

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

*Number* **ST00483WI**

*This certificate issued to:*

Teledyne Controls  
501 Continental Blvd  
El Segundo, CA 90245

*certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 25 of the Federal Aviation Regulations.*

*Original Product - Type Certificate Number:*      A20WE  
*Make:*      Boeing  
*Model:*      747-100, 747-200 and 747-300

*Description of Type Design Change:*

Replacement of the existing engine instruments with the Spirent Systems Wichita, Inc. Flat Panel Engine Instrument Display System (EIDS) Model 94002, in accordance with (1) Installation Data referenced on Continuation Sheet 2; and (2) FAA Approved Airplane Flight Manual Supplement (AFMS) referenced on Continuation Sheet 2.

*Limitations and Conditions:*

Compatibility of this design change with previously approved modifications must be determined by the installer. 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. Installation Data #1-2 and AFMS #1-2 are limited to Boeing 747-100, -100B SUD, -200B, -200C, -200F, SR, and -747SP Series. Installation Data #3 and AFMS #3 are limited to Boeing 747-200B, -200C, -200F Series. Installation Data #4 and AFMS #4 are limited to Boeing 747-100, -200B, -200C, SR, and 747-300 Series. Installation Data #5 and AFMS #5 are limited to Boeing 747-200B, -200F, -200C, and 747-300 Series.

(see continuation sheet 2 of 2)

*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:*      April 7, 1995  
*Date of issuance:*      February 11, 1997

*Date reissued:*      January 5, 1998; October 2, 2000;  
June 30, 2003; November 3, 2011  
*Date amended:*      December 16, 1998; September 23, 1999;  
November 29, 1999; July 12, 2000; November 20, 2001;  
January 21, 2003

*By direction of the Administrator*

*Original signed by Raymond Johnston*



(Signature)

Raymond N. Johnston  
Program Manager  
Wichita Aircraft Certification Office

(Title)

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

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*Limitations and Conditions* (continued):

**Installation Data**

- 1) B&D Master Data List. Document No. 94002-003-901, Revision "A", dated 12/14/96
- 2) Penny & Giles Aerospace Inc. Installation Manual, Document No. 94002-003-011, Revision "Original", dated 12/04/98, or later FAA Approved Revisions
- 3) Penny & Giles Aerospace Inc. Installation Manual, Document No. 94002-003-011, Revision "Original", dated 12/04/98, or later FAA Approved Revisions
- 4) Penny & Giles Aerospace Inc. Installation Manual, Document No. 94002-005-011, Revision "C", dated 12/04/02, or later FAA Approved Revisions
- 5) Penny & Giles Aerospace Inc. Installation Manual, Document No. 94002-007-011, Revision "-", dated 09/27/99, or later FAA Approved Revisions

**AFMS**

- 1) B&D Drawing No. 94002-003-013, Revision "Original", dated 02/11/97
- 2) Penny & Giles Aerospace Inc. Drawing No. 94002-003-013, Revision "C", dated 12/16/98, or later FAA Approved Revisions
- 3) Penny & Giles Aerospace Inc. Drawing No. 94002-006-013, Revision "Original", dated 12/16/98, or later FAA Approved Revisions
- 4) Penny & Giles Aerospace Inc. Drawing No. 94002-005-013, Revision "B", dated 12/04/02, or later FAA Approved Revisions
- 5) Penny & Giles Aerospace Inc. Drawing No. 94002-007-013, Revision "Original", dated 11/29/99, or later FAA Approved Revisions

**Engines**

- Pratt and Whitney JT9D-7A, -7F, -7Q, -7R4G2 or -7J
- Pratt and Whitney JT9D-7A, -7F, -7Q, -7R4G2 or -7J
- Pratt and Whitney JT9D-70A, JT9D-7Q
- Pratt and Whitney JT9D-7A, -7AH, -7F, -7Q, -7R4G2 or -7J
- GE CF6-50E2

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