

condition, and the FAA has determined that further rulemaking action is necessary; this proposed AD follows from that determination.

Explanation of Relevant Service Information

Airbus has issued the following service bulletins:

Service Bulletins

Airbus service bulletin—	For Airbus model—	Equipped with model—
A300–78–6017, dated August 6, 2001	A300 B4–620 airplanes	PWJT9D–7R4 series engines.
A300–78–6018, dated July 17, 2001	A300 B4–622R airplanes	PW4000 series engines.
A300–78–6020, dated August 10, 2001	A300 B4–622 airplanes	PW4000 series engines.
A310–78–2018, dated June 1, 2001	A310–222 and –322 series airplanes	PWJT9D–7R4 series engines.
A310–78–2019, dated May 2, 2001	A310–324 and –325 series airplanes	PW4000 series engines.
A310–78–2020, dated June 1, 2001	A310–221 and –222 series airplanes	PWJT9D–7R4 series engines.

These service bulletins describe procedures for installing modifications that will add an independent third line of defense on the thrust reverser system and consequently enhance its redundancy. The actions are intended to preclude a single/dual thrust reverser deployment due to failure of the first two lines of defense, or failure of mechanical retention means. The modifications comprise five parts:

- Retrofit of the new electrical circuit between the avionics compartment and the forward cargo compartment at frame (FR) 38.2.

- Retrofit of the new electrical circuit between the forward cargo compartment at FR 38.2 and the wing/pylon interfaces.

- Retrofit of the new electrical circuit in the engine pylons.

- Retrofit of the new electrical circuit in the avionics compartment.

- Installation of the synchronous shaft lock system and connection to the new electrical circuit.

Accomplishment of the actions specified in the service bulletins is intended to adequately address the identified unsafe condition. The Direction Générale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, classified these

service bulletins as mandatory and issued French airworthiness directive 2001–523(B), dated October 31, 2001, to ensure the continued airworthiness of these airplanes in France.

FAA's Conclusions

These airplane models are manufactured in France 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. 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 Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would

supersede AD 98–25–51 to continue to require deactivating both thrust reversers and revising the airplane flight manual (AFM) to ensure that safe and appropriate performance is achieved during certain takeoff conditions. (The AMOC described previously allows for re-activation of the thrust reversers and removal of the AFM limitations.) The proposed AD would also require installing modifications involving retrofit of a new electrical circuit at four locations and installation of the synchronous shaft lock system and connection to the new electrical circuit. The modifications would terminate the requirements of the existing AD, as well as the associated AMOC, which allows re-activation of the thrust reversers. The modifications would be required to be accomplished in accordance with the applicable service bulletins described previously.

Cost Impact

There are approximately 38 airplanes of U.S. registry that would be affected by this proposed AD. The FAA provides the following cost estimates for the actions specified in this proposed AD:

Cost Estimates

Action	Model/series	Work hours	Hourly labor rate	Parts cost	Cost per airplane
Actions currently required by AD 98–25–51					
Thrust reverser deactivation	All	2	\$60	\$0	\$120
AFM revision	All	1	60	0	60
Proposed modification, per Service Bulletin					
A310–78–2018	A310–222 and –322	1,433	60	16,234	102,214
A310–78–2019	A310–324 and –325	1,395	60	15,061	98,761
A310–78–2020	A310–221 and –222	1,267	60	14,848	90,868
A300–78–6017	A300 B4–620	817	60	13,810	62,830
A300–78–6018	A300 B4–622R	1,198	60	15,141	87,021
A300–78–6020	A300 B4–622	817	60	10,760	59,780