

EMERGENCY AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post Emergency ADs on the internet at www.faa.gov/aircraft/safety/alerts

DATE: December 23, 2005

AD #: 2005-26-53

Send to all owners and operators of Pacific Aerospace Corporation Ltd. Model 750XL airplanes, all serial numbers, that are certificated in any category.

Discussion

What events have caused this AD? The Civil Aviation Authority (CAA), which is the airworthiness authority for New Zealand, recently notified FAA that an unsafe condition may exist on Pacific Aerospace Corporation Ltd (PAC) Model 750XL airplanes. The CAA reports that the wings of these airplanes may not meet the ultimate load requirements for a maximum takeoff weight of 7,500 pounds. PAC found the condition on a production wing during an ultimate load test. Investigation is not complete, but indications show that some critical rivets were not fully age-hardened.

PAC has started developing a modification that will replace the critical rivets with "AN" bolts, but it will be some time before the modification is available.

In the interim, PAC is reducing the maximum takeoff weight from 7,500 pounds to 7,125 pounds. The maximum takeoff weight reduction will allow the airplane to meet the ultimate load requirements for an airplane certificated in the Normal Category.

What are the consequences if the condition is not corrected? The wing not being able to hold ultimate load could result in wing failure and subsequent loss of control of the airplane.

What action did the CAA of New Zealand take? The CAA issued emergency New Zealand AD Number DCA/750XL/7, dated December 22, 2005, to ensure the continued airworthiness of these airplanes in New Zealand.

Did the CAA of New Zealand inform the United States under the bilateral airworthiness agreement? These PAC Model 750XL airplanes are manufactured in New Zealand and are type-certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement.

Under this bilateral airworthiness agreement, the CAA of New Zealand has kept us informed of the situation described above.

What has FAA decided? After careful review of all available information related to the subject presented above, we have identified an unsafe condition that is likely to exist or develop on other products of this same type design. For this reason, FAA has determined that:

- the maximum takeoff weight should be reduced from 7,500 pounds to 7,125 pounds on type design PAC 750XL airplanes; and

- AD action should be taken to allow wing ultimate load requirements to be met, which if not met, could result in wing failure and subsequent loss of control of the airplane.

What does this AD require? This AD requires you to insert the following into the Limitations Section of the Airplane Flight Manual (AFM):

“The maximum takeoff weight is reduced from 7,500 pounds to 7,125 pounds.”

In preparation of this rule, we contacted type clubs and aircraft operators to obtain technical information and information on operational and economic impacts. We have included, in the rulemaking docket, a discussion of information that may have influenced this action.

Presentation of the Actual AD

This rule is issued under 49 U.S.C. Section 44701 (formerly section 601 of the Federal Aviation Act of 1958), pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this action.

2005-26-53 PACIFIC AEROSPACE CORPORATION LTD.: Directorate Identifier 2005-CE-54-AD.

When Does This AD Become Effective?

(a) This emergency AD becomes effective upon receipt.

Are Any Other ADs Affected By This Action?

(b) None.

What Airplanes Are Affected by This AD?

(c) This AD affects Model 750XL, all serial numbers, that are certificated in any category.

What is the Unsafe Condition Presented in This AD?

(d) This AD is the result of information that the wing of these airplanes may not meet the ultimate load requirements for a maximum takeoff weight of 7,500 pounds. Pacific Aerospace Corporation Ltd. found the condition on a production wing during an ultimate load test. Investigation is not complete, but indications show that some critical rivets were not fully age-hardened. This AD is intended to allow wing ultimate load requirements to be met, which if not met, could result in wing failure and subsequent loss of control of the airplane.

What Must I do to Address This Problem?

(e) To address this problem, you must do the following:

Actions	Compliance	Procedures
Insert the following information into the Limitations Section of the Airplane Flight Manual (AFM). You may do this by inserting a copy of this AD into the Limitations Section of the AFM. “The maximum takeoff weight is reduced from 7,500 pounds to 7,125 pounds.”	Prior to further flight after receipt of this emergency AD.	The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do the flight manual changes requirement of this AD. Make an entry in the aircraft records showing compliance with this portion of the AD following section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

May I Request an Alternative Method of Compliance?

(f) The Manager, Standards Office, Small Airplane Directorate, FAA, has the authority to approve alternative methods of compliance for this AD, if requested using the procedures found in 14 CFR 39.19. For information on any already approved alternative methods of compliance, contact Karl Schletzbaum, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4146; facsimile: (816) 329-4090.

Is There Other Information That Relates to This Subject?

(g) CAA Airworthiness Directive DCA/750XL/7, dated December 22, 2005, also addresses the subject of this AD.

Issued in Kansas City, Missouri, on December 22, 2005.

Kim Smith,
Manager, Small Airplane Directorate,
Aircraft Certification Service.