

TC-10 Scope TC-10 is actively developing and/or promoting six (6) major standards: The promotion of IEEE Std 181-2011 (Standard for Transitions, Pulses, and Related Waveforms); the revision (PAR approved June 2014) & promotion of IEEE Std 1057-2007; P1057 (Standard for Digitizing Waveform Recorders); the promotion of IEEE Std 1241-2010 (Standard for Terminology and Test Methods for Analog-to-Digital Converters); the promotion of IEEE Std 1658-2011 (Standard for Terminology and Test Methods for Digital-to-Analog Converter Devices; and, the promotion of IEEE Std 1696 (Standard for Terminology and Test Methods for Electronic Probes). In addition TC-10 has, as of June 2014 began develop a standard on jitter P2414. TC-10 activities since last report TC-10 held its most recent, face-to-face meeting in Irvine, CA on 18 March 2014 and the minutes have been posted on the TC-10 home page here: <http://grouper.ieee.org/groups/1057/index.html> The site has also been updated at that time and will be continually updated along with its subcommittee pages. TC-10 is promoting IEEE IMS TC-10 at the 2014 International Test Conference poster session on Wednesday, October 22nd from noon to 2 PM with a poster, #44 entitled "The Evolution of Waveform Generation, Measurement and Analysis, and its Impact on Test" - we have blogged it here - <http://www.xcerra.com/itc.html> - other promotional activities are always in planning.

Subcommittee on Pulse Techniques (SCOPT) (181) (Nick Paulter, Chair): Nick Paulter, the chairman of SCOPT, was invited to give a presentation at the IMEKO TC4 September 2014 meeting in Italy. In this presentation he described the importance of documentary standards to pulse metrology, providing many references to the IEEE Std 181 and exhibiting examples of the definitions and algorithms contained in this standard. He invited interested audience members to participate in the next revision of the standard, which should commence in two or three years. Nick met with the TC-10 jitter standard chairman, Sergio Rapuano, regarding the jitter-related text currently in the Std 181 and how that should/could be incorporated into the jitter standard. Nick and Sergio will discuss the best strategy for harmonizing these two standards. Per request from the IEEE TC-10 chair, Steve Tilden, inputs were provided that describe the Std 181 for the International Test Conference 2014.

Waveform Measurement Subcommittee (P1057) (Bill Boyer, Chair): The IEEE Std 1057 on Waveform Recorders will expire in December 2018. We have formed a committee and started work on the revision. We were granted a Project Authorization Request (PAR) from the IEEE Standards Board to perform the work in June 2014. The initial work will consist of making 1057 compatible with the ADC standard 1241. This phase has started and several members have contributed input on what modifications should be done to 1057. A working draft of the new standard incorporating these inputs will be completed by the end of the year.

ADC Subcommittee (1241) (Eric Zimmerman, Chair): (report by Steve Tilden this last time during transition) IEEE-STD-1241-2010 is currently being promoted through the aforementioned ITC 2014 conference poster session on 22 October in Seattle. A new PAR will be submitted when it is up for revision.

DAC Subcommittee (1658) (Daniel Kimmitt, Chair): (report by Steve Tilden this last time during transition) IEEE-STD-1658-2011 is currently being promoted through the aforementioned ITC 2014 conference poster session on 22 October in Seattle. A new PAR will be submitted when it is up for revision.

Subcommittee on Probe Standards (SCOPS) (P1696) (Nick Paulter, Chair): Nick Paulter, the chairman of SCOPS, per request from the IEEE TC-10 chair, Steve Tilden, provided inputs for the International Test Conference 2014 that describe the Std 1696.

Subcommittee on Jitter (SCOJM) (P2414) (Sergio Rapuano, Chair): The Subcommittee on Jitter Measurement (SCOJM) submitted the PAR for a new IEEE Standard for Jitter and Phase Noise that has been approved by the IEEE SA in April 2014 and given the number 2414. Then an operating working group has been assembled chaired by Sergio Rapuano, with Steven Tilden as co-chair and Niclas Bjorsell as secretary, and including all the SCOJM members. The purpose of the standard is to facilitate accurate and precise communication concerning jitter and phase noise and the methods for measuring them. Because of the broad applicability of such terms in the electronics industries (such as computer, telecommunication, and measurement instrumentation industries), developing unambiguous definitions and the presentation of methods for their measurement is important for communication between manufacturers, users and consumers. The standard will define specifications, modeling methods and terminology for the dispersion of the significant instants of repetitive signals in electronics, telecommunications and measurement referred to as jitter and phase noise. As a first step the SCOJM started working at the throughout review of the existing standards dealing with jitter and phase noise to prepare the ground for the development of a new one harmonized at international level with the existing ones. In 2014 the SCOJM met three times together face-to-face and via teleconference. The first teleconference meeting has been held in March. Then two face-to-face meetings have been held in Montevideo, during the I2MTC 2014, in May and in September, in Benevento, Italy, during the 20th IMEKO TC-4 Symposium 2014.