

T-17 Technical Committee for Metals Fabrication

Expanding its Vision and Mission

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Chair, T-17



Background

- T-17 has overseen the work of the Joint AASHTO/AWS Bridge Welding Code Committee
 - Known as the SC 10 or AWS D1J Committee
 - Created by an agreement between AASHTO and AWS going back to 1982
 - Consists of 6 AASHTO members, 6 AWS members and 6 General Interest members

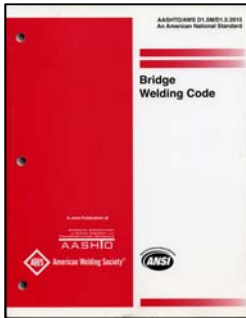
Background

- As the Technical Committee for Welding, T-17:
 - Submits Nominations of state DOT engineers to the Chair of SCOBS for appointment to serve as AASHTO members
 - Responsible for AASHTO SCOBS approval of BWC revisions by introducing them as Agenda Items
 - Supporting the work of SC 10 by proposing NCHRP research problem statements as needed by their strategic work plan

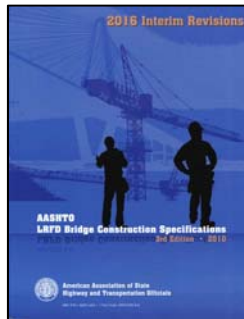
Fabrication

- At the 2013 T-17 meeting in Portland, OR, discussion began about T-17 getting involved in fabrication issues
 - Discussions in SC 10 to remove the fabrication provisions in the BWC that are not typically found in other AWS Codes
 - If these were to be removed from the BWC, where would they go?

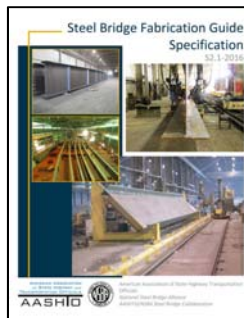
Fabrication Specifications at the Time



Fabrication requirements related and not related to welding.
Overseen by T-17



Fabrication specifications for steel members.
Overseen by T-4



Fabrication Guide Specifications developed through the National Steel Bridge Alliance.
Adopted by AASHTO through T-14



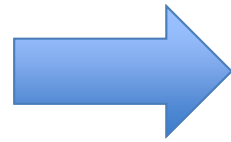
Was This Efficient?

- Three separate documents maintained by three separate SCOBS Technical Committees
- Would take constant work effort between the three Technical Committees to coordinate
 - Overlapping requirements, were all consistent?
 - If nuanced differences, which ones would govern?
 - If one committee's work made changes, others would have to make changes to their documents.

Was This Efficient?

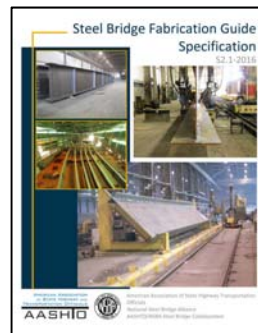
- In addition to the BWC, Fabricators need to use two documents:
 - AASHTO LRFD Construction Specs
 - An AASHTO Specification
 - Fabrication only in Chapter 11, most of the rest is not relevant to fabricators
 - AASHTO/NSBA Steel Bridge Fabrication Guide Specifications
 - Collaboration guide specification, not a full AASHTO Spec
 - Whole publication devoted to fabrication

T-17's Dilemma



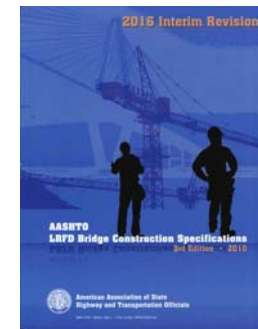
If fabrication guidelines were to be removed from the BWC, where would they go?

AASHTO/NSBA
Fabrication Guide
Specs?

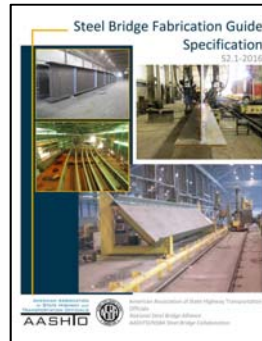
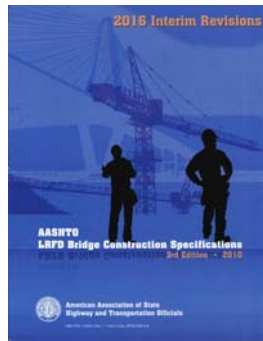


LRFD Construction
Specifications?

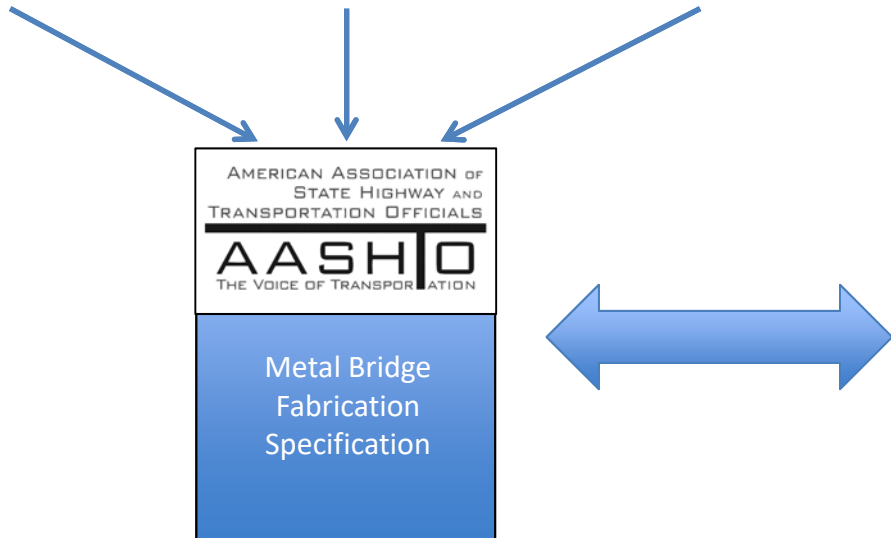
Both?



Would This be Better



Combine the requirements of the three fabrication documents into one AASHTO Metal Bridge Fabrication Specification that would be a companion to the AASHTO/AWS Bridge Welding Code



T-17 Discussions

- June 2014 meeting in Columbus
 - Expanding its role to include fabrication
 - Had the time resources to focus on this one aspect
 - Working on developing the proposed AASHTO Steel Bridge Fabrication Spec
- Change name to reflect this expanded role
 - Need to have draft Vision and Mission statements and a Strategic Plan for implementation before going to SCOBS

Why “Metals Fabrication”?

- Steel bridge fabrication would be the first effort, however
- Wanted to recognize that there may be a need for fabrication for other metals that could be used in the future
 - Being called Technical Committee for Metals Fabrication would allow T-17 to address those metals in the future

Interfacing with SCOBS T-14 Technical Committee

- How would T-17 interface with T-14
 - T-14 would focus on the design aspects of steel bridges
 - T-17 would focus on fabrication of steel bridges
 - Where there was overlap, such as for fracture critical members, T-14 would work on the fatigue design provisions, T-17 would work on the fracture control plan
 - Together, we would collaborate to keep the two consistent

Working Collaboratively with Other SCOBS Technical Committees

- Have focused on having liaison members on T-17
 - Members of T-17 who are members of the other related committees:
 - Wayne Symonds, Vice Chair of T-4
 - Hannah Cheng, member of T-12
 - Jamie Farris, member of T-14
 - Be a direct communication link to the other committees on T-17 activities and vice versa

Work on Vision and Mission Statements and Strategic Plan

- T-17 worked on these documents starting at the June 2015 meeting in Saratoga Springs, NY
 - Input from T-17, the AASHTO SC 10 members, fabricators, and some consultants
- Documents finalized and approved by T-17 at the June 2016 in Minneapolis, MN
- Presented to the SCOBS Executive Committee that year
 - Discussions over the next year

New Vision and Mission

- **Vision:** To be the Subject Matter Experts on welding and metals fabrication within the AASHTO Subcommittee on Bridges and Structures
- **Mission:** To promote the state of the art in innovative and efficient welding techniques and metals fabrication processes that:
 - Optimize the performance of structural systems
 - Accelerate the construction of bridges and other highway structures
 - Extend their service lives

by working with other SCOBS Technical Committees and industry groups to develop, maintain, and enhance AASHTO specifications that govern the welding and metals fabrication of bridges and other highway structures and to develop training for engineers to enhance their knowledge of these topics



Strategic Plan

1. Working with and supporting the AASHTO/AWS Joint Committee
2. Being a resource on matters of welding and metals fabrication for bridge members and other highway structures to other SCOBS technical committees
3. Collaborating with industry groups on the advancement of welding and metals fabrication of bridge members and components and of other highway structures
4. Being involved in research into the welding and metals fabrication of bridge members and components and of other highway structures
5. Collaborating with other SCOBS technical committees and industry groups to develop training on and to showcase the state of the art of welding and metals fabrication

SCOBS Approval

- Gregg Frederick consulted with other tech committees (specifically T-4, T-14, T-12) and industry (NSBA)
 - No overriding objections voiced
 - Industry groups supportive of this initiative and of the new document
- Received approval for name change and expanded mission on March 29, 2017



QUESTIONS?