# Approved by General Counsel

TR-14 Meeting Report

Date(s): 10/02/2015 - 10/02/2015

Location: Virtual (conference call, web conference, etc.)

Approved: 12/03/2015

TELECOMMUNICATIONS
INDUSTRY ASSOCIATION

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# Telecommunications Industry Association (TIA)
## Technology and Standards Department
## Engineering Committee Meeting Report
## For TR-14 (http://www.tiaonline.org/all-standards/committees/tr-14)
## Structural Standards for Communication and Small Wind Turbine Support Structures

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|---|---|
| Date: | October 2, 2015 |
| Location: | Teleconference |
| Leadership: | John Erichsen, PE, SE, Chair |
| | Mark Malouf, PE, Vice-Chair |
| | Bryan Lanier, PE, SE, Secretary |
| | Marianna Kramarikova, Manager, Technology & Standards |

| Attendants: | | |
|---|---|---|
| John Erichsen, Chair, | EET, LLC |
| Mark Malouf, Vice-Chair | Malouf Engineering International |
| Bryan Lanier, Secretary | American Tower Corporation |
| David Brinker, Editorial Committee | Rohn Industries |
| John Wahba, Editorial Committee | Turris |
| Stephen Yeo, Editorial Committee | Rohn Products International Arabia |
| Marianna Kramarikova, Manager | TIA |
| Greg Burbage | 4SE, Inc. |
| Raphael Mohamed | American Tower Corporation |
| Victor Allen | AT&T Mobility |
| Scott Vance | B&T Engineering, Inc. |
| Michael DeBoar | Bennett and Pless |
| Pankaj Taneja | Bentley Systems |
| Ping Jiang | Black & Veatch |
| Ernie Jones | Consolidated Engineering, Inc. |
| Richard Cullum | Crown Castle |
| Joseph Kim | Crown Castle |
| Aaron Poot | Crown Castle |
| Spiro Soukis | Crown Castle |
| Ahmet Colakoglu | Destek Engineering, LLC |
| Eric Heine | Ehresmann Engineering, Inc. |
| John Robinson | Electronics Research, Inc. |
| Joel Deis | Engineering Specialties Group |
| Dennis Abel | FDH Engineering, Inc. |
| Christopher Ply | FDH Engineering, Inc. |
| Timothy Drumm | Forge, Inc. |
| Ta-Wen Lee | FWT, LLC |

| Attendants: | Robert Keith | GlenMartin |
| | Chris Martin | GlenMartin |
| | Christopher Roesink | GPD Group |
| | Joel Parent | Howell Labs |
| | Lance Cooke | Morrison Hershfield |
| | Scott Kisting | MUTI |
| | Krupakaran Kolandaivelu | NB+C |
| | Jordan Maxson | Nello Corporation |
| | David Hawkins | Paul J. Ford & Company |
| | Martin Piercey | Pier Structural Engineering Corporation |
| | Carlo Franceschino | Sabre Industries |
| | Keith Tindall | Sabre Industries |
| | Ryan McCauley | Shively Labs |
| | Chris Cullinan | SMBH, Inc. |
| | Albert Schmidt | SSC |
| | Scott Stekr | Structural Components, LLC |
| | Jean Lecordier | TCI |
| | Jeffrey Kirby | Tectonic Engineering |
| | Kavish Zawar | Tectonic Engineering |
| | Victoria Mitchell | Telecommunication Industry Association |
| | John Paul Jones | Tower and Turbine |
| | Madison Batt | Tower Engineering Company |
| | Michael Gardner | Tower Engineering Professionals |
| | Ronnie Glover | Tower Engineering Professionals |
| | Paul Higgins | Tower Engineering Professionals |
| | Matthew Lackey | Tower Engineering Professionals |
| | Jessica Moebs | Tower Engineering Professionals |
| | Kelsey Olson | Tower Engineering Professionals |
| | Abe Shah | Tower Engineering Professionals |
| | William Martin | Tower Engineering Professionals |
| | Peter Chojnacki | Tower Numerics Inc. |
| | Ross Royer | TowerMRL, Inc. |
| | Scott Haines | Union Pacific Railroad |
| | Avery Fann | Vertical Solutions, Inc. |
| | Daniel Blakeman | Vertical Structures |
| | Joshua Walton | W-T Communication Design Group |
| | Buford Evans | Walker Engineering, Inc. |
| | Jim Walker | Walker Engineering, Inc. |

1. **Administrative**
   - **The meeting was called  to Order at 10:30AM**
   - TIA Sign-in Code:  328
   - http://www.tiaonline.org/standards/committees/rosters/
   - **Attendance (Call Quorum, Introductions, Roster)**

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- The chairman thanked all participants for attending the TR-14 quorum teleconference meeting and introduced Chairman, Vice-Chairman, Secretary, Manager and Steering Committee
- Attendance Taken
- Quorum Taken and Achieved
- **Meeting Agenda Review and Approval**
- Motion to review and approve the Meeting Agenda October 2, 2015 Contribution number TR-14-2015Oct02-001
  - First Motion: Joseph Kim, Crown Castle
  - Second Motion: David Brinker, Rohn Products
  - Any Objections/discussion: None
  - Motion to approve the TR-14 Meeting Agenda October 2 2015: Approved
- **Meeting Report Review and Approval**
  - Motion to review and approve the Meeting Report October 29, 2014
  - First Motion: John Wabha, Turris Corp.
  - Second Motion: Joshua Walton, WT Engineering
  - Any Objections/discussion: None
  - Motion to approve TR-14 Meeting Report October 29, 2014: Approved
- **The chairman read the TIA Notice of Participation**
- "Participation in, or attendance at, any activity of a TIA Formulating Group or any sub-element thereof, constitutes acceptance of and agreement to be bound by all provisions of the TIA Engineering Manual and permission that all communications and statements, oral or written, or other information disclosed or presented, and any translation or derivative thereof, may without compensation, and to the extent such participant or attendee may legally and freely grant such copyright rights, be distributed, published, and posted on TIA's web site, in whole or in part, on a non-exclusive basis by TIA or TIA's licensees or assignees, or as TIA directs. Exceptions to the foregoing may be granted or permitted in writing to the Chair of the Formulating Group by the head of TIA's Standards Program on a case-by-case basis."
- **Intellectual Property Rights (Early Disclosure Policy)**
- The chairman read the TIA IPR statement, as found in the TIA Standards Development Procedures.
- "TIA's Intellectual Property Rights Policy can be found in Statements of Policy (ANNEX D) and other clauses and annexes of this document. Participants in the work of the TIA Formulating Groups are urged to review the appropriate sections. Individual participants are encouraged to notify TIA of any patent(s) or published pending patent application(s) of which they are aware that may be essential to the practice of a proposed TIA Publication, including requirements introduced through normative references, early on in the development to reduce the possibility for delays in the development process and increase the likelihood that the proposed TIA Publication will become a Standard. However, a Patent Holder who has provided TIA with a TIA Patent Holder Statement with respect to the applicable proposed TIA Publication need not (but may elect to) identify its specific patent(s) or published pending patent application(s) that may be essential to the practice of the proposed TIA Publication in question. Patent searches are not required to comply with the TIA Intellectual Property Rights Policy."

- "TIA has an Intellectual Property Rights (IPR) Policy. We call to the attention of participants and attendees that TIA's Policy is to encourage, but not require, the voluntary disclosure (preferably early) of Essential Patent(s) and published pending patent application(s) that may be essential to the practice of a TIA Publication. Such disclosures are to be made following the procedures of the TIA Intellectual Property Rights Policy. Additional information can be found in the TIA Intellectual Property Rights Guidelines."
- Participants in the work of the TR-14 are urged to review this policy. Participants were encouraged to notify TIA of any patents of which they are aware that are related to the practice of TIA publication early in the development of the TIA document to reduce the possibility for delays in the development process and increase the likelihood that the draft TIA publication will be approved for publication. If there is knowledge of patents, the use of which may be essential to any documents being considered by TIA TR-14. No new IPR was identified.

2. **Old Business**

- **ANSI/TIA-222-G-3 and ANSI/TIA-222-G-4**
- Both addendums were published on December 17, 2014.  Complimentary copies were supplied to the voting TR-14 participants and a press release was distributed to the industry.  With the publishing of both Addendums, both TIA TR-14Task Groups (1 and 2) can be dissolved
- Motion to dissolve TIA TR-14 Task Group 1:
  - First motion:  Avery Fann, Vertical Solutions
  - Second motion:  Krupakaran Kolandaivelu, NB+C
  - Motion approved
- Motion to dissolve TIA TR-14 Task Group 2:
  - First motion:  Scott Haines, Union Pacific Railroad
  - Second motion:  David Brinker, Rohn Products
  - Motion approved
- Any discussion or objections:  None

- **Spanish Translation of ANSI/TIA-222-G**
- Spanish translation of ANSI/TIA-222-G is ready to be released.  Note will be added that Spanish translation is a translation only, and any issues should be related back to English edition. Idea is for any issues found to be communicated back to the TR-14 leadership for corrections.
- Questions:
  - Chris Martin, GlenMartin:  Will the Spanish version be distributed with the English version?
  - TR-14:  No, it will be a separate purchase.
  - David Brinker:  Will complimentary copies of the Spanish edition be distributed?
  - TR-14: The committee members will be informed once the Spanish edition is available.

- **International Building Code Update**
- General Scope:  2 Goals for the Task Group to address
  - Interface with ICC to ensure proper inclusion of the TIA-222 Standard in upcoming IBC editions.
  - To track and report on the other state and local developments which may impact the acceptance of TIA-222.
  - Formal scope will be created by the Task Group and distributed to the TIA Technology and Standards Department. TR-14 participants will receive TIA TG 6 information via email

- Creation of TIA TR-14 Task Group 6
  - First motion:  Albert Schmidt, SSC
  - Second motion:  Avery Fann, Vertical Solutions
  - Objections/discussion:  None
  - Motion Approved
- Proposed Chair of Task Group:  Spiro Soukis, Crown Castle (spiro.soukis@crowncastle.com)
- Objections to acclamation of Mr. Soukis to chair TIA TR-14 Task Group 6:  None
- Discussion: None
- Current Task Group Members:
  - American Tower Corporation
  - Crown Castle
  - Valmont
  - Bentley Systems
  - TR-14 chairman Mr. John Erichsen extended invitation to the TR-14 participants to actively participate and contribute at the newly established TIA TR-14 Task Group 6. Participants interested in involvement should contact TR-14 leadership and TIA manager.

- **ANSI/TIA-322**
- At the October 2014 quorum meeting TR-14 committee voted to open new ANSI project:  *ANSI TIA-322 Loading Criteria, Analysis, and Design Related to the Installation, Alteration and Maintenance of Communication Structures.* To initiate the work on the draft document, there is a need to create a Task Group, which will provide the draft of ANSI/TIA-322.
- Vice-chair called for a motion to create TIA TR-14 Task Group 7
  - First motion:  Ernie Jones, Consolidated Engineering
  - Second motion:  Joshua Walton, WT Engineering
  - Objections/discussion:  None
  - Motion to create a TIA TR-14 Task Group 7: Approved
- Proposed Chair of Task Group:  Ernie Jones, Consolidated Engineering, Inc. (ejones@conenginc.com)
  - First motion:  John Robinson, ERI
  - Second motion:  David Brinker, Rohn Products
  - Objections/discussion to acclamation of Mr. Ernie Jones to chair TIA TR-14 Task Group 7 :  None
  - Motion Approved
- Mr. Ernie Jones comments:  ASSE committee has until the end of October 2015 on the acceptance A10.48 standard  Expectation is it will be approved with comments.  Comments must be addressed, then it will be placed in final draft form.  A10.48 will be released for public ballet afterwards, which then must be left open for 3 months.  The expectation is the balloting period will end in February 2016, and will be submitted for publication after this time.  A number of definitions have been updated to ensure consistency between A10.48 and ANSI/TIA-322.
- John Erichsen:  Expectation is to publish ANSI/TIA-322 by February 2016.  Initial discussion / development will be limited and new project for ANSI/TIA-322-A will be opened to initiate second round.  Much greater development will be expected at that time.  Initial version of ANSI/TIA-322 will be developed largely by the editorial group and is largely consistent with engineering standards from ANSI/TIA-1019-A.

- Newly acclaimed chairman Mr. Ernie Jones extended invitation to the TR-14 participants to actively participate and contribute at the newly established TIA TR-14 Task Group 7. Participants interested in involvement should contact the TR-14 leadership and TIA manager.
- Scope of Group will be finalized and distributed to the TR-14 participants via email.

**3. New Business**

- **Status update of TIA TR-14 Task Group 3 for ANSI/TIA-222-H by chairman of the Task Group Mr. Mark Malouf**
- Mark recently returned from the IASS meeting in September and noted the TIA-222-G standard is being used worldwide, especially in emerging markets. In some locations it is even used in favor of the existing standards, due to its practicality.
- Number of sub-task groups are still working on action lists.
- Anticipate having a draft document ready for review by the next face / face meeting.
  New members who are interested in contributing are welcomed. Contact Mr. Mark Malouf about interest, specifically which section, and communication will be made with sub-chair group.

- **Technical Bulletin for Mount Classification Sub-Task Group**
- Sub-Task Group falls within the TIA TR-14 Task Group 3 for ANSI/TIA-222-H which is chaired by Mr. Mark Malouf
- Sub-Task Group Chairman: Michell Miller, SSOE (mlmiller@ssoe.com)
- Questions: Vicor Allen, AT&T Mobility, Does Rev. G require original mount analysis, but not for tower reanalysis?
- John Erichsen: Mount analysis is required as needed by the Engineer of Record, owner and other responsible parties. Concern over mount analysis is due to larger weight being installed on mounts now, vs. 5 – 10 year earlier.
- David Brinker: Mount standard has some additional loading combinations, beyond what is in TIA-222-G, to ensure specific mount classification. Everything that is needed to analyze a mount is in TIA-222-G. The mount standard is to establish classification, which allows the user to avoid having to complete a rigorous analysis each time loading is changed.

  - **Seismic Sub-Task Group**
  - Sub-Task Group falls within the TIA TR-14 Task Group 3 for ANSI/TIA-222-H which is chaired by Mr. Mark Malouf
- Task Group Sub-Chairman: Bryan Lanier, American Tower Corporation (bryan.lanier@americantower.com)

- **Committee comments on Safety**
- Safety videos with TIRAP and OSHA, in conjunction with TIA, are being released and will continue to be released and posted on the TR-14 committee site.
- Various members of TIA will contribute and be visible in these videos, not only the chairman of TR-14.

- **Upcoming Meeting Q1 2016**
  - o Likely in Las Vegas

3. **Adjournment**
   - First motion to adjourn the TR-14 quorum meeting:  Peter Chojnacki, Tower Numerics Inc.
   - Second motion to adjourn:  Ronnie Glover, Tower Engineering Professionals
   - Objections/discussion:  None
   - Meeting Adjournment Approved

This meeting was conducted in accordance with the TIA Legal Guidelines and the engineering procedures.