

Service Bulletin No: 34-033

Ref No: 280

Modification No: EC-11-0607

ATA Chapter: 34

**NAVIGATION - ATTITUDE AND DIRECTION
REPLACE THE AIR DATA, ATTITUDE AND HEADING REFERENCE SYSTEM (ADAHRS)****1. Planning Information****A. Effectivity**

All PC-12/47E aircraft MSN 545 and MSN 1001 thru MSN 1340.

This modification will be incorporated during production on MSN 1341 and subsequent.

All ADAHRS KSG 7200, Honeywell P/N 065-00188-5101 (Pilatus P/N 985.99.12.101), Honeywell P/N 065-00188-5102 (Pilatus P/N 985.99.12.192), Honeywell P/N 065-00188-5103 (MOD 2) (Pilatus P/N 985.99.12.205) and Honeywell P/N 065-00188-5103 (MOD 3) (Pilatus P/N 985.99.12.220) held as spare or in stock.

B. Concurrent Requirements

This Service Bulletin supersedes Service Bulletin 34-028 (Navigation - Attitude and Direction - Replace the Air Data, Attitude and Heading Reference System (ADAHRS)).

For aircraft MSN 545 and MSN 1001 thru 1180, Service Bulletin 34-022 (Upgrade the Air Data, Attitude and Heading Reference System (ADAHRS) to -205 standard) must be accomplished previously, or simultaneously to, this Service Bulletin.

NOTE: If you will do Service Bulletin 34-022 simultaneously to this Service Bulletin, install the ADAHRS KSG 7200 Honeywell P/N 065-00188-5103 (MOD 4 or MOD 5) (Pilatus P/N 985.99.12.245). If you install the ADAHRS KSG 7200 Honeywell P/N 065-00188-5103 (MOD 4 or MOD 5) (Pilatus P/N 985.99.12.245), make sure you make an entry in the aircraft flight log that Service Bulletin 34-022 and Service Bulletin 34-033 (Part B) have been incorporated.

C. Reason**(1) Problem**

- (a) For MSN 545 and MSN 1001 thru MSN 1270 that are Pre Service Bulletin 34-028:

Production flight test reports have indicated that there is a possibility that one or both ADAHRS channels may fail to provide attitude data in some PC-12/47E aircraft equipped with the ADAHRS KSG 7200. The failure may occur during high speed descents (above 180 KIAS) with gear down and a simultaneous turn. In all cases the failure is appropriately flagged. The failures are covered by the relevant procedures within the AFM which require the pilot to refer to the ESIS and to select the opposite ADAHRS channel as required. The ESIS, as an independent system to the ADAHRS, is not affected by this failure.

- (b) For MSN 545 and MSN 1001 thru MSN 1340:

Honeywell discovered a problem with the ADAHRS KSG 7200. The affected units may fail the acceptance test procedure due to some hardware issues.

(2) Solution

Install an updated ADAHRS KSG 7200, Honeywell P/N 065-00188-5103 (HW MOD 4 or MOD 5) (Pilatus P/N 985.99.12.245).

D. Description

This Service Bulletin gives the data and instructions to address and correct the problems identified in Para 1.C.(1).

Part A:

- For MSN 545 and MSN 1001 thru MSN 1270 that are Pre Service Bulletin 34-028, put the Temporary Revision TR 17 into the PC-12/47E AFM (Report No. 02277).

Part B:

- For MSN 545 and MSN 1001 thru MSN 1340, replace the installed ADAHRS unit with a Honeywell P/N 065-00188-5103 (HW MOD 4 or MOD 5) (Pilatus P/N 985.99.12.245) unit.

Revision 1 to this Service Bulletin adds Honeywell P/N 065-00188-5103 (MOD 5) (Pilatus P/N 985.99.12.245) of the ADAHRS KSG 7200.

E. Compliance

Mandatory.

Part A

- For MSN 545 and MSN 1001 thru MSN 1270 that are Pre Service Bulletin 34-028:
Before Next Flight.

Part B

- For MSN 545 and MSN 1001 thru MSN 1270 that are Pre Service Bulletin 34-028:
Compliance time is Sep. 29, 2013.
- For MSN 545 and MSN 1001 thru MSN 1270 that are Post Service Bulletin 34-028 and MSN 1271 thru MSN 1340
Compliance time is Sep. 29, 2014.

F. Approval

The technical content of this Service Bulletin is approved under the authority of DOA No. EASA.21J.357.

PILATUS advises Operators/Owners to check with their designated Airworthiness Authorities for any changes, local regulations or sanctions that may affect the embodiment of this Service Bulletin.

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H. Manpower

Task	Man-hours (Part B)
Replacement and test	8.0
TOTAL MAN-HOURS	8.0

I. Weight and Balance

(1) Weight Change

Not affected.

(2) Moment Change

Not affected.

J. Electrical Load Data

Not affected.

K. Software

Pilatus ensures configuration control.

L. References

Honeywell Service Bulletin D201212000025.

Aircraft Maintenance Manual (AMM): 12-B-34-25-01-00A-920A-A

M. Publications Affected

For MSN 545 and MSN 1001 thru MSN 1270 that are Pre Service Bulletin 34-028:

Part A: Insert TR No. 17 into the Aircraft Flight Manual (AFM)

Part B: Remove TR No. 17 from the AFM, once Part B of this Service Bulletin has been incorporated.

| Illustrated Parts Catalog (IPC): 34-20-00.

N. Interchangeability of Parts

One way interchangeable. A pre-Service Bulletin 34-033 ADAHRS unit must not be installed in a post-Service Bulletin 34-033 aircraft.

2. Material Information**A. Material Information**

For repair of the ADAHRS, contact the Honeywell Service Center:
Honeywell Aerospace - Olathe
23500 West 105th St.
Olathe, KANSAS 66061
USA
Tel: +1 (913) 712 3000
Fax: +1 (913) 712 1313

For exchange of the ADHARS, contact Honeywell Aerospace at:
<https://myaerospace.honeywell.com>.

Operators are requested to advise Pilatus Aircraft Ltd. of the Manufacture's Serial Number (MSN) and the flying hours if aircraft which are affected by this Service Bulletin.

B. Warranty

Honeywell agrees to cover the costs for parts and labor of affected aircraft on approval of a warranty claim, provided the work is accomplished by an appropriately rated Honeywell Service Center within 36 months of the issue date of this Service Bulletin.