

Test and Diagnosis for Electronic Systems

Standards Committee (SCC20)

Chairs Report
May 1, 2024

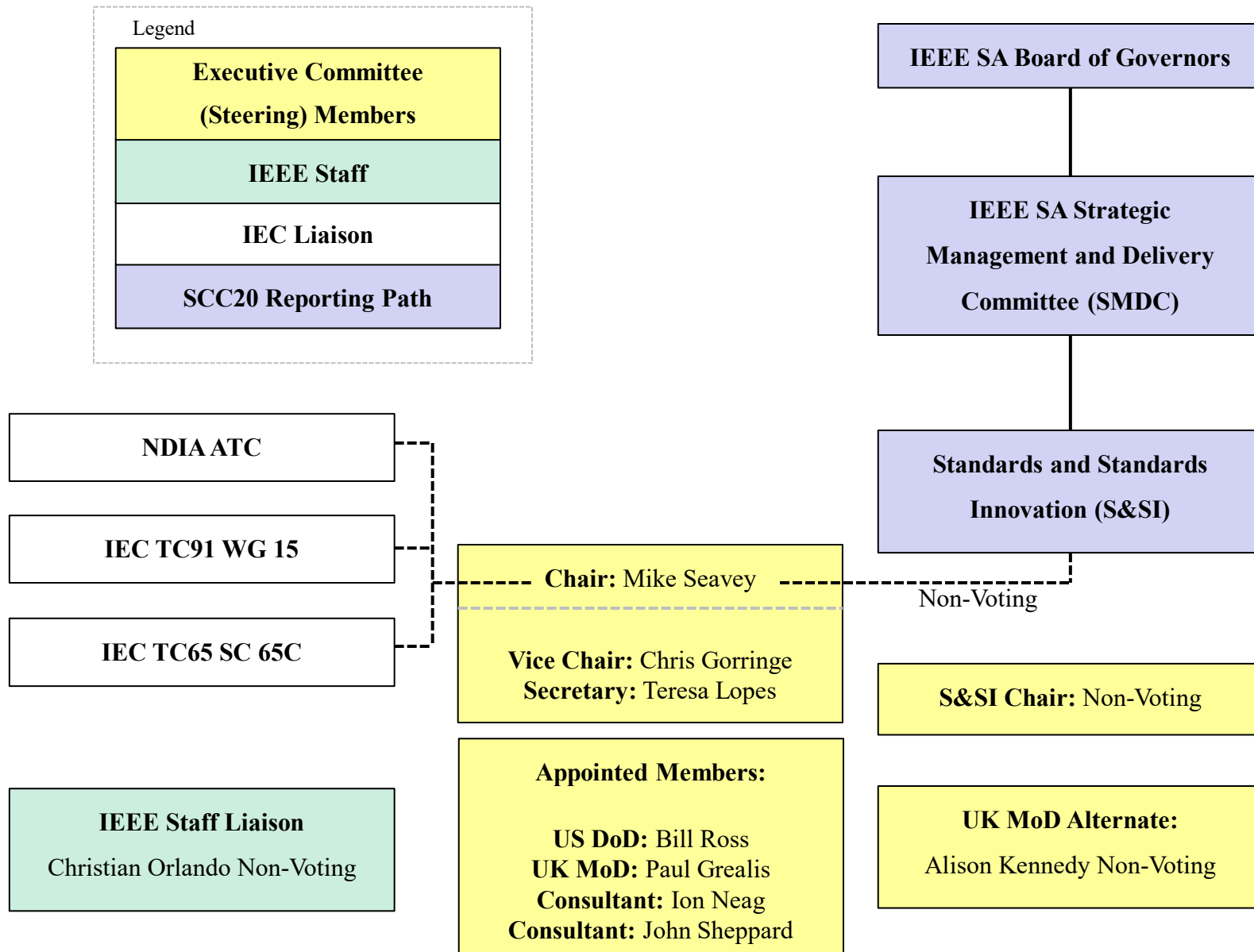
Mike Seavey
Draft 2
May 1, 2024

For Disclosure

- I Retired from Northrop Grumman on July 15, 2022.
 - In the near future:
 - I presently am the SCC20 Chair through the end of 2025.
 - I will continue with Standards Activities, both IEEE and IEC.
 - I will continue with any U.K. CATS4D Activities.
 - I will continue with NDIA Automatic Test Committee (ATC) Activities.
- I am the IEEE Autotestcon 2024 Technical Program Chair.
 - I have been a Chair or Co-Chair for each of the last 6 Autotestcon Conferences.
- I am a member of the IEEE P3396 Working Group
 - Recommended Practice for Defining and Evaluating Artificial Intelligence (AI) Risk, Safety, Trustworthiness, and Responsibility

2024 SCC20 Organization

(1 of 3)



2024 SCC20 Organization

(2 of 3)

IEEE P2848
Standard for Prognostics and Health
Management in Automatic Test Systems

Working Group: John Sheppard

IEEE P1871.3
Recommended Practice for Using JavaScript
Object Notation (JSON) with XML-based
Data Models for Test and Diagnosis for
Electronic Systems

Working Group: Anand Jain

IEEE P1671
Standard for Automatic Test Markup Language
(ATML) for Exchanging Automatic
Test Equipment and Test Information via
eXtensible Markup Language

Working Group: Mike Seavey

ATML-compatible representation in SysML
of test requirements information for
electronic systems.

Study Group Chair: Ion Neag

IEEE-1232: AI-ESTATE Revision

Study Group Chair: Mike Seavey

2024 SCC20 Organization

– Potential New Study Groups

(3 of 3)

- 2020 Survey Responses: Path Forward (ATML) Study Group – Should this Continue?
- Cyber Security & Resiliency for ATS Recommended Practice
 - Chair: Mike Seavey – A lot of Interest was initially shown; however, no work has been done. The pandemic did not help.
- IEEE-488.1-2003 & IEEE-488.2-1987 – Digital I/F for Programmable Instruments & Std Codes, Formats, Protocols, Commands
 - Chair: Mike Seavey – I have not worked on this since the pandemic began.

SCC20 Standards Tracking

Type	Publication	Project	PAR by	PAR Approval Date	PAR Expiration Date	Valid Standard Until	Notes
Standard	488.1-2003	—	—	—	—	3/19/2019	
Standard	488.2-1992	—	—	—	—	6/17/2020	
Standard	716-1995(R2011)	—	—	—	—	12/31/2021	
Users Guide	771-1998(R2009)	—	—	—	—	12/9/2019	
Standard	1232-2010	—	—	—	—	12/8/2020	Study Group
Users Guide	1232.3-2014	—	—	—	—	12/31/2024	
Standard	1445-2016	—	—	—	—	12/8/2026	
Standard	1505-2010	—	—	—	—	9/30/2020	
Standard	1505.1-2019	—	—	—	—	12/31/2029	
Standard	1505.3-2015	—	—	—	—	12/31/2025	
Users Guide	1546-2000(R2011)	—	—	—	—	12/31/2021	
Standard	1636-2018	—	2025	—	—	12/31/2029	
Standard	1636.1-2018	P1636.1 Cor 1	—	—	—	12/31/2029	
Standard	1636.2-2018	—	2025	—	—	12/31/2029	
Standard	1636.99-2013	—	—	—	—	12/31/2023	
Standard	1641-2022	—	—	—	—	12/31/2032	
Users Guide	1641.1-2013	—	2019	—	—	12/31/2023	
Amendment	1641.1a-2018	—	—	—	—	12/31/2028	
Standard	1671-2010	P1671	—	June 29, 2023	December 31, 2027	9/30/2020	PAR for the Revision of 1671-2010
Standard	1671.1-2017	P1671.1 Cor 1	—	—	—	12/31/2027	
Standard	1671.2-2012	—	2018	—	—	12/31/2022	
Standard	1671.3-2017	—	2023	—	—	12/31/2027	
Standard	1671.4-2014	—	2020	—	—	12/31/2024	
Standard	1671.5-2015	—	2021	—	—	12/31/2025	
Standard	1671.6-2015	—	2021	—	—	12/31/2025	
Recommended Practice	1871.1-2014	—	2020	—	—	12/31/2024	
Recommended Practice	1871.2-2017	—	2023	—	—	12/31/2027	
Recommended Practice		P1871.3	—	June 29, 2023	December 31, 2027		PAR for a New Recommended Practice
Standard		P2848	—	November 7, 2019	December 31, 2025		2 year extended PAR for a New Standard
	As of 4/24/2024				Active PARs		

Standards Activities since the 23-2 Meeting

- Corrigenda for IEEE Std.1636.1-2018
 - The Corrigenda is in the process of being published.
- Corrigenda for IEEE Std.1671.1-2017
 - The Corrigenda is in the process of being published.

Autotestcon 2024 Papers

- Of interest to SCC20:
- Cole A Reeder (Bloomy Controls, Inc., USA) has submitted an abstract related to ATML.
 - Title: *Refining Test System Design: Combining Signal Based Test and ATML-Driven Approach to Test System Architecture and Automation.*
 - Abstract: ...This paper proposes a transformative approach, advocating for architectures to guide specific implementations. This shift enables the creation of more efficient and adaptable test systems that employ signal-based testing and adhere to ATML standards, focusing on the perspectives of the Unit Under Test (UUT). Central to this innovative approach is the adoption of ATML industry standard interfaces within the workflow, promoting the automated generation of system component definitions. This automation is achieved by harmonizing the Test Description (1671.1) and UUT Capabilities (1671.3) to select appropriate Instrumentation components (1671.2) within a test station configuration (1671.6).....

2024 Remaining NesCom/RevCom Submittal Deadlines

- 16 August 2024 (for September 2024 mtgs)
- 18 September 2024 (for October 2024 mtgs)
- 21 October 2024 (for December 2024 mtgs)

- **Electronic “Steering” Meeting**
 - Date and Time: TBD. (Before August) potentially for:
 - AI-ESTATE (IEEE Std. 1232-2010) Revision PAR.
 - ATML-compatible representation in SysML of test requirements information for electronic systems PAR.
- **24-2 Committee Meeting**
 - IEEE Autotestcon 2024 is August 26 - August 29.
 - Gaylord National Convention Center, National Harbor, Maryland.
 - The NDIA ATC Meeting
 - Monday August 26 from 1:00PM-5:00PM
 - Options for our fall meeting
 1. Meet in Reston, Virginia on Saturday/Sunday (24th/25th).
 2. Meet in Reston, Virginia on Thursday/Friday (29th/30th).

- 25-1 Committee Meeting
 - Location: Paris, France
 - Dates TBD
- 25-2 Committee Meeting
 - In Conjunction with Autotestcon 2025
 - Dates TBD

Questions?

