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Approved by General Counsel

TR-14.7 Meeting Report

Date: 2/4-5/08

Location: Las Vegas, NV

Approved: 2/18/10



COMMITTEE CORRESPONDENCE

TELECOMMUNICATIONS INDUSTRIES ASSOCIATION (TIA)
Standards and Technology Department
Meeting Report
Subcommittee TR 14.7 - Steel Antenna Towers and Antenna Supporting Structures
February 4th and 5th, 2008

Hilton Garden Inn Las Vegas Strip South,
Las Vegas, NV

ATTENDEES (61)

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Global Signal
Industrial Engineering & Testing
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KPPF
KPPF
LFC, Inc.
Malouf Engineering International
MLD Engineering Solutions, Inc
Paul J. Ford & Co.
PennSummit Tubular, LLC
Radian Communications
RISA Technologies
Sabre Communications Corp.
Sabre Communications Corp.
Shively Lab
Stainless LLC
Stainless, LLC
Structural Components
Tower Consultants, Inc.
Tower Engineering Corp
Tower Engineering Professionals
Tower Technology
Towerkraft Engineering, P.C.
Turriscorporation
Valmont
Valmont Communications
Vertical Solutions
Walker Engineering Inc.
Weisman Consultants
WesTower Communications Inc.

Murphy, Christopher M
Barton, Roger
Lee, Tawen
Martin, Chris
DeBoer, Michael T.
Griswold, William
Richard Cullum
Fonseca, Tony
Tornquist, Jason
Duvall, VG
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Hawkins, David P.E.
Zavitkovski, Jaroslaw
Brinker, David
Chojnacki, Peter
Tindall, Keith
Yeo, Stephen
Adams Jones
Hoenninger, Thomas J.
Fehrman, Greg
Cook, Brad
LeCordier, Jean-Alain
Batt, Madison J PE
Ply, Christopher G
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Call to Order, Opening Remarks & Meeting Agenda Review and Approval

3:08 February 4th – Meeting of TR 14.7 Subcommittee – A quorum was present

3:09 – Roll Call & Introduction – Brian Reese TR 14.7 Chairman

The chair noted the Meeting agenda had been distributed by the TIA. The chair asked if anyone had any revisions or changes to make to the agenda. There were none. Meeting Agenda has been approved unanimously.

3:10 – ERI (John Robinson) – Properties of Shifflerized angles – The equations for the 90 degree angle moment of inertia equation (it is marked in the presentation) was corrected. The section affected is highlighted. John Robinson provided a brief summary of the development of the effort to develop properties of Shifflerized angles. This will be published as part of revision H.

3:15 – Guy Tensions – Weisman Consultants (Simon Weisman) – Oleg Proshlyalov Technique. See Weisman presentation. Simon Weisman describes the technique proposed to measure the guy tension. It is a technique based upon surveying. The technique measures guy tension by measuring multiple guy locations with a transit. A single centenary shape will match these measurements. The technique can be used over a multi year period to determine the towers relative movement and change in tension. It is similar to the tangent intercept. Conclusion: It is a more precise method that is more complex than the approaches currently used. It can be added to the standard as a revision H. Software published by Proshlyalov is available to assist in completing the calculations. The technique requires precise measurements.

3:24 – Stainless Inc. (Tom Hoening) – Adoption of the TIA standard by the IBC. See handout provided. The handout can also be reviewed via the following link page 63.
See link <http://www.iccsafe.org/cs/codes/2007-08cycle/ProposedChanges/errata-consolidated.pdf> The submittal to the IBC must include the addendum title. So, each new addendum must be submitted for adoption by the IBC. All changes to the referenced standard will be titled under S238-07/08. At the end of February 2008 all of the proposed changes will be reviewed by vote. If approved, the changes go to public ballot. The public comment period ends in November 2008. Any other changes as a result of the public comment period must be submitted by June 9 2008. After this date, any additional changes must be tabled until the next cycle in 2009. The 2009 IBC will reference revision G and unless it is not approved, will include addendum 2. Committee members may go to www.iccsafe.org/government/adoption.html to view the version of the IBC adopted by each state. Caution, the information may not be up to date.

3:37 – Motion for adjournment – Motioned by Rohn (Radian (Radian (Dave Brinker))). 2nd by Weisman Consultants (Simon Weisman)

6:30 - Dinner

8:00 Call to order

- a. General introduction regarding the TR14 committee & TR 14.7 sub-committee.
- b. The Chair requested members update the distributed TR 14.7 membership list.
- c. Chair reviewed membership requirements and voting eligibility. Voting eligibility is maintained by being current with membership dues and attendance at two meetings.
- d. The Chair reviewed the day's meeting agenda.
- e. Introduction of participants
- f. The Chair encouraged anyone who was aware of intellectual property that relates to the work of TR-14.7 to make the appropriate statements as early as possible in the process. The Chair directed the members to the TIA Engineering Manual, and the TIA web site (www.tiaonline.org), for the specific requirements.

Notice of Intellectual Property Rights: 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

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Early Disclosure Rights: The TIA Patent Policy can be found in Statements of Policy and subsequent sections of the updated TIA Engineering Manual (i.e. Section 6.5.1 and Annex H1. Participants in the work of the TIA Formulating Group are urged to review and comply with the appropriate sections.

- g. The Chair reviewed TIA rules on sending Subcommittee correspondence. All Subcommittee documents are available on TIA's web site (www.tiaonline.org) and are only available to Subcommittee members. Recent documents will be uploaded to the TIA website by the Secretary.
- h. Acceptance of report from May 7th, 2007 in Atlanta. Motion by MEI (MEI (Mark Malouf)) and seconded by Radian (Radian (Dave Brinker)). Motion carries by unanimous vote.

8:10 – Old Business – none

8:15 – EET LLC (John Erichsen) reviewed the www.TIA-222-g.com website, and TIA forms.

8:25 – Stainless Inc. (Tom Hoening) – Reviewed IBC adoption

8:32 – Radian (Dave Brinker) explained Change Request E1. Motion to approve as submitted by Radian (John Wahba) Second by MEI (Mark Malouf). Voted to approve Unanimous

8:45 – Radian (Dave Binker) – Change Request E2. Motion to approve as modified by MEI (MEI (Mark Malouf)). Second by IETS (Bill Griswold). Approved Unanimously. Voted to approve as modified.

8:50 - Radian (Dave Binker) – Change Request E3. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

9:00 - Radian (Dave Binker) – Change Request E4. Motion to approve request as modified by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

9:10 - Radian (Dave Binker) – Change Request E5. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

9:12 - Radian (Dave Binker) – Change Request E6. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

9:30 – Radian (Dave Binker) – Change Request E7. Motion to approve request as submitted by MEI (Mark Malouf). Second by Weisman Consulting (Simon Weisman) Approved Unanimously.

9:30 – Break

9:52 - Resume

10:03 – Radian (Dave Binker) – Change Request E8. Motion to approve request as submitted by Weisman Consulting (Simon Weisman). Second by Radian (John Wahba) Approved Unanimously.

10:05 – Radian (Dave Binker) – Change Request E9. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold). Approved Unanimously.

10:06 – Radian (Dave Binker) – Change Request E10. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

10:07 – Radian (Dave Binker) – Change Request E11. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

10:10 – Radian (Dave Binker) – Change Request E12. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

10:11 - Radian (Dave Binker) – Change Request E13. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

10:23- Radian (Dave Binker) – Change Request E14. Motion was not approved. Tabled for further discussion. Withdrawn by Radian (Dave Brinker) for more consideration.

10:24 - Radian (Dave Binker) – Change Request E15. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

10:27 – Radian (Dave Binker) – Change Request E16. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

10:32 – Radian (Dave Binker) – Change Request E17. Motion to approve request as modified by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

10:34 – Radian (Dave Binker) – Change Request E18. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.

- 10:35 – Radian (Dave Binker) – Change Request E19. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 10:37 – Radian (Dave Binker) – Change Request E20. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 10:39 – Radian (Dave Binker) – Change Request E21. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 10:42 – Radian (Dave Binker) – Change Request E22. Motion to approve request as modified by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 11:08 – Radian (Dave Binker) – Change Request E23. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved with 1 objection
- 11:09 – Radian (Dave Binker) – Change Request E24. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 11:15 – Radian (Dave Binker) – Change Request E25. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 11:27 – Radian (Dave Binker) – Change Request E26. Motion to approve request as modified by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 11: 41- Radian (Dave Binker) – Change Request E27. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 11:46 – Radian (Dave Binker) – Change Request E28. Motion to approve request as submitted by MEI (Mark Malouf). Second by IETS (Bill Griswold) Approved Unanimously.
- 11:50 – Crown Castle (Jim Kyriacopoulos) – Change Proposal request to section 14.2. To extend inspection regimen under specified conditions. Motion is tabled for further discussion. Will resume for lunch.
- 12:07 – Lunch
- 1:45 – Reconvene – Crown Castle (Jim Kyriacopoulos) – The change request will be tabled for further consideration. Jim will solicit volunteers to participate in a conference call to discuss the proposal and to develop a solution. The call will be organized by John Erichsen. Once a proposal is formalized, the change proposal will be submitted to the steering committee for refinement. Upon review and approval by the steering committee, the submittal will be sent to committee members for a vote approval electronically. If approved it will be rolled into the addendum 2 listing.
- 1:50 – ERI (John Robinson) – Request for clarification. See submittal pertaining to climbing rungs
- 1:55 – ERI (John Robinson) – Request for clarification. See submittal pertaining to feed line cluster.
- 2:10 – ERI (John Robinson) - Request for clarification. See submittal pertaining to insulators
- 2:12 – ATT (Vic Allen) – Request for clarification. To be submitted. Class distinction
- 2:36 – ATT (Vic Allen) – Request for clarification. To be submitted. Reanalysis requirements
- 2:44 – EET LLC (John Erichsen) – Request for clarification – See submittal – defining antenna and mount EPA.
- 2:50 – IETS (Bill Griswold) – summary of reliability committee efforts
- 3:00 – Motion by PJF (Dave Hawkins) Seconded by IETS (Bill Griswold) to approve the change proposals approved pending resolution of the modifications approved. The committee approved submittal of the change proposals in the form of addendum 2 to public ballot.
- 3:05 - Break
- 3:20 – Bechtel (Peter Moskal) – Manufacturers Qualifications – See presentation attached. A position paper is provided.
- 4:00 – EET LLC (John Erichsen) – summarized the State of Washington actions to force SE registration for all structures
- 4:21 – Aero Solutions (Brian Reese) – Point to Point Committee TR 14 discussion. Which of the subcommittees are inactive? To our knowledge they are inactive.
- 4:24 – New Business – No motion was received from the floor.
- 4:25 – Adjournment – Motion to adjourn Crown Castle (Jim Kyriacopoulos), Second by IETS (Bill Griswold). Approved by voice vote.

Adjournment


The meeting was conducted in accordance with the TIA Legal Guides and the Engineering Manual.

End of Report

By: John R. Erichsen, P.E., S.E. – TR14.7 Vice Chairman & Secretary

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