DCA/750XL/9 Wing Rear Spar – Inspection and Modification

Applicability: Model PAC 750XL aircraft, S/N 101, 102, 104 through to 128, except aircraft with

modification PAC/XL/0273 embodied.

Requirement: To prevent damage to the rear spar due to working and failing rivets between the rear

spar and the inboard rib, accomplish the following instructions in accordance with Pacific Aerospace Limited Mandatory Service Bulletin PACSB/XL/022 and PAC

Drawing No. 11-20035:

1. Inspection

On both left and right sides of the aircraft, inspect the inboard end of the rear spar for security of the blind rivets which attach the fuselage attach fitting to the rear spar and inboard rib. Inspect the radii of the rear spar upper and lower flanges for cracking. Inspect from the attachment fitting to a point 8" outboard. Inspect the aft flange of the inboard rib for cracking.

If the aft flange of the inboard rib is cracked, or the rivets show signs of working, repair per modification PAC/XL/0270.

If the rear spar is cracked, replace the rear spar, before further flight.

Note 1: Modification PAC/XL/0270 is a repair scheme for damaged spars and inboard ribs.

and may be used as an alternative means of compliance to the spar replacement

requirement of this AD.

2. Modification

On both left and right sides of the aircraft remove the NAS1738E-6-6 blind rivets joining the rear spar P/N 11-20031/32-1 and the aft end of the inboard rib, and replace with bolts or rivets as detailed on drawing No. 11-20035 and PACSB/XL/022.

Note 2: Modification PAC/XL/0217 addresses the installation of a packer on the rear wing

pickup, using bolts instead of rivets, and is an alternative means of compliance to the modification in requirement 2 of this AD. Modification PAC/XL/0217 may already be

installed on some aircraft.

Compliance: 1. Inspect within the next 50 hours TIS, unless already accomplished within the last

50 hours TIS and thereafter at intervals not to exceed 150 hours until the rivets have

been replaced by bolts in accordance with requirement 2 of this AD.

2. Modify within 300 hours TIS, or 12 months, whichever occurs sooner.

Note 3: Once the modification per requirement 2 of this AD has been accomplished,

operators should continue to inspect the main wing aft attachment area in accordance with the aircraft maintenance manual at intervals not to exceed 300 hours TIS or 12

months, whichever occurs sooner.

Effective Date: 29 March 2007



FAA MCAI INFORMATION FORM

To: Airworthiness Authority of USA (FAA)

In support of the FAA's actions to address your country's Mandatory Continued Airworthiness Information (MCAI) in the United States, please provide the items highlighted below by Airworthiness Directive (AD) or service information.			
Aircraft Manufacturer/Model	ECAA AD/Revisio	on No./Date	Service Bulletin/Revision No./Date
PAC 750XL	DCA/750XL/9	9	PACSB/XL/022
1. Describe the unsafe condition, AND its root cause. Include description of how the problem could affect the safe operation of the airplane. Cracked rear spar web near inboard attach area. Failure occurred on an aircraft on intensive agricultural operations.			
2. Provide the number and description of occurrences that prompted the AD. Number of Occurrences:One Description: Refer description in PACSB/XL/022			
3. How was the compliance time (s) established? Inspection to be accomplished as soon as possible (within the next 50 hours TIS). The modification within 300 hours TIS or 12 months.			
4. Cost of parts and/or installation work hours for the owner/operator (data from the manufacturer and their supplier, if applicable): Costs:TBA Work hours:TBA			
5. If parts are required, are they av ⊠Yes □No □No		Availability/Lea	d Time:Standard A/C hardware
	e cause of the unsafe cond uality Control Problem napproved Parts	ition? ⊠Operation: □Other (Spe	
7. Should a ferry flight be permitted? ⊠Yes □No			
8. Number of aircraft affected, by serial number (S/N) (U.S. Registered and Worldwide): ALL, or S/N: 101, 102,104 through 128 U.S. Registered Worldwide (including) U.S. Registered 20			
9. If this is interim action, is terminating action available? If so, please provide description and recommended compliance time. Embodiment of Modification PAC/XL/0273 is a terminating action. Thereafter inspect per aircraft MM at intervals not to exceed 300 hours TIS or 12 months whichever occurs sooner.			
10. Other: Refer DCA/750XL/9 and PACSB/XL/022			
		Da	ate: 27 March 2007





MANDATORY SERVICE

PACIFIC AEROSPACE LIMITED

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PACSB / XL / 022

REPLACEMENT OF RIVETS - WING REAR PICKUP - INBOARD

1. PLANNING INFORMATION

A. EFFECTIVITY PAC 750XL aircraft S/N's 101, 102, 104

through 128.

B. REASON To eliminate the possibility of damage to

the rear spar due to working and failing

rivets.

C. DESCRIPTION A case of a main wing cracked rear spar

near the inboard attach point occurred after failure of the NAS1738E-6-6 rivets that attach the inboard rib aft end to the rear spar. This failure occurred during intensive agricultural operations with agricultural overload, short cycle times and frequent flap use. In this case the working rivets were not discovered early enough and some were completely lost. This led to cracking in the rear spar web directly

below the row of lost rivets.

D. COMPLIANCE At next 150 hour inspection.

Modifications PAC/XL/0270 or

PAC/XL/0217 are alternative means of compliance. Modification PAC/XL/0270 is a repair scheme for damaged spar and inboard rib due to rivet failure, and modification PAC/XL/0217 installs a packer on the rear wing pickup with bolts

in place of the rivets in question.

E. APPROVAL By the delegated authority.

F. TOOLING No special tools are required.

G. WEIGHT AND BALANCE Not affected.

H. REFERENCE PAC 750XL Maintenance Manual, Drawing

11-20035.

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2. ACCOMPLISHMENT INSTRUCTIONS

A. <u>Additional Components</u>.

- 1. Oversize Bolt #NAS6603-5X (14 off).
- 2. Nut #MS21042-3 or MS21044N3 (14 off).
- 3. Washer #AN960-10 (14 off).

OR

Rivet #MS90354-0605 (14 off).

B. Method:

Remove NAS1738E-6-6 rivets joining the rear spar (P/N 11-20031/32-1) and inboard rib aft end and replace with bolts or rivets i a w drawing 11-20035 and standard aircraft practices (standard bolt torque guidelines in the Maintenance Manual is applicable). If the rear spar is found to be cracked, replace the rear spar. If inboard rib aft flange is cracked or holes damaged, Modification PAC/XL/0270 can be used to repair the damaged inboard rib aft flange.

C. <u>Inspection:</u>

Continue to inspect the main wing aft attachment to fuselage area every 300 hours in service or 12 months, whichever comes first, i a w the Maintenance Manual.

3. CERTIFICATION

Record compliance with this Bulletin and Modification PAC/XL/0273 in the Airframe Log Book.

4. <u>MATERIAL REQUIRED</u>

- 1) Oversize Bolt #NAS6603-5X (14 off).
- 2) Nut #MS21042-3 or MS21044N3 (14 off).
- 3) Washer #AN960-10 (14 off).

OR

Rivet #MS90354-0605 (14 off).

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