P1293

Submitter Email: dtarrant@mindspring.com
Type of Project: Revision to IEEE Standard 1293-1998
PAR Request Date: 22-Aug-2012
PAR Approval Date: 02-Nov-2012
PAR Expiration Date: 31-Dec-2016
Status: PAR for a Revision to an existing IEEE Standard
Root Project: 1293-1998

1.1 Project Number: P1293
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard Specification Format Guide and Test Procedure for Linear, Single-Axis, Non-Gyroscopic Accelerometers

Changes in title: ~~IEEE~~ Standard Specification Format Guide and Test Procedure for Linear, Single-Axis, Non-Gyroscopic Accelerometers

3.1 Working Group: Accelerometer Panel Working Group (AES/GA/AP_WG)
Contact Information for Working Group Chair
Name: Reese Sturdevant
Email Address: annereese@beyondbb.com
Phone: 575-679-1728
Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Aerospace and Electronic Systems Society/Gyro Accelerometer Panel (AES/GA)
Contact Information for Sponsor Chair
Name: Randall Curey
Email Address: rcurey@pacbell.net
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Contact Information for Standards Representative
Name: David Tarrant
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 04/2016
4.3 Projected Completion Date for Submittal to RevCom: 10/2016

5.1 Approximate number of people expected to be actively involved in the development of this project: 10
5.2 Scope: The specification and test requirements for a linear, single-axis, nongyroscopic accelerometer for use in inertial navigation, guidance, and leveling systems are defined. A standard specification format guide and a compilation of recommended test procedures for such accelerometers are provided. Informative annexes are given on the various types of such accelerometers (force or pendulous torque rebalance with analog or digital output, vibrating beam, and micromechanical) and error effects, on filtering, noise, and transient analysis techniques, and on calibration and modeling techniques (multipoint tumble analysis, vibration and shock test analyses, and geophysical effects in inertial instrument testing).

Changes in scope:

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: This document provides a standard specification format guide and a compilation of recommended test procedures for the preparation of a linear, single-axis, nongyroscopic accelerometer specification. These test procedures are derived from those presently in use in the industry.

Changes in purpose:

5.5 Need for the Project: There is a need to standardize both manufacturer and user specifications for linear, single-axis, nongyroscopic accelerometers. There is also a need to provide industry standard test procedures for use in verifying these specifications. The benefit of this standard is that common ground will be established between manufacturers and users such that there will be no misunderstanding as to the meaning of a specified capability or performance requirement nor in the method(s) used to test.

5.6 Stakeholders for the Standard: Users, producers, and those with general interest in non-gyroscopic accelerometers to include MEMS sensor developers and users. This would include military, commercial, industrial, and academic fields.

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

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7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
Is it the intent to develop this document jointly with another organization?: No

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8.1 Additional Explanatory Notes (Item Number and Explanation):