

ACI 117 Meeting Minutes

TUESDAY, OCTOBER 22nd 2013

Hyatt Regency, Phoenix, AZ
8:30AM – 11:30AM

Attendees:

Voting Members (17/29 = 59%): Eldon Tipping (TAC), Eric Peterson (Chair), Scott M. Anderson (Secretary), Scott Anderson, Bryan Birdwell, David Buzzelli, Darrell Darrow, Ron Eldridge, Allen Face, Mark Josten, Colin Milberg, Art McKinney, Peter Ruttara, Bruce Suprenant, Brett Szabo, Michael West, Scott Winkler

Associate / Consulting Members (7): Michael Ahern, Jum Horst, Scott Hosking, Dennis Hunter, Jim Kretz, Jim, Tkach, Peter Zdziebloski

Visitors (4): Bev Garnant, Ben Larsen, Larry Campbell, Dennis Fontenot

1) Old Business—Chair Peterson called the meeting to order at 8:30AM and welcomed everyone to Phoenix.

- It was noted that electronic versions of the Fall 2013 Meeting Agenda and Spring 2013 Meeting Notes were previously posted to the ACI 117 website.
- Minutes were approved unanimously.
- All meeting attendees were given a chance to introduce themselves to the group.
- Chair Peterson has reviewed the current roster and checked attendance and voting record. Noted that participation was quite good.
- Chair Peterson expressed that he will also review the balance of the current roster, but has not yet done so.

2) New Business:

- Tolerance Compatibility Document
 - i. Chair Anderson provided a summary of the efforts to date and the current status of the document. The document will all committee approved changes are back in the hands of ACI staff and no further action should be required of the committee..
 - ii. Chair Anderson expressed much appreciation on the behalf of the committee to David Ballast, Ward Malisch, and Bruce Suprenant for their efforts in getting the document to its' current state of development.
 - iii. The committee will apply to ACI for a session in Spring 2014 to present the Guide to Concrete Compatibility.
- Chair Peterson stated that the new focus of the committee is on the next revision of ACI 117.
 - i. The next version will include re-formatting of ACI 117 to eliminate the commentary similar to ITG-7
 - ii. Level of precision of tolerances relative to fractional dimensions must be addressed.
 - iii. The next version must also take into account the accuracy of the standard measuring devices when specifying tolerances.
 - iv. Chair Peterson reminded the committee that Committee 117 cannot unilaterally change tolerances, however issues raised during the revision of 117 would be pursued with regard to errors in tolerances, and establishing tolerances which do not now exist, such as with bending radii of rebar,
- Chair Peterson proposed both near and long-term goals for the 117 Specification. The near-term goals were:
 - Conform to ITG – 7 Format

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- Identify and Correct Ambiguities & Errors
- State Tolerances Such That their Precision of Measurement is Explicit
- Expressing Precision of Fractional Tolerances

The long-term goals proposed were:

- Production of the Measurement Protocol Document (trailing but tracking w/117)
 - A Record of Justification for Each Tolerance Expressed
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- The Chair noted that some method of keeping record of how tolerances were or are established should be kept by the Committee as a means of being able to both provide rationale for tolerances, and as a reference when changes are being proposed for their revision. A journal or internal document was suggested for this purpose, although in later discussion the idea was suggested to maintain this record in a separately published document which would also contain what portions of the commentary the Committee found essential.
 - A discussion took place on the subject of implied tolerances in the expression of the tolerance values within the 117 document, specifically with regard to the TAC requirement of expressing limiting values in significant figures. The idea of using improper fractions was discussed. It was also suggested that a statement could be made that all tolerances in stated in the document should be evaluated to the closest 1/16". This was the preferred path and whether this works or not, for all tolerances, would be evaluated as each chapter is reviewed and revised.
 - Mike West inquired and it was confirmed that the target release for the next revision of ACI 117 is 2015.
 - Allen Face inquired as to the intent of the Committee in moving ACI 117 closer to a statistical basis for tolerances. Chair Peterson confirmed that a move to a statistical basis for tolerances is desired but that not all tolerances lend themselves to this move. It was agreed that where there is an opportunity to move towards a statistical basis, the committee would make that consideration.
 - Chair Peterson invited Associate Member Dennis Hunter to talk about rebar fabrication and bending tolerances. It was noted that the bending machines and type of steel all play a role in the actual bending tolerances. CRSI is funding a study that should be available by mid next year.
 - Chair Peterson presented work he has performed in Section 2 for Committee as a proposed model of the sequence and organization for revising all Sections.
 - It was noted that there is a need to update the new document with graphics that are more representative of the actual field conditions regularly encountered. Committee members were asked to volunteer if they had resources available to develop new graphics.
 - Chair Peterson requested volunteers to join in the effort needed to update each Chapter and to develop the list of new graphics needed. Colin Milberg noted that team pairs of Contractor and Engineer might be of use.
 - Brett Szabo asked about integrating our graphics in 3D modeling software such as Revit or Tekla. Anticipating that the future is that this information could be placed online. There was a question about the timing of a move to 3D (too soon and potentially adding a layer of complexity that we are not yet ready to handle.)
 - Chapter Volunteers were recorded under separate exhibit.
 - TAC Liaison Eldon Tipping noted that he will get graphics standards from Charles Hanskat. Art McKinney, Scott Winkler, and Brett Szabo have volunteered to assist with the graphics production. Eldon also said he would contact the members of ITG 7-09 who worked on the graphics for this document to provide 117 with the standards they used.

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- Mike West inquired as to the timeline of the overall process. Chair Peterson shared a timeline that allows one month from the meeting date to complete the “scrubbing” of each section and to produce the list of graphics needed by the end of the year with the production of the new figures by the end of January 2014.
- Eric Peterson will produce a CPM style schedule for the path to publish ACI 117-15 for review and consideration by the full committee.
- Scrubbing effort is to:
 - i. Eliminate “clearances” from our document as clearances are really a design issue.
 - ii. Eliminate errors from the document
 - iii. Eliminate inconsistencies within the document
- A discussion was directed to Eldon Tipping regarding the latitude which the Committee has with respect to both establishing the level of precision stated in the numerical values of the tolerances as required by TCM 11.6.7, and the process of changing tolerances. Eldon will research these questions, and with regard to changing tolerances he stated that the technical committee which developed the tolerance would have to approve any changes.
- A proposal was made, and which will be investigated is to transfer tolerances stated in sections for specialty structures such as canal linings to the committees which are specialty concerned with these structures, similar to what was done in the 117-10 revision for Masonry. Eldon Tipping pointed out that the 117 document must be coordinated with ACI 301, indicating that if a discipline of work is covered by 301, their associated tolerances must also exist in 117.

3) Open Floor to New Business-

- Discussed creation of a 117.2-R type User’s Guide in lieu of a commentary section. This could be the “journal” that was described by Chair Peterson.
- Bruce Suprenant presented a study of “Colin’s data vs. other data”

4) Adjournment — Meeting was adjourned at approximately 11:15AM.

5) Next meeting is Tuesday, March 25, 2014 at the Grand Sierra Resort in Reno, NV!