



RCSC Annual Meeting

Friday, June 7, 2024
Drury Plaza Pittsburgh Downtown
745 Grant Street
Pittsburgh, PA 15219

Meeting Minutes – Approved 6/5/2025

1. 10:00 am EDT Welcome - Call to order (S. Brahimi)
2. Welcome and Introductions (S. Brahimi)
 - a. Thanks to C. McGee, R. Wilson and KTA Tator for hosting and organizing this meeting
 - b. Thanks to our sponsors: Bay Bolt, IFI, High Steel Structures, Skidmore Wilhelm, Nucor Fastener, Unytite
 - c. Quorum established – 38 members in attendance (S. Prabhudesai): T. Anderson, J Barton, D Bogaty, S Brahimi, R Brown, D Castle, J Chadee, C Curven, J DiPasquale, N Dorsey, A Fossa, M Friel, B Germuga, M Haaksma, L Kruth, C Larson, C Marvin, C McGee, J McGormley, R Medlock, H Mitchell, J Neeley, T Nickerson, J Ocel, B Porter, S Prabhudesai, G Rassati, C Rex, T Schlafly, R Shanley, D Sharp, R. Shaw, J Swanson, C Tribble, T Ude, C Vertullo, R Wilson, D Wroblewski
 - d. 10 guests in attendance: D Laro, V Sagan, L Housel, J O'Brien, R Brown, T Mccullough, J Hilton, C Garrell, S Faruquee, C Raebel.
3. Reviewed mission of the RCSC (S. Brahimi)
4. Approval of the Meeting Agenda (S. Brahimi)
 - a. Motion: *Approve 2023 meeting agenda*
 - i. Passed without objection
5. Approval June 2023 Annual Meeting minutes from Lancaster (S. Brahimi)
 - a. Motion: *Approve June 10, 2022 Annual Meeting minutes* - - Motion made by G Rassati, 2nd T. Anderson
 - i. Passed without objection
 - b. H Mitchell requested that meeting minutes be sent in advance so they can be reviewed prior to the Annual meeting
6. Secretary/Treasurer's Report (S. Prabhudesai)
 - a. Membership
 - i. Membership roster sent around meeting room for members to update contact information and for members/guests to sign-in
 - ii. Welcomed new members to the council:
 1. Noah Dorsey – Producer – succeeding Peter Kasper
 2. Jeff Greene – General Interest
 3. Clinton Rex – General Interest – succeeding Curtis Mayes

- iii. Members with classification changed:
 - 1. James DiPasquale to General Interest
 - 2. Matt Haaksma to User
 - 3. Sahil Prabhudesai to General Interest
 - 4. Christopher Tribble to Producer
- iv. Karl Frank nominated and approved by the BOD as a Life Member of the RCSC due to his significant contributions to the industry. S. Brahimi to formally congratulate and deliver the news to K. Frank and include an article in AISC publication.
- v. Council now has 72 members
- vi. Acknowledged the passing of long-time member Raymond HR Tide from WJE
- vii. Discussion regarding having an unofficial sub-classification of General Interest membership into university, additional member from other categories, etc. ‘
 - 1. R. Medlock, J Chadee, M Haaksma to work with S Prabhudesai to work on this.

b. Financials:

- i. Reviewed RCSC Financial Report with a December 31, 2023 balance of \$407,698.47
- ii. Motion: *Approve 2023 Financials* – Motion made by T. Anderson, Seconded by GA Rassati
 - 1. Passed without objection.

7. Chairperson's Report (S. Brahimi)

a. Organizational Structure –

- i. Reviewed organizational structure
- ii. New A3 Chairperson appointed by the Board of Directors: J. Chadee
 - 1. J Chadee: Plan to focus on financials and donations, not membership immediately.
- iii. New Ad hoc Committee on Meetings.
 - 1. J McGormley appointed as the new chair
- iv. Discussion on creation of an RCSC booth at NASCC 2025.
 - 1. Discussed by AISC. C Raebel shared that it would be possible to have a booth in the entrance/registration area but not on the Tradeshow/Exhibit Floor
- v. New slate of candidates as proposed by the nominating committee shared with the membership.

b. Election of Officers and Directors (B. Germuga)

- i. Nominating Committee: D. Sharp (Chair), B. Germuga, and C. Larson presented slate of candidates.
 - 1. Chair: Robert Shaw
 - 2. Vice-Chair: GA Rassati
 - 3. Secretary Treasurer: Sahil Prabhudesai
 - 4. Director 1: Salim Brahimi
 - 5. Director 5: Toby Anderson
 - 6. Director 6: Carly McGee
- ii. Motion: *To elect slate of candidates as presented by Nominating Committee* – Motion by S. Brahimi. Seconded by T. Anderson.
 - 1. Motion Withdrawn. S Brahimi
- iii. Motion: *To elect slate of candidates as presented by Nominating Committee except Director 1 position* – Motion by S. Brahimi. Seconded by T. Anderson.
 - 1. Motion Passes: Approve – 34, Nay – 0, Abstain – 2

- iv. Motion: *To elect Salim Brahimi as Director 1 for new vacant position presented by Nominating Committee*– Motion by GA Rassati, Seconded by T. Anderson.

- 1. Motion Passes: Approve – 35, Nay – 0, Abstain – 1

- c. Operating procedures

- i. S Brahimi discussed the history of needing new bylaws and that the bylaws are only for governance.
 - ii. Need to work on committee operational procedures (R. Shaw)
 - 1. The membership list that is a part of the review committee was shared.
 - a. R Shaw (chair), S Brahimi, T Schlafly, L Kruth, T Anderson
 - 2. Next steps for operating procedure will include a detailed review of the old bylaws, reviewing AISC, AWS, and ASTM procedures.
 - 3. The issue for the RCSC has been the voting rules, however, this is likely going to be the last item to change due to being mid-cycle.
 - 4. Lack of participation in the upcoming ballot cycle will prompt a review of the voting rules.
 - iii. RCSC Ballot this year (S Brahimi)
 - 1. L Kruth discussed the consequences and ballot delays due to non-participation in ballots.
 - 2. If a member doesn't vote, their voting status may be under review
 - 3. Reviewed section 3.12 of the by-laws
 - 4. L Kruth encouraged all to vote, even if it is an Abstention.

- 8. Specifications Committee (L. Kruth)

- a. Each TG Chair provided a report and a summary will be sent out.
 - b. Discussed Specbuilder through ASTM but the need for an AISC account to be able to vote in the upcoming ballot.
 - c. Membership was instructed to make account on the AISC website
 - d. Clarification on voting members discussed and Secretary to publish a new list on Bolt Council website prior to the Ballot.
 - e. RCSC needs to be ready to go to print in 2025 because IBC shortened to a 5-year cycle
 - f. Communicated the BOD decision to enforce a more stringent inactivity policy.

- 9. Research/Education Committee (T. Ude)

- a. Resource Forecast: Four project commitments ongoing, will spend down our current balance of 400k+ to 200k+ over a couple of years.
 - b. Review of ongoing research/projects
 - i. Research on Slip Coefficients of Metallic Coatings (T. Ude)
 - 1. Testing a large matrix galvanized and thermal spray metalized faying surfaces for properties related to slip critical connection design:
 - a. slip coefficient (about 50% complete)
 - b. long term creep displacement properties (through shakedown testing, entering production testing)
 - c. bolt tension relaxation (coming soon)
 - ii. Total original budget \$170k. Half spent with investigator Roy at Rutgers. Investigator Cross (w/ Rassati & Swanson) are executing the second half at Univ Cincinnati. 1/3 of 2nd half spent. Anticipating a request for additional time and additions funding for continued student support.

- iii. Educational Videos (C. McGee)
 - 1. Develop a library of 15 video chapters, +/- 15 min each.
 - 2. Total budget of \$120k. 25% spent. No cost time extensions granted to investigator Shaw. RCSC Oversight Chair McGee.
- iv. 3rd Edition of The Guide
 - 1. Chapters 1-12 are being posted for review by RCSC oversight committee. Committee and their review are under the direction of Jon McGormley. Show of hands for readers/reviewers: Mitchell, Ude, Prabhudesai, Vertullo, Rex
 - 2. 20% of 40k authorization paid. Substantial supplement request anticipated. Investigators Swanson & Rassati at Univ Cincinnati.
- v. Stainless Steel Bolting Guide (C. Vertullo)
 - 1. RCSC / AISC Collaboration to publish an AISC Design Guide that will serve as a proto-specification for structural connections using high-corrosion-resistance fasteners in high-corrosion-resistance steel.
 - 2. TOC has been reviewed and commented on and revised.
 - 3. 65% draft coming for review by the oversight committee soon.
 - 4. Investigators Badoo & Meza (Steel Construction Institute, UK) and Provines (Virginia DOT). RCSC Oversight Chair Vertullo. 25% of \$40k authorization paid.
- c. Possible Future Work
 - i. Extra long slotted holes – Committee will consider request from AISC to cost share 2nd phase of an initial study AISC funded.
 - ii. Any additional work the members want to see, in light of ASTM F16 activities to lift the prohibition on HDG Grade 490 bolts. A2/A4 is not independently initiating or calling for proposal; someone needs to champion. A. Fossa noted that AGA will be looking to RCSC for clarification on RCSC's position on the use of HDG Gr 490, if ASTM does lift their prohibition.
 - iii. R Medlock and R Shaw considering the role RCSC could play in establishing bolt installer qualifications, similar to welder qualifications.

10. Other Committee Activities

- a. Liaison Committee (S. Brahimi)
 - i. ASTM Committee F16 and A01.22
 - 1. Update on the current ballot to approve 144KSI Heavy Hex and twist-off bolts in F3125 provided by B. Germuga.
 - 2. Update on Task Group on hot dipped galvanizing of Grade 490 bolts provided by T. Anderson. F16 are confident that negatives can be resolved and the prohibition on HDG Gr 490 bolts can be lifted.
 - ii. ASTM A563 Nuts (D. Wroblewski)
 - 1. A563 now has been updated to include 1-5/8" nuts
 - 2. Proposal to increase the minimum proof load on Oversize Tapped nuts, rationale being the possibility of these nuts being used on 150KSI+ strength bolts.
 - iii. ASTM F436 Hardened Washers (B. Germuga)
 - 1. Subcommittee revision of an advisory note on hot dipped galvanized washers alerting users about other galvanizing methods. Other methods such as thermal diffusion coating not currently included in RCSC spec.
 - iv. 50th anniversary of ASTM F16 committee
 - 1. Congratulated 2 award recipients who are also members of the RCSC:

- a. Chad Larson - Award of Merit
 - b. Salim Brahimi - Outstanding Scientific Leadership
 - v. ASTM F3393 changes in appendix discussed (S. Brahimi)
 - vi. ASME B18 (S. Brahimi)
 - 1. B18.2.6 – Some upcoming changes, but primarily cleaning up and editorial for consistency.
 - 2. Upcoming DTI dimensional changes to protrusion dimensions
 - vii. ISO TC2 (S. Brahimi)
 - 1. There is an upcoming overhaul of ISO 10684 for Galvanizing of Fasteners
 - 2. ISO 898 currently goes until M39 (~1.5"). There is going to be a new standard that will cover sizes from M39-M100
 - 3. ISO TC2 meeting this year in US. It will be in Chicago IL during Week 42 (October).
 - viii. AISC (L. Kruth)
 - 1. First ballot is complete. Progressing to the next ballot.
 - 2. Next RCSC Spec may be needed in 2030.
 - ix. ISO TC 167 Steel and Aluminium Structures (R. Shaw)
 - 1. Meeting in Orlando FL during Fabtech -10/14/24
 - 2. New standard published in late 2023 on fabrication and erection of steel structures prepared under Working Group 3
 - 3. Working Group 4 on structural bolting has four projects underway relevant to RCSC.
 - a. Slip factor for faying surfaces
 - b. Test method to determine loss of pretension caused by creep in coatings
 - c. Test method to establish bolt tightening procedures
 - d. Structural bolting coordination tasks and responsibilities (bolting supervisor)
 - 4. R. Shaw to assist with gaining access to those documents if there is interest. Please reach out if interested.
11. Editorial Committee Report (T. Schlafly)
- i. Currently have enough people in the committee but will be reaching out individually to assist with proofreading.
12. Old Business
- a. Membership 2021 Survey discussion (S. Brahimi)
 - i. Galvanizing A490 had the highest interest from RCSC membership in the previous survey
 - ii. S. Brahimi requested those that opted for this option to reach out to T. Anderson to provide input for future ASTM work.
13. New Business
- a. Wind/Offshore Structure Bolting (J. Chadee)
 - i. J. Chadee brought up that Ironworkers are installing Wind/Offshore structures and that there isn't a standardized bolting practice. Discussion if RCSC should take this on.
 - ii. S. Prabhudesai stated that if the designers/OEMs specify current products covered by the spec then they may consider using RCSC specific. It was shared that Solar industry is similar where the components and designs are unique/proprietary with wide range of fasteners similar to the Automotive industry.
 - b. Booth at NASCC (R. Shaw)

- i. Further discussed the possibility of RCSC booth at NASCC, continuing discussion from Chairperson's report.
 - ii. R Shaw sought a rough show of hands for those attending NASCC and willing to volunteer time at the RCSC booth. Membership willing to help out and R. Shaw to follow-up with AISI.
- c. Bolt hole tolerances (R. Medlock)
 - i. Suggestion that in the future, RCSC consider going to holes that are 1/8" over bolt diameter for additional bolt sizes (i.e., bolts less than 1" in diameter, notably 7/8-inch diameter) instead of the current 1/16" over bolt diameter. This is requested for bridge work.
- d. Effects of extreme environmental conditions on fasteners (B. Germuga)
 - i. Looking to submit a research project to study the environmental effects on load cell testing, as well as torque dependent fasteners.
 - ii. The project's outcome to include proper operating temperature for load cell, as well as for torque dependent fasteners.
- e. Marketing of RCSC through LinkedIn to seek additional membership and funding of Research Contributions
 - i. A3 Committee Chair, J. Chadee to explore further
- f. Du factor for slip-critical connection design is currently set for 1.13. This may be high for some pretensioning methods and is known to be low for others such as turn-of-nut. Research had had been previously proposed to A4 but was declined. There is renewed interest in the topic.

14. 2025 Annual Meeting (S. Brahimi)

- a. Show of hands: Majority were in favor of switching the meeting days from Tuesday thru Thursday.
- b. University of Cincinnati volunteered to host, to plan for Tuesday-Thursday, but may need to be Wednesday -Friday
- c. IFI (Independence, OH) volunteered to be the backup host

15. Technical Presentations

- a. Using F3394 washers for RCSC installation methods - Prof. G.A. Rassati with University of Cincinnati

16. 1:30pm Adjournment (S. Brahimi)

- a. Motion: *To adjourn* made by T. Anderson, Seconded by S. Prabhudesai — Passed without objection

Prepared by: Sahil Prabhudesai, RCSC Secretary