



**NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety

Washington, D.C. 20594

**STRUCTURES GROUP CHAIRMANS FACTUAL REPORT**

DCA06MA010

Attachment C  
FAA Forms 337 & 8110  
Repair Analysis & Drawings  
for N142PA & N2969

DCA00MA010

Structures Group Factual Report  
Grumman Mallard G73

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

Form Approved Attachment C  
OMB No.2120-0020

U.S. Department  
of Transportation  
Federal Aviation  
Administration

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 GRUMMAN	Model G-73
	Serial No. J42	Nationality and Registration Mark N142PA
2. Owner	Name (As shown on registration certificate) SEAPLANE ADVENTURES LLC	Address (As shown on registration certificate) 75 HOLLY LILL LN GREENWICH, CONNECTICUT 06830-6098

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.
JORGE RUPERTO SEPULVEDA CORAL GABLES, FL 33134	<input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse 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 8/10/05	Signature of Authorized Individual [Signature]
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7. Approval for Return To Service

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

BY	FAA Fit Standards Inspector	Manufacturer	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection	Certificate or Designation No.		Signature of Authorized Individual		
8/10/05	[Redacted]		[Signature] SERGIO R. ALEN		

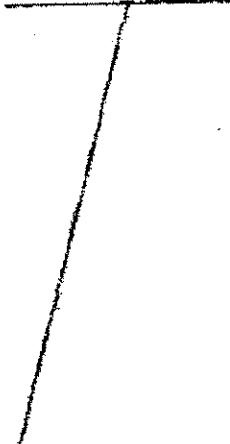
Structures Group Factual Report  
 U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL AVIATION ADMINISTRATION  
**STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS**

DATE: July 29, 2005  
 DCA06MA010  
 Attachment C

**AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION**

MAKE Grumman	MODEL NO. G 73	TYPE (Airlane, Rofa, Helicopter, etc.) Airplane	NAME OF APPLICANT Chalk's Ocean Airways, Inc.
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**LIST OF DATA**

IDENTIFICATION	TITLE
Report no: 050707  Drawing no: 050703 rev "A"	<p><b>"STRUCTURAL SUBSTANTIATION - WING SKIN CRACK REPAIR"</b></p> <p><b>"REPAIR SCHEME - WING BOX LOWER SKIN"</b></p> <p>This data is approved for Grumman model G-73 aircraft serial number J42, registration number N142PA only.</p> <p>Damage tolerance analysis per FAR 25.571 requires a structural inspection for crack detection at the outboard WS station 68 splice original skin panel fastener holes at 6020 flight hours with repeat inspections at the same time interval.</p> 

**PURPOSE OF DATA**

To structurally approve a repair scheme to the R/H wing inboard lower skin area on the above aircraft.

**APPLICABLE REQUIREMENTS (if not specific sections)**

CAR part 4a; paragraphs: 4a.302, 4a.303, 4a.308  
 FAR Part 25; paragraphs: 25.1529, 25.571

**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.

Recommend approval of these data

I (We) Therefore  Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
[Redacted Signature]	[Redacted Designation]	Structures

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

7-23-99

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE GRUMMAN	MODEL NO. G73T	TYPE (Airplane, Radio, Helicopter, AIRPLANE	NAME OF APPLICANT CONSULTANT
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LIST OF DATA

IDENTIFICATION	TITLE
RT-G735730.7239 DTD 7/23/99	DRAWING "LOWER WING SKIN CRACK/CORROSION REPAIR GRUMMAN MALLARD G73T N42PA S/N J42."
=====END=====	=====END=====
	NOTE: APPROVAL HEREIN IS FOR STRUCTURAL ASPECTS OF ENGINEERING DATA ONLY.

PURPOSE OF DATA

TO SHOW COMPLIANCE OF THE DATA LISTED ABOVE TO THE FAR'S  
LISTED BELOW

APPLICABLE REQUIREMENTS (List specific sections)

25.301	25.601	25.607
25.303	25.603	25.609
	25.605	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 AS ABOVE 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

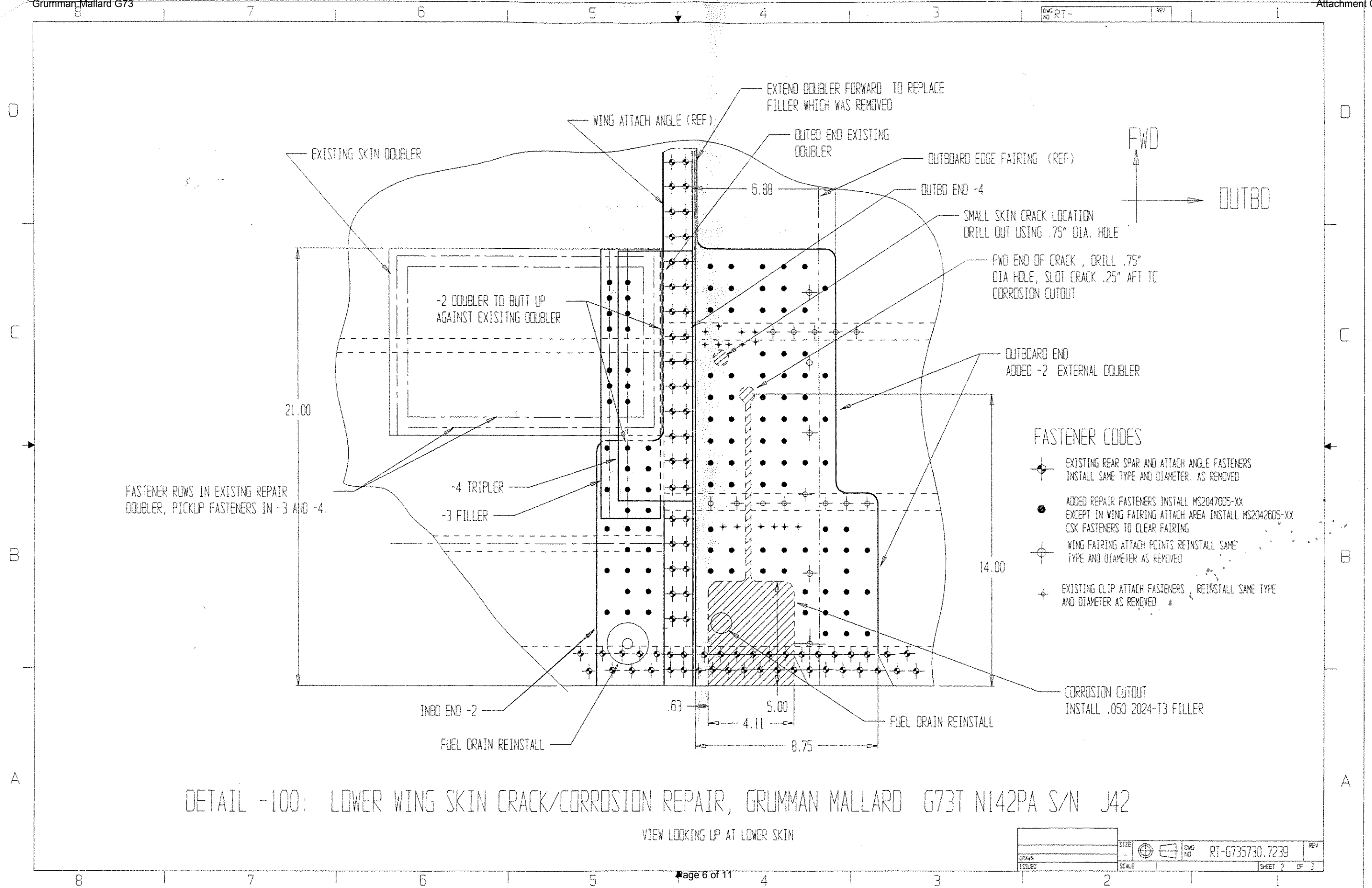
SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBERS(S)	CLASSIFICATION(S)
R. L. TORRES		STRUCTURES

GENERAL NOTES

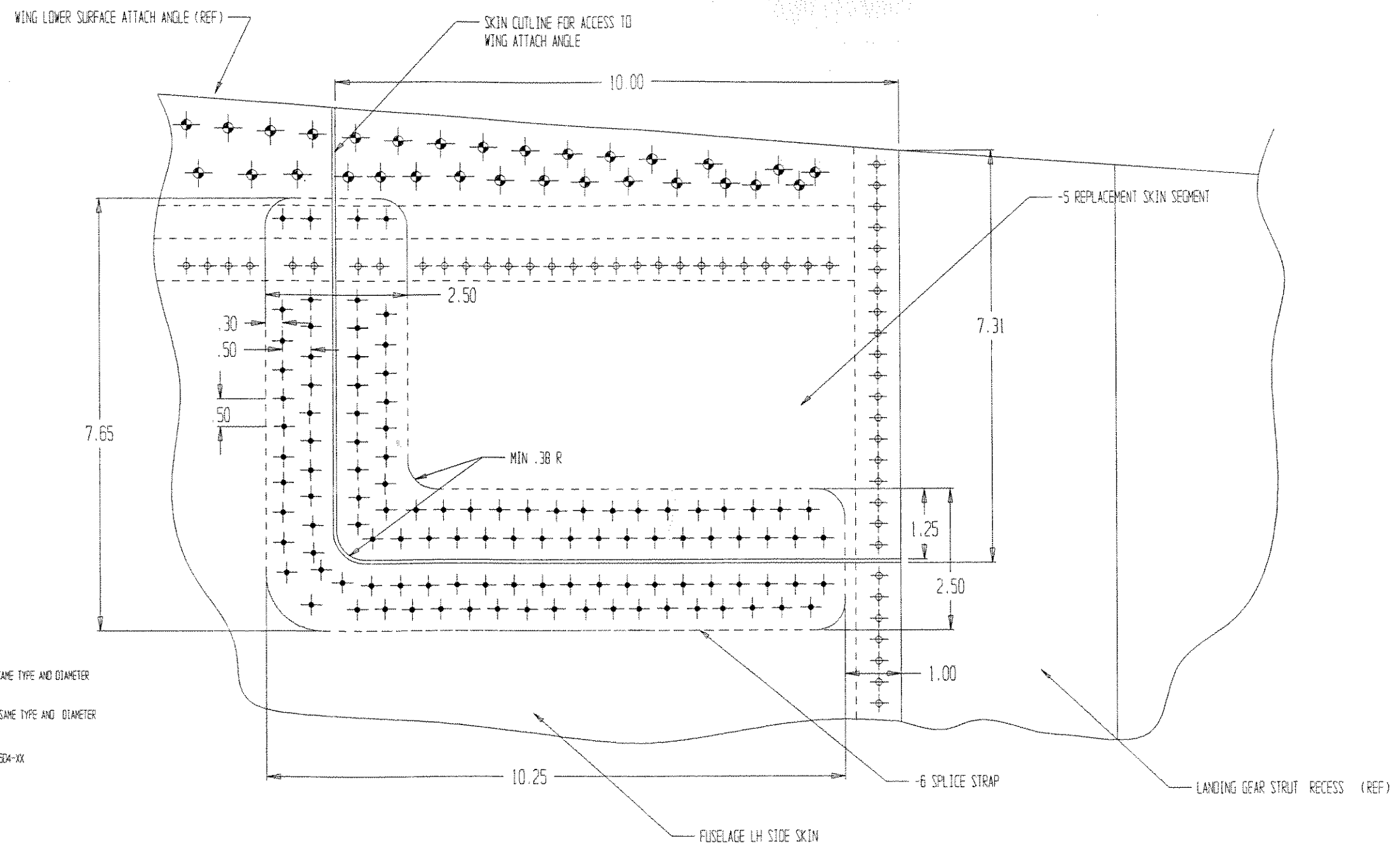
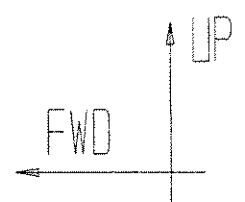
1. THIS DRAWING PROVIDES DETAILS FOR REPAIR OF THE LH WING LOWER SKIN AT FUSELAGE ATTACHMENT DUE TO A SKIN CRACK AND CORROSION ON GRUMMAN MALLARD G73T N142PA S/N J42.
2. CUTOUT FUSELAGE SKIN AS SHOWN SHEET 3 FOR ACCESS TO AFT END OF WING ATTACH ANGLE. REMOVE FASTENERS IN ATTACH ANGLE AND SLIDE OUT EXISTING SHIM BETWEEN WING LOWER SKIN AND ATTACH ANGLE.  
  
CUTOUT CORRODED SKIN AREA AND CRACK AREA AS SHOWN SHEET 2 STOP DRILL FWD END OF CRACK USING .75" DIA. HOLE
3. BREAK ALL SHARP EDGES .020/.030 R.
4. FINISH ALUMINUM PARTS AND REWORKED AREAS USING ALODINE 1201S AND 2 COATS EPOXY PRIMER. REFER TO G73 SRM CHAPTER 51 FOR ADDITIONAL FINISH REQUIREMENTS.
5. DELETED
6. MAINTAIN MINIMUM 2D + 1/16 EDGE DISTANCE ON ALL FASTENERS UNLESS OTHERWISE SPECIFIED.
7. SHIM/TAPER SHIM AS REQUIRED.
8. ALL HI-LOK FASTENERS ARE TO BE INSTALLED IN INTERFERENCE FIT CLOSE REAMED HOLES. HOLE TOLERANCE PER NAS618. ALL OTHER FASTENERS ARE TO BE INSTALLED IN NET FIT HOLES, HOLE TOLERANCE PER NAS 618.
9. ALL FASTENER LENGTHS TO BE DETERMINED ON INSTALLATION.
10. INSTALL ALL REPAIR PARTS WET USING PR1436G TYPE III FAYING SURFACE SEAL (OR EQUIVALENT).
11. RELOCATE FASTENERS AS REQUIRED TO MAINTAIN MINIMUM 3D SPACING BETWEEN ADDED FASTENERS AND EXISTING HOLES IN FRAME WEB.
12. REINSTALL FUEL DRAINS AND VENT AT AFT EDGE OF SKIN USING SAME TYPE AND DIAMETER FASTENERS AS REMOVED.
13. INSTALL FUSELAGE SKIN REPAIR PER SHEET 3 UPON COMPLETION OF WING SKIN REPAIR.
14. RE-SEAL FUEL TANK AREAS PER MAINTENANCE MANUAL INSTRUCTIONS.
15. REVISE AIRCRAFT WEIGHT AND BALANCE AS APPLICABLE.

1	-6	SPLICE STRAP, FUSELAGE SKIN REPAIR	00-A-250/5	.063 2024-T3
1	-5	REPLACEMENT SKIN, FUSELAGE SKIN REPAIR	00-A-250/5	.063 2024-T3
1	-4	TRIPLER, WING SKIN REPAIR	00-A-250/13	.063 7075-T6
1	-3	FILLER, WING SKIN REPAIR		THICKNESS AS REQUIRED 2024-T3 OR 7075-T6
1	-2	DOUBLER, EXTERNAL; WING SKIN REPAIR	00-A-250/13	.063 7075-T6
1	-1	DELETED		
1	-200	FUSELAGE SKIN CUTOUT AND SPLICE FOR WING REPAIR ACCESS		
1	-100	LOWER WING SKIN CRACK/CORROSION REPAIR, GRUMMAN MALLARD G73T N142PA S/N 42.		

QTY	DASH NO.	DESCRIPTION	PART NO.	SPECIFICATION	MATERIAL
		DRAWING CREATED FOR:	 P.O. BOX 170928 HIALEAH, FL 33017-0928 • 405 688-5603/688-5811 TITLE: LOWER WING SKIN CRACK/CORROSION REPAIR GRUMMAN MALLARD G73T N142PA S/N J42		
		PAN-AM AIR BRIDGE			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		PROJECT NO.	DWG NO. RT-G735730.7239 SHEET 1 OF 3		
UNSPECIFIED TOLERANCE		DRAWN			
FRACTIONS	ANGLES	CHECKED			
± 1/32	± 5 MACH. ± 2 FORMED	STRESS			
		DECIMALS	SCALE NOTED		
		.X ± .1			
		.XX ± .03			
		.XXX ± .010			




DWG NO RT- REV



- FASTENER CODES**
- WING ATTACH ANGLE FASTENERS, INSTALL SAME TYPE AND DIAMETER
  - REAR ANGLE ATTACH FASTENERS, INSTALL SAME TYPE AND DIAMETER
  - ADDED REPAIR FASTENERS, INSTALL MS20426D4-XX

DETAIL -200: FUSELAGE SKIN CUTOUT & SPLICE FOR WING REPAIR ACCESS  
 VIEW LOOKING INBOARD

SIZE	DWG NO	REV
SCALE	RT-G735730.7239	
DRAWN		SHEET 3 OF 3
ISSUED		

 U.S. Department of Transportation Federal Aviation Administration		<b>MAJOR REPAIR AND ALTERATION</b> <b>(Airframe, Powerplant, Propeller, or Appliance)</b>		Form Approved OMB No. 2120-0020	
				For FAA Use Only	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)					
1. Aircraft	Make Grumman		Model G73T		
	Serial No. J27		Nationality and Registration Mark N2969		
2. Owner	Name (As shown on registration certificate) SeaPlane Leasing III, LLC		Address (As shown on registration certificate) 3240 Bird Ave. FL Lauderdale, Florida 33131		
	3. For FAA Use Only				
4. Unit Identification					
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.	
Juan Heredia [Redacted] Miami, Florida 33147		<input checked="" type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer		[Redacted]	
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 6, 2000		Signature of Authorized Individual [Redacted]			
7. Approval for Return to Service					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA Fit Standards Inspector	Manufacturer	Inspection Authorization	Other (Specify)	
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection July 6, 2000		Certificate or Designation No. [Redacted]	Signature of Authorized Individual James Kittl, Chief Inspector [Redacted]		



**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.)*

July 6, 2000

N2969

Stringer repaired in Right Hand wing at Sta. 50.5, third stringer from aft. See attached Drawing and 8110 #RT-G7355720.6290. Wing fuel tank resealed and leak check carried out in accordance with Frakes Service Manual. Aircraft was reweighed prior to return to service.

END

Additional Sheets Are Attached

DEPARTMENT OF TRANSPORTATION  
 FEDERAL AVIATION ADMINISTRATION

DATE

6-30-00

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE GRUMMAN	MODEL NO. G73T N2969	TYPE (Airplane, Radio, Helicopter, etc.) AIRPLANE	NAME OF APPLICANT CONSULTANT
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LIST OF DATA

IDENTIFICATION	TITLE
RT-G735720.6290 DTD 6/29/00 NO CHANGE	<b>DRAWING</b> "STRINGER CRACK REPAIR, WING BOX LOWER SKIN WS 50.5 G73T N2969."
=====END=====	=====END=====

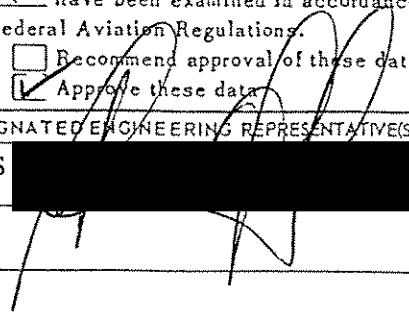

PURPOSE OF DATA: TO SHOW COMPLIANCE OF THE DATA LISTED ABOVE TO THE FAR'S LISTED BELOW

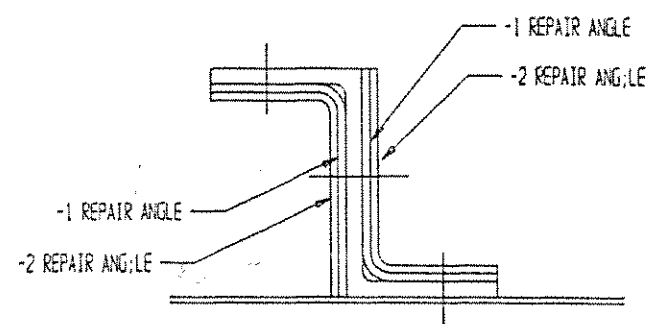
APPLICABLE REQUIREMENTS (List specific sections)

25.301 25.601 25.607  
 25.603 25.609  
 25.613

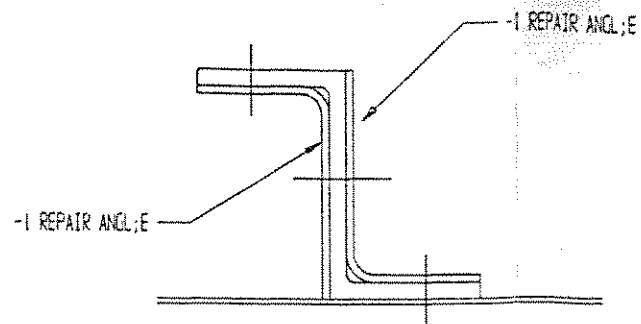
CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with conditions and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed above and on attached sheets numbered as above have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I (we) Therefore  Recommend approval of these data  
 Approve these data

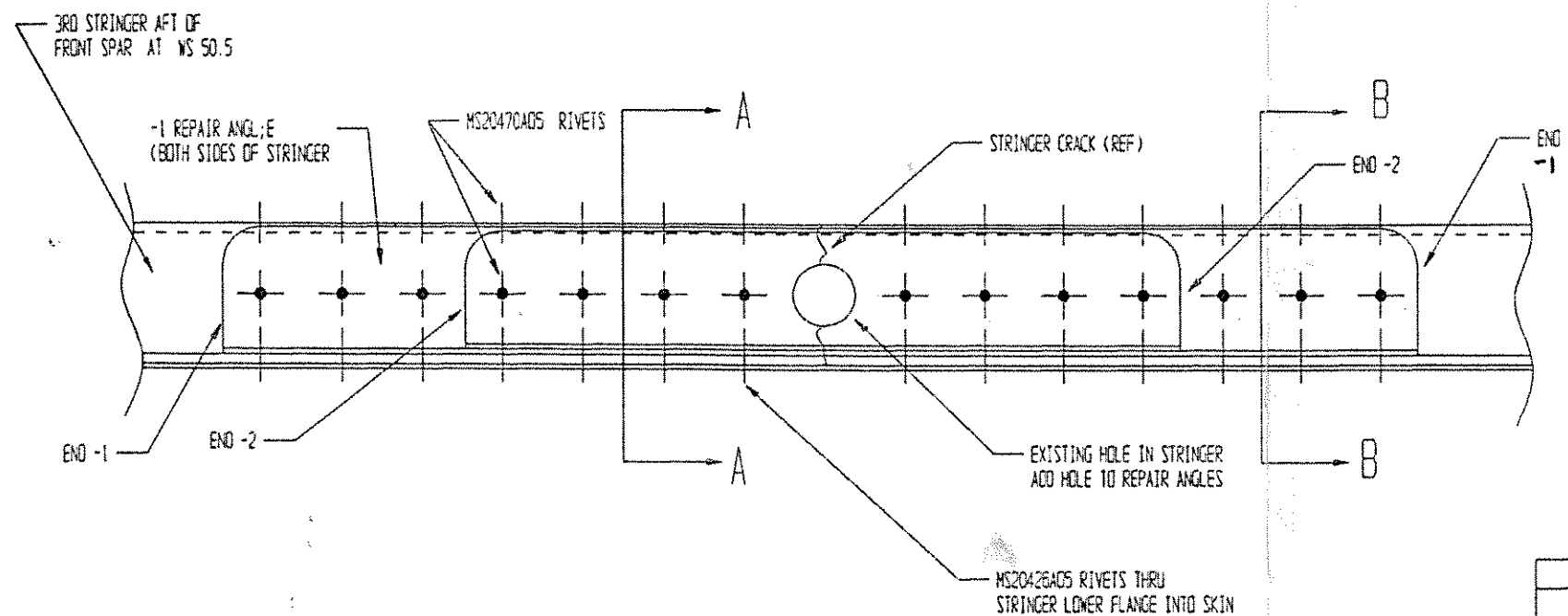
SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
R. L. TORRES 		STRUCTURES



SECTION A-A



SECTION B-B



STRINGER CRACK REPAIR, WING BOX LOWER SKIN AT WS50.5 G73T N2969

GENERAL NOTES

1. THIS DRAWING PROVIDES DETAILS FOR REPAIR OF THE CENTER WING BOX LOWER SKIN STRINGER ON GRUMMAN MALLARD G73T N2969. THE CRACK IS LOCATED ON THE 3<sup>RD</sup> STRINGER AFT FROM THE WING FRONT SPAR AT WS 50.5. THE CRACK COMPLETELY SEVERES THE STRINGER AT AN EXISTING HOLE LOCATION.
2. INSTALL NESTED ANGLE REPAIR AS SHOWN HEREIN. PICK UP EXISTING FUEL PASSAGE HOLE IN REPAIR ANGLES.
3. BREAK ALL SHARP EDGES .020/.030 R.
4. FINISH ALUMINUM PARTS AND REWORKED AREAS USING ALODINE 1201S AND 2 COATS EPOXY PRIMER. REFER TO G73 SRM CHAPTER 51 FOR ADDITIONAL FINISH REQUIREMENTS.
5. DELETED
6. MAINTAIN MINIMUM 2D + 1/16 EDGE DISTANCE ON ALL FASTENERS UNLESS OTHERWISE SPECIFIED.
7. SHIM/TAPER SHIM AS REQUIRED.
8. ALL FASTENERS ARE TO BE INSTALLED IN NET FIT HOLES. HOLE TOLERANCE PER NAS618
9. ALL FASTENER LENGTHS TO BE DETERMINED ON INSTALLATION.
10. INSTALL ALL REPAIR PARTS WET USING PR1436G TYPE III FAYING SURFACE SEAL (OR EQUIVALENT).
11. RELOCATE FASTENERS AS REQUIRED TO MAINTAIN MINIMUM 3D SPACING BETWEEN ADDED FASTENERS AND EXISTING HOLES IN FRAME WEB.
12. RE-SEAL FUEL TANK AREAS PER MAINTENANCE MANUAL INSTRUCTIONS.
13. REVISE AIRCRAFT WEIGHT AND BALANCE AS APPLICABLE.

QTY	DASH NO.	DESCRIPTION	PART NO.	SPECIFICATION	MATERIAL
2	-2	REPAIR ANGLE		00-A-250/5	.040 2024-T3
2	-1	REPAIR ANGLE		00-A-250/5	.040 2024-T3
1	-100	STRINGER CRACK REPAIR G73T N2969			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		UNSPECIFIED TOLERANCE		DRAWING CREATED FOR:	
FRACTIONS	ANGLES	DECIMALS	GRANN	CHALKS INTERNATIONAL	
±1/32	±.5 MACH. ±.2 FORMED	.XX ±.1 .XXX ±.03 .XAX ±.010	CHECKED	RTAEROSPACE	
			STRESS	P.O. BOX 17928 MIAMI, FL 33177-0928 • (305) 866-2803 • FAX 305-866-2811	
			APPROVED	TITLE: STRINGER CRACK REPAIR WING BOX LOWER SKIN WS 50.5 G73T N2969	
				PROJECT NO.	
				DNG NO. RT-G735720.6290	
				SCALE NOTED	
				SHEET OF	