



Gyro and Accelerometer Panel Technical Operations Panel Report

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The Gyro and Accelerometer Panel (GAP) is composed of representatives of industry, government laboratories, educational institutions and professional societies, and who are active in the domain of inertial sensors and systems. Its main objectives are:

- Create and maintain terminology, specification format, and test procedure standards for components and systems designed to detect or measure inertial motion.
- Promote understanding of inertial components and systems.
- Establish accepted ways to describe inertial technologies and products.
- Create a common language that can be used by the inertial industry.

The GAP currently has two working groups:

1. IEEE Std 836 Working Group

- **Purpose:** Revision of IEEE Std 836 to align with current industry technologies and practices.

2. IEEE Std 1431 Working Group

- **Purpose:** Revision of IEEE Std 1431 to align with current industry technologies and practices.

The GAP held bimonthly meetings to address the following standards:

- **IEEE Std 836** *Recommended Practice for Precision Centrifuge Testing of Linear Accelerometers*
- **IEEE Std 1431** *IEEE Standard for Specifying and Testing Coriolis Vibratory Gyros*

The GAP also received questions regarding IEEE Std 952 Annex C. Discussions with the author of the questions led to a draft of a corrigenda for IEEE Std 952, created with the help of the original Annex C author. The GAP will consider publishing the corrigenda after the revisions for the current in-work standards are complete and will determine if the corrigenda also applies to IEEE Std 647.

IEEE Std 836 Working Group

The working group is working to revise the standard to address technical issues and bring it inline with current industry practices. Work on this standard is nearing completion.

IEEE Std 1431 Working Group

The working group is working to revise the standard to address technical issues and bring it inline with current industry practices. Revision of this standard continues. A PAR extension was approved and extends the PAR to 31 December 2026.

Research and Innovation

None

Conference Contributions

None

Publication Activities

None

Education Activities

None

Industry Engagement and Standards

- **IEEE Std 836** *Recommended Practice for Precision Centrifuge Testing of Linear Accelerometers*
- **IEEE Std 1431** *IEEE Standard for Specifying and Testing Coriolis Vibratory Gyros*

- The GAP plans to complete the revision of IEEE Std 836 in 2026.
- IEEE Std 1431 revision work will continue through 2025 with a completion goal of 2026.
- After each standard is complete the GAP will identify other standards that need revision and submit PARs for that work.
- The GAP is also investigating the development of a future standard to address the recommended practice for specifying inertial navigation systems.