

## Meeting Minutes

1. Welcome at 8:05 - Call to order, Declaration of a Quorum, and opening comments were made by Carter.
2. Attendees introduced themselves and the attendance sheet was passed around (see attached list).
3. Meeting Agenda was approved by unanimous vote as presented.
4. Minutes of the June 2013 meeting was approved as amended by unanimous vote. The following changes will be made to the 2013 minutes.
  - a. Spec change F1137 to 1136
  - b. Add Carly Mc Gee A2/A4 spending committee.
5. Carter gave Executive Committee Report (see attached report).
  - a. Request for volunteers to participate in a working group to update the RCSC bulletin regarding ASTM F1136.
    - i. Chad Larson
    - ii. Rick Babik
    - iii. Nick Deal
    - iv. Ken Lohr
    - v. Salim Brahim
    - vi. Bill Germaga
    - vii. Chuck Hundley
    - viii. Kevin Menke
    - ix. Plus Executive Committee
  - b. Working group volunteers for RCSC style guide development.
    - i. Tom Sc
    - ii. Bob Shaw
    - iii. Garrett Burn
  - c. Discussion is under way to decide what to do when more than one person from a particular organization.
6. Joe Greenslade Secretary/Treasurer's Report by Greenslade:
  - a. Membership:
    - i. Total membership – 81
    - ii. New members – 2
      1. Jamie Deckard – Progressive Design
      2. Justin Ocel – Federal Highway Administration
    - iii. Withdrawn members - 6
      1. Changed industries - 1
      2. Retired - 3
      3. No response and no 2014 Research Contribution – 2
    - iv. Applicant - Sarah Olthof – Corrosion Control Consultants and Labs
  - b. Financials
    - i. Net Worth 2013
      1. Start - \$173, 186
      2. End - \$213,036

3. Gain - \$39,850
  - ii. Net Worth 2014 as of May 30
    1. Start - \$213,036
    2. End - \$261,029
    3. Gain - \$47,993
  - iii. 2014 meeting expenses
    1. Should be fully covered by income and sponsorships during May 2014.
    2. Sponsors for 2014 Thursday evening dinner
      - a. Hussam N. Mahmoud - Colorado State University
      - b. Gene Mitchell – Consultant
      - c. Karl Frank - Hirschfield Industries
      - d. Peter Kasper - Ifastgroupe/Infasco/DSI
  - iv. Research Fees
    1. Outstanding – none, no open project as of June 6, 2014
    2. Payments in 2013 after meeting – one for \$5000 as final payment to Salim Brahimi for hydrogen embrittlement project work.
    3. Payments in 2014 - none
7. Report of Officer/Director Ballot (Nominating committee: Victor Schnur, Toby Anderson, and Peter Kasper). The following were elected.
- a. Al Harrold – Chair
  - b. Salim Brahimi – Vice Chair
  - c. Joe Greenslade – Secretary/Treasurer
  - d. Curtis Mayes
  - e. Todd Ude
  - f. Tom Schlafley
  - g. Chuck Hundley
8. Committee reports
- a. Al Harrold presented Specification Committee Report (see report attachment).
  - b. Todd Ude Spending Committee Report
    - i. No funding requests have been received since the 2013 meeting.
    - ii. A first DRAFT procedure for reviewing and proposing future RCSC spending will be prepared by Ude.
    - iii. The general areas for future spending are training materials such as videos, Research (co-funding and/or individual project funding), and scholarships.
    - iv. Ude asked for project proposal submissions in the near future.
    - v. Suggestions from the floor were:
      1. AISC Galvanized surface slip coefficient study
      2. Bridge study on metalizing and galvanizing components
      3. Study on non-steel materials between members
      4. Study bolts through hollow sections for design and installation.
  - c. ASTM Liaison Report by Joe Greenslade (See attached report).
- A request was made that the proposed rotational capacity test ASTM F16 DRAFT be circulated to all RCSC members for comments before finalization which was agreed to by Chad Larson, technical leader of project in F16.
9. Technical Presentations (each posted on [www.Boltcouncil.org](http://www.Boltcouncil.org) site under the Meeting Minutes tab)
- a. Chad Larson -- Update on work to create a consolidated ASTM standard for bolting products.
  - b. Salim Brahimi -- Lessons for coating of higher-strength bolts and recommendations for future work.

- c. Todd Helwig/Joe Yura -- Progress report on AISC/RCSC project on galvanized bolted surfaces.
- d. Justin Ocel -- Round robin testing using RCSC Specification Appendix A.
- e. Bernardo Duran, AZZ Galvanizers on behalf of American Galvanizers Association

10. New Business

11. Location and Dates for 2015 Annual Meeting- Montreal, Canada at McGill University, June 10 - 12.

12. Meeting adjournment – 2:10 PM.

Respectfully submitted by: Joe Greenslade, RCSC Secretary/Treasurer

**NOTE: Copies of the presentations will be found with the Meeting Minutes posted on the RCSC web site, [www.boltcouncil.org](http://www.boltcouncil.org).**

**RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS**  
**SPECIFICATION COMMITTEE A.1 MEETING, JUNE 5, 2014**  
**SUMMARY OF MEETING AND REPORT TO MAIN COUNCIL**

The following is a brief summary of the Specification Committee meeting that was held on June 5th, 2014:

- 1) Resolution of Ballot Results: Four items were balloted in 2014. The items discussed are as follows:
  - a) S12-047B Section 3.3 – Hole Definitions This ballot had 2 negatives (Miazga and H. Mitchell). The task group did a very good job of working out editorial language with the negative voters and both negatives were changed to affirmative with comment. This ballot passed and will be included in the 2014 Edition.
  - b) S13-051 Section 13-051 – Section 9.2 Snug-Tight Inspection. This ballot had 1 negative (Curven) The negative voter could not find the ballot proposal in the packet. This negative fails to meet the Bylaw provisions for a proper negative and will be ignored. This ballot was the follow-up to ballots S11-038 and S12-045 from previous years. The ballot passed and will be included in the 2014 Edition. A couple of the comments from voters will become new business items for the 2015 meeting.
  - c) S13-052 Section 6 – Use of Washers This ballot had no negatives. The ballot passed and will be included in the 2014 Edition.
  - d) S12-040 Section 8.2.4 Commentary. This ballot had four negatives (Birkemoe, Curven, Deal and Lohr). Through an administrative error this item was sent out to ballot rather than being sent to the Spec Committee task group that had been formed. Negatives were deemed persuasive per administrative fiat and the task group will take up the process.
  
- 2) Four new proposed changes were discussed. They are as follows:
  - a) S14-053 Table 3.1 – Larger standard holes for large bolts. This proposal was worked up by a Spec Committee task group that had been formed. Following discussion the task group will continue with their work with a proposal for balloting later in the year.
  - b) S14-054 Section 5.4 – Limitation on  $k_{sc}$  Equations. This is a proposal from Tom Murray to address a condition where the value of  $k_{sc}$  may get outside of an acceptable range, i.e., is no longer positive. The Executive Committee deemed that this change was editorial and was passed by them.
  - c) S12-046 Glossary – Definition of Torque. This proposal was worked up by a Spec Committee task group that had been formed. The proposal will be balloted as presented.
  - d) S14-055 Section 2.4.2 Commentary – Lubricant Color. This is a proposal from Ray Tide to address a potential issue distinguishing hot-dipped galvanized parts versus mechanical galvanized parts. The Executive Committee deemed this proposal as not something they wanted to pass to Spec. Some discussion on the topic occurred.
  
- 3) Task group reports were made on the following items:

- a) Non-ASTM approved coatings. There was an extended task group report itemizing some of the issues to be resolved in this area. The task group will continue their work.
  - b) Use of hardened washers with DTI's – Item will be dropped in the future.
  - c) Bolt length increments – Item will be dropped in the future.
  - d) Match-marking language for Turn of the Nut installation – No report
  - e) Snug Tight definition for Turn of the Nut installation. A presentation was made on the issue. The Executive Committee approved a closure ballot on this item to correct the safety concerns that currently exist in the Specification. Passage of the ballot will include this item in the 2014 Edition.
  - f) Updates to the testing protocols in Appendix A – A report was made of the ongoing research. The task group met later in the day and made good progress.
- 4) Old business items covered include the following items:
- a) Thick coatings
  - b) Shear allowables
  - c) Oversize holes – slip critical vs. shear connections – Item will be dropped in the future.
  - d) Specification for XTB bolts
- 5) A new business item regarding the use of subcommittees to simplify the operation of the Spec Committee was presented. There was a good response to this idea. Subcommittee chair positions remain open and candidates are encouraged to indicate their interest.



June 6, 2014

**June 2014 ASTM F16 Liaison Report for RCSC**

1. **ASME B18.31.3**, Threaded rod (inch) has been balloted a number of time. The next ballot should be opened in May 2014.
2. **ASTM F16 Structural Bolt Standard** – A new standard is in the works which is a compilation of inch and metric bolt standards including A325, A490, F1852, F 2280, A449, A354, A325M, and A490M. This is an effort to make the requirements of these related bolt standards consistent. A ballot closed in March. The results and any resulting comments will be reviewed and resolved at the May 7 meeting in Toronto.
3. **ASTM F436/F436M**, the inch and metric standards are in the process of being combined. No technical changes are involved.
4. **ASTM F959/F959M**, the inch and metric standards are in the process of being combined. No technical changes are involved.
5. **New 200KSI TC Bolt Standard**, this new standard, sponsored by Bob Shaw, has been through two ballots and will soon be balloted a third time after which it will probably be published.
6. **ASTM A354** – as a result of the Bay Bridge A354 BD failure this standard F16 is reviewing the entire standard to determine how the standard can be improved to avoid future incidences in the future.

Joe Greenslade  
IFI Director of Engineering Technology  
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**Supplement  
to  
ASME B18.2.6-2010  
Fasteners for Use in Structural Applications**

The supplement correction listed below applies to ASME B18.2.6-2010. This supplement was approved by the American National Standards Institute (ANSI) on May 5, 2011. See revised table on the overleaf.

<i>Page</i>	<i>Location</i>	<i>Change</i>
2	Table 1	Note (6) added

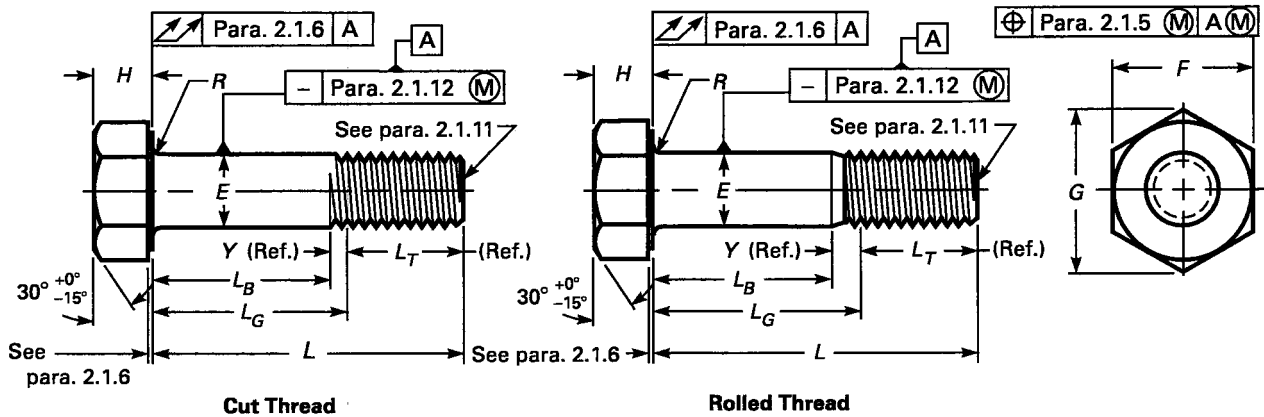
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS  
Three Park Avenue, New York, NY 10016-5990

May 2011



M0161S

**Table 1 Dimensions of Heavy Hex Structural Bolts**



Nominal Size or Basic Product Diameter [Note (1)]	Body Diameter, E [Note (6)]		Width Across Flats, F [Note (2)]		Width Across Corners, G		Head Height, H [Note (3)]			Radius of Fillet, R		Thread Length, L <sub>T</sub> [Note (4)]	Transition Thread Length, Y [Note (4)]	Maximum Total Runout of Bearing Surface FIM [Note (5)]		
	Max.	Min.	Nominal	Max.	Min.	Max.	Min.	Nominal	Max.	Min.	Max.	Min.	Ref.	Ref.		
1/2	0.500	0.515	0.482	7/8	0.875	0.850	1.010	0.969	5/16	0.323	0.302	0.031	0.009	1.00	0.19	0.016
5/8	0.625	0.642	0.605	1 1/16	1.062	1.031	1.227	1.175	25/64	0.403	0.378	0.062	0.021	1.25	0.22	0.019
3/4	0.750	0.768	0.729	1 1/4	1.250	1.212	1.443	1.383	15/32	0.483	0.455	0.062	0.021	1.38	0.25	0.022
7/8	0.875	0.895	0.852	1 7/16	1.438	1.394	1.660	1.589	35/64	0.563	0.531	0.062	0.031	1.50	0.28	0.025
1	1.000	1.022	0.976	1 5/8	1.625	1.575	1.876	1.796	39/64	0.627	0.591	0.093	0.062	1.75	0.31	0.028
1 1/8	1.125	1.149	1.098	1 13/16	1.812	1.756	2.093	2.002	11/16	0.718	0.658	0.093	0.062	2.00	0.34	0.032
1 1/4	1.250	1.277	1.223	2	2.000	1.938	2.309	2.209	25/32	0.813	0.749	0.093	0.062	2.00	0.38	0.035
1 3/8	1.375	1.404	1.345	2 3/16	2.188	2.119	2.526	2.416	27/32	0.878	0.810	0.093	0.062	2.25	0.44	0.038
1 1/2	1.500	1.531	1.470	2 3/8	2.375	2.300	2.742	2.622	15/16	0.974	0.902	0.093	0.062	2.25	0.44	0.041

GENERAL NOTE: See additional requirements in section 2.

NOTES:

- (1) See para. 2.4.1.
- (2) See paras. 2.1.2 and 2.1.3.
- (3) See para. 2.1.4.
- (4) See para. 2.1.10.2.
- (5) See para. 2.1.6.
- (6) The body diameter limits are shown in this table. Any swell or fin under the head or any die seam on the body shall not exceed the basic bolt diameter by the following:
  - (a) 0.030 in. for sizes 1/2 in.
  - (b) 0.050 in. for sizes 5/8 in. and 3/4 in.
  - (c) 0.060 in. for sizes over 3/4 in. through 1 1/4 in.
  - (d) 0.090 in. for sizes over 1 1/4 in.



RCSC 2014 Main Committee Attendance List

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