	AIRWORTHINESS DIRECTIVE No F-2005-055	Distribution: B	Issue date: March 30, 2005	Page : 1/2
	Direction générale de l'aviation civile France GSAC publication	This Airworthiness Directive is published by the DGAC on behalf of EASA, Airworthiness Authority of the State of Design for the affected product, part or appliance.		<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive, unless otherwise agreed with the Authority of the State of Registry.				
Corresponding foreign Airworthiness Directive(s): Not applicable		Airworthiness Directive(s) replaced: None		
Person in charge of airworthiness: AIRBUS SAS		Type(s): A340-500/600 aircraft		
Type certificate(s) No. A.015 TCDS No A.015				
ATA chapter: 27	Subject: Flight controls - FCPC standard evolution			

1. **EFFECTIVITY:**

AIRBUS aircraft A340-500 and A340-600 series, all certified models, all serial numbers, except those equipped with Flight Control Primary Computer (FCPC) standard W8A or subsequent.

The FCPC standard W8A is embodied in production by AIRBUS modification 54133 or embodied in service by AIRBUS Service Bulletin (SB) A340-27A5029.

2. **REASONS:**

One operator has reported recently a temporary multiple FCPC's and FCSC's (Flight Control Secondary Computer) failure in cruise on one A340-200 fitted with FCPC's standard L15. Inboard ailerons and elevators electrical control was then lost. Crew reset the affected computers, and normal flight condition was resumed without further anomalies.


Analyses have demonstrated that, as a result of the oscillatory input received from the Push Button Switches (P/BSW), the related FCPC may fail. However, prior to its failure, the affected FCPC may itself transmit oscillatory signals to the other flight controls computers leading to their failure.

Further investigations have revealed that the monitoring present in the FCPCs developed for A340-500/600 does not prevent this case of multiple flight control computer failures.

This situation, if not corrected, could lead, in the worst case, to the loss of all flight control computers resulting on the simultaneous loss of both elevators and of several ailerons.

The aim of this Airworthiness Directive (AD) is to render mandatory the installation of a FCPC standard that prevents the failure of flight control computers other than the one receiving the oscillatory input from the affected push button switch.

The AD F-2005-026 has been issued for the A340-200 and A340-300 for the same subject

	AIRWORTHINESS DIRECTIVE No F-2005-055	Distribution: B	Issue date: March 30, 2005	Page: 2/2
---	--	---------------------------	--------------------------------------	---------------------

3. **MANDATORY ACTION AND COMPLIANCE TIME:**

Unless already accomplished,

No later than April 30, 2005, upgrade all three (3) FCPC's standard to W8A in accordance with instructions of AIRBUS SB A340-27A5029.

4. **REFERENCE PUBLICATION:**

AIRBUS Service Bulletin A340-27A5029
(Any later approved revision of this SB is acceptable).

5. **EFFECTIVE DATE:**

Upon receipt from March 30, 2005.

6. **REMARK:**

For questions concerning the technical contents of this AD's requirements, contact:

AIRBUS SAS - Airworthiness Office - EAL - Fax : 33 5 61 93 45 80.

7. **APPROVAL:**

This AD is approved under EASA reference No 2005-2575 dated March 22, 2005.