

"Docket No. 2002-NM-102-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in this AD may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2125; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: The Direction Générale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, notified the FAA that an unsafe condition may exist on certain Airbus Model A330-223, -321, -322, and -323 series airplanes equipped with Pratt & Whitney Model PW4164, PW4168, or PW4168A engines. The DGAC advises that engine fan blade-out tests performed by the engine manufacturer, Pratt & Whitney, have shown that the loads used for certification of the engines were underestimated. In the event of an engine fan blade-out, the induced loads could lead to reduced structural integrity of the primary structure of the engine pylons, and uncommanded deployment of the thrust reversers. This condition, if not corrected, could result in reduced controllability of the airplane.

Explanation of Relevant Service Information

Airbus has issued Service Bulletin A330-54-3016, Revision 01, dated August 7, 2000, which describes procedures for the modification of the primary structure of the engine pylons. The modification includes, among other actions, replacing the stainless steel screws at rib 8B and rib 12 with Inconel screws, and replacing the stainless steel screws located on the lateral panel seam of the lower spar between rib 8C and rib 10 with stainless steel screws of the next-higher-nominal diameter.

Airbus has also issued Service Bulletin A330-78-3011, dated December 14, 1999, which describes procedures for the replacement of the thrust reverser locking actuators with new, improved locking actuators.

Accomplishment of the actions specified in these service bulletins is intended to adequately address the identified unsafe condition. The DGAC classified these service bulletins as mandatory and issued French airworthiness directive 2000-237-123(B) R1, dated December 12, 2001, in order to assure the continued airworthiness of these airplanes in France.

Airbus Service Bulletin A330-78-3011, dated December 14, 1999, references Pratt & Whitney Service Bulletin PW4G-100-78-71, dated September 24, 1999, as an additional source of service information for accomplishment of the replacement of the thrust reverser locking actuators.

FAA's Conclusions

This airplane model is manufactured in France and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.19) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Explanation of Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design that may be registered in the United States at some time in the future, this AD is being issued to prevent the reduced structural integrity of the primary structure of the engine pylons, and uncommanded deployment of the thrust reversers, which could result in reduced controllability of the airplane. This AD requires accomplishment of the actions specified in the service bulletins described previously, except as discussed below.

Differences Between this AD and the French Airworthiness Directive

This AD differs from the parallel French airworthiness directive in that it will not require repetitive visual inspections of the fan blades at intervals not to exceed 500 engine hours, or an ultrasonic inspection of the attachment area of the fan blade root before the accumulation of 5,000 parts cycles since new, or within 500 parts cycles after the effective date of the French airworthiness directive. These

inspections are not associated with any known unsafe condition. The DGAC required these inspections to minimize the possibility of a fan blade-off event, pending the retrofit of the modifications in paragraph 3 of the French airworthiness directive. All Airbus Model A330-223, -321, -322, and -323 series airplanes of U.S. registry were delivered with the modifications installed.

The French airworthiness directive defers implementation of the mandatory actions (*i.e.*, modification of the engine pylon and replacement of the thrust reverser locking actuators) for a period of time by requiring the inspections described in the preceding paragraph. The compliance time for accomplishment of the mandatory actions is before the accumulation of 8,000 flight cycles since new, or before August 1, 2004, whichever occurs first. The DGAC advises that if the inspections in the preceding paragraph are not mandated, the modifications must be accomplished in a timeframe comparable to that of the inspections. Therefore, this AD requires accomplishment of the mandatory actions within 500 engine hours or six months after the effective date of this AD, whichever occurs later.

Operators should note that, unlike the French airworthiness directive, this AD will not require the replacement of the pylon aft mount nuts and bolts since the manufacturer has confirmed to the FAA that all pylon aft mount nuts and bolts made of MP159 material have already been replaced. Additionally, the French airworthiness directive requires replacement of the pylon front mount bolts made of MP159 material. The FAA has determined through review of data provided by the engine manufacturer that repetitive inspection of front mount bolts made of MP159 material addresses the unsafe condition. As discussed below, the FAA previously issued two other ADs that require these actions.

These differences have been coordinated with and acknowledged by the DGAC.

Other Relevant Rulemaking

The FAA has previously issued two other ADs that concern the pylon aft and forward mount nuts and bolts on Airbus airplanes:

1. AD 2000-25-53, amendment 39-12051 (65 FR 82259, December 28, 2000), requires repetitive inspections for cracks or other damage of pylon aft mount nuts and bolts made of MP159 material.

2. AD 2000-16-02, amendment 39-11856 (65 FR 49730, August 15, 2000), requires repetitive inspections and