

| REV LTR    | NEW               | A                  | B                  | C | D | E |
|------------|-------------------|--------------------|--------------------|---|---|---|
| DRAWN BY   | Charmaine Sprague | Charmaine Sprague  | Charmaine Sprague  |   |   |   |
| LAYOUT BY  | 2/11/2011         | 10/20/2011         | 10/19/2012         |   |   |   |
| CHECKED BY | J. BECKER 2-15-11 | J. BECKER 10/21/11 | J. BECKER 10/19/12 |   |   |   |
| GP LDR     | J. BECKER 2-15-11 | J. BECKER 10/21/11 | J. BECKER 10/19/12 |   |   |   |
| STRESS GP  | D. WILE 2-16-11   | R. Dineen 10/21/11 | Skayman 10/19/12   |   |   |   |
| MAT/PRCS   |                   |                    |                    |   |   |   |
| MASS PROP  |                   |                    |                    |   |   |   |
| MFG        |                   |                    |                    |   |   |   |
| QUALITY    |                   |                    |                    |   |   |   |
| PROJ ENGR  | P. Holt 2/16/11   | P. Holt 10/21/11   | J. Holt 10/19/12   |   |   |   |
| PCTT       |                   |                    |                    |   |   |   |
| REV LTR    | F                 | G                  | H                  | J | K | L |
| DRAWN BY   |                   |                    |                    |   |   |   |
| LAYOUT BY  |                   |                    |                    |   |   |   |
| CHECKED BY |                   |                    |                    |   |   |   |
| GP LDR     |                   |                    |                    |   |   |   |
| STRESS GP  |                   |                    |                    |   |   |   |
| MAT/PRCS   |                   |                    |                    |   |   |   |
| MASS PROP  |                   |                    |                    |   |   |   |
| MFG        |                   |                    |                    |   |   |   |
| QUALITY    |                   |                    |                    |   |   |   |
| PROJ ENGR  |                   |                    |                    |   |   |   |
| PCTT       |                   |                    |                    |   |   |   |

MODEL - GV

S/N - 506

THIS DRAWING CONTAINS NO  
PHOTO REPRO SHEETS

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TOP DRAWING -  
REPAIR/MODIFICATION,  
GV S/N 506

|           |      |            |      |
|-----------|------|------------|------|
| CAGE CODE | SIZE | DWG NO.    | REV. |
| 59734     | A    | SE50000506 | B    |

PROJECT NUMBER-

\_ SHEET 1 OF 10

This drawing defines and authorizes specific repair/modification drawing(s) for the serial numbered aircraft below. This drawing will be revised if/when additional repair and/or modification drawings are required.

|                             |                    |
|-----------------------------|--------------------|
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| <p>TOP DRAWING -</p>        |                    |
| <p>REPAIR/MODIFICATION,</p> |                    |
| <p>GV S/N 506</p>           |                    |
| <p>REV.: _____</p>          | <p>DATE: _____</p> |
| <p>DWG. NO. _____</p>       |                    |
| <p>SE50000506</p>           | <p>B</p>           |
| <p>SHEET 2 OF 10</p>        |                    |

This section identifies Gulfstream type-design data for which the 8110-3 form is not available for Q.C. Dept to support aircraft departure. Q.C. and shop personnel have verified the drawing effectivity is appropriate for use on the aircraft serial number identified in this drawing's title.

This section will be revised if/when additional type-design data is required to support rework of this aircraft.

[illegible]

|                             |              |
|-----------------------------|--------------|
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| <p>TOP DRAWING -</p>        |              |
| <p>REPAIR/MODIFICATION,</p> |              |
| <p>GV S/N 506</p>           |              |
| <p>DWG. NO.</p>             | <p>REV.:</p> |
| <p>SE50000506</p>           | <p>B</p>     |
| <p>SHEET 3 OF 10</p>        |              |

## EFTA01112848

This section defines and authorizes specific deviations encountered on aircraft serial number identified in this drawing's title. These are deviations noted while this aircraft was undergoing service repair or modification at Gulfstream Savannah Service Center.

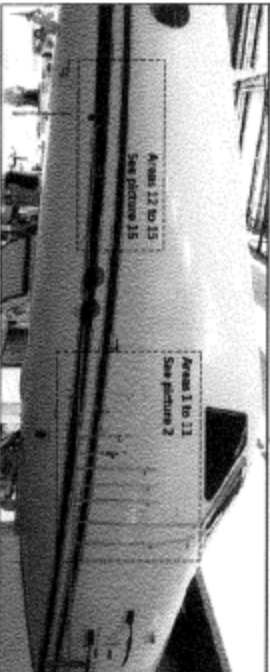
This section also addresses structural discrepancies on aircraft which are not covered by existing repair drawings, Structural repair manual or other FAA approved sources.

Gulfstream Service Engineering has reviewed the discrepancies listed below for the aircraft serial number identified in this drawing's title. All items listed below have been reviewed and are deemed airworthy for continued normal operations.

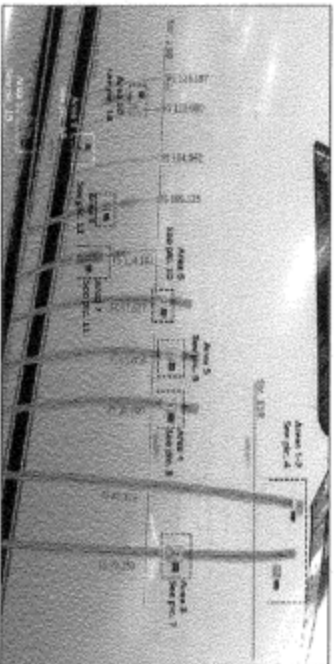
REV. A

CS262854.1. Discrepancy: Aircraft sustained a lightning strike and numerous entry/exit points have been noted.

Overview of affected areas on Fuselage Skin R/H side.



Overview of affected areas between FS 79,250 and FS 123,687



|                                                     |       |
|-----------------------------------------------------|-------|
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| TOP DRAWING -<br>REPAIR/MODIFICATION,<br>GV S/N 506 |       |
| DWG NO.                                             | REV.: |
| SE50000506                                          | B     |
| SHEET 4 OF 10                                       |       |

Section III cont.

REV. A cont.

**CS262854.1.1.1 Preliminary Engineering Disposition:**

FOR AREAS: # 3 LOWER HOLE ONLY, #5, #9, #10, #11, #12, #13, & #14

USE HOLE CONTROL TOOLING TO PULL HOLE 100% IN THE DIRECTION REQUIRED TO CLEAN OUT THE BLENDED/DAMAGED AREAS. HOLE IS TO BE OPENED TO A CLEAN AND ROUND .161-.166 DIA. THEN COUNTERSINK FOR AN NAS1097AD5 RIVET. THE COUNTERSINK BEING CONCENTRIC TO THE NEW HOLE DIA. MAINTAIN MINIMUM 1.5 X DIAMETER EDGE DISTANCE ON OVERSIZED HOLES. IF OVERSIZED HOLE REMOVE ALL DAMAGE THEN INSTALL NAS1097AD5 RIVETS IN SUBJECT HOLES WET WITH PS890 SEALANT OR EQUIVALENT PRODUCT PER MIL-S-8802. IF ANY OF THE BLENDED/DAMAGED AREA DOES NOT CLEAN OUT, RESUBMIT INFORMATION WITH PICTURES FOR FURTHER DISPOSITIONING.

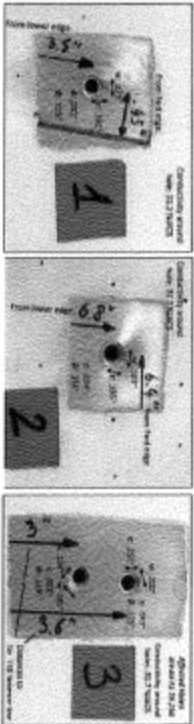
FOR AREAS: # 1, #2, #3, #4, #6, #7, & #8

PLEASE MARK THE EXACT RIVET LOCATION ON THE PROVIDED DRAWING AND RESUBMIT INFORMATION FOR FURTHER DISPOSITIONING.

FOR THE HORIZONTAL TIPCAP.

REMOVE STATIC WICK BASE AND INSPECT BASE FAYING SURFACE AND THE ATTACHING SURFACE OF THE TIPCAP FOR DAMAGE. RESUBMIT RESULTS.

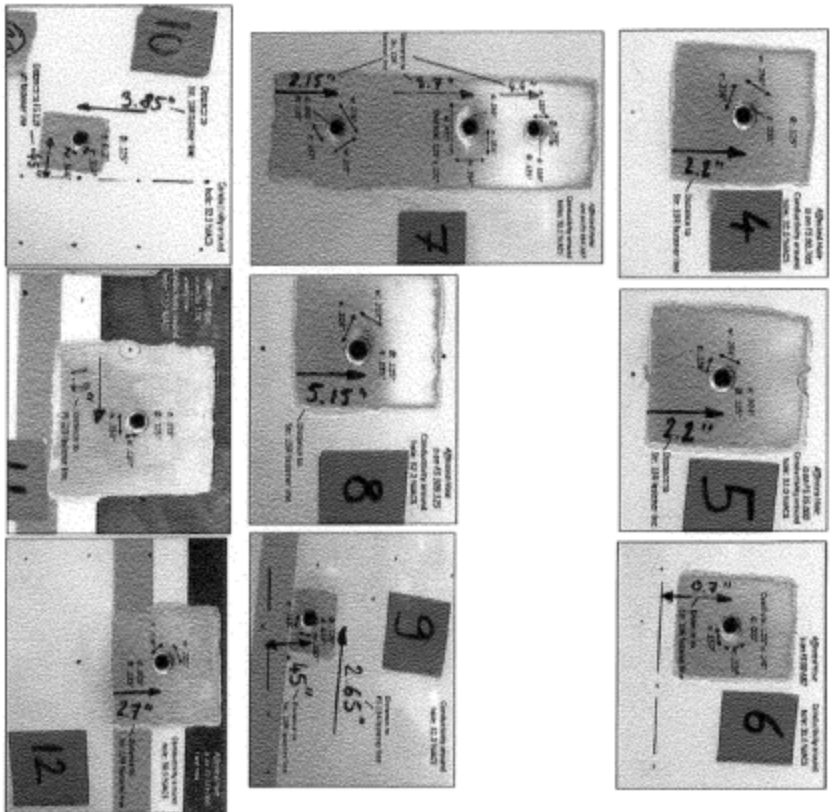
CS262854.1.2 & CS262854.1.3 Discrepancy: AOG Customer has complied with the prelim disposition and provided details.



|                                                     |            |
|-----------------------------------------------------|------------|
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| TOP DRAWING -<br>REPAIR/MODIFICATION,<br>GV S/N 506 |            |
| DWG NO.<br>SE50000506                               | REV.:<br>B |
| SHEET 5 OF 10                                       |            |

Section III cont.

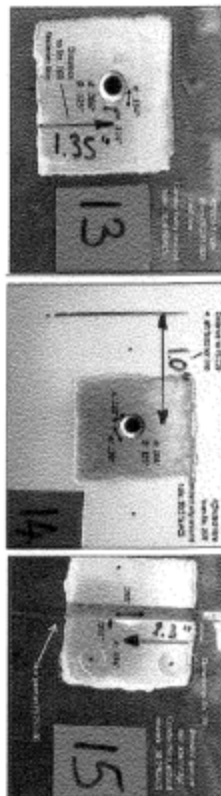
REV. A cont.  
CS762854.1.2 & CS762854.1.3 Discrepancy cont.:



|                                                     |       |
|-----------------------------------------------------|-------|
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| TOP DRAWING -<br>REPAIR/MODIFICATION,<br>GV S/N 506 |       |
| DWG NO.                                             | REV.: |
| SE50000506                                          | B     |
| SHEET 6 OF 10                                       |       |

Section III cont.

REV. A cont.  
CS262854.1.2 & CS262854.1.3 Discrepancy cont.:



CS262854.1.2.1 Preliminary Engineering Disposition: FOR AREAS: # 1, #2, #3, #4, #6, #7, & #8

PLEASE MEASURE THE FASTENER PITCH (CENTER-TO-CENTER HOLE DISTANCE) TO THE ADJACENT FASTENER ABOVE AND TO THE ADJACENT FASTENER BELOW THE DISCREPANT HOLE. IF THERE IS AN ADJACENT FASTENER FORWARD OR AFT OF THE SUBJECT HOLE, PLEASE PROVIDE THE FASTENER PITCH FOR THOSE ALSO. MEASUREMENTS PROVIDED SHOULD BE TO .XX INCH MINIMUM DECIMAL PLACE ACCURACY. RESUBMIT RESULTS FOR FURTHER DISPOSITIONING.

FOR AREAS: # 3 LOWER HOLE ONLY, #5, #9, #10, #11, #12, #13, & #14

THAT WERE DISPOSITIONED PREVIOUSLY, IF THE HOLES HAVE NOT BEEN COUNTERSUNK, LIMIT COUNTERSINK TO .240 INCH DIA. AND AFTER INSTALLING THE NAS1097AD5 RIVET, SHAVE HEAD FLUSH. THE HORIZONTAL TIPCAP IS ACCEPTABLE AS IS FOR CONTINUED NORMAL OPERATION. TOUCH-UP FIN 213 3012 AND PAINT TO CUSTOMER REQUIREMENTS.

CS262854.1.3.1 Engineering Disposition for AREAS #4, 6, & 8:

AT NOTED LOCATIONS INSTALL FREEZE PLUGS PER SE05102901-1. KEEP FREEZE PLUG HOLES TO A MINIMUM SIZE TO CLEAN OUT DAMAGE WHILE SATISFYING ALL REPAIR DRAWING REQUIREMENTS. AREAS 4 AND 8 SHOULD HAVE A .453 DIA. HOLE WITH A .490-.500 DIA. CSK. AREAS 6 SHOULD BE A .281 DIA. HOLE WITH A .320-.330 DIA. CSK.

|                                                     |                   |
|-----------------------------------------------------|-------------------|
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| DWG NO.<br><b>SE50000506</b>                        | REV.:<br><b>B</b> |
| SHEET 7 OF 10                                       |                   |

# **Section III cont.**

REV. A cont.

CS262854.1.3.2 Engineering Disposition for AREAS #1, 3, & 7:

AT NOTED LOCATIONS INSTALL FREEZE PLUGS PER SE05102901-1. KEEP FREEZE PLUG HOLES TO A MINIMUM SIZE TO CLEAN OUT DAMAGE WHILE SATISFYING ALL REPAIR DRAWING REQUIREMENTS.

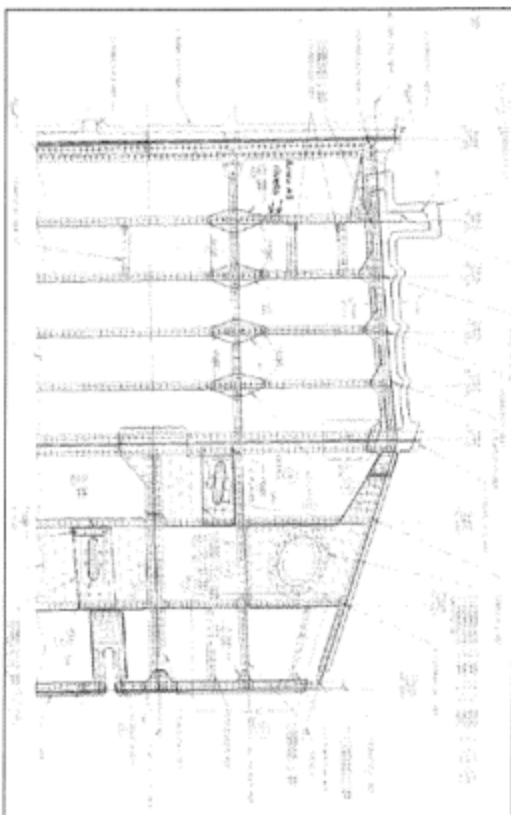
AREA 1 & AREA 3 UPPER LOCATION SHOULD HAVE A .312 DIA. HOLE WITH A .360-.370 DIA. CSK.

AREA 7 UPPER AND LOWER LOCATIONS SHOULD BE A .281 DIA. HOLE WITH A .320-.330 DIA. CSK. WHILE AREA 7 CENTER LOCATION SHOULD HAVE A .453 DIA. HOLE WITH A .490-.500 DIA CSK.

CS262854.1.3.3 Engineering Disposition for AREA #2:

AT NOTED LOCATION INSTALL A FREEZE PLUG PER SE05102901-1. KEEP FREEZE PLUG HOLES TO A MINIMUM SIZE TO CLEAN OUT DAMAGE WHILE SATISFYING ALL REPAIR DRAWING REQUIREMENTS. AREA 2 SHOULD HAVE A .312 DIA. HOLE WITH A .360-.370 DIA. CSK.

Affected Rivet Locations on FWD Skin (Area #3)



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TOP DRAWING -  
REPAIR/MODIFICATION,  
GV S/N 506

DWG NO.

SE50000506

REV.:

B

SHEET 8 OF 10

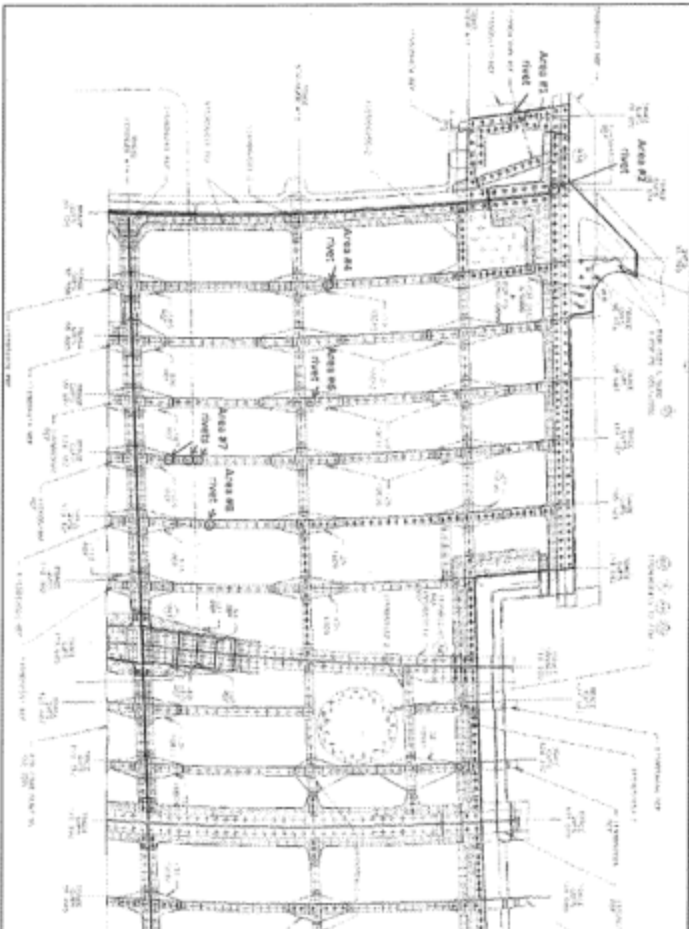


REV. A cont.

CS262854.1.3.1: 1.3.2 & 1.3.3 Engineering Disposition cont.

Section III cont.

Affected Rivet locations on Alt Skin (areas #1, #2, #4, #6, #7, #8)



CS262854.1.3.4 Engineering Disposition for AREA #15:  
AREA #15 IS ACCEPTABLE FOR CONTINUED NORMAL OPERATIONS. TOUCH-UP FINISH AREA WITH #213,  
#5012 AND TOPCOAT TO MATCH SURROUNDING FINISH.

|                                                     |       |
|-----------------------------------------------------|-------|
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| DWG NO.                                             | REV.: |
| SE50000506                                          | B     |
| SHEET 9 OF 10                                       |       |

# GULFSTREAM V

## MAINTENANCE MANUAL

### UNSCHEDULED MAINTENANCE CHECKS — INSPECTION / CHECK

#### 1. Lightning Strike — Inspection

##### A. Preparation

###### (1) References

- Safe Ground Maintenance Procedure, 20-00-00, Maintenance Practices
- Preflight - Inspection, 20-00-00, Inspection / Check
- Aileron and Trim Control System - Operational Test, 27-10-00, Adjustment / Test
- Aileron / Flight Spoiler Control System - Functional Test, 27-11-00, Adjustment / Test or Code 271103
- Rudder and Trim Control System - Operational Test, 27-20-00, Adjustment / Test or Code 272113
- Elevator Control System - Operational Test, 27-30-00, Adjustment / Test or Code 273005
- Flap System - Operational Test, 27-50-00, Adjustment / Test or Code 275003
- Ground Spoiler System - Functional Test, 27-62-00, Adjustment / Test or Code 276203
- Engine Lower Cowl Door - Open and Close Procedures, 71-10-00, Maintenance Practices
- Engine Upper Cowl Door - Open and Close Procedures, 71-10-00, Maintenance Practices
- Engine Scavenge Strainers - Detailed Inspection, 79-21-03, Inspection / Check or Code 792107
- Engine and Accessory Gearbox Magnetic Chip Detectors - Detailed Inspection, 79-21-04, Inspection / Check or Code 790011

###### (2) Aircraft Preparation

- (a) Prepare aircraft for safe ground maintenance. See Safe Ground Maintenance Procedure, 20-00-00, Maintenance Practices.
- (b) When a lightning strike is reported, four following items of information should be obtained from flight crew:
  - Did anyone actually see the strike and, if so, where was it
  - Was landing gear extended or retracted
  - Were flaps extended or retracted
  - Were spoilers extended or retracted

##### B. Inspection

- 1) Perform inspection of airframe as follows:

**WARNING: FAILURE TO DISSIPATE HYDRAULIC PRESSURE BEFORE INSTALLING OR REMOVING ALL LANDING GEAR AND LANDING GEAR DOOR SAFETY DEVICES SHALL CAUSE DAMAGE TO AIRCRAFT OR MAY RESULT IN SERIOUS INJURY OR DEATH.**

**FAILURE TO ENSURE ALL PERSONNEL AND EQUIPMENT ARE CLEAR OF FLIGHT CONTROL SURFACES BEFORE OPERATING FLIGHT CONTROLS MAY RESULT IN SERIOUS INJURY OR DEATH.**

- (a) Dissipate hydraulic system pressure by cycling flight controls and / or operating brake pedals several times.

**COPY**

**Project**

**Nbr.:** BN3XE005

**Date:** 27 SEP 2011

**05-50-00**

Page 601  
June 30/11

# GULFSTREAM V

## MAINTENANCE MANUAL

**WARNING: FAILURE TO INSTALL ALL LANDING GEAR AND LANDING GEAR DOOR SAFETY DEVICES BEFORE WORKING IN ANY WHEEL WELL MAY RESULT IN SERIOUS INJURY OR DEATH.**

- QML* (b) Install all landing gear and landing gear door safety devices.
- QML* (c) If location of lightning strike entry point is known, perform the following:

**NOTE:** On occasion, one rivet may have a lower resistance than others and may attract a low current. This can cause a rivet to melt away. Paint discoloration will also be evident. If such a condition covers an area of several fasteners, it will be necessary to check the heat treat condition of the material to determine if it has been locally affected. If this situation is encountered, contact Gulfstream Technical Operations for assistance.

If discrepancies are found in this procedure, contact Gulfstream Technical Operations for disposition and assistance.

- QML* 1 Start at known location and verify a strike entry point.
- QML* 2 Start from strike entry point, look for a path of pinpoint burn marks and / or charred spots on paint surface / structure and proceed along the path as far as possible and locate the exit point.
- 3 Replace any burned or charred static wick(s) as required.

**NOTE:** Static discharge wicks are the most likely exit path.

- N/A* (d) If lightning strike entry point location is unknown, perform the following:

- N/A* 1 From ground level, no greater than arms length distance, start forward of main entrance door and proceed clockwise around aircraft.

**NOTE:** Follow the sequence detailed in Preflight - Inspection, 20-00-00, Inspection / Check.

- N/A* 2 Visually inspect all extremities of aircraft including radome, wing tips / winglets, fuselage tail cone for pinpoint burn marks and / or charred spots.

- N/A* 3 Visually inspect all projections such as antennas, angle of attack probes, pitot static probes and total air temperature probes for pinpoint burn marks and / or charred spots.

- N/A* 4 Visually inspect upper fuselage, vertical stabilizer and horizontal stabilizer for pinpoint burn marks and / or charred spots on structure and control surfaces including static wicks.

- N/A* (e) Was the landing gear extended? If Yes, inspect the following:

- N/A* 1 Visually inspect main and nose landing gear structural attachment locations (fuselage and gear) for indication of electrical current passing through landing gear (burn marks or charred spots).

a If more than 2 square inches of paint discoloration is seen, disassemble and inspect all moveable joints between the discharge point(s) and airframe structure.

b Where indication is present, replace all bearings located between fixed airframe structure and the exit point on the landing gear.

- N/A* 2 Visually inspect for melted grease nipples.

**05-50-00**

Page 602  
June 30/11

EFTA01112856

## GULFSTREAM V

### MAINTENANCE MANUAL

- a If a melted grease nipple is found, disassemble the joint, check surface condition, clear all grease passages, replace nipple and reservice with grease. Accomplish replacement within 50 flying hours.

*N/A* 3 Visually inspect brackets holding electrical components for indication of electrical current passage.

- a If burn marks and / or charred spots are found on electrical component brackets, perform a functional check of electrical component.

*N/A* 4 Visually inspect brackets holding hydraulic components for indication of electrical current passage.

- a If burn marks or charred spots are found on hydraulic component brackets, it is possible the contained hydraulic fluid was subjected to excessive heat build-up. The amount of heat absorbed depends on how much surrounding metal is available to form a heat sink. If that possibility exists, drain, flush and reservice affected hydraulic system.

*N/A*(f) If flaps and / or spoilers were extended, inspect the following:

*N/A* 1 Visually inspect ailerons, flaps and spoilers for indication of electrical current passage.

- a If burn marks or charred spots are found on any surfaces, visually inspect all connections between parent surface and affected surfaces including bonding jumpers, hinges, bearings and lateral control system including ailerons, flight spoiler and ground spoiler actuators and attachments.
- b For wing mounted surfaces, visually inspect their controls along wing rear beam.
- c If there is indication that a high current passed through an aileron, flap or spoiler bearing, disassemble bearing for an inspection of bearing surface and grease / lubricant. Replace sealed bearings that are affected by a high current.

*QMA* 2 Visually inspect elevators and elevator trim tabs for indication of electrical current passage.

- a If burn marks or charred spots are found on elevator surfaces, visually inspect all connections including bearing hinges and bonding jumpers back down to fuselage.

*QMA* 3 Visually inspect horizontal stabilizer pivot area, horizontal stabilizer actuator and its attachment for evidence of burn marks or charred spots.

*N/A* 4 If there is no sign of damage or deterioration from a high current, perform a functional test of each of the following systems:

- Aileron and Trim Control System - Operational Test, 27-10-00, Adjustment / Test
- Aileron / Flight Spoiler Control System - Functional Test, 27-11-00, Adjustment / Test or Code 271103
- Rudder and Trim Control System - Operational Test, 27-20-00, Adjustment / Test or Code 272113
- Elevator Control System - Operational Test, 27-30-00, Adjustment / Test or Code 273005

**05-50-00**

Page 603  
June 30/11

# GULFSTREAM V

## MAINTENANCE MANUAL

- Flap System - Operational Test, 27-50-00, Adjustment / Test or Code 275003
- Ground Spoiler System - Functional Test, 27-62-00, Adjustment / Test or Code 276203

(2) Visually inspect all structural joints between point where current entered airframe and exit point.

*QMA* (3) Perform inspection of engines as follows:

- QMA* (a) Position maintenance platform(s) by engine as required.
- QMA* (b) Ensure that the engine has been shut down for at least 5 minutes.
- QMA* (c) Open upper and lower cowl doors. See Engine Lower Cowl Door - Open and Close Procedures, 71-10-00, Maintenance Practices and Engine Upper Cowl Door - Open and Close Procedures, 71-10-00, Maintenance Practices.

*QMA* (d) Perform external Visual Inspection of the engine for damage.

*QMA* (e) If there are signs of damage or arcing, inspect the following oil system components:

*QMA* 1 Examine the scavenge oil strainers (see Engine Scavenge Strainers - Detailed Inspection, 79-21-03, Inspection / Check or Code 792107):

- Accessory gearbox
- Front bearing chamber
- Rear bearing chamber

*N/A* 2 Examine magnetic chip detectors after  $25 \pm 10$  hours. See Engine and Accessory Gearbox Magnetic Chip Detectors - Detailed Inspection, 79-21-04, Inspection / Check or Code 790011.

*N/A* (f) If no metal particles are found in Step 1.B.(3)(e)2 proceed as follows:

1 Perform Step 1.B.(3)(e)2 again after  $50 \pm 10$ ,  $75 \pm 10$  and  $100 \pm 10$  flight hours.

**NOTE:** If no metal particles are found after  $100 \pm 10$  flight hours, return engine to normal operations.

*QMA* (g) Examine fan blades for arc burns (lightning strikes).

**NOTE:** A sign of arc burn is a circular or semicircular area on the blade surface. The area will have a change of color (dark blue oxide), there can also be signs of pitting, melting or cracking.

BSL / CH 145 0012  
DIA WATERMANN  
AUTH REF: 204400

4 OCT 2011 *QMA*

### C. Follow On

- (1) Inspect for presence of foreign objects.
- (2) Record all maintenance actions in accordance with current governing authority.

### 2. Hail Damage to Aircraft / Engine — Inspection

**NOTE:** This inspection can be utilized for hail damage to aircraft and / or engine sustained in-flight or on the ground.

#### A. Preparation

#### SPECIAL TOOLS AND TEST EQUIPMENT

Maintenance Platform ..... Standard

- (1) References

# 05-50-00

Page 604  
June 30/11

EFTA01112858

BNXXE005-405

RR BR710-A1

EMM 72-00-00-200-806

RevDate: Nov 15/06

**Inspection of the Engine after Lightning Strike**

Effectivity: BR710

INSPECTION/CHECK 06

TASK 72-00-00-200-806

Inspection of the Engine after  
Lightning Strike

**WARNING: BE CAREFUL WHEN YOU DO WORK ON THE ENGINE PARTS  
AFTER THE ENGINE IS SHUTDOWN. THE ENGINE PARTS  
CAN STAY HOT FOR ALMOST ONE HOUR.**

**WARNING: DO NOT TOUCH HOT PARTS WITHOUT APPLICABLE  
GLOVES. HOT PARTS CAN CAUSE AN INJURY. IF YOU GET  
AN INJURY PUT IT IN COLD WATER FOR 10 MINUTES AND  
GET MEDICAL AID.**

1. Job Set-Up Information

A. Fixtures, Tools, Test and Support Equipment

| REFERENCE   | DESIGNATION                    |
|-------------|--------------------------------|
| No Specific | Access Platform(s)             |
| No Specific | Circuit Breaker Safety Clip(s) |
| No Specific | Inspection Lamp                |
| No Specific | Inspection Mirror              |

*AM* B. Referenced Information

| REFERENCE                                     | DESIGNATION                                                          |
|-----------------------------------------------|----------------------------------------------------------------------|
| 71-10-00, PB 201<br>TASK 71-10-00-010-<br>801 | Open the Upper and Lower Cowls                                       |
| 71-10-00, PB 201<br>TASK 71-10-00-410-<br>801 | Close the Upper and Lower Cowls                                      |
| 72-31-02, PB 601<br>TASK 72-31-02-200-<br>801 | Inspection of the Compressor (Fan) Blades<br>and the Annulus Fillers |
| 79-00-00, PB 601<br>TASK 79-00-00-200-<br>801 | Inspection of the Oil System - General                               |

*AM* 2. Job Set-Up

Printed: Oct 03/11

**THIS PAGE MUST NOT BE RETAINED FOR REFERENCE**

EFTA01112859

**Inspection of the Engine after Lightning Strike****Effectivity:** BR710

INSPECTION/CHECK 06

## SUBTASK 72-00-00-860-013

*QML* A. Aircraft configuration*QML* (1) Make sure the aircraft is prepared for safe ground maintenance (Refer to the Aircraft Maintenance Manual (AMM)).*QML* (2) Prepare the engine for safe ground maintenance

✓ (a) Make sure that the engine has been shut down for at least 5 minutes.

✓ (b) Open, safety and tag the circuit breakers (Refer to the AMM).

*QML* (3) Put the access platform(s) in position.

## SUBTASK 72-00-00-010-008

*QML* B. Open the Upper and Lower Cowl Doors (Refer to 71-10-00, PB 201/TASK 71-10-00-010-801).

## 3. Procedure

## SUBTASK 72-00-00-210-016

*QML* A. Visually examine the engine externally for damage.

NOTE: If there are signs of damage or arcing, continue with SUBTASK 72-00-00-210-017.

*QML* SUBTASK 72-00-00-210-017*QML* B. Examine the oil system items that follow:*QML* (1) Examine the magnetic chip detectors after 25 (+/-10) flight hours (Refer to 79-00-00, PB 601/TASK 79-00-00-200-801).

N/A (2) If no metal particles are found in step (1)

(a) Do step (1) again after 50 (+/-10), 75 (+/-10) and 100 (+/-10) flight hours.

(b) If no metal particles are found after 100 flight hours start normal operations again.

**Inspection of the Engine after Lightning Strike****Effectivity:** BR710

INSPECTION/CHECK 06

## SUBTASK 72-00-00-210-019

*QMJ* C. Examine the fan blades for arc burns (lightning strikes)

- (1) Examine the fan blades, (Refer to 72-31-02, PB 601/TASK 72-31-02-200-801).

NOTE: A sign of arc burn is a circular or semi-circular area on the blade surface. The area will have a change of color (dark blue oxide), there can also be signs of pitting, melting or cracking.

30 OCT 2011

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204009

## SUBTASK 72-00-00-869-002

- D. Record the lightning strike in the engine log book.

## 4. Close-Up

## SUBTASK 72-00-00-160-005

- A. Make sure that the work area is clean and clear of all tools and equipment.

## SUBTASK 72-00-00-410-010

- B. Close the Upper and Lower Cowl Doors (Refer to 71-10-00, PB 201/TASK 71-10-00-410-801).

## SUBTASK 72-00-00-860-014

- C. Aircraft configuration

- (1) Put the engine back to a condition for operation
- (a) Remove the access platform(s) from the work area.
  - (b) Remove the safety clips and the tags and close the circuit breakers (Refer to the Aircraft Maintenance Manual (AMM)).
- (2) Put the aircraft back to a condition for operation (Refer to the AMM).



GV

## COMPUTERIZED MAINTENANCE PROGRAM

CMP<sub>net</sub>

|                                 |                                |                                                                   |                                         |
|---------------------------------|--------------------------------|-------------------------------------------------------------------|-----------------------------------------|
| REGISTRATION<br><b>N33XE</b>    | SERIAL NO.<br><b>506</b>       | TITLE<br><b>Ice Detector Probe<br/>(Right) - Operational Test</b> | <b>308004</b><br>Page 1 of 1            |
| LOGBOOK<br><b>Airframe</b>      | AUTHORITY<br><b>Part 135</b>   |                                                                   | PARENT CODE / OPERATION                 |
| AIRFRAME HOURS<br><b>5485.0</b> | AIRFRAME CYCLES<br><b>1488</b> |                                                                   | TASK TYPE<br><b>Functional/Ops Test</b> |
|                                 |                                |                                                                   | ZONE/ACCESS                             |
|                                 |                                | COMPLIANCE REMARKS                                                | REQUIREMENTS REFERENCE                  |
| ESTIMATED HOURS<br><b>1.0</b>   | SKILL                          |                                                                   | PROCEDURE REFERENCE<br><b>30-81-01</b>  |

NOTE: SERVICE CODES ARE COLLECTED AND ANALYZED BY THE MANUFACTURER TO IMPROVE THE MAINTENANCE PROGRAM AND TO INCREASE THE RELIABILITY OF THE AIRCRAFT. IT IS IMPORTANT THAT TECHNICIANS PROVIDE ACCURATE SERVICE CODES AND INSPECTION FINDINGS WHEN COMPLETING A MAINTENANCE WORK CARD.

FAX ALL COMPLETED WORK CARDS TO GULFSTREAM CMP GROUP AT 1-912-963-8265 OR TOLL FREE 1-800-944-1775.

|                                                                               |                                                                                |                                                                                 |                      |                      |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------|----------------------|
| COMP CHG / OPS CHG<br><b>S</b> <input type="checkbox"/><br>MARK AS APPLICABLE | IN AS IS<br><b>V</b> <input checked="" type="checkbox"/><br>MARK AS APPLICABLE | REQUIRED SERVICE IND<br><b>W</b> <input type="checkbox"/><br>MARK AS APPLICABLE | PART NUMBER: _____   | SERIAL NUMBER: _____ |
|                                                                               |                                                                                |                                                                                 | MATERIAL COST: _____ | LABOR HOURS: _____   |

|                                                                                                           |                                                                                                     |                                     |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------|
| TECHNICIAN SIGNATURE<br> | CERTIFICATE #<br><b>205150</b>                                                                      | COMPLIANCE DATE<br><b>06/DEC/11</b> |
| INSPECTOR SIGNATURE<br> | CERTIFICATE #<br> | DATE<br><b>6 DEC 2011</b>           |

WORK ORDER: BN3XE005-0407

FACILITY: \_\_\_\_\_

CERTIFICATE: \_\_\_\_\_



001003162607

EFTA01112862

ISSUED/REVISED: 06/30/06

AREA

308003 Ice Detector Probe (Left) - Operational Test  
308004 Ice Detector Probe (Right) - Operational Test

## A. Preparation

## (1) Reference

- Safe Ground Maintenance Procedure, 20-00-00, Maintenance Practices

## (2) Aircraft Preparation

- (a) Prepare aircraft for safe ground maintenance. See Safe Ground Maintenance Procedure, 20-00-00, Maintenance Practices.
- (b) Ensure the following Circuit Breakers (CB) are depressed:

| CB NAME         | CB PANEL | CB LOCATION |
|-----------------|----------|-------------|
| COMBINED WOW    | Pilot    | C2          |
| WARN LTS PWR #2 | LEER     | A9          |
| ANN LTS PWR #6  | LEER     | B7          |
| L ICE DET CONT  | LEER     | E3          |
| L ICE DET       | LEER     | F3          |
| WARN LTS PWR #1 | REER     | A23         |
| ANN LTS PWR #7  | REER     | B24         |
| R ICE DET CONT  | REER     | E14         |
| R ICE DET       | REER     | F14         |

- (c) Apply electrical power to aircraft.

- (d) On DISPLAY SYSTEM CONTROL panel, select all switches to NORM.

- (e) On System Monitor panel, select MAINT TEST switch to on.

## B. Procedure

- (1) Pull L ICE DET circuit breaker. Verify the following CAS message is displayed:

- L ICE DETECT FL (amber)

- (2) Depress L ICE DET circuit breaker. Verify the following on CAS:

- L ICE DETECT FL message is not displayed, then is displayed for 2 - 4 seconds and then is not displayed
- L ICE DETECTED (amber) message is displayed for 1 second (approximately) and then is not displayed

- (3) Pull R ICE DET circuit breaker. Verify the following CAS message is displayed:

- R ICE DETECT FL (amber)

- (4) Depress R ICE DET circuit breaker. Verify the following on CAS:

- R ICE DETECT FL message is not displayed, then is displayed for 2 - 4 seconds and then is not displayed

**GV****Gulfstream**  
**COMPUTERIZED MAINTENANCE PROGRAM****308003**  
Page 2 of 2ISSUED/REVISED: 06/30/06  
(CONTINUED)

AREA

308003 Ice Detector Probe (Left) - Operational Test  
308004 Ice Detector Probe (Right) - Operational Test

- R ICE DETECTED (amber) message is displayed for 1 second (approximately) and then is not displayed

**C. Follow On**

- (1) Pull L ICE DET and R ICE DET circuit breakers.
- (2) On System Monitor panel, select MAINT TEST switch to OFF.
- (3) On DISPLAY SYSTEM CONTROL panel, select all switches to OFF.
- (4) Remove electrical power from aircraft.
- (5) Inspect for presence of foreign objects.
- (6) Record all maintenance actions in accordance with current governing authority.

**GV**