IEEE Waveform Generation Measurement and Analysis Technical Committee (TC10)
Approved Meeting Minutes
17 January 2023 / 11:00 AM –13:00 PM (UTC-5)

1. Call to Order

2. Introductions and Roll Call
    a. Nick Paulter, TC10 chair, presided and took minutes

3. Approval of the Agenda
    a. Motion for agenda approval was provided by Gregory and seconded by Sergio. No dissenting opinion.
    b. The approved agenda is available on iMeetCentral (https://ieee-sa.imeetcentral.com/login).

4. Approval minutes from 18 October 2022 meeting
    a. Motion for minutes approval was provided by John and seconded by Fritz. No dissenting opinion.
    b. The approved minutes are available on iMeetCentral (https://ieee-sa.imeetcentral.com/login).

5. TC10 administrative
    a. Comments, concerns, issues for IEEE SA tools was solicited.
        i. There have been three issues for the 17 January 2023 meeting in which attendees did not receive WebEx invitation, which has e-mailed separately. If this issue has not been resolved, IEEE-SA will be asked for assistance.
    b. Next meeting will be 18 April 2023 starting at 1100 (UTC-4).

6. Working Groups Updates
    a. Revision of IEE Std 181, IEEE Standard for Transitions, Pulses, and Related Waveforms
        i. Lead: Nick Paulter
        ii. PAR expires 2025. We will wait until the 1241 is approved for publication before starting on the 181.
        iii. Attendees expressed their interest to participate in the revision of the 181.
    b. Revision of IEEE Std 1241, IEEE Standard for Terminology and Test Methods for Analog-to-Digital Converters
        i. Lead: Nick Paulter
        ii. Status
            1. PAR extension has been approved.
            2. Comment Resolution Group formed and convened. Resolution for comments provided and submitted to P1241 WG for review and approval.
    c. Revision of IEEE Std 1658, IEEE Standard for Terminology and Test Methods of Digital-to-Analog Converter Devices
        i. Lead: Luca DeVito
        ii. Status
            1. PAR extension has been approved.
            2. Comment Resolution Group formed and meeting scheduled.
    d. Revision of IEEE Std 1696, IEEE Standard for Terminology and Test Methods for Circuit Probes

i. Lead: John Jendzurski
ii. John has received a Word copy of the standard from the IEEE-SA and converted it to the current IEEE-SA documentary standards format.
iii. John will share with the working group before the end of January 2023.

7. Discussion topics
    a. IEC sample-by-sample (SBS) waveform uncertainty standard
        i. The IEC TC85 WG22 has started an informal activity to develop an SBS waveform uncertainty documentary standard. This is an informal WG22 activity until the document development has become more mature, at which time the WG22 will submit a proposal for a new standard to the IEC.
        ii. Nick will investigate setting-up an IEEE ListServ for this activity to foster a liaison between the TC10 and the WG22. TC10 members are welcome to participate.
    b. TC10 technical presentations
        i. Allan Belcher provided a technical presentation titled "Measuring wide band nonlinearity: Beyond the limits of conventional test methods." The presentation was followed by questions and discussion.
        ii. Fritz Caspers volunteered to provide a presentation at the next TC10 quarterly meeting.

8. Adjourn
    a. Motion to adjourn was made and seconded.
    b. Meeting adjourned around 1240 (UTC-5).

9. Tasks
    a. Outstanding tasks (not completed from previous lists)
        i. WG chairs - review web pages (https://sagroups.ieee.org/im-wma-tc10/) for content
    b. New
        i. Nick Paulter - upload agenda and draft minutes of 17 Jan 2023 meeting
        ii. Nick Paulter - upload approved minutes of 18 Oct 2022 meeting

Attendee list with affiliation:

Attendee name	Affiliation
Allan Belcher	Signal Conversion, Ltd, UK
Bill Boyer	Sandia Natl. Lab., retired, USA
Fritz Caspers	CERN, Switzerland
Razvan Ciocan	Draper, USA
Yuji Gendai	THine Electronics, Japan
John Jendzurski	National Institute of Standards and Technology, USA
Gregory Kyriazis	National Institute of Metrology, Quality and Technology (INMETRO), Brazil
Kruno Miličević	Computer Science and IT Osijek (FERIT), Croatia; Random Red, Ltd., Croatia
Alessandro Mingotti	University of Bologna, Italy
Nicholas Paulter	National Institute of Standards and Technology, USA
Sergio Rapuano	University of Sannio, Italy
Han Wang Yoo	Automation and Control Institute, Austria