### 1. Call to order

The Fall 2021 meeting of SCC 14 was called to order at 3:02 PM EST on 29 November 2021 by the Chair, Doug Edwards.

A roll call of attendees was taken with the following individuals noted.

## 2. Determination of Quorum

Last Name	First Name	Affiliation	Role	Present
Edwards	Doug	Siemens Industries Inc.	Chair	<b>✓</b>
Flowers	Keith	Siemens Industries Inc.	Vice-Chair	✓
Shull	Stephen	BBC Electrical Services	Secretary	✓
Balma	Peter	Individual	Voting Member	<b>✓</b>
Curey	Randy	Northrup Grumman	Voting Member	<b>√</b>
Benham	Elizabeth	NIST	Voting Member	✓
Hoffman	Gary	Advanced Power Technologies	Voting Member	✓
Ressel	Howard	Individual	Voting Member	✓
David	Graves	Point 8 Power	Observer	✓
Adam	Ley	Asset Intertech	Observer	✓
John	Webb	ABB, Inc.	Observer (Requesting Membership) <sup>1</sup>	<b>√</b>
Michael	Kipness	IEEE		✓

With 8 of 8 members presentA quorum was declared for all manner of business.

## 3. Approval of Agenda

The agenda was sent out previously. There was an addition to the agenda proposed by Keith Flowers to discuss Std 315 and 315a, IEEE Standard for Graphic Symbols. This was added as Item 9.3. A motion

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<sup>&</sup>lt;sup>1</sup> Based on SCC14 P&P, Chair has the ability to appoint him to the committee if the requester meets the membership criteria. The Chair will determine this before the next meeting.

was made by Keith Flowers, seconded by Howard Ressel for approval of the agenda as amended. Hearing no objections, Doug declared it approved by consent.

## 4. Approval of March 3, 2021 SCC14 Meeting Minutes

The meeting minutes were sent out previously. There were no corrections or additions. A motion was made by Keith Flowers, seconded by Howard Ressel for approval of the minutes. Hearing no objections, Doug declared it approved by consent.

## 5. Call for Patents and Copyright Notice

There were no patent issues. The copyright policy was discussed.

#### 6. Chair's Remarks

The Chair commented quickly on two projects, P260.1 and P1541 one which is near completion and other completed. The Chair commended the Chairs for their hard work on these documents. He also stated that it important to give our full attention to one of the last agenda item. The subject of which is the transitioning of the current SCC14 to a new home.

## 7. Reports by Standard/Working Group and Liaisons See Annex A: SCC14 Document Status

## 7.1. P1541, IEEE Standard for Prefixes for Binary Multiples Report: K. Flowers, Chair

The document is on the December 7<sup>th</sup> NesCom agenda. Preliminary indications are this will be recommended for approval by RevCom and moved to the SASB agenda. It is presumed it will be moved into the editorial/publishing process in the first guarter of next year.

## 7.2. P260.1, IEEE Standard Letter Symbols for Units of Measurement (SI Units, Customary Inch-Pound Units, and Certain Other Units) Report: Randy Curey, Chair

There are a few more items that the Working Group will need to work through before the document will be ready for ballot. There are currently two (2) Working Group meetings scheduled. It is projected that this work will be completed sometime in first quarter of 2022.

## 7.3. IEEE Std 260.3-1993 Mathematical signs and symbols for use in physical sciences and technology Report: Randy Curey

After some discussion it was decided because the current standard will have the same title and close to the same scope a PAR should be requested. The scope was reviewed. A motion was made by Peter Balma and seconded by Keith Flowers to direct the working group chair to move forward with a PAR with the same title and scope only being

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modified by deleting the last sentence.

### Scope:

Only signs and symbols used in writing mathematical text are contained in this Standard. Special symbols peculiar to certain branches of mathematics, such as non-Euclidean Geometries, Abstract Algebras, Topology, and Mathematics of Finance, which are not ordinarily applied to physical sciences and engineering, have been omitted. Because there is no consensus in the literature for signs and symbols used in tenor analysis, the subject of tensors is relegated to future editions when there is general agreement among authorities in the field. Symbols used in tensor analysis are also omitted.

After some discussion, a motion was made by Randy Curey and seconded by Gary Hoffman to add the following sentence; "Symbols used in tensor analysis are also omitted." This motion pasted unanimously. The amended motion was passed unanimously.

7.4. IEEE Std 260.4-2018 American National Standard Letter Symbols and Abbreviations for Quantities Used in Acoustics Report: Gary Hoffman

No discussion was held on this document because no action is required at this time.

7.5. P270-2006, IEEE Standard Definitions for Selected Quantities, Units, and Related Terms, with Special Attention to the International System of Units (SI)

Report: Doug Edwards

There was a discussion on the status of the document. The Chair suggested that a PAR study group be formed to move this document to revision. This was the result of various definition revisions that had been adopted. A motion was made by Keith Flowers and seconded by Howard Ressel to form a PAR study group. This motion pasted unanimously. The following individuals volunteered for formal this task.

Doug Edwards
Howard Ressel
Randy Curey
Keith Flowers

7.6. P280-1985, IEEE Standard Letter Symbols for Quantities
Used in Electrical Science and Electrical Engineering
Report: Randy Curey

This project has been completed and no action is required at this time.

7.7. P945, Recommended Practice for Preferred Metric Units for Use in Electrical and Electronics Science and Technology Report: Doug Edwards Old Business

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#### SCC14

## Quantities, Units and Letter Symbols Committee Agenda 29 November 2021, 2:00 to 4:00 PM EST Web Teleconference Meeting

There was no discussion on this except to point out that it would not expire until 2029 and we do not need to consider any revision at this time.

## 7.8. WG P947, IEEE Guide for Identification of Alternative Metric Devices for Valves, Fittings, Threads, Flanges Report: Stephen Shull

Since this PAR will be allowed to expire. Michael Kipness will help in getting the Website pulled and removing the link in the Main SCC14 page.

## 7.9. WG SI 10, American National Standard for Metric Practice Standard approved 2016. Expires: Dec 31, 2026 Report: Edwards

This document is a dual logo document with ASTM. Currently a working group chair is needed for this document. The Chair would be reaching out to the membership to find a Chair for this work.

#### 8. Old Business

## 8.1. SCC14 Website Update Report: Doug Edwards

The Chair reported that the website is up to date and is currently being used for minutes and meeting notifications. Doug is our webmaster and therefore he requested any new items be sent to him for posting.

## 8.2. Revised WG P&P Report: Doug Edwards

It was decided during the spring 2021 meeting these would be reviewed in conjunction with the SC P&Ps. Because of changes in SCC14 status, these will need to be addressed next year. This was effectively tabled until next meeting.

## 8.3. Metric Association Liaison Report Report: Howard Ressel

Howard informed the group of the purpose of the US Metric Association (USMA) organization. The first item he shared was the offer of a one-year free membership in this organization to all members of SCC14. This would normally cost \$30 for an individual. If anyone is interested, please email him with this request. The second item concerned an article he had prepared which was targeted to be publish in the metrification society publication.

### 9. New Business

## 9.1. Officer Rotation Doug Edwards / Gary Hoffman

From <u>SCC14 PnP</u> – Clause 3.0 Officers

9.1.1.1. Office may serve any number of consecutive terms

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Clause 3.1 Election or Appointment of Officers

- 9.1.1.2. Chair appointed by SASB Chair
- 9.1.1.3. Chair shall appoint an Elections Administrator with nominations for Elections Administrator
- 9.1.1.4. Terms shall be three years, but an officer may serve until a successor is selected.

The chair noted that the officer rotation would be next spring. He said as it now stands, the Chair is selected by the SASB chair. This would be discussed more at the spring 2022 meeting.

## 9.2. SASB Restructure of SCC's - Move to S&SI Edwards/Hoffman

The adhoc group with the SASB has targeted SCC14 to move to the Standards & Standards Innovation Committee which is under the auspices of the Strategic Management and Delivery Committee. The Chair requested the committee provide guidance if this move would be supported by the membership. The motion to support this move was made by Howard Ressel and seconded by Keith Flowers. The motion passed with 6 for, 0 against and 2 abstentions.

The chair suggested we consider a different name other than SCC14 since Standards Coordinating Committees (SCC) will no longer removed from the IEEE SASB Operations Manual. After some discussion, a motion was made to recommend change of the name to the "Quantities, Units, and Symbols Committee" with acronym of QUSCom. The motion passed with 7 for, 0 against and 1 abstention. It was also pointed out since we were reforming this committee, the scope of the committee could be modified to better reflect our ongoing mission.

### 9.3. WG Awards

## **Edwards/Kipness**

Mike shared the WG chairs can submit their award request after the standard is SASB approved. This can be done by filling out the form at this link and then once the document is published, the awards request will be processed.

https://standards.ieee.org/about/awards/wgchair/wgawards.html

### 9.4. Graphic Symbols - 513 & 513A

## **Flowers**

It was discovered that these standards might be orphaned. After some discussion, it was decided that Mike Kipness will determine if these can be included in our group of standards. This discussion will be included on our spring 2022 agenda.

### 10. Next SCC14 Meeting Spring 2022

Steve Shull will send a doodle poll to establish a date and time for the next meeting. Targeted time for next meeting will be in March.

## 11. Adjournment

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The meeting was adjourned at 4:00 PM EST.

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## SCC14

## Quantities, Units and Letter Symbols Committee Minutes 29 November 2021, 2:00 to 4:00 PM EST Web Teleconference Meeting

## **ANNEX A: Document Status**

Active WG Action Item	Project Number	Chair	Secretary	WG Members	Project Type	Project Title	Year Published	Expiration Date	Next Action Date (3 years b4 expiration)	Approval PAR Date	Expiration PAR Date	Invitation Close Date	Ballot Close Date	Project Status
Active WG	P1541	Keith Flowers		2	Revision	Standard for Prefixes for Binary Multiples	2002	2018/12/31	Active WG	2016/09/22	2021/12/31	2018/05/24	2018/06/30	On 2021/12/07 RevCom Agenda
Active WG	P260.1	Randy Curey	Doug Edwards	7	Revision	Standard Letter Symbols for Units of Measurement (SI Units, Customary Inch-Pound Units, and Certain Other Units)	2004	2020/12/31	Active WG	2016/09/22	2024/12/31	NA	NA	Draft Development – Projected to got to ballot in first quarter 2022
PAR Study Group	260.3	Randy Curey		?	Revision	American National Standard Mathematical Signs and Symbols for Use in Physical Sciences and Technology	1993	2022/12/31	2020/12/31	NA	NA	NA	NA	PAR is to be submitted
NA - Future	260.4					Standard Letter Symbols and Abbreviations for Quantities Used in Acoustics	2018	2028/12/31	2026/01/02	NA	NA	NA	NA	Completed
PAR Study Group	270	Doug Edwards		4	Revision	Standard for Definitions for Selected Quantities, Units, and Related Terms, with Special Attention to the International System (SI)	2006	2022/12/31	2022/12/31	NA	NA	NA	NA	PAR Study Group formed
NA - Future	280					Standard Letter Symbols for Quantities Used in Electrical Science and Electrical Engineering	1982	2031/12/31	2027/12/31	NA	NA	NA	NA	Completed
NA - Future	945					Recommended Practice for Preferred Metric Units for Use in Electrical and Electronics Science and Technology	2019	2029/12/31	2027/01/02	NA	NA	NA	NA	Completed
Need Chair	SI_10				Revision	American National Standard for Metric Practice	2016	2026/12/31	2024/01/02	NA	NA	NA	NA	Completed