

United States of America  
Department of Transportation -- Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* ST02377CH

*This certificate issued to*  
Armstrong Aerospace  
111 North Addison Avenue  
Elmhurst, IL 60126

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 25 of the Federal Aviation Regulations. (See Page 3 of 3 for complete certification basis.)*

*Original Product--Type Certificate Number:* A28NM  
*Make:* Airbus  
*Model:* A319-131; A319-133; A320-232; A321-232

*Description of Type Design Change:*

Installation of a Rockwell Collins Tailwind 560 Satellite TV System and modification of a Thales Top Series i3000/i4000 In flight Entertainment (IFE) System in accordance with Armstrong Aerospace Master Data List, Doc. No. DC104-4038-00, Revision C, dated July 31, 2007, or later FAA approved revision.

*Limitations and Conditions:*

- 1) Compatibility of this design change with previously approved modifications must be determined by the installer.
- 2) FAA Approved Airplane Flight Manual Supplement, Armstrong Aerospace Doc. No. DC303-4038-00, Revision A, approved August 21, 2007, or later FAA approved revision, is required on board the modified aircraft.
- 3) FAA Approved Instructions for Continued Airworthiness, Armstrong Aerospace Doc. No. DC113-4038-00, Section 2, Revision B, dated March 8, 2007, approved August 21, 2007, or later FAA approved revision is required for this modification.
- 4) If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:* August 1, 2006

*Date reissued:*

*Date of issuance:* January 29, 2007

*Date amended:* August 21, 2007



*By direction of the Administrator*

(Signature)

Charles L. Smalley  
Manager, Systems and Flight Test Branch  
Chicago Aircraft Certification Office

(Title)

United States of America  
Department of Transportation - Federal Aviation Administration  
**Supplemental Type Certificate**  
(Continuation Sheet)

*Number* ST02377CH

*Date amended:* August 20, 2007

*Certification Basis:*

The certification basis for the changed Airbus A319 Models 131 and 133, A320 Model 232, and A321 Model 232 aircraft as described in this certificate is as follows:

- a. The type certification basis for the Airbus A319 Models 131 and 133, A320 Model 232, and A321 Model 232 aircraft is shown on TCDS A28NM for parts not changed or not affected by this change.
- b. The certification basis for the parts changed or affected by this change since the reference date of application, August 1, 2006, is shown on TCDS A28NM. In addition, the applicant has complied with 14 CFR Part 25 as amended by Amendment 25-119.

**Regulations at the latest amendment 25-0 through 25-119**

25.23(a)-(b); 25.29(a)-(b); 25.251(a)-(b) (d); 25.301(a)-(c); 25.303; 25.305(a)-(e); 25.307(a); 25.321(a)-(d); 25.331(a)-(c); 25.333(a)-(c); 25.335(a)-(d); 25.337(a)-(d); 25.341(a); 25.349(a)-(b); 25.351(a)-(d); 25.365(a)-(d); 25.561(b); 25.571(a)-(b); 25.581(a)-(c); 25.601; 25.603(a)-(c); 25.605(a); 25.609(a)-(b); 25.611; 25.613(a)-(b); 25.619(a)-(c); 25.625(a); 25.629(a)-(e); 25.787(a)-(b); 25.789(a); 25.841(a)-(b); 25.853(a); 25.855(e); 25.869(a); 25.901(c); 25.903(c); 25.981(a); 25.1301(a)-(d); 25.1307(c); 25.1309(a)-(d) (g); 25.1351(a); 25.1353(a), (b), (d); 25.1357(a) (c)-(d); 25.1431(a)-(d); 25.1501(a)-(b); 25.1529; 25.1581(a), (b), (d); 25.1585(a)-(b).

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