

MCAI Information Form

In support of the Civil Aviation Authority actions to address your Mandatory Continued Airworthiness Information (MCAI), please provide the information below, if not contained in the referenced service information. **Important Note:** The Director may require information considered necessary in the interests of civil aviation safety, Civil Aviation Act 1990 Section 15 refers.

Aircraft Manufacturer/Model *Pacific Aerospace Ltd / P-750 XL*

Service Bulletin/Revision/Date *PACSB/XL/115 – Issue 3 – 21/01/2019*

Number of aircraft affected, all aircraft or by S/N: *ALL 750XL (NZ) aircraft up to and including S/N 216, and S/N 220.*

750XL (CN) aircraft S/N 8001 and 8002.

1. Describe the unsafe condition, AND its root cause. Include a description of how the problem could affect the safe operation of the aircraft:

Aileron pivot fork bearing P/N: NA4901-2RSR retaining washers are missing off some installation. The possible consequence is that the bearing may slip out and the control column may be felt floppy during flight.

The loss of the outer bearing race leads to excessive play in the control column.

The root cause is that the retaining feature for the bearings is not present. As a result, the migration of the outer race of the bearing may occur.

2. Provide the number and description of occurrences that prompted the mandatory service bulletin:

The outer race of the NA4901-2RSR bearing slipped out on aircraft XL 147 during flight October 2018.

3. How was the compliance time(s) established?

Since the missing of retaining washers has medium safety risk (refer Design Risk Management Form), it's decided to have the issue inspected at a daily routine, and finally resolved by 165-hour maintenance.

4. Cost of parts and/or installation man hours?

For each aircraft, the following hardware are required: four off WAS7-4 washers, four off WAS18-1 washers, two off AN960-516 washers, two off AN960-516L washers, two off NAS6605D60 bolts, two off MS17825-5 nuts and two off MS24665-12 split pins, AeroShall grease 22.

For an experienced aircraft maintenance engineer, the daily inspection will take 1 hour, the installation of the retaining feature to the bearing will take 3 hours.

5. If parts are required, are they available for all aircraft?

WAS7-4 washer (made from AN970-4 washer), AN960 washers and AeroShell grease 22 are common aircraft product, and are immediately available around the world.

WAS18-1 washer is made of stainless steel, and operator can make the washer from stainless steel sheet.

The NAS bolt, castellated nut and split pin are standard aircraft parts.

However, all of the parts are available for purchasing from PAL.

6. What category best describes the cause of the unsafe condition? Design problem, maintenance, quality control problem, unapproved parts, operational or other (specify):

Design failed to consider the retaining feature for the bearing.

Although by 2015, the retaining feature was added to the drawing, production failed to follow the drawing.

7. Should a ferry flight be permitted?

Yes, provided that the outer race of the bearing is inspected to be safe before flight.

8. If this is an interim action, is a terminating action available? If so, please provide a description and recommended compliance time:

The action required by the PACSB/XL/115 Part A is an interim action.

The action required by the PACSB/XL/115 Part B is a one-step mandatory action.

9. Other additional information:

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