Document No.: AF-456 Revision (IR)

Date: August 26, 2009

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# Aviation Fabricators Inc. 805 North Fourth Street Clinton, MO. 64735

## INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

For

2 Place Side Facing Divans

**Document No.: AF-456** 

**Revision "IR"** 

Revision Date: 08/26/09

Applicable to:

Jetstream models 3101 and 3201

Modified by FAA STC SA01046WI

The information in the Instruction for Continued Airworthiness is FAA accepted material and complies with 14 CFR 23.1529, Instructions for Continued Airworthiness. It supersedes or adds to that provided in the Maintenance Manual for the Jetstream 3101 and 3201 Series Aircraft, only where covered in the items contained herein. For limitations and procedures not contained in the Supplement, consult the Component Maintenance Manual, or other approved airplane data.

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# **REVISION PAGE**

Document Title: Instructions for Continued Airworthiness

Prepared By: <u>Todd Pogue</u>

Log of Revisions				
REV. NO.	EFFECTED PAGE(S)	DESCRIPTION	DATE	APPROVED BY
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#### **LIST OF EFFECTIVE PAGES**

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# **ABBREVIATIONS AND DEFINITIONS**

Abbreviations	Definitions
AML	FAA Approved Model List (AML)
Detailed Inspection (DET)	An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc. may be necessary. Surface cleaning and elaborate access procedures may be required.
FAA	Federal Aviation Administration
FAA MIDO	FAA Manufacturing Inspection District Office
General Visual Inspection (GVI)	A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hanger lighting, flashlight or droplight and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked.
ICA	Instructions for Continued Airworthiness
Special Detailed Inspection (SDI)	An intensive examination of a specific item, installation, or assembly to detect damage, failure or irregularity. The examination is likely to make extensive use of specialized Inspection Techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedure may be required.
STC	Supplemental Type Certificate

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#### 1.0 INTRODUCTION

The purpose of this Maintenance Manual Supplement and Instructions for Continued Airworthiness (ICA) is to provide the maintenance technician with the information necessary to ensure the continued airworthiness of the Aviation Fabricators 2 place installation, per installation numbers 52-0306 and 52-0307, when installed in accordance with Aviation Fabricators design data included on Drawing List AF-317 and per Supplement Type Certificate (STC) SA01046WI.

Modifications to an aircraft obligates the operator to include the maintenance information provided by this document into the operators aircraft Maintenance Manual and operator's aircraft scheduled maintenance program. This document defines supplementary maintenance operations and frequencies recommended by Aviation Fabricators Inc., to ensure the aircraft's airworthiness.

The information contained herein addresses the requirements specified in 14 CFR 23.1529, Instructions for Continues Airworthiness and supplements the basic Airplane Maintenance Manual only in those areas listed as pertains to the installation of divan seats, as installed per the Aviation Fabricator Drawing List AF-317. For limitations and procedures not contained in this supplement, consult the basic Airplane Maintenance Manual.

#### DATA

All information to support the continued airworthiness of this modification is contained in:

STC SA01046WI.

STC drawing list: AF-317.

Installation: STC drawing list: AF-317:

Drawing D-10352 for p/n 52-0307 Drawing D-10353 for p/n 52-0306

Parts: Refer to 52-0306 & 52-0307 and respective drawings as

listed on STC drawing list AF-317.

The divan is a self contained complete assembly that mounts to the existing seat track, using standard fittings, in accordance with approved floor plans.

#### **Design Change Control**

All data and changes to the parts and assemblies will be tracked per STC Drawing List AF-317 Rev F or later approved revision.

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# **Applicable Aircraft**

Jetstream model 3101 and 3201 aircraft.

# 2 Place Divans

P/N's 52-0306 (Shown), and 52-0307

Top not shown for clarity

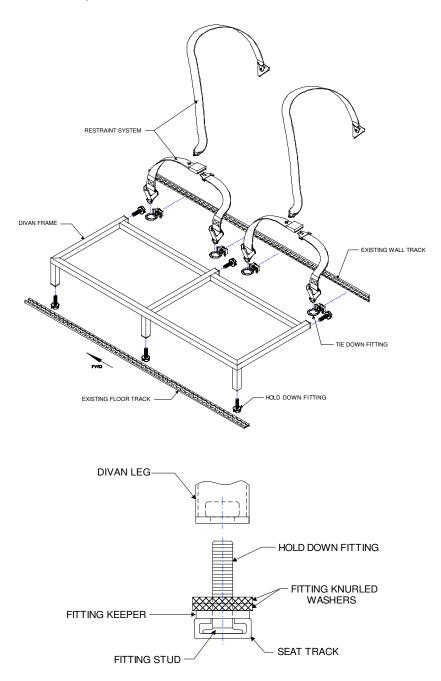


Figure 1.0A

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# Shoulder Harness Kit

P/N's 52-0308 (Shown), and 52-0309

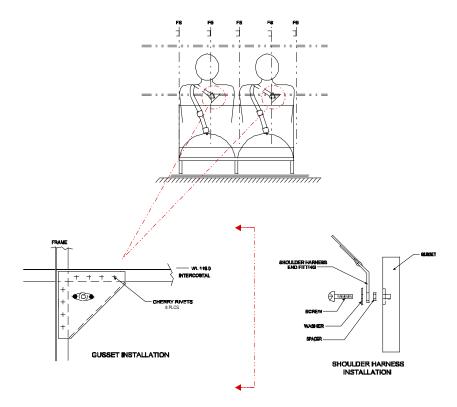


Figure 1.0B

# Seat Belt Attachment

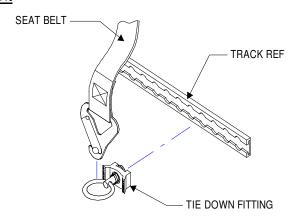


Figure 1.0C

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#### 2.0 INSPECTION REQUIREMENTS AND OVERHAUL SCHEDULE

- 1. To comply with 14 CFR 23.1529, continue the new divan and restraint system on the same inspection and maintenance schedule used per the applicable Jetstream 3101 and 3201 Series Maintenance Manual for seats.
  - a. The new divan requires no service other than inspection at normal inspection interval of 600 hours.
  - b. The safety belts require no service other than inspection at normal inspection interval of every 12 months.
  - c. Perform a detailed visual inspection of each bottom and back cushion and cover to detect apparent or obvious defects, deterioration in the form of wear, tears, rips, punctures or irregularities that cause the cushion assembly to become worn or distorted. Replace the cushion assembly if this cover does not fit properly or the cushion develops a "lumpy" or irregular feel.
  - d. Perform a detailed visual inspection of each divan frame assembly including weld joints, diaphragm, fasteners and anchors, track fittings, and restraint systems to detect apparent or obvious defects, corrosion, cracks, large deformations (permanent deformation in frame tubes more than ¼ the overall thickness of the tube diameter), irregularities that cause the frame assembly and/or anchor/fitting to become distorted and not fit into the intended seat track/anchor locations. If deformities are found the divan frame assembly must be removed from the aircraft and returned to Aviation Fabricators for repair or replacement.
  - e. Perform a detailed visual inspection of the sidewall gusset to detect apparent or obvious defects, corrosion, cracks, large deformations, or irregularities that cause the gusset assembly to become distorted and not function properly. If deformities are found, the gusset assembly must be removed from the aircraft. Contact Aviation Fabricators for replacement.

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2. Inspection Time Limit for 1, 2, 3, & 4 Place Side Facing Divan Assembly Installations:

600 hour inspection for the divan assembly 12 months for the safety belts

		Schedule	Date	Mech	Insp
a.	Inspect for damage to upholstery.				
b.	Inspect safety belts for wear, cuts, fraying, damage, and deterioration.				
C.	Inspect safety belt attachment fittings for wear and damage				
d.	Inspect foot fittings for damage, security, and function.				
e.	Inspect seat frame for damage, and corrosion.				
f.	Inspect overall seat for fit and function.				
g.	Inspect gusset assembly for defects, corrosion, cracks, or deformations.				
	b. c. d.	<ul> <li>b. Inspect safety belts for wear, cuts, fraying, damage, and deterioration.</li> <li>c. Inspect safety belt attachment fittings for wear and damage</li> <li>d. Inspect foot fittings for damage, security, and function.</li> <li>e. Inspect seat frame for damage, and corrosion.</li> <li>f. Inspect overall seat for fit and function.</li> <li>g. Inspect gusset assembly for defects,</li> </ul>	b. Inspect safety belts for wear, cuts, fraying, damage, and deterioration.  c. Inspect safety belt attachment fittings for wear and damage  d. Inspect foot fittings for damage, security, and function.  e. Inspect seat frame for damage, and corrosion.  f. Inspect overall seat for fit and function.  g. Inspect gusset assembly for defects,	b. Inspect safety belts for wear, cuts, fraying, damage, and deterioration.  c. Inspect safety belt attachment fittings for wear and damage  d. Inspect foot fittings for damage, security, and function.  e. Inspect seat frame for damage, and corrosion.  f. Inspect overall seat for fit and function.  g. Inspect gusset assembly for defects,	b. Inspect safety belts for wear, cuts, fraying, damage, and deterioration.  c. Inspect safety belt attachment fittings for wear and damage  d. Inspect foot fittings for damage, security, and function.  e. Inspect seat frame for damage, and corrosion.  f. Inspect overall seat for fit and function.  g. Inspect gusset assembly for defects,

A. The new divan and restraint system on the same inspection and maintenance schedule used per the applicable Jetstream Maintenance Manual for seats.

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## 3.0 DIMENSION AND ACCESS:

The installation of the new divan does not change the dimensions of the aircraft or alter the access to any existing aircraft system.

# 4.0 LIFTING AND SHORING

No change.

# 5.0 LEVELING AND WEIGHING

No change.

# 6.0 TOWING AND TAXIING

No change.

# 7.0 PARKING AND MOORING

No change.

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## 8.0 PLACARDS AND MARKINGS

Up to 3 placards are required in conjunction with this modification:

1. Each seat section is approved for 20 lbs of underseat storage capacity. Placard, part number 15-0377 must be installed in plain view of the seat occupants.

20 LBS MAXIMUM STORAGE CAPACITY FOR EACH UNDERSEAT COMPARTMENT AREA

Figure 8.0A

2. A placard stating "to install harness over seat occupant's fwd shoulder" is sewn on to restraint system part numbers 3091-2-021-2396 and should be legible and easily viewed by the seat occupant.



Figure 8.0B

3. Lifevest placard part number 15-0288 must be installed in plain view of the seat occupant.

LIFE VEST IS STORED IN UNDERSEAT COMPARTMENT

Figure 8.0C

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#### 9.0 SERVICE INFORMATION

## **Typical Divan Service Instructions:**

## A. Upholstery Cleaning:

#### **Divan Service Instructions**

- 1. Remove seat back and seat bottom cushion assemblies from sidewall and divan top.
- 2. If possible dry clean fabric cushions.
- 3. If dry cleaning is not possible clean fabric with Armour All fabric cleaner or equivalent.
- 4. Clean leather with Armour All leather cleaner or equivalent.
- 5. Clean and inspect restraint system for damage or excessive wear.
- 6. Inspect all attachment fittings and replace if necessary.
- 7. Inspect overall seat for fit and function.

# **Typical Divan Maintenance Instructions:**

#### Divans

The divans are self contained complete assemblies that mount to the existing aircraft cabin seat track using standard fittings in accordance with approved floor plans. Refer to Figure 1.0A. The divan installations require a FAA approved shoulder harness kit to be installed. Refer to Figure 1.0B for Aviation Fabricators kit p/n's 52-0308K and 52-0309K.

#### Divan Removal

To remove the divan from the existing aircraft cabin seat track loosen the hold down foot fittings by turning the knurled washers from the hold down keeper and slide the divan so that fitting stud can be lifted out of the track.

#### Divan Installation

To install the divan align the hold down fitting studs into the seat track. Then slide the divan forward or aft so that the fitting keeper locks into place and tighten the knurled washers onto the keeper.

#### Cushions

Seat back and seat bottom cushion assemblies are removed by simply pulling the cushion inboard away from the Velcro on the sidewall or up away from the Velcro on the pan of the divan assembly, respectively.

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Seat Belt and Shoulder Harness

Shoulder Harness removal is accomplished by loosening attaching hardware and removing from the aircraft sidewall. The seat belt is removed per the divan installation by removing the hook end fitting of the belt from the tie down fitting attached to the track.

Installation of the shoulder harness is accomplished by tightening the attaching hardware through the harness end fitting into the side wall gusset attached to the aircraft structure. The seat belt is installed by using a tie down fitting in the existing seat track. Refer to Figure 1.0C

#### **B. RECOMMENDED OVERHAUL PERIODS**

No additional overhaul time limitations.

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#### 10.0 AIRWORTHINESS LIMITATIONS

The information contained herein supplements the basic Maintenance Manuals only in those areas listed, when the aircraft is modified in accordance with Aviation Fabricators Drawing List AF-317 Rev "F" or later approved revision. For limitations and procedures not contained in this supplement, consult the basic Airplane Maintenance Manuals.

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

AIRWORTHINESS LIMITATIONS - LOG OF REVISIONS				
REV.	EFFECTED PAGE (s)	DESCRIPTION of REVISION	DATE	
(IR)	All	Initial Release	08/26/2009	

#### AIRWORTHINESS LIMITATIONS

There are no Airworthiness Limitations to the aircraft with the addition of the 2 Place Side Facing Divan installed by this STC.

#### Distribution:

Per the requirement of Appendix G of 14 CFR Part 23 paragraph G23.1 (c), the changes made to the ICA by the applicant will be distributed via mail by means of paper copy.