



Approved by General Counsel

TR-14 Meeting Report

Date(s): 10/17/2018 - 10/17/2018

Location: Denver, CO

Approved: 03/21/2019



October 31, 2018

**TR-14 Structural Standards for Communication and Small Wind Turbine Support
Structures Engineering Committee**

<http://www.tiaonline.org/all-standards/committees/tr-14>

MEETING REPORT

Date: October 18, 2018
Time: 8:30-17:30
Location: Doubletree by Hilton Denver Tech Center
7801 East Orchard Road
Greenwood Village, CO 80111, USA
Meeting Room: Mandarin/Granita
Chair: John Erichsen, PE, SE
Vice Chair: Mark Malouf, PE
Secretary: Bryan Lanier, PE, SE
TIA staff: Marta Soncodi

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The above statement was read in full to the committee and advised on it's significance.



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1. Administrative/General Business

1.1 Call to Order

- Motion: Scott Kisting
- Second: Dave Hawkins
- Time called to order: 8:30

1.2 Attendance (Call Quorum, Introductions, Roster)

- Introduction of Chairman, Vice-Chairman, Secretary, Steering Committee and TIA staff
- Attendance Taken for Quorum (One company, one vote – section 5.2.2 ECOP)
- Quorum was achieved
- Introduction
- Meeting roster site: <https://standards.tiaonline.org/standards/committees/rosters/>
- Sign in code: 8507
- Distribution and Numbering of Documents
TR-14 email reflector address: tr14@tiacomm.org
TR-14 FTP site: <http://ftp.tiaonline.org/TR-14/>

1.3 Meeting Agenda Review and Approval

- No objections
- Motion: Scott Kisting
- Second: Dave Hawkins
- Meeting agenda approved

1.4 Previous Meeting Report (New Orleans) Review and Approval

- No objections regarding meeting report dated August 17, 2017
- Motion: Scott Vance
- Second: John Wabha
- Previous meeting report approved

1.5 TIA Intellectual Property Rights (Early Disclosure Policy)

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1.6 Chair's Report and General Items

- Reprinting / 2nd Edition of ANSI/TIA-222-H
- Use / adoption of ANSI/TIA-222-H nationwide in various locations
- Introduction of purchase of portions of ANSI/TIA-222-H, as opposed to buying the entire copy
- Size / Scale of TR-14
- Request for volunteers for an editorial group to review the operating procedures for the TR-14 Committee (interested parties should contact Mark Malouf - MMalouf@maloufengineering.com)
- Thanks to all volunteers for support and work

1.7 TIA Report and General Items

- Discussion of withdrawal of ANSI/TIA-1019A
- Definitions of Addendums vs. Revisions
- IBC 2018 Reference Correction / IBC 2021 Reference: Specifically confirming IBC 2018 references ANSI/TIA-222-H as the appropriate standard and confirming steps necessary to have any addendums or revisions referenced in IBC 2021

1.8 Update for ANSI/TIA-322

- A number of potential change proposals were introduced to improve the standard, more discussion to be had before issuing these change proposals
- Looking for support to make next round of changes to ANSI/TIA-322
- Renaming of ASSE to ASSP, which A10.48 is a part of
- Number of change proposals being prepared for A10.48
- Next meeting for A10.48 in Q1, 2019

2. New Business

2.1 Announcement of TR-14 Leadership Elections

- Transition of leadership: Elections for positions of Chairman and Vice-Chairman will be held in Q1 of 2019
- Nominations for leadership can start immediately, must be nominated by a committee member, be a committee member and have business organization provide letter stating support for nominee to assume the role
- Elections to take place March / April 2019
- Creation of task group regarding TR-14 leadership and functions
- Group will be formed in Q4 2018 with specific criteria being needed (multiple years of service to TR-14, involvement in Rev. G and H, etc.) to be a part of the group
- Notify Bryan Lanier (bryan.lanier@americantower.com) with any interest in contributing to the task group

2.2 Future Work

- Development of Ad Hoc Groups for Addendums or ANSI/TIA-222-I
- Contact the leads below with interest



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- Monopole baseplates – Ad Hoc Group 16
 - Lead: Bryan Lanier (bryan.lanier@americantower.com)
 - Will study Annex work completed, along with various finite element models completed by contributing organizations
 - Group to be formed by end of the year
 - Studies to happen in Q1 / 2 of 2019, with recommendations complete by end of 2019
- Interaction of Mounting Systems - Ad Hoc Group 15
 - Lead: Scott Vance (svance@btgrp.com)
 - Significant work already completed
 - Need to establish roles / responsibilities of A&E engineer, manufacturer and owner
 - Further work needed establish checks / rules of thumb for application, vs. full model analysis for each design
- Monopole modifications – Ad Hoc Group 14
 - Lead: Dave Hawkins (dhawkins@pauljford.com)
 - Started prior to the Boston meeting
 - Condensed into an Annex, but wasn't ready to publish
 - Most of work is done, intent now is to publish as a white paper, sometime in early 2019, to get feedback to prepare to insert into ANSI/TIA-222
 - Work remaining is complete additional design checks along with white paper development
 - End goal is to complete draft by June 2019 to provide to the Editorial Committee
- Portholes – Ad Hoc Group 17
 - Lead: William Martin (whmartin@tepgroup.net)
 - Will study other standards and some finite element models
 - Expecting to develop consistent standards for rim sizes, welding, installation clearances and unreinforced holes
 - End goal is to draft white paper which may be incorporated into future codes
- Reliability - Ad Hoc Group 19
 - Lead: Chris Ply (chris.ply@ets-pllc.com)
 - Purpose to apply some logic to fall zone letters along with demonstrating robustness / reliability of telecommunication structures
 - Significant work already started
 - 3 areas to continue focusing work: 1. Summary of design standards 2. Explanation of Reliability and Risk 3. Maintenance and Inspection Programs
- Antenna drag coefficients - Ad Hoc Group 20
 - Lead: Lemmy Recinos (irecinos@maserconsulting.com)
 - Expansion of Table 2-9
 - Will study work by multiple antenna manufacturers
 - Will also look at published drag coefficients for antennas with rounded edges
 - Look into the effect of K_a along with the use of antenna drag coefficients
- Wind oscillation / Fatigue of Tubular Structures - Ad Hoc Group 21
 - Lead: John Wahba (John.Wahba@turriscorp.com)
 - Significant work already completed in the Canadian standard
 - Response of cross and along wind is relatively well known for tubular poles and tri-poles
 - Video demonstration of some examples
 - Goal is to add to current annex in ANSI/TIA-222 equations / load combinations to predict structures where this may be a concern



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- U-bolts – Ad Hoc Group 18
 - Lead: Ben Greenwell (bgreenwell@verticalstructures.com)
 - Goal is to add clarity / depth to Section 4.9.11 of ANSI/TIA-222-H
 - Results of testing completed thus far noted
 - Continue testing of u-bolts in various combinations and applications
 - Discussion of how u-bolts are used in connections and tightening applications
- Foundations – Ad Hoc Group 22
 - Lead: Justin Kline (jkline@pauljford.com)
 - New formulated group to review, discuss and improve foundation provisions introduced in ANSI/TIA-222-H
- Drones – Ad Hoc Group 23
 - Lead: Sam McGuire (sam.mcguire@redmountainscientific.com) and Robert McCoy (Robert.mccoy@crowncastle.com)
 - New formulating group to discuss / strategize use of drones for telecommunication applications and need to codify any application

2.3 Update on the Industry Initiatives

- TIA foundation: Scott Kisting spoke of the focus of each group (SEMC, Climbing Facilities, Risk Category) with respect to TIF. Purpose of TIF is to promote the needs of the industry as educated opinion without infringing upon the ANSI accreditation of the published standards
- PANS were also discussed by Michelle Kang, regarding purpose and method of publishing
- Many PANS are in progress
- Scott Kisting (scott@PTSADVISORS.COM) and William Heiden (william.heiden@valmont.com) are planning on writing a white paper / PAN on small cell design, with William leading the effort. Please contact either with interest.
- OSHA: Efforts still being made to ensure ANSI/TIA-322 and ANSI/ASSP 10.48 are utilized as construction standards
- Mount White Paper: Coordinated effort by Michael Oglesby, Michelle Kang and Tyler Barker. Much work has been created in establishing a design guideline, but much work remains on the 7 sections. Work completed and to be completed for each section was discussed. First sections to be presented to the editorial committee by the end of the year, with additional sections to follow.
- Drone Presentation: Sam McGuire spoke of the introduction of use of drones in the telecommunication industry. Specifically, of industry momentum, progress, request for ad-hoc group to study and benefits to the industry.

3. Ken Koffman

- Senior VP of Standards and Technology
- Discussed strategic goals of TIA
- Role of TIA within telecommunications industry
- Noted various engineering committees under TIA umbrella and accomplishments

4. Hurricane Update

- ATC, CCI and SBA spoke of relative lack of damage to their infrastructure. Biggest obstacles to carrier airtime is access to sites, flooding and backup power reliability

5. Upcoming Meetings

- Next meeting will be in Q2 2019, in Dallas, Texas.

6. Adjournment

- o No objections
- o Motion: Dave Brinker
- o Second: Dave Hawkins
- o Motion approved
- o Meeting was adjourned at 17:00

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

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