAL NO.	8. ENGINE BUILDER'S NAME (Make)	7. ENGINE MODEL DESIGNATION		52853
20115	Pratt & Whitney	JT8D-7B		
6. NUMBER OF ENGINES	9. PROPELLER BUILDER'S NAME (Make)	10. PROPELLER MODEL DESIGNATION		11. AIRCRAFT IS (Check if applicable)
3	-----	-----		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			SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)													
	2		LIMITED													
	8		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	X	EXPERIMENTAL (Indicate operation(s) to be conducted)	1		RESEARCH AND DEVELOPMENT	2		AMATEUR BUILT	3		EXHIBITION				
				4		RACING	5		CREW TRAINING			MKT. SURVEY				
				8	X	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	0		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)

NAME: Northwest Holding Corporation — IF DEALER, CHECK HERE →

ADDRESS: Foulkstone Plaza, Suite 102
1409 Foulk Road, P.O. Box 7138, Wilmington, DE 19803

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

- AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.): A3WE
- AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.): X — 90-02-19
- AIRCRAFT LISTING (Give page number(s)): Rev. 18 Dated February 20, 1987
- SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated):

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

- X — CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173
- TOTAL AIRFRAME HOURS: 29820 Hours
- 9 — 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
February 2, 1990	R.A. Broulik Valsan Program & Engineering Manager	

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 13[illegible]
- FAR 145

DATE	DISTRICT OFFICE	DESIGNEE'S SIGNATURE AND NO.	FAA INSPECTOR'S SIGNATURE
2/2/90	VAN NUYS M100	Robert Skaggs DAR-48-AC-NM	

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

EFTA00277900

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME	ADDRESS

B. PRODUCTION BASIS *(Check applicable item)* C45-A2-46-5...

- ☐ 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 FOR 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)*
- [X] I. Previous Airworthiness Certificate Issued in Accordance with FAR 21.197(a)(1) CAR _____ *(Original Attached)*
- [X] J. Current Airworthiness Certificate Issued in Accordance with FAR 21.191(b) _____ *(Copy attached)*

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

EFTA00277901

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

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

A	CATEGORY/DESIGNATION	SPECIAL FLIGHT PERMIT	
	PURPOSE	MAINTENANCE.	
B	MANU-FACTURER	NAME	
		ADDRESS N/A.	
C	FLIGHT	FROM LOVE FIELD, DALLAS, TEXAS.	
		TO BURBANK, CALIFORNIA.	
D	N-505C		SERIAL NO. 20115.
	BUILDER BOEING.		MODEL B727-31.
E	DATE OF ISSUANCE JANUARY 26, 1990		EXPIRY FEBRUARY 14, 1990.
	OPERATING LIMITATIONS DATED JANUARY 26, 1990		ARE A PART OF THIS CERTIFICATE
	SIGNATURE OF FAA REPRESENTATIVE Francis Fenton		DESIGNATION OR OFFICE NO. DFW 2-15-90.

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. 1 N DATE: 8- 15- 90

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 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: 1988—562-538

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

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
N505C	Boeing 727-31	20115	Transport

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 valid 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
Exchange 06/30/69	Murray Gross	WP-FSDO-10

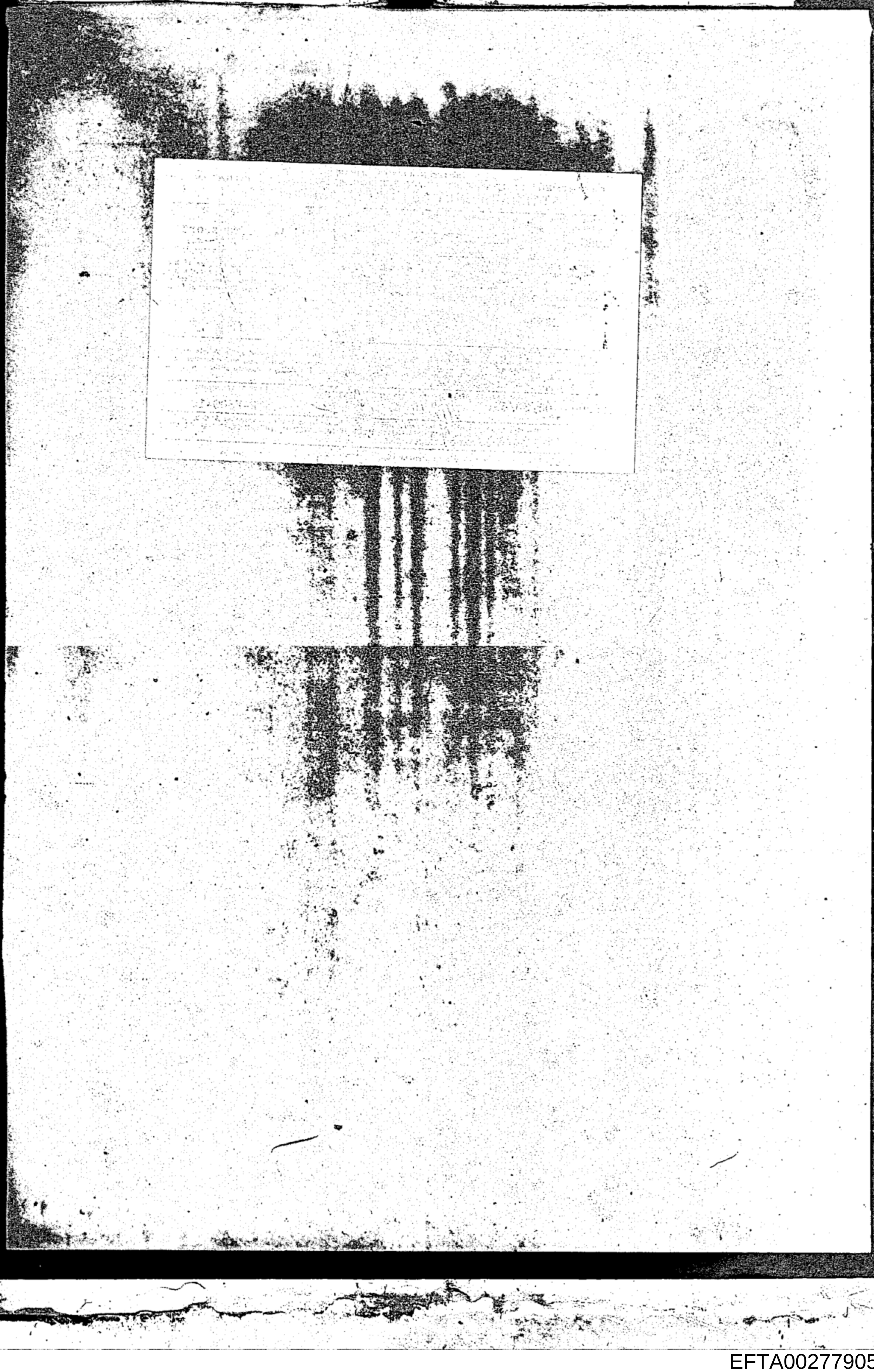
Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding $1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

FAA Form 8100-2 (7-67) FORMERLY FAA FORM 1362

GPO : 1967—O-270 931

EFTA00277904

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90



FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

OKLA

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

A	CATEGORY/DESIGNATION	EXPERIMENTAL	
	PURPOSE	TO SHOW COMPLIANCE WITH F.A.R."S	
B	MANU-FACTURER	NAME N/A	
		ADDRESS N/A	
C	FLIGHT	FROM N/A	
		TO N/A	
D	N– 505C		
	BUILDER Boeing	SERIAL NO. 20115	
E	DATE OF ISSUANCE Feb 2, 1990	MODEL 727-31	
	OPERATING LIMITATIONS DATED 2/02/90	EXPIRY 8/01/90	
	SIGNATURE OF FAA REPRESENTATIVE	ARE A PART OF THIS CERTIFICATE	
	ROBERT STAGG	DESIGNATION OR OFFICE NO.	
		DAR-48-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 8130-7 (7-79) USE PREVIOUS EDITION

SEE REVERSE SIDE

EFTA00277906

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

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. 1 N DATE: 8- 15- 90

U.S. Department of Transportation
Federal Aviation Administration

Manufacturing Inspection District Office
16501 Sherman Way, Suite 200
Van Nuys, CA 91406

February 2, 1990

EXPERIMENTAL - SHOW COMPLIANCE WITH FAR's

MAKE: Boeing MODEL: 727-31 SERIAL NO. 20115 REG. NO. N505C

THESE OPERATING LIMITATIONS SHALL BE ACCESSIBLE TO THE PILOT

This aircraft must be operated in accordance with the following limitations:

1. No person may operate this aircraft for other than the purpose of Show Compliance with the FAR's to accomplish the tests outlined in the applicant's program letter dated February 2, 1990 describing compliance with FAR 21.193(d). Additionally, this aircraft shall be operated in accordance with applicable air traffic and general operating rules of FAR 91, and all additional limitations herein prescribed under the provisions of FAR 91.42(e).

2. All flights shall be conducted within the geographical areas described as follows:

1. Western United States of America bounded on the East by the Mississippi River, on the North by the U.S.A./Canadian border, on the South by the U.S.A./Mexico border, and bounded on the West by no more than 200 miles from the West Coast of the United States of America.

2. Base of operations is Palmdale/Lancaster Airport, Palmdale, California and secondary base of operation to be Moses Lake Airport, Moses Lake, Washington.

3. The pilot-in-command of aircraft must, as applicable, hold an appropriate category/class rating, have an aircraft type rating, have a flight instructor's log book endorsement 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 Boeing Low Utilization Program, I/A/W FAR 91.169(f)(4).

5. This aircraft shall contain the placards, markings, etc. required by FAR 91.31.

6. The cognizant FAA 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.

7. This aircraft approved for day/night VFR/IFR only.

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

Federal Aviation Administration
Manufacturing Inspection District Office

Experimental - Show Compliance with FAR's, cont'd
Page 2 of 2

8. No operations shall be conducted over densely populated areas or in congested airways except for takeoffs and landings, and when under ATC control.

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

10. 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 unless approved by the cognizant FAA office.

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

12. After the aircraft has been re-engined, the pilot-in-command must make a log book entry stating the aircraft complies with FAR 91.42(a) and FAR 91.42(b).

Robert Stagg
DAR-48-AC-NM

These limitations will expire on August 1, 1990.

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

VALSAN

VALSAN® PARTNERS 3010 Westchester Avenue, Purchase, New York 10577
(914) 694-3600 Telex: 825379 VALSAN UF
Fax: (914) 694-6062

A Delaware Limited Partnership

Marketing Office:
99 Washington Street, Norwalk, CT 06854
(203) 866-6051
Telex: 6714726 DALAV UW
Fax: (203) 855-0362

Product Support Office:
3605 Long Beach Blvd., #205
Long Beach, CA 90807
Tel: (213) 424-2145
Fax: (213) 595-0920

February 2, 1990

Mr. Bud Martell, Manager
Federal Aviation Administration
Manufacturing Inspection District Office
16501 Sherman Way, Suite 200
Van Nuys, CA 91406

In reply refer to 001020290

Subject: Application for Experimental Airworthiness Certificate (To Show Compliance with F.A.R.)

Gentlemen:

This letter is to inform you that Valsan intends to operate Boeing 727-31 , Registration N505C, Serial #20115 owned by Northwest Holding Corporation, Foulkstone Plaza, Suite 102, 1409 Foulk Road, P.O. Box 7138, Wilmington, Delaware 19803 in an experimental flight test program. The flight test program is in support of the Valsan JT8D-219 Re-Engining Program TIA NM-100S-1320.

Terms and conditions of the Experimental Airworthiness Certificate are as follows:

1. Valid for six (6) months from effective date of the certificate.

2. Geographic area is the Western United States of America.

3. Operation of aircraft will be in accordance with all applicable F.A.R.'s and F.A.A. 8130-6 (attached).

4. Aircraft to be maintained in accordance with Federal Aviation Regulations Part 91.169(f)(4), a current inspection program recommended by the manufacturer (Boeing Low Utilization Maintenance Program).

Very truly yours,

R. A. Broulik

R.A. Broulik
Valsan Program/Engineering Manager
C/O - Rockwell International
2825 East Avenue P
Palmdale, CA 93550

Attachment

RAB:lg

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

EFTA00277911

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

W.O.# 0646

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
WP-PHX-FSDO

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

1. AIRCRAFT	MAKE: BOEING	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: N505C
2. OWNER	NAME (As shown on registration certificate): FB TRANSPORT INC. % P HUNT	ADDRESS (As shown on registration certificate): 100 PINE ST 21 FLOOR SAN FRANCISCO, CA 94121

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) •••••••••••••••••••••••			XXX	
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
DYNAIR TECH OF ARIZONA, INC. 3737 E. BONANZA WAY PHOENIX, ARIZONA 85034	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC XXX CERTIFICATED REPAIR STATION MANUFACTURER	CRS 407-36 AIRFRAME IV

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*
AUGUST 10, 1989	KENNETH ROWBOTHAM Kenneth Rowbotham

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	XXX	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
AUGUST 10, 1989	CRS 407-36	DANIEL MEAKIN Daniel B Meakin

FAA Form 337 (7-67) (8320)

EFTA00277912

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 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.)*

1. FABRICATED & INSTALLED REPAIR ANGLE ON LOWER EDGE OF FUSELAGE SKIN FOR NO. 2 ENGINE SIDE COWL AT FIREWALL BULKHEAD APPROXIMATELY FS 1455 PER SRM 51-40-4.
2. REPAIRED CRACK AT RH HORIZONTAL STABILIZER LEADING EDGE APPROXIMATELY STA 78.3-88.3 PER SRM 55-10-3.
3. REMOVED CORROSION, CUT OUT BULGED AREA IN EXTERIOR FUSELAGE SKIN, INSTALLED DOUBLER APPROXIMATELY FS 1157 AT STRINGER 27R PER SRM 53-30-3.
4. REPAIRED FUSELAGE SKIN CORROSION DAMAGE BS 1166 - 1174 AT STRINGER 27L IN ACCORDANCE WITH BOEING REPAIR MESSAGE NO. BPM23200D.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

C FAA AC 23-1994

☆ U.S. GOVERNMENT PRINTING OFFICE: 1986-659-121/40146

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

RECEIVED FAA 1-16: 9AA)

U.S DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

APR 2 0 19~~9~~0 VNY FSDO

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION
VNY 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.

1. AIRCRAFT	MAKE: BOEING	RECEIVED FAA	MODEL: 727-100
	SERIAL NO.: 20115	MAY 0 1 1990	NATIONALITY AND REGISTRATION MARK: N505C
2. OWNER	NAME (As shown on registration certificate): LIMITED INCORPORATED	VNY FSDO	ADDRESS (As shown on registration certificate): 4387 International Gateway Columbus, Ohio 43219

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					X
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
North American Aircraft Rockwell International Corporation 2825 E. Avenue P Palmdale, Ca. 93550	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Airframe Class 4 Limited Powerplant Class 3 NXAR688K

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
April 24 1990	D. A. Perazzo

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
April 24 1990	NXAR688K	

FAA Form 337 (7-67) (8320)

EFTA00277914

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 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.)***

A. Modified Boeing Model 727-100 , Serial Number 20115, in accordance with supplemental type certificate SA4363NM, amended September 1, 1989 as follows:
1. Valsan-Boeing 727-200 Re-engining Document VA000001, Revision F, dated January 15, 1990.
2. The following drawings and engineering orders (EO's) are in addition to the above document:

NOTE: "VA" denotes Valsan Drawing.

a. Chapter 24 ELECTRICAL POWER

VA240000	A	Electrical System Instl. - Strut E.O.: 003A, 101
VA240007	E	Panel-Load Control Center Modification E.O.: 003A, 004, 005, 006

b. Chapter 28 FUEL SYSTEM INSTALLATION, STRUT

VA280001	B	Tube Assy - Fuel Strut Feed Thru E.O.: 100

c. Chapter 48 MISC

VA481100	A	Pressure Buldhead Reinforcement Sect. 48-727 E.O.: 101, 102
VA481200	C	Frame Assy Sta 1263 E.O.: 101, 103
VA481300	C	Fuselage Skin E.O.: 106, 114A, 114, 116
VA481324	NC	Intercostal Assy - BSTA 1223 to BSTA 1243 W/L244.39 E.O: 106
VA481325	NC	Intercostal Assy - BSTA 1223 to BSTA 1243 W/L234.06 E.O: 105

d. Chapter 53 FUSELAGE STRUCTURE

VA530001	B	Ballast Weight Installation E.O: 100, 102
VA530003	C	Ballast Weight, Support Structure Assy. E.O.: 002,100
VA530004	NC	Ballast Weight Instl. STA 312 - 360 E.O.: 002, 100

e. Chapter 54 NACELLES & PYLONS

VA543000	C	Main Strut Assy (Sh. 1, 2, & 5) E.O.: 003
VA543100	D	Firewall Rib, Side Engine E.O: 36A, 003A

f. Chapter 71 POWER PLANT

VA710000	NC	Power Plant Instl. - Engine Pod V727RE E.O.: 002, 105B, 109, 108, 001A, 104A, 005A, 004, 110, 003, 111, 006A

g. Chapter 73 ENGINE FUEL AND CONTROL

VA732301	K	Approach Idle Solenoid Wiring Diagram E.O: 002(Rev L), 002 (Rev. M), 003(Rev. M)
VA732303	D	Relay Instl. - Approach Idle Solenoid E.O.: 103, 003, 100B
VA732304	D	Switch/IND Light Instl - Approach Idle E.O.: 002,
VA732310	A	Switch Instl. - Nose Gear Position Approach Idle E.O.: 103
VA732315	NC	Relay Instl. Pilots Overhead Panel E.O.: 100, 002, 101

h. Chapter 76 ENGINE CONTROL

VA760000	A	Engine Controls Instl. - Strut E.O.: 002A
VA760014	A	Drum Instl. - Eng. Controls E.O.: 100, 101
VA760015	A	Bracket Assy - Pulley ESTA 100 E.O.: 105

☒ ADDITIONAL SHEETS ARE ATTACHED

C FAA AC 73-4966

*U.S. GOVERNMENT PRINTING OFFICE: 1988-659-121/40260

EFTA00277916

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8-15-90

DESCRIPTION OF WORK ACCOMPLISHED (Continued)

Serial No. 20115

i. Chapter 77 ENGINE INDICATING

VA771005	NC	Indicator Engine Pressure Ratio EPR, E.O.: 001

j. Chapter 78 ENGINE EXHAUST

VA780000	B	Engine Strut controls Instl. E.O.: 002
VA783010	E	Flt Deck Indicator Instl. T/R Sys. E.O.: 003, 004
VA783011	F	Thrust Reverser System Wiring Diagram E.O.: 002 (Rev. G)
VA783013	D	Support Bracket Assy - T/R Control Valve R/S E.O.: 100 (Rev. E)
VA783017	J	Placards E.O.: 007,, 008
VA783024	B	Relay Instl. - Thrust Reverser Control E.O.: 003
VA783028	A	Mixer, Exhaust - Instl. 727E E.O.: 100
VA783101	C	No. 2 Engine T/R Wiring Deactiviation E.O.: 002

k. Chapter 91 CHARTS

VA910002	A	Instl. - Electrical Wire Harness E.O.: 003, 004, 005, 006, 007
* VA910008	NC	Wire List V727RE E.O.: 001, 002, 003

*New drawings added to modification.

B. Boeing 727 Service Bulletin 727-53A0171, dated December 14, 1989.
Subject: Fuselage - Station 1182
Pressure Bulkhead Web,
Crack Repair and Preventive
Modification

C. The aircraft empty weight and center of gravity was revised in accordance with Boeing Weight and Balance Manual D6-21200. Weight and Balance Manual Supplement, VA-CR279 is attached.

END

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

EFTA00277919

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8-15-90

727 - 100 / 200 Weighing Form

Date	Model	Serial Number	Place Weighed	Technician	Phone
4/18/90	727-100	20115 - N505C	PALMDALE	FOLEY	(805)265-2151

REACTIONS	SCALE READING	TARE	NET WEIGHT	ARM	MOMENT
Left Outboard Main	24402	6	24408		
Left Inboard Main	21865	2	21867		
Right Outboard Main	23687	-4	23683		
Right Inboard Main	23381	3	23384		
Subtotal (Mains)	93335	7	93342	A 950.12	88686101
Left Nose	1339	0	1339		
Right Nose	1498	0	1498		
Subtotal (Nose)	2837	0	2837	B 311.37	883253
TOTAL	96172	7	96179	931.28	89569354
LESS Items NOT part of Basic Weight			165		176804
PLUS Items part of Basic Weight but not Weighed			264		208347
AIRCRAFT BASIC WEIGHT			96278	930.65	89600897

CORRECTIONS

NOT Part of Basic Weight

Description	Weight	Arm	Moment
Usable Fuel Trapped	127.0	1081.0	137287
Engine Inlet Cvrs	35.0	1100.0	38500
Extra Overspeed Sensors (2)	3.0	339.0	1017
TOTAL	165		176804

Items NOT weighed but Part of Basic Weight

Description	Weight	Arm	Moment
Drainable/unusable Fuel			
Std Tanks	179.0	838.0	150002
Fwd. Aux.	27.0	607.0	16389
Aft. Aux.	17.0	1033.0	17561
Fuel Cells (2)	41.0	595.0	24395
TOTAL	264		208347

MEASUREMENTS

119.22 = (H1) Distance from the jig point to the main axle centerline
520.11 = (H2) Distance between the left nose axle centerline and the jig point.
518.85 = (H3) Distance between the right nose axle centerline and the jig point.
830.90 = (R1) Distance from the reference datum to the jig point of the aircraft.
950.12 = (A) Main Axle Reaction A = R1+H1
311.37 = (B) Nose Axle Reaction B = R1-(H2+H3)/2

REMARKS

1. The aircraft was weighed in a level attitude and in an enclosed hanger.
2. The wing panel jack point was used for the aircraft jig point.
3. This is the summation of the 3 weighings.
4. Baseline Weight Results for Post Mod Flight Test, dated 4/18/90.

EFTA00277920

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

727 - 100 / 200 Weighing Form

Date	Model	Serial Number	Place Weighed	Technician	Phone
4/18/90	727-100	20115 - N505C	PALMDALE	FOLEY	(805)265-2151

REACTIONS	SCALE READING	TARE	NET WEIGHT	ARM	MOMENT
Left Outboard Main	24402	6	24408		
Left Inboard Main	21867	2	21869		
Right Outboard Main	23685	-4	23681		
Right Inboard Main	23375	3	23378		
Subtotal (Mains)	93329	7	93336	A 950.12	88680400
Left Nose	1340	0	1340		
Right Nose	1497	0	1497		
Subtotal (Nose)	2837	0	2837	B 311.37	883357
TOTAL	96166	7	.96173	931.28	89563757
LESS Items NOT part of Basic Weight			0		0
PLUS Items part of Basic Weight but not Weighed			0		0
AIRCRAFT BASIC WEIGHT			96173	931.278	39.33% 89563757

CORRECTIONS

NOT Part of Basic Weight

Description	Weight	Arm	Moment
TOTAL	0		0

Items NOT weighed but Part of Basic Weight

Description	Weight	Arm	Moment
TOTAL	0		0

MEASUREMENTS

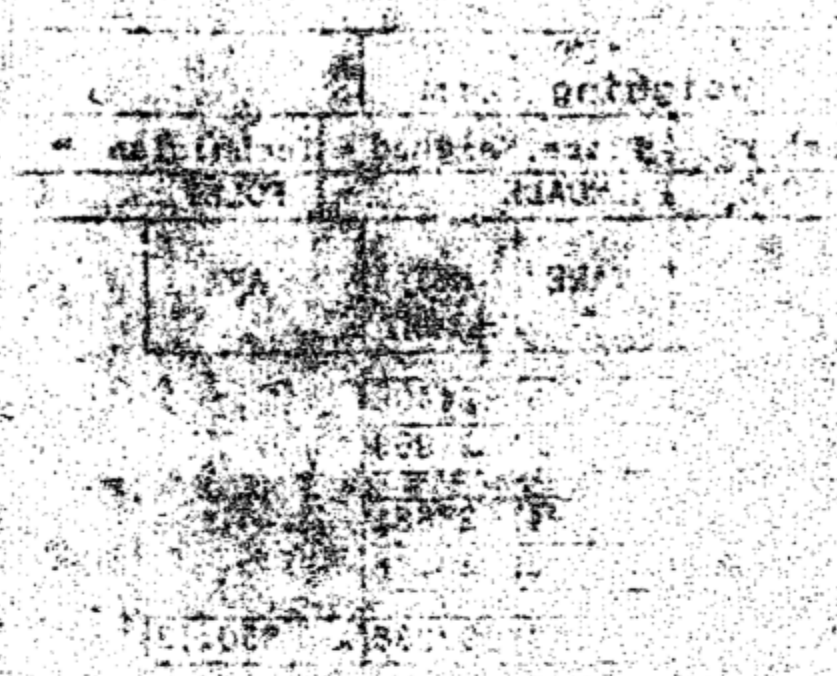
119.22	= (M1) Distance from the jig point to the main axle centerline
520.11	= (M2) Distance between the left nose axle centerline and the jig point.
518.95	= (M3) Distance between the right nose axle centerline and the jig point.
830.90	= (R1) Distance from the reference datum to the jig point of the aircraft.
950.12	= (A) Main Axle Reaction A = R1+M1
311.37	= (B) Nose Axle Reaction B = R1-(M2+M3)/2

REMARKS

1. The aircraft was weighed in a level attitude and in an enclosed hanger.
2. The wing panel jack point was used for the aircraft jig point.
3. This is weighing 1 of 3

EFTA00277922

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90



FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

727 - 100 / 200 Weighing Form

Date	Model	Serial Number	Place Weighed	Technician	Phone
4/18/90	727-100	20115 - N505C	PALMDALE	FOLEY	(805)265-2151

REACTIONS	SCALE READING	TARE	NET WEIGHT	ARM		MOMENT
Left Outboard Main	24402	6	24408			
Left Inboard Main	21865	2	21867			
Right Outboard Main	23689	-4	23685			
Right Inboard Main	23381	3	23384			
Subtotal (Mains)	93337	7	93344	A 950.12		88688001
Left Nose	1338	0	1338			
Right Nose	1501	0	1501			
Subtotal (Nose)	2839	0	2839	B 311.37		883979
TOTAL	96176	7	96183	931.27		89571981
LESS						
Items NOT part of Basic Weight			0			0
PLUS						
Items part of Basic Weight but not Weighed			0			0
AIRCRAFT BASIC WEIGHT			96183	931.27	39.33%	89571981

CORRECTIONS

NOT Part of Basic Weight

Description	Weight	Arm	Moment
TOTAL	0		0

Items NOT weighed but Part of Basic Weight

Description	Weight	Arm	Moment
TOTAL	0		0

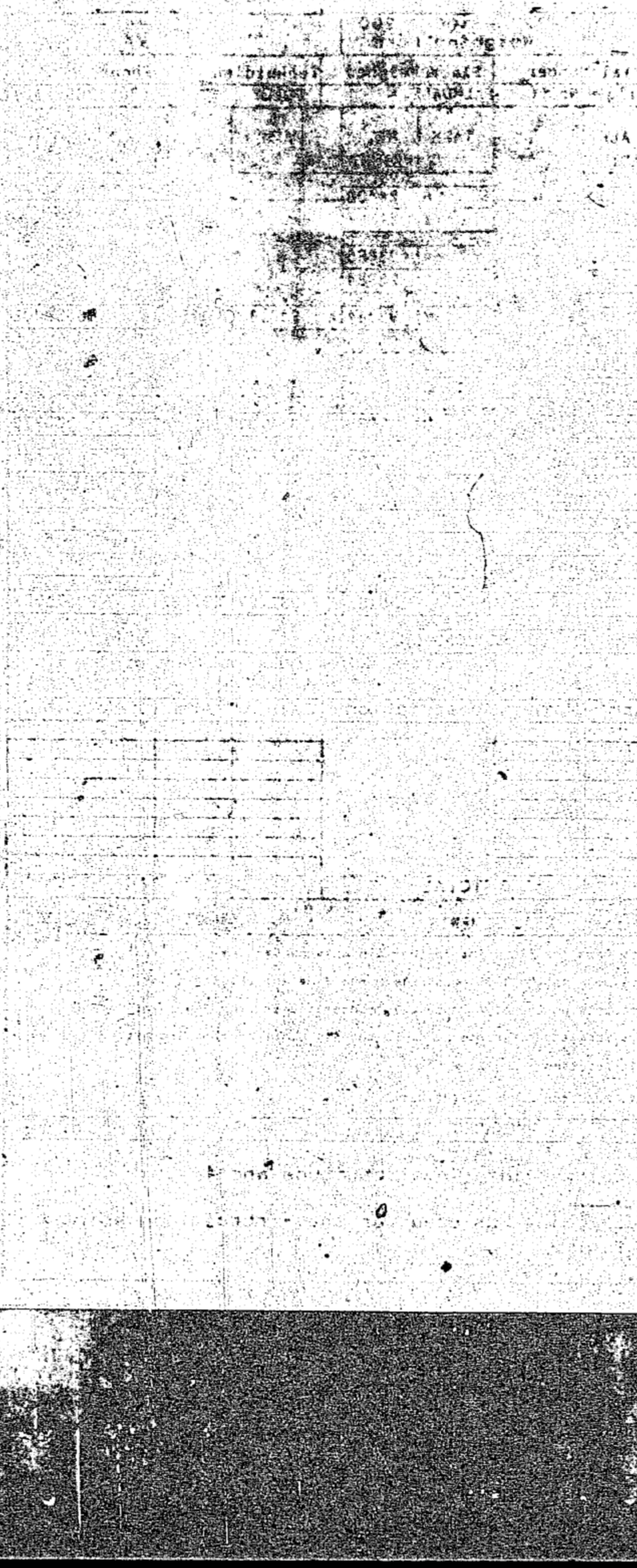
MEASUREMENTS

119.22	= (M1) Distance from the jig point to the main axle centerline
520.11	= (M2) Distance between the left nose axle centerline and the jig point.
518.95	= (M3) Distance between the right nose axle centerline and the jig point.
830.90	= (R1) Distance from the reference datum to the jig point of the aircraft.
950.12	= (A) Main Axle Reaction A = R1+M1
311.37	= (B) Nose Axle Reaction B = R1-(M2+M3)/2

REMARKS

1. The aircraft was weighed in a level attitude and in an enclosed hanger.
2. The wing panel jack point was used for the aircraft jig point.
3. This is weighing 2 of 3.

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90



FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

727 - 100 / 200 Weighing Form

Date	Model	Serial Number	Place Weighed	Technician	Phone
4/18/90	727-100	20115 - N505C	PALMDALE	FOLEY	(805)265-2151

REACTIONS	SCALE READING	TARE	NET WEIGHT	ARM	MOMENT
Left Outboard Main	24401	6	24407		
Left Inboard Main	21862	2	21864		
Right Outboard Main	23688	-4	23684		
Right Inboard Main	23388	3	23391		
Subtotal (Mains)	93339	7	93346	A 950.12	88689902
Left Nose	1339	0	1339		
Right Nose	1495	0	1495		
Subtotal (Nose)	2834	0	2834	B 311.37	882423
TOTAL	96173	7	96180	931.30	89572324
LESS					
Items NOT part of Basic Weight			0		0
PLUS					
Items part of Basic Weight but not Weighed			0		0
AIRCRAFT BASIC WEIGHT			96180	931.30 39.35%	89572324

CORRECTIONS

NOT Part of Basic Weight

Description	Weight	Arm	Moment
TOTAL	0		0

Items NOT weighed but Part of Basic Weight

Description	Weight	Arm	Moment
TOTAL	0		0

MEASUREMENTS

119.22	= (M1) Distance from the jig point to the main axle centerline
520.11	= (M2) Distance between the left nose axle centerline and the jig point.
518.95	= (M3) Distance between the right nose axle centerline and the jig point.
830.80	= (R1) Distance from the reference datum to the jig point of the aircraft.
950.12	= (A) Main Axle Reaction A = R1+M1
311.37	= (B) Nose Axle Reaction B = R1-(M2+M3)/2

REMARKS

1. The aircraft was weighed in a level attitude and in an enclosed hanger.
2. The wing panel jack point was used for the aircraft jig point.
3. This is weighing 3 of 3

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 8- 15- 90

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 7-7-89

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
ASO-830-64

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: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: N505T
2. OWNER	NAME (As shown on registration certificate): Tenneco Inc.	ADDRESS (As shown on registration certificate): 16951 J.F. K. Blvd. Houston, TX 77032

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)				XX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Tenneco Inc. 16951 J.F.K. Blvd. Houston, TX 77032	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	205-10

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
04-04-85	Glen a Everett

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
04-04-85	205-10	Glen a Everett

FAA Form 337 (7-67)

(8320)

EFTA00277928

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 7-7-89

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.)*

CREW AREA CHAIR INSTALLATION

I. Removed folding couch from L/H crew compartment station 400.

II. Installed (1 each) Tosington T1150M24 F/A AFT facing single chair on sliding rails from station 420 to station 380.

III. This alteration was completed in accordance with Threshold Engineering Company of San Antonio, TX, drawing #270 and instructions identified in report #259.

IV. All engineering drawing and reports were drafted and approved on FAA Form 8110-3 by J. A. Dugelby D.E.R. (designation number SW-256) and are available to the administrator on request.

V. All work performed utilizing acceptable methods, techniques, and practices per AC 43.13-1A.

VI. Aircraft weight and balance amended.

---END---

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 7-7-89

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 SW-FSDO-65

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: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: N505T
2. OWNER	NAME (As shown on registration certificate): Tenneco Inc	ADDRESS (As shown on registration certificate): 16951 JFK Blvd. Houston, Texas 77032

3. FOR FAA USE ONLY

The data/information identified herein compiled with 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.

12-30-85 Date — James B. Taylor Signature of FAA Inspector

4. UNIT IDENTIFICATION / 5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. REPAIR	5. 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.
Tenneco Inc 16951 JFK Blvd. Houston, Tx. 77032	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	205-10

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
12-30-85	G. Kalb

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	[X] REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
12-30-85	205-10	G. Kalb

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 7-7-89

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.)*

INSTALLATION ASINC, INC. AIRSHOW 100 SYSTEM

I. Mounted T.T.G. (Time to go) Preset Unit forward of center console, below existing Radar Indicator. (.5# @ Sta 210)

II. Mounted Rotary Selector Switch above existing T.V. Monitor. (.05# Sta 808)

III. Mounted Remote Video Relay Switch on shelf behind T.V. Monitor, same cabinet. (.5# @ Sta 820)

IV. Mounted D.I.U. (Digital Interface Unit) with suppliers rack on shelf adjacent to ATC-1 Transponder in A & E Bay, R/H Side. (8# @ Sta 463)

V. Installed 2 amp Klixon CB on forward end of #2 Essential Radio Bus CB Panel, Left side of cockpit. (Sta 261)

VI. Installed wiring and associated hardware, connectors, etc. (4# @ Sta 640)

VII. Complete system installed, tested, and operationally checked, in accordance with the manufacturers manual #910600, Tenneco Inc. Interface Wiring Diagram 011586, and acceptable methods, techniques, and practices per AC 43.13-1A Chapter 5, Chapter 11 Sections 2 thru 7, Chapter 15, AC 43.13-2A Chapters 1 and 2.

VIII. This installation does not adversely affect the operation of any other system.

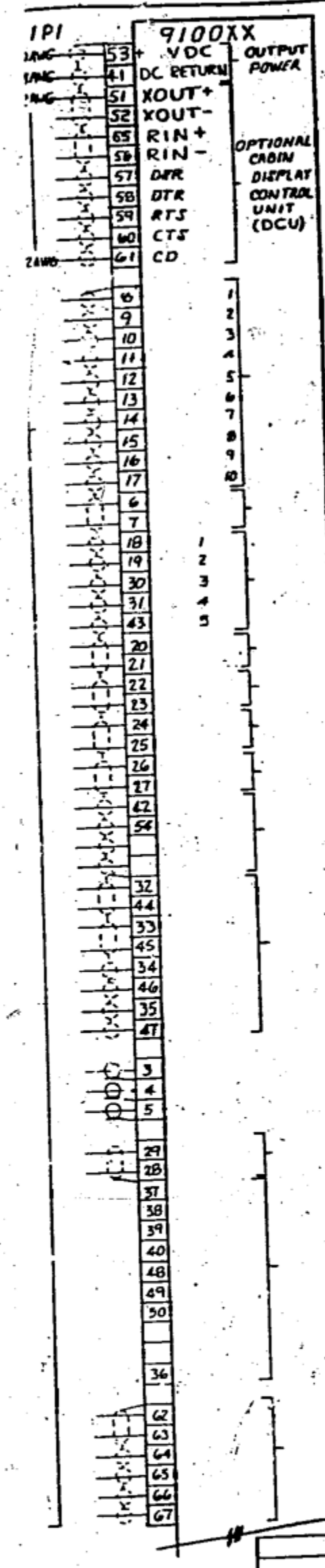
IX. W & B and Equipment List amended.

-END-

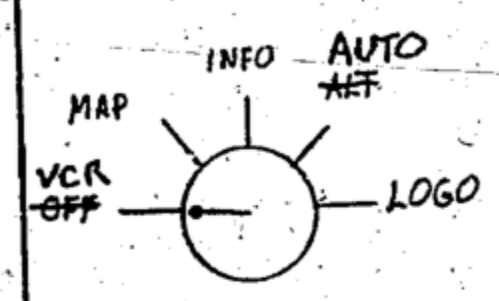
☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO: 3 DATE: 7-7-89



AIRSHOW 100
(DIU) S/N 384



12. CONNECT TO DRAIN VALVE SHROUD C.B.

13. LOCATE BEHIND VIDEO MONITOR

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	N/R	DCU RELEASE	10-13-83	
	A	ADD DCU VIDEO AND ALTER.	10-28-83	
	B	ELIMINATE ALTERNATE DCU CONN.	12-19-83	
	C	CHANGE PER DCN LOG # 291	2/20/84	
	D	CHANGE PER DCN LOG # 280	4/27/84	
	E	CHANGE PER DCN LOG # 364	30OCT84	
	F	CHANGE PER DCN LOG # 416	16 APR 85	

11. IN "OFF" POSITION POWER IS BROKEN TO VIDEO RELAY. IN ALL OTHER POSITIONS 28V IS SUPPLIED TO RELAY.

10. SWITCHES CONTROL THE DISPLAY. GROUND RETURN IS ON SHIELD.
PIN 29 GND AND PIN 30 OPEN YIELDS MAP DISPLAY.
PIN 29 OPEN AND PIN 30 GND YIELDS INFO DISPLAY.
PIN 29 OPEN AND PIN 30 OPEN ALTERNATES DISPLAY.
PIN 29 GND AND PIN 30 GND YIELDS LOGO DISPLAY.

9. 3J1 CABIN ACCESSIBLE CONNECTOR FOR DCU CONNECTION TO A5100 SYS. DCU CABLE WITH 3P1 PROVIDED AS PART OF DCU (P/N 713600). FOR TYPICAL INTERFACE OF DIU TO RS232 PORT OF PERSONAL COMPUTER (WHICH IS NOT SUPPLIED BY ASINC):

DIU 3P1 PIN	DESCRIPTION	RS232 PORT PIN	DESCRIPTION
51	DATA OUT	3	DATA IN
55	DATA IN	2	DATA OUT
56	GROUND	7	GROUND

8. GROUND D4 (ONLY) FOR ARINC 429 INPUT ON #1 2-W BUS.
GROUND B4 (ONLY) FOR ARINC 429 INPUT ON #2 2W BUS.
GROUND D4 AND B4 FOR ARINC 429 INPUT ON #1 AND #2 2W BUS.
NOTE: ALTITUDE ENCODER INPUT NOT USED WHEN ARINC 429 INPUTS ARE REQUIRED. ALTITUDE DISPLAY PARAMETER OBTAINED FROM AIRDATA 2W ARINC 429 INPUT.

7. FOR REFERENCE: FOR OAT DISPLAY CONNECT SPERRY AZ-ZGL CONNECTOR 9J1A-47 TO PIN 5, 9J1A-49 TO PIN 6 AND 9J1A-46 TO PIN 17.

6. #2 ARINC 2 WIRE SHOULD BE USED FOR DIGITAL ADS IF INS OR ONS CONNECTED. #2 ARINC CAN BE USED BY #2 INS OR ONS IF DIGITAL ADS NOT USED.

5. FOR INS OR ONS, BOTH 2 WIRE AND 6 WIRE ARINC OUTPUT SHOULD BE CONNECTED IF AVAILABLE.

4. AVOID ROUTING COAX WITH OTHER AIRCRAFT WIRING CARRYING NOISE PRODUCING CURRENTS.

3. ALL SHIELDED WIRES TO HAVE INSULATED JACKET. SHIELDS TO BE GROUNDED TO CONNECTOR SHELL AT AIRSHOW 100 DIU RACK END.

2. A1 AND A2 COAX CONNECTOR REQUIRE RG58 DIAMETER COAX. RG59 SHOULD BE SPLICED IN FOR LONG RUN (>10FT).

1. 24 AWG OPTIONAL EXCEPT FOR POWER INPUT.

NOTES: (UNLESS OTHERWISE SPECIFIED)

CONNECTOR TABLE			
REF	DESCRIPTION	ALTERNATE	ASINC P/N
1P1	(AMP) RMRPC78 32CCS-0001 (200)		615012
2P1	KPTOCE-8-4S	PTOCE-8-4S	625008
3P1	MS3126F-14-12P		625012
3J1	MS3122E-14-12S	MS3112E-14-12S	625017
3J2	UG/U 492D	BNC BULK HD	625018

920410 F

QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
			PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS = — DECIMALS .XX = — .XXX = — ANGLES = —

MATERIAL

FINISH

DO NOT SCALE DRAWING

NEXT ASSY | USED ON
APPLICATION

CONTRACT NO.

APPROVALS	DATE
DRAWN C. VON OVEREEM	24APR85
CHECKED	

910600 REVP
SHEET 31

ASINC, INCORPORATED
19611C MYFORD RD. TUSTIN CA 92680

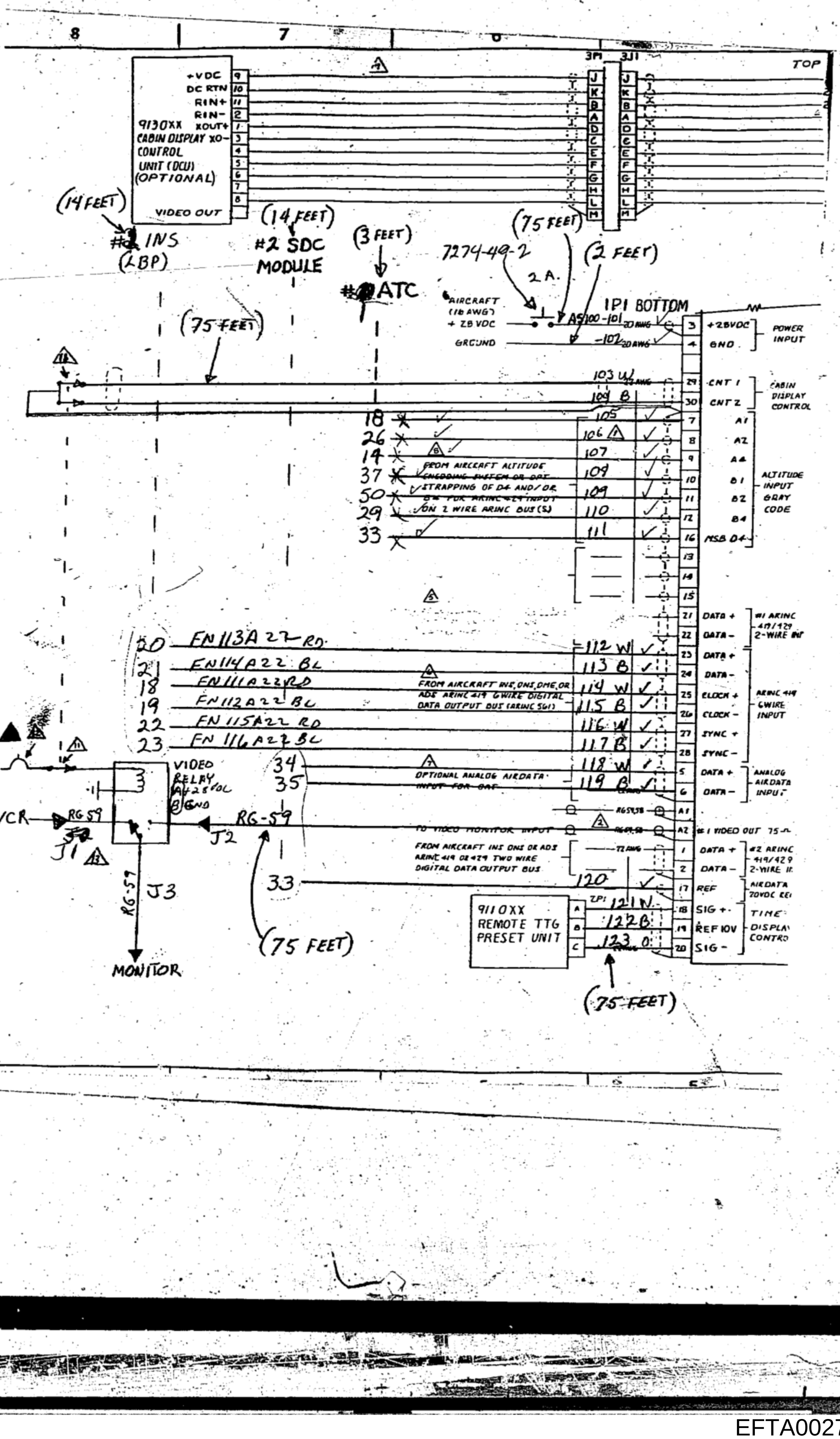
INTERCONNECT WIRING
AIRSHOW 100 WITH DCU

SIZE D | CODE IDENT NO. | DRAWING NO. 920410 | F
SCALE — | SHEET 1 OF 1

4 3 2 1

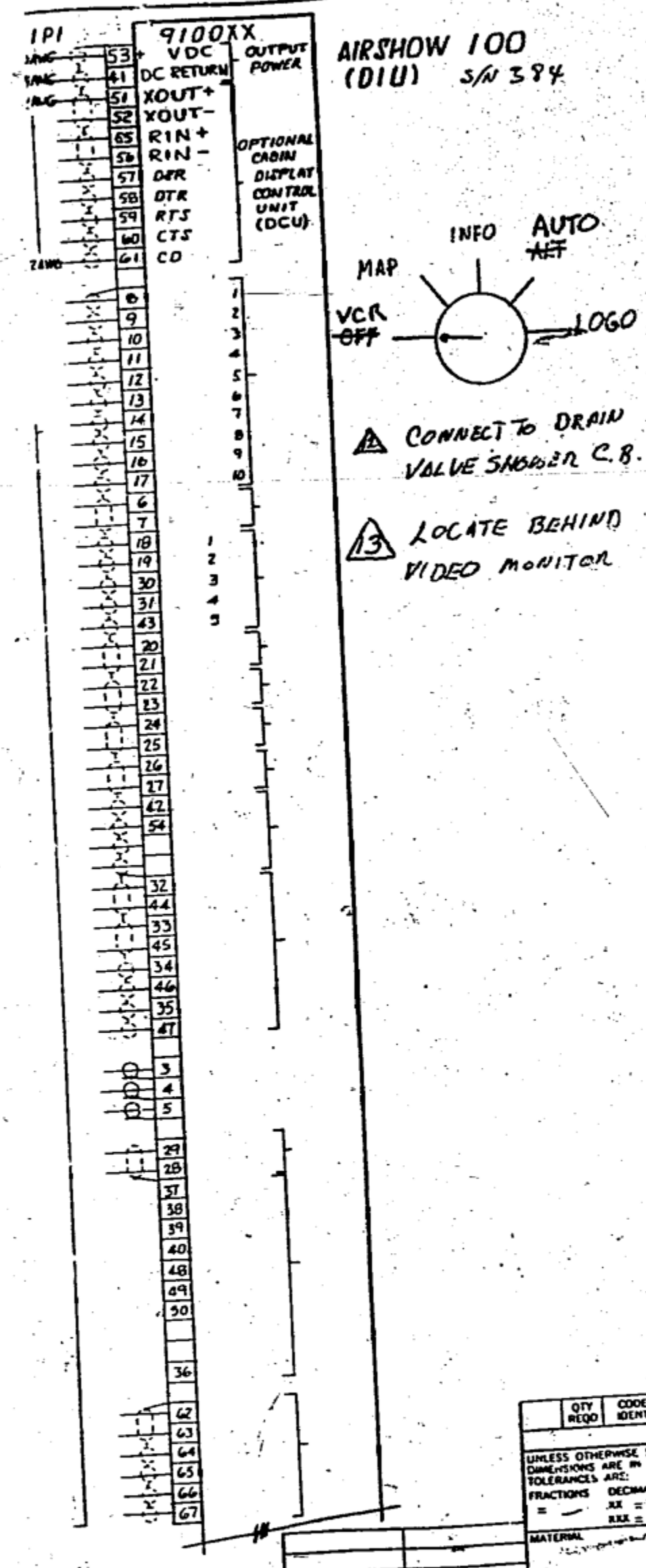
EFTA00277932

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 7-7-89



EFTA00277933

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 7-7-89



AIRSHOW 100
(DIU) S/N 384

⚠4 CONNECT TO DRAIN VALVE SHROUD C.B.

⚠13 LOCATE BEHIND VIDEO MONITOR

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	N/C	DCU RELEASE	10-13-83	
	A	ADD DCU VIDEO AND ALTER.	10-28-83	
	B	ELIMINATE ALTERNATE DCU CONN.	12-19-83	
	C	CHANGE PER DCN LOG # 291	2/20/84	
	D	CHANGE PER DCN LOG # 286	4/27/84	
	E	CHANGE PER DCN LOG # 364	30 OCT 84	
	F	CHANGE PER DCN LOG # 416	16 APR 85	

⚠11 IN "OFF" POSITION POWER IS BROKEN TO VIDEO RELAY. IN ALL OTHER POSITIONS 28V IS SUPPLIED TO RELAY

⚠10 SWITCHES CONTROL THE DISPLAY. GROUND RETURN IS ON SHIELD.
PIN 29 GND AND PIN 30 OPEN YIELDS MAP DISPLAY.
PIN 29 OPEN AND PIN 30 GND YIELDS INFO DISPLAY.
PIN 29 OPEN AND PIN 30 OPEN ALTERNATES DISPLAY.
PIN 29 GND AND PIN 30 GND YIELDS LOGO DISPLAY.

⚠9. 3J1 CABIN ACCESSIBLE CONNECTOR FOR DCU CONNECTION TO AS100 DIU. DCU CABLE WITH 3P1 PROVIDED AS PART OF DCU (P/N 910000). FOR TYPICAL INTERFACE OF DIU TO RS232 PORT OF PERSONAL COMPUTER (WHICH IS NOT SUPPLIED BY ASINC):

DIU (P1 PIN	DESCRIPTION	RS232 PORT PIN	DESCRIPTION
51	DATA OUT	3	DATA IN
55	DATA IN	2	DATA OUT
56	GROUND	7	GROUND

⚠8. GROUND D4 (ONLY) FOR ARINC 429 INPUT ON #1 2-W BUS.
GROUND B4 (ONLY) FOR ARINC 429 INPUT ON #2 2W BUS.
GROUND D4 AND B4 FOR ARINC 429 INPUT ON #1 AND #2 2W BUS.
NOTE: ALTITUDE ENCODER INPUT NOT USED WHEN ARINC 429 INPUTS ARE REQUIRED. ALTITUDE DISPLAY PARAMETER OBTAINED FROM AIRDATA 2W ARINC 429 INPUT.

⚠7. FOR REFERENCE: FOR OAT DISPLAY CONNECT SPERRY AZ-262 CONNECTOR 9J1A-47 TO PIN 5, 9J1A-49 TO PIN 6 AND 9J1A-46 TO PIN 17.

⚠6. #2 ARINC 2 WIRE SHOULD BE USED FOR DIGITAL ADS IF INS OR ONS CONNECTED. #2 ARINC CAN BE USED BY #2 INS OR ONS IF DIGITAL ADS NOT USED.

⚠5. FOR INS OR ONS, BOTH 2 WIRE AND 6 WIRE ARINC OUTPUT SHOULD BE CONNECTED IF AVAILABLE.

4. AVOID ROUTING COAX WITH OTHER AIRCRAFT WIRING CARRYING NOISE PRODUCING CURRENTS.

3. ALL SHIELDED WIRES TO HAVE INSULATED JACKET. SHIELDS TO BE GROUNDED TO CONNECTOR SHELL AT AIRSHOW 100 DIU RACK END.

⚠2. A1 AND A2 COAX CONNECTOR REQUIRE RG58 DIAMETER COAX. RG-59 SHOULD BE SPLICED IN FOR LONG RUN (>10FT).

⚠1. 24 AWG OPTIONAL EXCEPT FOR POWER INPUT.

NOTES: (UNLESS OTHERWISE SPECIFIED)

CONNECTOR TABLE			
REF	DESCRIPTION	ALTERNATE	ASINC P/N
1P1	(AMP) RM2PC78 32CEJ-0000 (200)		615012
2P1	KPTOCE-8-4S	PTOCE-8-4S	625008
3P1	MS3126F-14-12P		625012
3J1	MS3122E-14-12S	MS3112E-14-12S	625017
3J2	UG/U 492D	BNC BULK HD	625018

QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
PARTS LIST			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS = — DECIMALS .XX = — .XXX = — ANGLES = —
MATERIAL
FINISH
DO NOT SCALE DRAWING
NEXT ASSY | USED ON
APPLICATION

CONTRACT NO.

APPROVALS	DATE
DRAWN C VAN OVEREEM	24 APR 85
CHECKED	

910600 REVP
SHEET 31

ASINC, INCORPORATED
19611C MYFORD RD. TUSTIN CA. 92680

INTERCONNECT WIRING
AIRSHOW 100 WITH DCU

SIZE D | CODE IDENT NO. | DRAWING NO. 920410 | F
SCALE — | SHEET 1 OF 1

920410 F

EFTA00277934

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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 SW-[illegible]-64

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: BOEING	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: USA N505T
2. OWNER	NAME (As shown on registration certificate): TENNECO INC.	ADDRESS (As shown on registration certificate): 16951 J.F.K. Blvd. Houston, TX 77032

3. FOR FAA USE ONLY

[illegible] identified herein complied with [illegible] applicable airworthiness requirements and is approved only for the [illegible] described aircraft subject to conformity inspection by [illegible] identified in E A 8.

12/21/84 [signature] Inspector

4. UNIT IDENTIFICATION / 5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: ALTERATION
AIRFRAME	••••••

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)***

TRASH COMPACTOR

I. Removed Thermador Trash Compactor P/N TMC-28B S/N 3060438, Having 6 AMP load, approved on 337 dated 9/19/83.

II. Installed Montgomery Ward Trash Compactor P/N SBW-5235-c S/N 48H-00442, Having 10 AMP Load.

III. Unit function tested satisfactorily; unit operation does not adversely affect the safe operation of the aircraft.

IV. Installation was same as previously approved on N505T 4/01/81 for Airesearch Aviation Co., Los Angeles, CA. (See previous weight and Balance Data Report #C-3688.)

V. Installation using acceptable methods, techniques, and practices in accordance with AC43-13-1A Chapter 11, and Chapter 13.

VI. Weight and Balance and Equipment List Revised.

---END---

☐ ADDITIONAL SHEETS ARE ATTACHED

C FAA AC 79-4008

☆ U.S. GPO: 1981 - 775-332/47

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

ORIG

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 SW-GADO-5

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: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: N505T
2. OWNER	NAME (As shown on registration certificate): Tenneco Inc.	ADDRESS (As shown on registration certificate): 16951 J.F.K. Blvd. Houston, TX 77032

3. FOR FAA USE ONLY

...ing alteration identified herein complied 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 (b).

8/8/84 Robert W. Dailey
Inspector SW - GADO 5

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.
Tenneco Inc. 16951 J.F.K. Blvd. Houston, TX 77032	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	205-10

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
8/3/84	

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	[ ]	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OR AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
8-8-84	205-10	

FAA Form 337 (7-67) (8320)

TC 1080/1 ✓ TC 789/1 ✓

EFTA00277937

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)*

VIDEO MONITOR AND VCR INSTALLATION

I. Revised interior (which was previously installed and approved by Airesearch Aviation Co., Los Angeles, CA 4/7/81 on report No. C-3688) as follows:
   A. Modified coat closet (R/H side Sta. 814.5) to receive mounts for installation of the following:
      1. Video Recorder - Mitsubishi HS-330UR
      2. Video Monitor - Mitsubishi CM-1901
      3. Infra-Red Transmitter - Nady 1RT-200
      4. Altitude Cut-Out Switch - Asinc 90500
      5. Power Receptacle - 7777K1
      6. Power Supply AC-DC Adaptor - Nady LA-2420

II. Modification of coat closet in accordance with Structural Substantiation Report No. 243 and Drawing No. 266, submitted and approved on FAA form 8110-3 by J. A. Dugelby, D.E.R., Threshold Engineering Company, San Antonio, TX. Reports and drawings are available to the Administrator on request.

III. Power Supply as follows:
   A. 28V DC Bus No. 1 (Drain Valve, Shower 3 amp CB, existing).
   B. 115V AC 60Hz (Utility Outlets Aft Cabin - 15 amp CB, existing).

IV. Utilized existing Altec 755E Speakers at Sta. 730.0

V. Systems installation is in accordance with Tenneco Inc. Drawing "N505T Video System" dated 7/26/84.

VI. All work performed utilizing acceptable methods, techniques, and practices per AC 43.13-1A, Chpt.15 and AC 43.13-2A Chpts. 1 & 2.

VII. Installation was functionally tested at ground level and at altitude during performance check flight, and operated satisfactorily and did not adversly affect the operation of any other systems.

VIII. Aircraft weighed. Weight and Balance and Equipment list amended.

-- END --

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/290

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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 SO GAFDA-5

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: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: N505T
2. OWNER	NAME (As shown on registration certificate): Tenneco Inc.	ADDRESS (As shown on registration certificate): 16951 J.F.K. Blvd. Houston, TX 77032

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) •••••••••••••••••••••••••			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Tenneco Inc. 16951 J.F.K. Blvd. Houston, TX 77032	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	205-10

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
8/3/84	

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
8/3/84	205-10	

FAA Form 337 (7-67) (8320)

TC1030h ✓

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)***

BODY STATION 950 BULKHEAD FORGING REPAIR

I. Repaired left and right BS 950 forging, lower section, in accordance with instructions provided by Threshold Engineering Company of San Antonio, TX. Subject instructions are identified in reports No. 242 and No. 244. Reports were drafted and approved on FAA form 8110-3 by J. A. Dugelby, D.E.R., and are available to the Administrator on request.

II. All work performed utilizing acceptable methods, techniques, and practices per AC 43.13-1A.

III. Aircraft weighed. Weight and Balance amended.

-- END --

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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 SW-GADO-6

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: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: U.S.A. - N505T
2. OWNER	NAME (As shown on registration certificate): Tenneco Inc.	ADDRESS (As shown on registration certificate): 16951 J.F.K. Blvd. Houston, TX 77032

3. FOR FAA USE ONLY

The aircraft identified herein complied with applicable airworthiness requirements and is approved only for the aircraft described hereon and subject to continuity inspection by a person authorized by F.A.R. 43.7 thereof.

7/20/84
Date

Inspector SW - GADO 6

4. UNIT IDENTIFICATION / 5. TYPE

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.
Tenneco Inc. 16951 J.F.K. Blvd. Houston, TX 77032	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	205-10

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
7/19/84	Glen A Emmett

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	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
7-25-84	205-10	Glen A Emmett

FAA Form 337 (7-67) (8320)

TC 1030/1V TC 789/1V

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)*

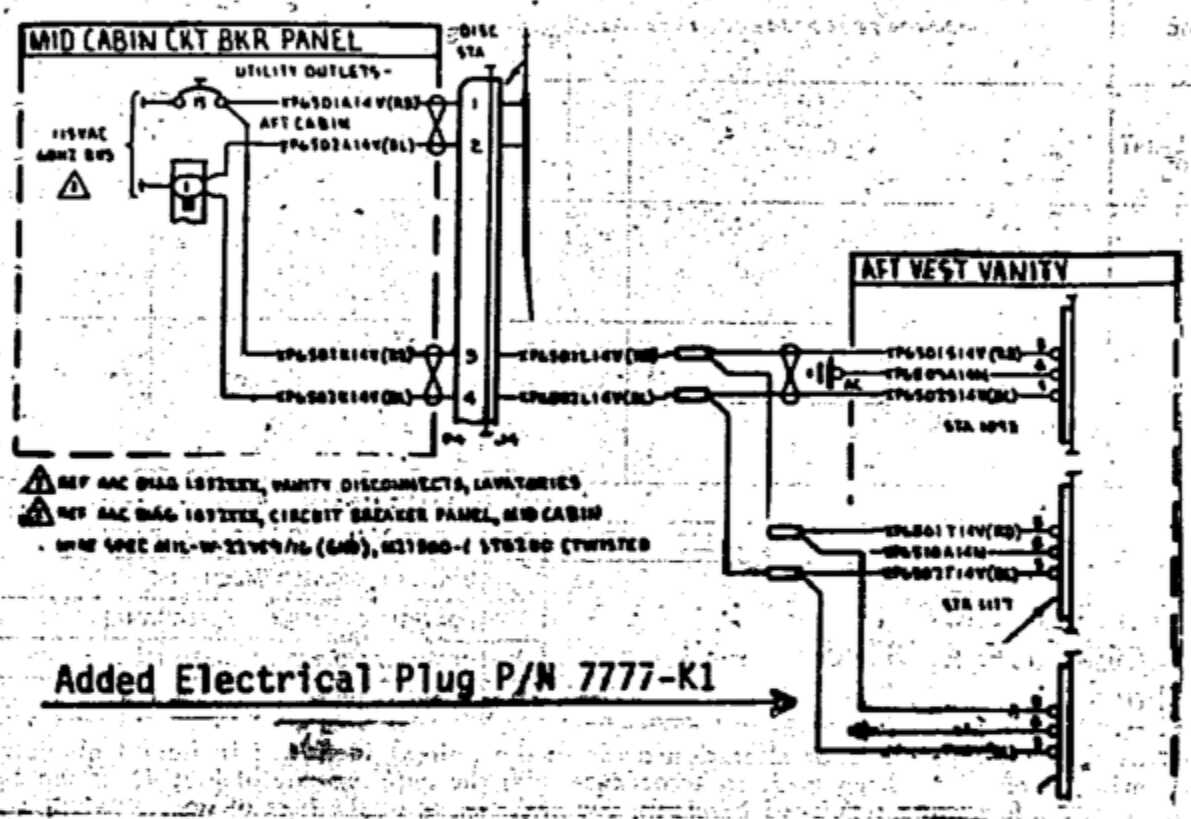
INSTALLATION OF 115 VOLT SOCKET & HAND VACUUM WITH CHARGER BASE

I. Installed 1 each Cutler - Hammer aircraft electric safety socket P/N 7777-K1 in rear closet, left hand side, station 1137. Wired new plug into existing 75/115 volt AC supply from utility plug in vanity.

II. The safety socket incorporates a switch, which connects the supply to the vacuum battery charger when the charger plug is inserted in the socket, and is protected by a 250 MA fuse.

III. Installed the following placard adjacent to safety socket.

VACUUM CLEANER CHARGER ONLY



IV. Installed 1 each Black & Decker cordless vacuum cleaner with battery charger base P/N 680982-00. This unit is Underwriters Laboratories approved and has the following specifications: 120 volts, 60HZ, 5 watts/ 7.2 V.D.C., 125 MA. The total voltage draw from the power supply will be approximately 1.06 MA.

V. The charger base is mounted adjacent to the electrical outlet at station 1137 and attached using AN526-8-32 screws, AN970-3 large area washers and AN305-8-32 fiber lock nuts.

VI. Weight & Balance and Equipment List amended.

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/200

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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 ASW-GAD05

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: BOEING	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: USA N505T
2. OWNER	NAME (As shown on registration certificate): TENNECO INC.	ADDRESS (As shown on registration certificate): 16951 J.F.K. BLVD. HOUSTON, TEXAS 77032

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.
G. C. Kolb Tenneco Inc. 16951 J.F.K. Blvd. Houston, Texas 77032	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A + P 1337480

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
September 19, 1983	G. C. Kolb

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
September 19, 1983	IA 1337480	G. C. Kolb

FAA Form 337 (7-67) ☆ U.S. Government Printing Office 1977—772-646/141 (8320)

TC-1030, DCB

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)*

TRASH COMPACTOR

I. Removed Montgomery Ward Trash Compactor P/N SBW-5021A S/N 08D-00489, Having 10 AMP Load.

II. Installed Thermador Trash Compactor P/N TMC-28B S/N 3060438, Having 6 AMP load, same location.

III. Unit function tested satisfactorily; unit operation does not adversely affect the safe operation of the aircraft.

IV. Installation was replacement of unit previously approved 4-07-81 for Airesearch Aviation Co., Los Angeles, Ca. (See previous weight and Balance Data Report #C-3688.)

V. Installation using acceptable methods, techniques, and practices in accordance with AC43-13-1A Chapter 11, and Chapter 13.

VI. Weight and Balance and Equipment List Revised.

----END----

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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
AWE FSDO65

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: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: U.S.A. N505T
2. OWNER	NAME (As shown on registration certificate): Tennco, Inc.	ADDRESS (As shown on registration certificate): 11795 J.F.K. Blvd. Houston, Texas 77205

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. REPAIR	5. 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.
Airesearch Aviation Co. 4150 Donald Douglas Dr. Long Beach, CA 90808	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	~~R.S. 4022 A~~ A/C CLASS 2-3-4 RADIO CLASS 1-2-3 LIMITED INSTRUMENT SPECIALIZED SERVICE

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: APR 17 1981

SIGNATURE OF AUTHORIZED INDIVIDUAL: Robert E. Fujii, Lead Inspector

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	

RECEIVED MAY 07 1981 LGB FSDO 65

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
APR 17 1981	RS 4022A	Robert E. Fujii, Lead Inspector

FAA Form 337 (7-67) (8320)

EFTA00277945

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)*

Installation of Dual Delco Carousel IVA Inertial Navigation System in accordance with STC SA4164WE, amendment dated April 16, 1981 to include 727-31 model. Flight manual supplement issued dated April 16, 1981.

It has been determined that the interrelationship between these changes and any other previously approved modifications will not adversely effect the airworthiness of this aircraft.

Aircraft has been weighed. Weight and balance and equipment list revised.

The end.

☐ ADDITIONAL SHEETS ARE ATTACHED

975-G.P.O.-1703-M/673-900/175

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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
SW-FSDO-62

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: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: USA N505T
2. OWNER	NAME (As shown on registration certificate): Tenneco, Inc.	ADDRESS (As shown on registration certificate): 16951 JFK Blvd. Houston, Texas 77205

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. REPAIR	5. 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.
G. C. KOLB Tenneco, Inc. 16951 JFK Blvd. Houston, Texas 77205	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	205-1

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
4-22-81	G. C. Kolb

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
4-24-81	1337480	G. C. Kolb

FAA Form 337 (7-67) (8320)

EFTA00277947

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)*

Supplementary Lights

I. Grimes Supplementary Lighting System installed on wing tips.

II. Installation was in accordance with good shop pratices per AC43.13-1A Chapter 5, Sec. 1, and Chater 6, Para. 248 and 249; Chapter 7, Sec. 1, Chapter 11, Sec. 1-2-3-4-5-7; Mfgs. Specifications; and Airesearch Aviation Co. Drawings #1359002"A" (Mechanical) and #1783009 "NC" (Electrical).

III. System was functionally checked and operation was normal.

IV. Weight and Balance and Equipment List revised.

-END-

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

EFTA00277948

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

STC 4

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 WE Eqp '65

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: BOEING	MODEL: 727-31
	SERIAL NO.: 20116	NATIONALITY AND REGISTRATION MARK: U.S.A. N505T
2. OWNER	NAME (As shown on registration certificate): TENNECO, INC.	ADDRESS (As shown on registration certificate): 17795 J.F.K. Blvd. Houston, Texas 77205

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) •••••••••••••••••••••••				XX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
AIRESEARCH AVIATION CO. 4150 Donald Douglas Dr. Long Beach, CA 90808	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	R. S. 4022 A A/C CLASS 2-3-4 RADIO CLASS 1-2-3 LIMITED INSTRUMENT SPECIALIZED SERVICE

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: APR 03 1981

SIGNATURE OF AUTHORIZED INDIVIDUAL: Robert E. Fujii, Lead Inspector

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
	[ ]	FAA DESIGNEE	[X]	REPAIR STATION	[ ]	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT

OTHER (Specify)

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
APR 03 1981	RS 4022A	Robert E. Fujii, Lead Inspector

FAA Form 337 (7-67) (8320)

EFTA00277949

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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.)*

Installation of dual Delco Carousel IVA Inertial Navigation System in accordance with STC SA4164WE. Flight Manual Supplement issued dated June 27, 1980.

Installation of dual HF Communications System using a vertical fin leading edge slotted antenna in accordance with Eastern Airlines STC ST610SO except for the following deviations:

AAC Drawing 1518198 - HF - 1 System Control Head Mod.

AAC Drawing 1518199 - HF - 2 System Control Head Mod.

It has been determined that the interrelationship between these changes and any other previously approved modifications will not adversely affect the airworthiness of this aircraft.

Aircraft has been weighed. Weight and Balance and Equipment List Revised.

THE END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977 -771-021/290

EFTA00277950

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

A4

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
AWE FSDO 65

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

1. AIRCRAFT	MAKE: Boeing	MODEL: 727-31
	SERIAL NO.: 20115	NATIONALITY AND REGISTRATION MARK: U.S.A. N505T
2. OWNER	NAME (As shown on registration certificate): Tenneco, Inc.	ADDRESS (As shown on registration certificate): 177795 John F. Kennedy Blvd. Houston, Texas 77205

3. FOR FAA USE ONLY

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

By David R Bertha AWE FSDO 65 Date 4-3-81

4. UNIT IDENTIFICATION / 5. TYPE

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.
AiResearch Aviation Co. 4150 Donald Douglas Dr. Long Beach, CA 90808	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	R. S. 4022 A A/C CLASS 2-3-4 RADIO CLASS 1-2-3 LIMITED INSTRUMENT SPECIALIZED SERVICE.

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
APR 03 1981	Robert E. Fujii, Lead Inspector

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
APR 03 1981	RS 4022A	Robert E. Fujii, Lead Inspector

FAA Form 337 (7-67) (8320)

EFTA00277951

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

NOTICE

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

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

The following systems were installed complete and in accordance with manufacturer's specifications; ACCS-32 all sections; AC4.3.13-2 Chapter 2, para. 21,22,23, Chapter 11, para. 182, 183, e,f,g; AC43-1A Chapter 16, sections 1,2,3,4,5; AiResearch Aviation Co. drawings DL 1500553 avionics radio, DL 1600562 avionics elect and Will Kennedy DER FAA 8110-3 data approval.

Dual Collins 618M-3A comm system
Dual Collins 51RV-1 VHF navigation system
Dual Collins FD-109Y flight director system
Dual Collins DME-40 DME system
Dual Collins TDR-90 transponder system
Dual Collins DF-206 ADF system
Collins FPC-75 ground proximity warning system
Collins 54W1C comparator warning system
Collins 51Z-4 marker beacon system
RCA Primus-400 WXD coloradar system
Wulfsberg flightfone III air to ground radiotelephone

Flight Instruments:

(2) IDC 521-28007005 servoed encoding altimeters
(2) IDC 422-30510-130 static defect corrector and SAT/TAS computers
(2) IDC 575-25820-739 mach/airspeed indicators
(2) IDC 513-24660-101 TAS/SAT/TAT indicators
(1) IDC 540-25100-001 altitude alerter
(3) Davtron 811B digital clock/flight time recorder
(2) Collins 329B-8Y approach horizon indicators
(2) Collins 331A-9G course indicators
Rosemount 102AH-2AG dual temperature probe
Cabin audio entertainment system

The following systems interface and wiring also installed in accordance with AC 43.13-1A chapter 11 all sections:

1607032	shaver outlets, mod
1608092	utility outlets, fwd cabin
1608093	utility outlets, aft cabin
1608099	service outlets, mod
161013	ac power distribution
161013	ac power galley service
1611031	Freq.conv. static 115 vac, 60 HZ
1636212	dc power distribution
1668006	engine oiler remote pump
1683354	sch-electric oven, mod (jenn-air)
1683355	electric oven, mod (jenn-air)
1683371	galley, fwd unit
1683372	galley, aft unit

ADDITIONAL SHEETS ARE ATTACHED

★1975-G.P.O.-1703-M/673-800/175

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

A4

The following systems interface and wiring also installed in accordance with AC 43.13-1A chapter 11 all sections:

1684011	sch-pneu, zone air cond.
1684012	sch-ckt, air cond. (zone temp. cont.)
1684013	sch-ckt, air cond. (overheat cont.)
1685073	air cond.zone temp control
1687047	air cond. sensor fans
1692239	water heater, galley 6 gal.
1692240	water heater, master lav. 20 gal.
1692241	water system line heaters,fwd
1692242	water system line heaters, aft
1692316	water heaters, lavatories, mod
1700040	vent blower galley
1755039	air cond. zone temp. indication
1782110	aisle lights, cabin
~~1783009~~	~~strobe lights wing~~
1784137	storage compt and closet lights
1789059	ceiling lts essential power
1792150	cove lights, crew compt
1792151	cove lights, galley
1792152	cove lights, lounge
1792153	cove lights, fwd. state room
1792154	ceiling & read lts, crew compt.
1793268	ceiling lts galley
1793269	ceiling & read lts, lounge
1793270	ceiling & read. lts, fwd stateroom
1793271	ceiling & read. lts, aft stateroom
1793272	ceiling lts, aft lavatory
1807045	table lamps cabin
1808212	shower fan/ lt & drain valve
1813061	panel ltg. 3rd crewman's
1813062	switch & panel ltg. cabin
1821059	ceiling lts, fwd vestibule
1821060	ceiling lts, aft vestibule
1824242	work & effect lts, lounge bar
1824243	vanity lights, aft vestibule
1824244	work lts, fwd and aft attendant's
1832400	attendant's panel, fwd vest.
1832401	attendant's panel galley
1832402	attendant's panel aft vest
1832403	vanity disconnects, lavatories
1832404	circuit breaker panel, galley
1832405	circuit breaker panel, mid cabin
1832406	control panels, cabin
1832407	electrical equipment instl. galley
1832408	electrical equip. instl, mid cabin
1837026	spare wires, electrical
1838211	electrical flush toilets, mod
1838212	drain valves water system
1838213	air compr. & qty ind. water system
1880028	air cond. overheat control
1883071	emergency exit ltg, mod
1886193	call system relay assy
1886194	call system cabin
1886195	call system crew

continued . .

EFTA00277953

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

The following systems interface and wiring also installed in accordance with AC 43.13-1A chapter 11 all sections:

1887205	passenger warning signs	
1888050	smoke and flame det. sensor assy	
1888053	smoke and flame det. bag compt	
1501388	radio power feeds	
1502232	radio lights	
1503178	ADF-1 system DF-206	
1504137	ADF-2 system DF-206	
1505284	NAV-1 system 51RV-1	
1506266	NAV-2 system 51RV-1	
1507304	FD-1 system FD-109Y	
1508276	FD-2 system FD-109Y	
1509281	DME-1 system DME-40	
1510184	DME-2 system DME-40	
1511058	DME indicator	
1513193	marker system 512-4	
1514066	Selcal system 456C- modif	
1515205	VHF-1 system 618M-3A 1516207	
1516207	VHF-2 system 618M-3A	
1520127	flitefone system	
1521225	atc system tdr-90 (dual)	
1523254	pa/inph (modif)	
1524057	stereo system (cabin)	
1525090	tv antenna (prov)	
1527211	cockpit audio (modif)	
1529137	comparator system 54W-1C	
1530149	weather radar primus-400	
1533204	no. 1 radar altimeter ala-51A (modif)	
1533205	no. 2 radar altimeter ala-51A (modif)	
1535205	autopilot system interface	
1536231	comp-1 system interface	
1537221	comp-2 system interface	
1538174	altitude system interface.	
1541186	ins-1 system CIVA	
1541188	ins-1 system interface	
1541187	ins-2 system CIVA	
1541189	ins-2 system interface	
1544264	l.h. altimeter/alerter	
1544265	r.h. altimeter indicator	
1544266	stby altimeter indicator	
1545117	mach/airspeed indicators	
1547116	l.h. sat/tas system	
1547117	r.h. sat/tas system	
1548034 (2)	scat system (modif)	
1549249	annon system	
1550178	reco accessory box	
1551077	digital clock system	
1552007	oat indicator (modif)	
1557091	data select system	
1558010	rate of turn system (modif)	
1560020	GPWS system (modif)	
1571017	ins relay unit	
1572028	nav relay unit	
1592046	annunciator cplr diagram	
1594097	cockpit hf/inph control	
1594098	cabin flitefone/inph control	

continued . . .

EFTA00277955

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

An electrical DC-AC load analysis has been made per AiResearch Aviation Co. report C-3724 in accordance with AC 43.13-1A-426, and 4b.621. Total DC capacity is 150 amps. Total normal cruise DC load is 81.9 amps. Total cruise AC load is 57.3 KVA.

Aircraft weighed. Weight and balance and equipment list revised.

The end.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

14

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 WE75DO 65

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 Boeing	MODEL 727-31
	SERIAL NO. 20155	NATIONALITY AND REGISTRATION MARK USA N505T
2. OWNER	NAME (As shown on registration certificate) Tenneco, Inc.	ADDRESS (As shown on registration certificate) 1795 J.F.K. Blvd. Houston, Texas 77205

3. FOR FAA USE ONLY

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

BY [signature] Date 4/3/81
WE75DO 65

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.
AiResearch Aviation Co. 4150 Donald Douglas Dr. Long Beach, CA 90808	U.S. CERTIFICATED MECHANIC	R. S. 4022 A A/C CLASS 2-3-4 RADIO CLASS 1-2-9 LIMITED INSTRUMENT SPECIALIZED SERVICE
	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
APR 03 1981	Robert E. Fujii, Lead Inspector

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		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
APR 03 1981	R4022A	Robert E. Fujii, Lead Inspector

FAA Form 337 (7-67) 1(7) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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 the following in accordance with ACCS-36 all sections. AC43.13-2 chapter 1 para. 1-4-5-6-7-8-9-10-11-12 and AiResearch Aviation Co. drawings, DL1300517, DL 1400319 and structural analysis contained in Howard Patterson DER report No. C-1825.

B.T.

1102034	Installation table, cocktail, removable.	
1102044	~~110244~~ " table, cocktail	
1102046	" table, cocktail w/ folding leaf	
1104065	" table, foldout , galley	
1124232	" divan, r.h. 3 place	
1124235	" divan, l.h. 2 place berthable	
1124236	" divan, curved, 4 place	
1124237	" divan, transverse, 3 place	
1124238	" divan, riviera, 3 place fwd. facing	
1124239	" divan, riviera, 3 place aft facing	
1124241	" kibitzer seat	
1130090	" closet/ desk, r.h.	
1130093	" closet l.h.	
1130094	" closet, linen	
1130096	" crew coatroom/cart storage	
1130097	" closet linen, outboard	
1139111	" ledge	
1142171	" cabinet, refreshment	
1144127	" table, with folding leaves	
1146114	" pull-out table divan	
1147184	" cabinet overhead	
1147185	" cabinet overhead	
1160200	" fabrication bulkhead and doors	
1160201	Fabrication furn. panels	
1160228	Fabrication bulkhead and attach	
1160233	Installation life raft, overhead	
161-STD-052	Installation std. blowout door and bulkhead prov.	
1164038	Installation fitting, bulkhead tiedown	
1164046	" bulkhead and partition upper attach	
1164050	" partitions, fwd, and aft	
1164052	" pass partition and attach	
1165470	" galley, r.h. fwd, fwd facing	
1165478	" galley, r.h. fwd aft facing	
1176173	" cabinet, vanity w/ seat	
1176174	" cabinet, aft lav.	
1214196	" shower	
1214200	" aux. water tank	
1214271	" hot water tank	
1214329	" aux. water tank, aft	
1220153	" pallet, single seat	
1220155	" pallet, single seat	
1220158	" pallet, 4th crew member	
1220159	" floor support mod. pallet	

ADDITIONAL SHEETS ARE ATTACHED

★1975-G.P.O.-1703-M/673-900/175

EFTA00277958

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

Boeing 20115 Tennaco Inc. 727-31 N505T

1. Installed the following in accordance with ACCS-36 all sections. AC43.13-2 chapter 1 para. 1-4-5-6-7-8-9-10-11-12 and AiResearch Aviation Co. drawings, DL1300517, DL 1400319 and structural analysis contained in Howard Patterson DER report No. C-3825.

1242022 Installation, crew desk/storage

2. Installed the following in accordance with ACCS-44, all sections and AiResearch Aviation Co. drawings.

1245409 Floorplan - installation of T.S.O. approved seats in relation to emergency exits.

3. Installed the following in accordance with CAR 4b.359 all sections 4.b382 all sections, 4b.383 para (a) and (b) AC 43.13-2 chapter 12, para. 201, 202, 203, 204, 205, 206 (b) and 207.

1211117 Baggage compartment - 1/h aft

4. Installed the following in accordance with ACCS-32 all sections, ACCS-33 all sections, AC 43.13-1A chapter 15 sect. 1-2-3-4-5 chapter 16, sect. 1-2-3-4-5, AC 43.13-2, chapter 2, para. 21-22-23 chapter 3, para. 31-33-34-35-36-37-38 and AiResearch Aviation Co. drawings.

1410337 Layout- radio rack E2, E3
1410338 Layout - radio rack E4, E5
1425272 Installation flitefone antenna
1461190 Installation weather radar r/t and ant.

5. Installed the following non-structural items in accordance with the following AiResearch Aviation Co. drawings:

1117075 Installation- ram air actuator access
1220865 " flat ceiling panels
1145047 " magazine rack
1266169 " oxygen box
1172074 " placards
1249014 " cabin temp sensors
1262139 " 4 zone temp control
1265029 " remote oil fill system
1092093 " modification- main air range
1167341-503 " conditioned air duct

6. Installed the following in accordance with ACCS-31 all sections, AC 43.13-1A, chapter 11 sections 1-2-3-4-5-6-7, chapter 16, sections 1-2-3-4-5 and AiResearch Aviation Co. drawings

1181405 Layout instrument panel
1233269 Layout control wheel
6A 1391117 ~~1391188~~ Modification pitot/static schematic
1401205 layout- radio controls
1411225 Installation- sensor total temp
1448005 Layout overhead panel
1449004 Layout flt engr. station

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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Boeing 20116 Tennessee, Inc. 727-31 N505T

7. Installation made in accordance with AC 43.13-2 chapter 4 and AC 43.13-1A chapter 5 section 1, chapter 6, chapter 7 section 1, chapter 11 sections 1-2-3-4-5 and 7, chapter 13 and manufacturer's specifications.

~~1259002 Strobe light installation~~

Aircraft weighed. Weight and balance and equipment list revised.

The end.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: APR 03 1981

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
BOEING	727-31	AIRPLANE	AIRESEARCH AVIATION CO.

LIST OF DATA

IDENTIFICATION	TITLE
C-3825	STRUCTURAL SUBSTANTIATION - Interior Installation for TENNECO, INC. 727-31, S/N 20115.
C-3688	Weight and Balance for S/N 20115.
DL-1300517 NC	Data List - Interior Furnishings.
DL-1400319 NC	Data List - Avionics Mech.

PURPOSE OF DATA
Substantiate BOEING 727-31 Interior Modification on N505T, Serial No. 20115 ONLY. Final Approval of the Modification will be made by FAA.

APPLICABLE REQUIREMENTS (List specific sections)

CAR 4b.202, 4b.301, 4b.306, 4b.260, 4b.358 and 4b.101

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 _____ _____ 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 ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Howard L Patterson	WE-663	STRUCTURES

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION

GPO 901-613

EFTA00277961

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

EFTA00277962

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

MICRO

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

FEDERAL AVIATION AGENCY

APPLICATION FOR AIRWORTHINESS CERTIFICATE
(FAR 21)

48 042081

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 reverse side.

I. AIRCRAFT DESCRIPTION

1. REGISTRATION MARK	2. AIRCRAFT MAKE	3. AIRCRAFT MODEL DESIGNATION	FAA CODING
N7893 503T	Boeing	727-31	1384010
4. AIRCRAFT SERIAL NO.	**5. ENGINE MAKE**	**6. ENGINE MODEL DESIGNATION**	
20115	Pratt & Whitney	JT8D-7	52044
7. NO. OF ENGINES	**8. PROPELLER MAKE**	**9. PROPELLER MODEL DESIGNATION**	**10. YR. AIRC. MANUFACTURED**
Three	N/A	N/A	1969

II. CERTIFICATION REQUESTED

A. APPLICATION IS HEREBY MADE FOR:

3	X	ORIGINAL CERTIFICATE—AIRCRAFT IS	X	NEW		USED		IMPORT
4		AMENDMENT OR MODIFICATION OF CURRENT CERTIFICATE						
5		OTHER (Specify)						

B. AIRWORTHINESS CLASSIFICATION (For multiple certification, check appropriate items)

1	X	STANDARD (Indicate category)		NORMAL		UTILITY		ACROBATIC	X	TRANSPORT
2		LIMITED								
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
			8	OTHER (Specify)						
4		EXPERIMENTAL (Indicate operation(s) to be conducted)	1	RESEARCH AND DEVELOPMENT	2			AMATEUR BUILT	3	EXHIBITION
			4	RACING	5			TO SHOW COMPLIANCE WITH FAR		
5		PROVISIONAL (Indicate class)	1	CLASS I	2			CLASS II		FAA CODING

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration) — IF DEALER CHECK HERE → X

NAME	ADDRESS (Number, street, city, State and ZIP code)
The Boeing Company	P. O. Box 3707 Seattle, Washington 98124

B. AIRCRAFT CERTIFICATION BASIS

X	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Rev. No.) A3WE, Rev. 6	X	AIRWORTHINESS DIRECTIVE SUMMARY (Give year and last card No.) 1968 69-12
	AIRCRAFT LISTING (Give page No(s).)		SUPPLEMENTAL TYPE CERTIFICATE (Give No(s).)

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

X	AIRCRAFT NEW—NO PREVIOUS HISTORY	TOTAL AIRFRAME HOURS RECORDED 2:25	FAA CODING
	RECORDS MAINTAINED IN COMPLIANCE WITH FAR 91.173		

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 Agency 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 classification(s) requested.

DATE OF APPLICATION	NAME AND TITLE (Print or type)	SIGNATURE
JUN 6 1969	R.C.Curtiss, Airworthiness Manager	R.C.Curtiss

IV. INSPECTION AGENCY VERIFICATION

IN ACCORDANCE WITH FAR 21.183, THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY:

2		CERTIFICATED AIR CARRIER (Give Certificate No.)	3	CERTIFICATED MECHANIC (IA) (Give Certificate No.)	CERTIFICATED DOMESTIC REPAIR STATION (Give Certificate No.)
5		AIRCRAFT MANUFACTURER (Give name of firm)			FAA CODING 4

DATE	TITLE	SIGNATURE

V. AIRWORTHINESS DOCUMENTATION

	A. CURRENT OPERATING LIMITATIONS AVAILABLE IN AIRCRAFT	X	G. THIS INSPECTION RECORDED IN AIRCRAFT RECORDS
	B. CURRENT OPERATING LIMITATIONS ATTACHED		H. STATEMENT OF CONFORMITY, FAA FORM 317 (Attach when required)
X	C. CURRENT APPROVED FLIGHT MANUAL AVAILABLE IN AIRCRAFT		I. PREVIOUS AIRWORTHINESS CERTIFICATE ISSUED IN ACCORDANCE WITH FAR ____ CAR ____ (Orig. attached)
	D. DATA, DRAWINGS, PHOTOGRAPHS, ETC. (Attach when required)		
X	E. CURRENT WEIGHT & BALANCE INFORMATION AVAILABLE IN AIRCRAFT	X	J. AIRWORTHINESS CERTIFICATE ISSUED IN ACCORDANCE WITH FAR 21.183(a) (Copy attached)
	F. MAJOR REPAIR AND ALTERATION, FAA FORM 337 (Attach when req.)		

VI. FAA REPRESENTATIVE CERTIFICATION

X	A. I have inspected the aircraft described above, find it conforms to its type certificate, and is in condition for safe operation.
	B. I have inspected the aircraft described above, find it is in condition for safe experimental operation.
	C. Current Airworthiness Certificate amended.

DATE	DESIGNATION NO.	OFFICE NO.	SIGNATURE
06-69 June 30, 1969	000 DMIR 4129	SEA AEDO 4-0-46	W.A. O'Neal DMIR 4129 W.A. O'Neal

FAA Form 305 (6-65) OBSOLETE PREVIOUS EDITION * GPO : 1968 OF—789-702 0052-024-7000 (8130)

EFTA00277963

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

MICRO

EFTA00277964

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85

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
N7893	Boeing 727-31	20115	Transport

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 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
June 30, 1969	W. A. O'Neal	DMIR 4129

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-270-831

EFTA00277965

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 4-22-85