# REPORT OF THE IEEE/AESS GYRO AND ACCELEROMETER PANEL

### April 2015

## Panel Activity

The revision of Std 1293, "IEEE Standard Specification Format Guide and Test Procedure for Linear, Single-Axis, Nongyroscopic Accelerometers," is nearing completion.

Progress continues on Std 1780, "Draft Standard for the Specification of Inertial Measurement Units (IMU)".

A couple of changes need to be made to the Corrigenda for Std 952, "IEEE Standard Specification Format Guide and Test Procedure for Single-Axis Interferometric Fiber Optic Gyros." These changes will eliminate possible confusion in the test setup for misalignment measurement. After these changes have been incorporated the corrigenda should be finished.

## Officers

At the November 2014 meeting, the following officers were elected for the year 2015:

Panel Chair	Randall Curey
Panel Vice Chair	Reese Sturdevant
Systems Committee Chair	Reese Sturdevant
Sensors Committee Chair	Cleon Barker

At the January 2015 meeting, the following officers were appointed for the year 2015:

**IEEE** Liaison

Dave Tarrant

### Objectives

The panel established the following objectives at the January 2015 meeting:

### Panel Objectives

- 1. Expand membership with an emphasis on IMU community.
- 2. Reach out to unrepresented organizations within the inertial community.
- 3. Publish 952 corrigenda by the end of the year.
- 4. Assign legacy documents for review to appropriate committee based on due date and state of document.

#### Systems Committee Objectives

- 1. Update IMU document plan as required.
- 2. Complete 100% of IMU document first draft by 1 Aug 2015.
- 3. Compile new and revised system terminiology to incorporate into the next revision of IEEE STD 1559. (Note that no revision is currently planned).
- 4. Complete other assignments as prioritized by the Panel.

### Sensors Committee Objectives

1. Complete the revision of Std 1293 "IEEE Standard Specification Format Guide and Test Procedure for Linear, Single – Axis, Nongyroscopic Accelerometers" and distribute for industry review.

- 2. Complete the resolution of known technical issues in Std 529 "Supplement for Strapdown Applications to IEEE Standard Specification Format Guide and Test Procedure for Single Degree-of-Freedom Rate-Integrating Gyros." and publish the drafted corrigenda.
- 3. Complete the resolution of known technical issues in Std 517 "IEEE Standard Specification Format Guide and Test Procedure for Single-Degree-of-Freedom Rate-Integrating Gyros." and publish the drafted corrigenda.
- 4. Finish addressing the known technical issues in Std 1554 "Recommended Practice for Inertial Sensor Test equipment, Instrumentation, Data Acquisition, and Analysis" through the corrigenda or revision process.
- 5. Compile new and revised sensor terminology to incorporate into the next revision of Std 528 "IEEE Standard for Inertial Sensor Technology." (Note that no revision is currently planned).

## Meetings

Since the last report (Fall 2014), the Panel has held three meetings:

Dates	Location	Host	Attendance
November 6/7	Tucson, AZ	Raytheon Missile	9
January 19/20	Auburn, AL	Auburn University	7
March 12/13	El Segundo, CA	Raytheon Space	5

## **Future Meetings**

Dates	Location	Host
May 4/5	Minneapolis, MN	Honeywell
July 9/10	El Segundo, CA	Aerospace Corp.
September 2015	Amityville, NY	US Dynamics
November 2015	Alamogordo, NM	Alamogordo/Holloman
		IEEE Chapter

## Other

None

Respectfully submitted,

Randell & Currey

Randall Curey

Chair, IEEE/AESS Gyro and Accelerometer Panel