Research Council on Structural Connections
Subcommittee A2/A4 – Education and Research
June 9, 2016. West Lafayette, IN

Minutes

Attendance: see attached

Membership of A2/A4 was reviewed. Call for new members was responded to by Victor Shneur (LeJeune Steel) and Rob Connor (Purdue University).

1. Galvanized / mixed galvanized faying surfaces.

   Todd Ude (TU) recapped recent and ongoing interest in galvanized and galvanized/metalized mixed faying surface work. UT Austin study by Helwig (supported by RCSC is complete). Final report to be read by A2/A4 volunteers, and recommendation for linking to RCSC website will be confirmed. American Galvanizers Association (Tom Langill) is planning to move ahead with additional specimen testing for a variety of mixed faying surfaces, including creep testing per Appendix A.

   Tom Langill (TL) gave an overview of AGA objectives and proposed test matrix. AGA is not seeking funding from RCSC, but would appreciate RCSC comments on the test matrix.

   Justin Ocel (JO) noted that some states call for 20 mil metalizing coatings but 12-14 mils might be more appropriate to test, and noted that there are different metalizing options that might be considered (pure zinc versus 85-15 zinc-aluminum mixtures).

   Karl Frank noted that sealing of metalized faying surfaces should be discouraged.

   Victor Shneur (VS) suggested that zinc silicate paints be considered for addition.

   TU to circulate the AGA testing proposal to A2/A4 members for review and comment. Comments received will be forwarded to TL at AGA.

2. 3rd Ed. Guide

   TU relayed discussion from Exec Committee; Charlie Carter (CC) will scope and propose the job of updating the Guide to Design Criteria for Bolted and Riveted Joints to Exec directly.

   JO indicated that he has access to Bob Dexter's hard drive, presumed to include progress that Dexter had made in a prior project aimed at updating the Guide.

3. RCSC Co-Op / Fellowship / Internship
   Jon McGormley (JM) presented the outlines of what an RCSC-sponsored program aimed at engaging students in the bolting industry might look like.
   a. One necessary step is to ensure that we have member firms that are interested and ready to hire for such a program.
   b. It needs to be determined whether the program should target a university-based co-op program, or present itself as summer intern employment apart from the school, or consist of funding to a university program supporting a graduate student in his/her studies.
   c. Possible configuration:
      - Promise the candidate 2 (minimum) rotations of temp employment
      - RCSC acts as program manager
        i. Coordinating with member companies
        ii. Coordinating with university programs
        iii. Participating firms review resumes and select candidate
        iv. Hiring firms and the candidate establish a task/goal that benefits both the candidate and the firms (and RCSC)
        v. RCSC provides a stipend for travel to the meeting and preparation / presentation of the work accomplished
        vi. Participating firms pay the candidate as employees

   Rob Connor noted that assembling the program as a summer internship basis will reduce bureaucracy that will come with university sponsored programs.

   CC noted that AISC organizes / supports an internship program within the wider steel industry.

4. Instructional Video Program; scope and approach update

   Carmen Vertullo (CV) has agreed to act as lead of the educational videos effort. He will build on his prior experience in training and videos and will work with TU and Curtis Mayes (CM)) to get one or two simple examples created / published.

   VS called attention to the liability aspect and advised inclusion of appropriate disclaimers.

   Dave Bornstein noted that Skidmore Wilhelm maintains a catalog of videos at their website, and that once created, some attention does need to be devoted to maintenance and keeping up to date.

   Others recommended attention to incidental safety messages; show appropriate personal protective equipment being used.

   Others noted that translated or multi-lingual closed captioning is appropriate, particularly Spanish and French.

5. Update on KTA-Tator Recordable Variables work, sponsored by AISC

   Carly McGee summarized findings of two studies KTA-Tator conducted for AISC.

   a. Tests were done comparing how different types of specimen preparation may affect the slip results from zinc rich primer testing. Differing degrees of blast cleaning appear not to influence the slip test results. But use of machine tools instead of blast cleaning can affect the slip test results. Draft report is under evaluation by AISC.
   b. Tests were done to study if the results of slip coefficient tests on zinc-rich coatings would be affected, if common shop practices for building (thickening) or screening (thinning) were employed on the specimens. Slip coefficient results do not appear to be affected by common build or screen practices.

6. Rotational Capacity Testing

   TU solicited the committee and audience on the matter of whether RCSC should be wading into the matter of confusion in the industry on proper use and performance of Rotational Capacity (RoCap) testing. The consensus was that RCSC need not reach out with an Educational Bulletin type document on a matter that is not covered in the RCSC Specification.

7. Proposal Evaluations

   TU advised that RCSC has received proposal of various scope and development for investigations which we may choose to fund. These will be circulated to A2/A4 to seek consensus on whether these will be recommended to Exec Committee for or against funding.

   a. Appendix A Recordable Variables: Weathering of Zinc Coatings
   b. Bolt Pretensioning: Effect of Turning Head vs. Turning Nut

Action Items

Date	Item	Responsible	Status
April 2016	Contact Helwig regarding prognosis for completing creep component of galvanized faying surface work	T Schlafly	Done – UT proposed to AGA / AISC. AGA going different route.
April 2016	Review scope of RCSC funded part of Helwig work – was creep included	T Ude	Done – the proposal we approved did not include creep testing per Appendix A.

Date	Item	Responsible	Status
April 2016	Prompt Langill /AGA for Research Needs statement on testing of mixed galvanized+other faying surfaces	T Schlafly	Done – discussed at June meeting, RCSC comments provided 6/30/16.
April 2016	Circulate for comment: KTA proposal for weathering of zinc coatings	TCU	Open
June 2016	Circulate for comment: Two proposals for investigation of effect of turning the head	TCU	Open
April 2016	Close loop with Chad on publishing his F1136 Coating A490s document at the website	TCU	Open (A2/A4 has read and provided comments to TCU.)
April 2016	Advise Germuga: format for research proposals (temperature effects investigation)	TCU	Open
April 2016	Solicit Bob Shaw for interest in writing bolt inspection summary for Insp Trends magazine	TCU	Done – Bob in contact with I.T.
April 2016	Propose dates for interim A2/A4 discussion throughout the year	TCU	Done
April 2016	Find volunteer to perform maintenance on research/education documents posted to website.	TCU	Open

Attachments:

1. Attendance List

boltcouncil
RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS
rcsc

2016 Annual Meeting

Meeting: A2/A4 Time: _____

	First	Last	Company	email	Initial
1	Toby	Anderson	Bay Bolt	baybolt@pacbell.net	TMA
2	Rodney L.	Baxter	Thornton Tomasetti	Rbaxter@ThorntonTomasetti.com	
3	David	Bornstein	Skidmore Wilhelm	dbornstein@skidmore-wilhelm.com	DB
4	Salim	Brahimi	Industrial Fasteners, Institute (IFI)	sbrahimi@indfast.org	
5	Charles J.	Carter	AISC	carter@aisc.org	CJC
6	Chad T.	Case	Kiewet Infrastructure Co.	chad.case@kiewit.com	
7	Jason	Chadee	Joint Apprentice Committee Ironworkers Locals 40 and 361	jchadee@nycironworkers.org	
8	Robert J.	Connor	Purdue University-School of Civil Engineering	rconnor@purdue.edu	RJC
9	Nick E.	Deal	Würth House of Threads Inc.	ndeal@houseofthreads.com	
10	Pat	Fortney	Cives Steel Company	pfortney@cives.com	
11	Karl H.	Frank	Hirschfeld Industries	karl.frank@hirschfeld.com	
12	Albert	Gelles	Doerken Corporation	agelles@doerkenusa.com	
13	Bill	Germuga	St. Louis Screw & Bolt	billg@stlouisscrewbolt.com	BG
14	Allen J.	Harrold	BlueScope Building - North America	ajharrold@butlermfg.com	
15	Todd	Helwig	University of Texas at Austin	thelwig@mail.utexas.edu	TAH
16	Charles J.	Kanapicki		ckanapicki@sbcglobal.net	
17	Peter F.	Kasper	Ifastgroupe/Infasco/DSI	PKasper@ifastgroupe.com	
18	Daniel J.	Kaufman	AISC	dkaufm02@gmail.com	
19	Lawrence	Kruth	Douglas Steel Fabricating Corp.	lkruth@douglassteel.com	
20	Thomas J.	Langill	American Galvanizers Association	technical@galvanizeit.org	TJL
21	Chad M.	Larson	LeJeune Bolt Company	clarson@lejeunebolt.com	
22	Bill R.	Lindley II	W W Steel, LLC	blindley@wwsteel.com	
23	Kenneth B.	Lohr	Lohr Fasteners	klohr@aol.com	
24	Curtis L.	Mayes	L.P.R. Construction	cmayes@lprconstruction.com	
25	Carly	McGee	KTA-Tator, Inc.	cmcgee@kta.com	
26	Jonathan C.	McGormley	Wiss, Janney, Elstner Associates	jmcgormley@wje.com	
27	Eugene R.	Mitchell	Consultant	gene@gwyinc.com	
28	Heath E.	Mitchell	G.W.Y., Inc.	heath@gwyinc.com	
29	Justin	Ocel	Federal Highway Administration	justin.ocel@dot.gov	
30	Sarah	Olthof	Corrosion Control & Labs	solthof@ccclabs.com	
31	Gian A.	Rassati	University of Cincinnati	gian.rassati@uc.edu	
32	Jordan	Richardson	Applied Bolting Technology	JordanR@appliedbolting.com	
33	Thomas J.	Schlafly	AISC	schlafly@aisc.org	
34	Gerald E.	Schroeder	Fish & Associates, Inc.	gschroeder@mwt.net	
35	Robert E.	Shaw Jr.	Steel Structures Technology Center	rshaw@steelstructures.com	
36	Victor	Shneur	LeJeune Steel Co.	victor.shneur@lejeunesteel.us	VS
37	W. Lee	Shoemaker	Metal Building Manufacturers Assoc.	lshoemaker@mbma.com	
38	Jim	Soma	The Magni Group	jsoma@themagnigroup.com	
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41	James A.	Swanson	University of Cincinnati	james.swanson@uc.edu	
42	William A.	Thornton	Cives Steel Company	bthornton@cives.com	
43	Raymond H.R.	Tide	Wiss, Janney, Elstner Assoc.	rtide@wje.com	
44	Todd C.	Ude	PARSONS	Todd.Ude@parsons.com	TCU
45	Floyd J.	Vissat	AECOM	floyd.vissat@AECOM.com	
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47	Joseph A.	Yura	U of T Austin/Phil M. Ferguson Str. Eng. Lab.	yura@mail.utexas.edu	
48	BRIAN	Goldsmith	Skidmore-Wilhelm	bgoldsmith@skidmore-wilhelm.com	BG
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			(Guests--Over)		

	Guests:				
1	Mark	Bowman		bowmanmd@purdue.edu	MDB
2	Phil	Fish	Fish & Associates, Inc.	PFish@fishassoc.com	
3	Brian	Goldsmith	Skidmore Wilhelm		
4	Atsushi	Hashimoto	Unytite, Inc.	a-hashimoto@unytite.com	
5	George	Koustis		george.koustis@sherwin.com	
6	Sean	Smith	ISA/Ajax		
7	Peter	Svendsgaard	ISA/Ajax	PETERS@IRASVENS.COM	
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