# July 2017
# IEEE 802
# LMSC
# 116th Plenary Session

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# 4.00 IEEE Support Staff

1. Michelle Turner    role: 802 editorial support lead
   title: Managing Editor

2. Jonathan Goldberg  role: 802 lead
   Supports dot03, dot15, dot21, dot22, dot24 groups
   title: Manager, Operational Program Management

3. Kathryn Bennet    role: Managing dot01, dot11, dot16, dot18, dot19 groups
   title: Senior Program Manager

4. Walter Pienciak    role: Focus on 802.1 (OmniRAN), IEEE 802.16 and 5G
   title: Senior Strategic Program Manager

5. Patrick Slaats    role: Support of 5G related and 802 strategic activities
   title: Strategic Program Manager

6. Jodi Haasz    role: Fellowship Program lead, SDO global engagement
   title: International Affairs Senior Manager

7. Natasha Alvardo    role: Fellowship Program support
   title: OPM Project Associate

8. Patrick Gibbons    role: IEEE 802 editorial support
   title: CPM Senior Program Manager

# 4.01 Meeting Fee Waivers

## Invited Guests

Motion: Approve meeting fee waivers for the July 2017 LMSC session for the following individuals:

EC Motion: Mover: tbd Seconder: tbd

1. None for this session

__Y/__N/__A (consent agenda item)

# 5.01 Chair's Announcement

- ## Chair's opening remarks

  – Reminder #1: Pass around an attendee sign in sheet

  – Reminder #2: June Interim EC meeting motion: Permit individuals to attend the initial 802.1 Industry Connections meeting Tuesday evening (July 11th, 2017) without registering (without intending to establish a precedent).

  – Reminder #3 802 Chair's Open Office Hours, Thursday 9:00-10:00, Nikolich (location: )

# 5.01 In Memoriam
# Ron Crane (19xx-2017)



- Ron Crane, the principal hardware implementer of early 10 Mb/s Ethernet died on June 19, 2017.

- Ron was a graduate of MIT and was working on his PhD at Stanford when he was hired as a hardware design engineer by Bob Metcalfe for Bob's development team at Xerox Systems Development Division. SDD was spun out of Xerox PARC to develop personal workstations, servers and networks as commercial products based on earlier work done at PARC.

- Ron was one of the 3 early implementors generally credited as being responsible for Ethernet.

# 5.01 In Memoriam
# Ron Crane (19xx-2017)
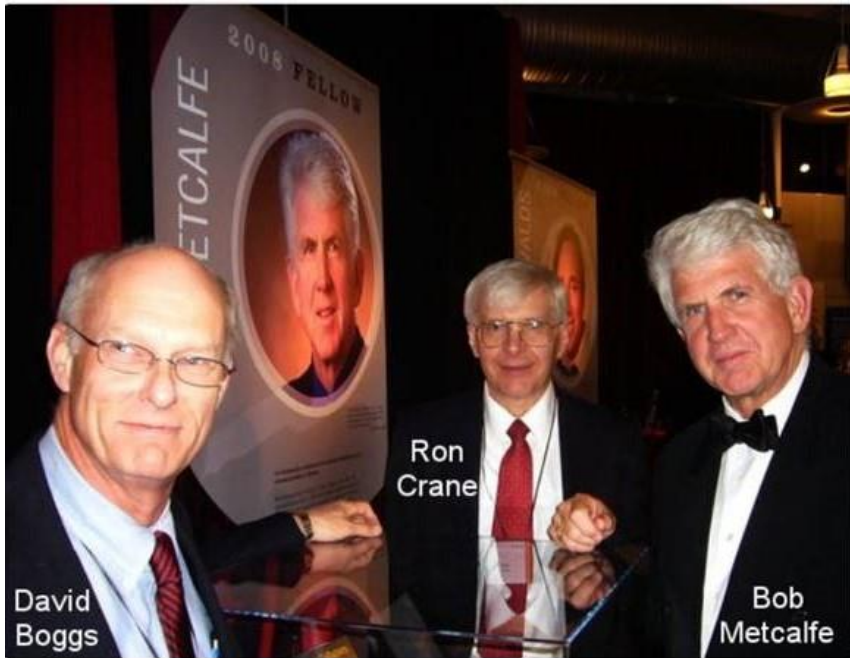


- Dave Boggs, Ron Crane and, of course Bob Metcalfe.

- Not too long after he hired Ron, Metcalfe left Xerox to flog Ethernet and open, multi-vendor networking in the outside world and to found 3Com. Metcalfe wanted Crane to be #2 at 3Com but Ron had some design obligations to finish up at Xerox. One of those was to get an image up on the integrated display of the new Xerox workstation. In a typical Crane move, Ron wrote just enough microcode to put up a static image and bolted for the door. Though Metcalfe considered him a co-founder he was actually employee #4.

- At 3Com Ron did the transceiver designs and, more importantly, was the underground communication channel for interoperability. Design engineers at other companies would get a call from Ron telling how to fix their designs so everybody would interoperate.

- Ron famously held up the design release to manufacturing of 3Com's integrated Ethernet controller for the PC so he could put in an arc tube on the transceiver interface, a feature he (and no one else) thought it needed for lightning protection. That feature literally saved the company after a lightning strike in a New York hi-rise and Ron's board pretty much became the market standard for PCs.

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# 5.01 In Memoriam
# Ron Crane (19xx-2017)



- Ron had left 3Com and had his own small company when he collaborated with the founders of Grand Junction to come up with 100BASE-Tx utilizing existing FDDI silicon for the PHY. They brought it to market and to 802.3. After 802.3's acrimonious split with H-P, dot 3 needed a 100 Meg solution for Category 3 (and worse) cabling so Ron invented 100BASE-T4 (clause 23) which became a successful product (mostly for 3Com) as long as there was DIW and Cat3 around.

- Ron was the perfect and ultimate technologist. Any conversation started with him was quickly steered into discussing and evaluating the technical aspects. When we started talking about noise immunity of 100BASE-T Ron came up with a Ben Franklin-like scheme to fly a 4-pair cable from a kite next to a radio tower to get enough imposed field strength on a link to be a good test. Ron later actually did this a little later next to a radio station in South San Jose and reported the results to 802.3.

- Ultimately, there were 3 people who were responsible for levering early Ethernet into place. Metcalfe and Boggs for inventing and widely deploying the 3 MB Research Ethernet within Xerox. Then with the early product Ethernet it was Metcalfe and Crane. Ron made it work and interoperate both in the market and in 802.3.

- We have lost a giant.

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# 5.01 Interim EC telecon October meeting notice

- Interim EC meeting scheduled for
  - 10 October 1-3PM ET

# 5.02 IEEE Boards updates

- SA Standards Board resolutions March 2017
  - In regards to P802.11ax, the SASB concluded that the measures are effective, SASB oversight will continue, and notes that a ProCom Ad Hoc was formed to determine whether changes are needed in IEEE-SA policies and procedures regarding dominance.
- Computer Society Standards Activity Board meetings 2017
  - No updates
- SA BoG meetings May 2017
  - SA 2018 budget discussions begun
  - Approved slate of candidates for BoG and CAG 2017 election/appointment process
  - Approved External Representatives for NFPA committees
- IEEE BoD meetings June 2017
  - Issued technologists in Internet policy position statement http://globalpolicy.ieee.org/380-2/

# 5.03 SA Standards Board Actions

## Project Authorization Approvals MAR/JUN 2017

**New Projects:**    P802.3ch, P802.3cj (maint#12), P802.15.3f, P802.15.13

**Modified PAR:**    none,

**Revisions:**    P802.11, P802.15.4,

**Reaffirmations:**    none.

**Corrigendum:**    none.

**Withdrawals:**    none.

**Extensions:**    none.

**Other:**    none.

# 5.03 SA Standards Board Actions

## Standards Ratification Actions MAR/JUN 2017

**New Standards:**    P802c, 802.3-2015/Cor-1-2017, P802.11ah, P802.11ai,

**Revised Standards:** none.

**Reaffirmations:**    none.

**Corrigendum:**    P802.3-2015/Cor1,

**Extensions:**    802.16-2012

**Withdrawals:**    none.

**Other Notes:**    none.

# 5.04
# LMSC Email Ballot Recap

| | open date | topic | yes/no/abs/dnv* | result |
|---|---|---|---|---|
| 1) | 20MAR | Approve ITU-R WP5A communications | 10/01/00/05 | pass |
| 2) | 22MAY | Approve ITU-R Light contribution | 12/00/00/04 | pass |
| 3) | 29MAY | 802.3 liaison response to ITU-T SG15 | 5 day review, no comments received | |

* 802 chair is counted as DNV unless his vote is required

# 5.05 EC Affiliation Update

IEEE 802 Executive Committee Members

| Position | Name | Affiliation |
|---|---|---|
| Chair | Paul Nikolich | Self, Intel, Huawei, Silver Spring Networks octoScope, UNH BCoE, YAS BBV |
| First Vice Chair | Pat Thaler | Broadcom Limited |
| Second Vice Chair | James P. K. Gilb | General Atomics Aeronautical Systems, Inc. |
| Treasurer | Clint Chaplin | Self |
| Recording Secretary | John D'Ambrosia | Futurewei, a subsidiary of Huawei |
| Executive Secretary | Jon Rosdahl | Qualcomm Technologies, Inc. |
| P802.1 High Level Interface (HILI) | Glenn Parsons | Ericsson |
| P802.3 Ethernet | David Law | Hewlett Packard Enterprise |
| P802.11 Wireless Local Area Network (WLAN) | Adrian Stephens | Intel Corporation |
| P802.15 Wireless Personal Area Network (WPAN) | Bob Heile | Wireless Communication Consulting, LLC., Wi-SUN Alliance |
| P802.16 Broadband Wireless Access | Roger Marks | EthAirNet Associates, Huawei |
| P802.18 Radio Regulatory TAG | Rich Kennedy | Hewlett Packard Enterprise |
| P802.19 Wireless Coexistence | Steve Shellhammer | Qualcomm Technologies, Inc. |
| P802.21 Media-independent Handover | Subir Das | Vencore Labs |
| P802.22 Wireless Regional Area Networks | Apurva Mody | BAE Systems, White Space Alliance |
| P802.24 Vertical Network Applications TAG | Tim Godfrey | EPRI |
| Member Emeritus | Geoff Thompson | GraCaSI Advisors |

Hibernating Working Groups

| | | |
|---|---|---|
| P802.20 Mobile Broadband Wireless Access | Radhakrishna Canchi | Kyocera International, Inc. |

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# 5.05 EC Affiliation Update

- Changes in affiliation among EC members from previous slide?

# 5.06 Cross-802 Topics

| Monday | Notes |
|---|---|
| **18:00-19:20 Tutorial: Practical PoE** | ECC Room 1 |
| **19:30-20:50 Tutorial Optical Wireless** | ECC Room 1 |
| **21:00-22:30 Tutorial 802 Ethernet for Automotive** | ECC Room 1 |
| **Tuesday** | |
| **13:30-15:30 802/JTC1 Standing Committee, Myles** | Room:  30441 4$^{th}$ fl. |
| **13:30-15:30 802/IETF Standing Committee, Thaler** | not being held this week |
| **19:00-21:00 802.1 Industry Connections: Network Enhancements for the next decade** | Room:  tbd |
| **Wednesday** | |
| **08:00-09:00  802/ITU Standing Committee, Parsons** | Room: 30241 2$^{nd}$ fl. |
| **19:00-21:30 Social Reception** | Estrel Berlin Boat Dock |
| **Thursday** | |
| **07:30-08:00 Next Venue Logistics, Rosdahl**<br>**08:00-09:00 Future Venues Ad Hoc, Rosdahl**<br>**09:00-10:00 802 Chair's Open Office Hours, Nikolich** | Room: 30241 2$^{nd}$ fl. |
| **13:30-15:30 802/JTC1 Standing Committee, Myles** | Room: 30441 4$^{th}$ fl. |

# 5.07 Drafts to Sponsor Ballot

1. 802.01: none.
2. 802.03: P802.3bt DTE power,
3. 802.11:.
4. 802.15: P802.15.4s, P802.15.3f (cond) and P802.15.4-2015/Cor1 (cond)
5. 802.16:P802.16Rev4 (cond)
6. 802.19:.
7. 802.21: P802.21-2017/Cor1,
8. 802.22: none.
9. 802.24: none.

# 5.08 Drafts to RevCom

1. 802.01: none.
2. 802.03: P802.3bs 200G and P802.3cc 25G,
3. 802.11: P802.11q (cond),
4. 802.15: P802.15.3d,
5. 802.16: P802.16s/D3,
6. 802.19: P802.19.1a,
7. 802.21: none.
8. 802.22: none.
9. 802.24: none.

# 5.09 Draft Documents for EC to consider

1. 802.00: response to SASB regarding remedy effectiveness.
2. 802.01: none.
3. 802.03:
4. 802.11: P802.11ah press release, several potential 3GPP liaisons
5. 802.15: none.
6. 802.16: none.
7. 802.18:
8. 802.19: Liaison to 3GPP on LAA/802.11 coexistence,
9. 802.21: none.
10. 802.22: none.
11. 802.24: none.
12. 802/JTC1 SC: tbd.
13. 802/ITU SC: tbd.
14. 802/IETF SC: tbd.
15. 802/Wireless Chairs SC: tbd.

# STDs due for 10 yr maintenance by DEC 2017

- none

# 5.10 Draft PARs to NesCom

1. 802.1ABcu - Amendment: LLDP YANG Data Model
2. 802.1ACct - Amendment: Support for IEEE Std 802.15.3
3. 802.1AS-Rev - Timing and Synchronization for Time-Sensitive Applications PAR Modification Request
4. 802.1CBcv - Amendment: Information Model, YANG Data Model and Management Information Base Module
5. 802.1Qcc - Stream Reservation Protocol (SRP) Enhancements and Performance Improvements PAR extension
6. 802.1Qcw - Amendment: YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing
7. 802.1Qcx - Amendment: YANG Data Model for Connectivity Fault Management
8. 802.1AE - Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Security Maintenance PAR
9. 802.3bt - Amendment: DTE Power via MDI over 4-Pair PAR Extension  Unmodified CSD


PAR withdrawal requests:

1. None.

# 5.11 Pre-PAR activity

| Group | New | Existing |
|-------|-----|----------|
| dot01 | . | Industries Connections deliberations on IEEE 802 network enhancements for the next decade.. |
| dot03 | Beyond 10km Optical PHYs. | ICAID: New Ethernet Applications. Enterprise/Campus/Data Centre Ethernet ad hoc. |
| dot11 | | SC: Advanced Access Network Interface (AANI). SG: none. Topic Interest Group: Light Communication.. Wireless Next Generation Standing Committee. |
| dot15 | | SG none. Interest Groups: LPWA, TeraHertz, High Rate Rail Communications, Vehicle Assisted Technology, Link Dependability SC: IETF/6tisch. Recommended practice on how to use 802.15.4. |

# 5.11 Pre-PAR activity

| dot16 | None. | None. |
|---|---|---|
| dot18 | None. | None. |
| dot19 | None. | None. |
| dot21 | None. | None. |
| dot22 | None. | None. |
| dot24 | None. | None. |
| dot ECSG | None. | None. |

# 5.12 EC Action Item recap

- Review Recording Secretary's list of Open Action Items

# 5.13 802 Task Force

- 802 Task Force Thurs 10:30AM-12:30

  Tentative agenda

  1. Open portion of meeting:
     1. IEEE SA staff update, 15 min, Goldberg
     2. Any other business?
     3. Action item review, 5 min, Nikolich

  2. Closed portion of meeting (as necessary):
     1. (Time specific 11:30am) IEEE SA tools update/discussion, 15 min, Nikolich + SA staff on phone

  3. Adjourn

# 5.50 EC meetings for the week

Sunday 19:30-21:30          LMSC Rules Review

Mon 08:00-10:00          Opening Executive Committee meeting

Tue 07:00-9:00          Open Source discussions      Parsons
Tue 13:30-15:30          802/JTC1/SC6      Standing Committee
Tue 13:30-15:30          ~~802/IETF~~      ~~Standing Committee~~
Tue 16:00-18:00

Wed 08:00-09:00          802/ITU      Standing Committee

Thu 07:30-08:00          Plenary venue space allocation planning
Thu 08:00-09:00          Future venue planning
Thu 09:00-10:00          802 Chair's Open Office hour
Thu 10:30-12:30pm          IEEE 802 Task Force
Thu 13:30-15:30          ~~802/JTC1/SC6~~      ~~Standing Committee~~
Thu 16:00-18:00pm          open

Fri 08:00-10:00          open
Fri 10:00-12:00          closing EC agenda prep
Fri 13:00-18:00          closing Executive Committee meeting

# End of Opening EC Meeting