Welcome to Webinar on Accelerated Bridge Construction

Prestressed/Precast Florida-Slab-Beams for Robust Local Bridges and Accelerated Construction

Sponsored by

Accelerated Bridge Construction University Transportation Center (ABC-UTC) at
Florida International University

Website: abc-utc.fiu.edu
Email: abc@fiu.edu

November 16, 2017 – 1:00 p.m. to 2:00 p.m. Eastern
Today’s Webinar

ABC Announcements (10 minutes)
Featured Presentation (35 minutes)

Prestressed/Precast Florida-Slab-Beams for Robust Local Bridges and Accelerated Construction

Steven Nolan, P.E., Senior Structures Design Engineer, State Structures Design Office, Florida Department of Transportation

Question and Answer (15 minutes)

Please post your questions in the question box
2017 Conference Update

National Accelerated Bridge Construction Conference

December 7th – 8th, 2017
Workshops December 6th
Hyatt Regency Hotel
Miami, Florida
2017 Conference Updates

Keynote Speaker: Secretary of Transportation
Elaine L. Chao (Invited)

Conference Co-Sponsors:
30 State DOTs, FHWA, TRB

119 thirty-minute technical presentations
11 four-hour workshops
50 Exhibits
Overview of the Eleven Pre-Conference Workshops

**W-01:** Implementation of the new AASHTO Guide Specifications for Accelerated Bridge Construction

**W-02:** Lightweight Concrete – A Tool for Accelerated Bridge Construction

**W-03:** Programmatic Approach to Accelerated Bridge Construction
Overview of the Eleven Pre-Conference Workshops

W-04: Ultra-High Performance Concrete Connections for Prefabricated Bridge Elements

W-05: Foundation Re-use for ABC Projects

W-06: Project and Technology Review of Proven Advanced Technologies
Overview of the Eleven Pre-Conference Workshops

**W-07**: Self-Propelled Modular Transporters for ABC – Trends, Challenges, and Future Activities

**W-08**: Today’s Precast, Prestressed Concrete Bridge Design

**W-09**: Recent Developments in Steel ABC Applications
Overview of the Eleven Pre-Conference Workshops

**W-10**: Innovative Bridge Designs for Rapid Renewal, SHRP2 R04 ABC Toolkit

**W-11**: Accelerated Bridge Construction in Seismic Regions
Overview of the 119 Technical Sessions

Presentation topics include:

• ABC Solutions
• ABC Research
• UHPC
• Earthquake-Resistant ABC
• Railway Bridges
• Superstructure Replacement
• ABC Tools
• ABC Contract/Policy
• Monitoring-Instrumentation/Research
• Steel Structures
• Substructure
• Contractor Perspective/Materials/Solutions
• Case Studies
• Lateral Slides
To reserve your exhibit booths, please
Visit [www.ABC-UTC.fiu.edu](http://www.ABC-UTC.fiu.edu)
Deadline For Online Registration is Friday, November 17, 2017

To Register online and more information please visit www.ABC-UTC.fiu.edu
Call for Papers

ASCE Journal of Bridge Engineering – Special Online Collection of Accelerated Bridge Construction
Sponsored by American Society of Civil Engineers (ASCE)
https://www.asce.org/

Note: All papers submitted through this solicitation will undergo the standard journal peer review process. Accepted papers will be published in regular issues of the ASCE Journal as they are accepted and will be added to the special online collection.

Paper Submission Deadline: February 28, 2018
Guest Editor: Dr. Atorod Azizinamini

For questions, contact Chief Editor:
Dr. Anil K. Agrawal, jbe.agrawal@gmail.com

Submit papers online:
https://www.editorialmanager.com/jrnbeeng/
National ABC Conference
Pre-Conference Workshops
December 6, 2017
National ABC Conference – Program

Workshop Programs – December 6, 2017

Morning: 8:00 a.m. – 12:00 p.m.
- W-01: Implementation of new AASHTO Guide Spec for ABC
- W-02: Lightweight Concrete – A Tool for ABC
- W-03: Programmatic Approach to Accelerated Bridge Construction
- W-04: UHPC Connections for Prefabricated Bridge Elements
- W-05: Foundation Re-use for Accelerated Bridge Construction Projects

Afternoon: 1:00 p.m. – 5:00 p.m.
- W-06: Project & Technology Review of Proven Advanced Technologies
- W-07: SPMTs for ABC – Trends, Challenges & Future Activities
- W-08: Today’s Precast, Prestressed Concrete Bridge Design
- W-09: Recent Developments in Steel ABC Applications
- W-10: Innovative Designs for Rapid Renewal, SHRP2 R04 ABC Toolkit
- W-11: Accelerated Bridge Construction in Seismic Regions
2017 National ABC Conference – Pre-Conference Workshops

W-06: Project and Technology Review of Proven Advanced Technologies
Wednesday, December 6, 2017 – 1:00 p.m. to 5:00 p.m.

Introduction:
This workshop provides up-to-date information on successful implementation of several Proven Advanced Technologies listed as resources on the ABC-UTC website. These technologies have been recommended by various State DOTs across the country. Technology representatives will present recent projects supported by the states. The ABC aspects of the projects, the time savings offered by the technologies, and the overall time and cost savings for future applications will be described. Lessons learned and new ideas to further advance the ease of application and understanding of these innovative ABC technologies will be included. Available funding programs will be discussed.

Workshop Organizer:
Kay Jimison, Intelligent Engineering – SPS North America

Program:

1:00 p.m. Welcome and Introduction to Workshop
           Moderator – Kay Jimison
1:10 p.m.  Proven Advanced Technologies Initiative
           Mary Lou Ralls, P.E.
1:20 p.m.  Available Funding Programs
           Romeo Garcia
1:30 p.m.  Solving Issues (from an Owner’s Perspective)
           John Holt, P.E.
1:45 p.m.  Sandwich Plate System (SPS) Decks
           Rolando Moreau / Doug Davis, P.E.
2:15 p.m.  Press-Brake-Formed Tub Girders
           Greg Michaelson, Ph.D.
2:45 p.m.  Break
3:00 p.m.  Lightweight Concrete: With Nearly 100 Years’ Experience – A Proven Tool for ABC
           Reid Castrodaile, Ph.D., P.E.
3:30 p.m.  Precast Segmental Bridges
           Garrett Hoffman, P.E.
4:00 p.m.  NEXT Beam
           Rita Seraderian, P.E.
4:30 p.m.  Folded Steel Plate Girder System
           Bob Elliott, P.E.
5:00 p.m.  Adjourn
National ABC Conference
Pre-Conference Workshops

Workshop Programs – December 6, 2017

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https://abc-utc.fiu.edu/
Call for Award Nominations

2018 NSBA Prize Bridge Awards
Bridges built in the U.S. of fabricated structural steel and completed / opened to traffic between May 1, 2015 and September 30, 2017
Sponsored by National Steel Bridge Alliance (NSBA)
https://www.aisc.org/nsba

In addition to Award Categories, NSBA offers special commendation to projects that best exemplify ABC

Submission Deadline: December 8, 2017
https://www.steelbridges.org/2018prizebridge

For more information, contact:
Matt Shergalis, Shergalis@steelbridges.org
Calls for Workshop & Award Nominations

35th Annual International Bridge Conference
– National Harbor, MD
June 11-14, 2018
Sponsored by Engineers’ Society of Western PA (ESWP)
http://www.eswp.com/bridge/

Suggested topics include Accelerated Bridge Construction

Call for Workshops: Due December 8, 2017
https://eswp.com/bridge/ibc-call-for-workshops/

Call for Awards: Due January 12, 2018
https://eswp.com/bridge/awards/nomination-form/
Upcoming Events

2017 CAMX – The Composites and Advanced Materials Expo – Orlando, FL
RE-SCHEDULED: December 12-14, 2017
http://www.thecamx.org

Sponsored by American Composites Manufacturers Association (ACMA) & Society for the Advancement of Material and Process Engineering (SAMPE)

For more information, contact John Busel: jbusel@acmanet.org
Resources – Industry Composites
https://abc-utc.fiu.edu/resources/industry/
Composite Bridges

- **American Composites Manufacturers Association (ACMA)**
- **Composites Product Suppliers**
- The ACMA FRP Rebar Manufacturers Council, is undertaking a project to update the AASHTO *LRFD Bridge Design Guide Specifications for GFRP Reinforced Concrete Decks and Traffic Railings*. This revision would be the second edition. The task force, led by Dr. Nanni, University of Miami, is coordinating the changes with experts from bridge industry including DOT engineers and consultants to update the guide to include all concrete elements in bridge construction and not limit the application to decks and barriers. In addition, the guide is being updated to be consistent with the updated ACI 440.2R-17. This initiative is expected to be completed by the end of the year and handed off to the AASHTO T-6 bridge committee for consideration, review, and adoption by the State DOT Bridge engineers at their next meeting.

- ACMA and the composites industry have been invited to participate in a new Manual of Practice publication for ASCE on the topic of Resiliency. ACMA's role in this publication is to characterize the use of FRP composites in the built environment that provides civil engineers with guidance on alternative materials and approaches that support design for resiliency of structures.


- ACMA is conducting a special event for the composites industry – an Infrastructure Day Fly-in to meet with Members of Congress and Federal Agencies on February 6-7, 2018.
Upcoming ABC-Related Activities at TRB Annual Meeting

January 7-11, 2018 – Washington, DC
http://www.trb.org/AnnualMeeting/AnnualMeeting.aspx

Lectern Session 211: Innovations in Connections and Retrofitting Strategies for ABC
Monday, 8:00 – 9:45 am, January 8, 2018
Sponsored by TRB Structures Section and Construction Section; co-sponsored by ABC Joint Subcommittee, AFF10, AFF30, AFF50, AFH50

Lectern Session 750: Longitudinal Deck-Level Connections for ABC
Wednesday, 8:00 – 9:45 am, January 10, 2018
Sponsored by TRB Structures Section and Construction Section; co-sponsored by ABC Joint Subcommittee, AFF10, AFF30, AFF50, AFH40
Upcoming ABC-Related Activities at TRB Annual Meeting

January 7-11, 2018 – Washington, DC
http://www.trb.org/AnnualMeeting/AnnualMeeting.aspx

Meeting: Accelerated Bridge Construction Joint Subcommittee, AFF00(2)
Tuesday, January 9, 3:45 – 5:30 pm
Sponsored by Structures Section (AFF00) and Construction Section (AFH00)

Meeting: Structures Collaboration Subcommittee, AFF00(1)
Tuesday, January 9, 1:30 – 3:15 pm
Sponsored by Structures Section (AFF00)
Call for Abstracts

IRF Global Road Conference – Las Vegas, NV
November 7-9, 2018

Sponsored by International Road Federation (IRF)
https://www.irf.global/

Conference tracks include:
4. Structural Design
   4.3 New Technologies in Accelerated Bridge Construction

Abstract Submission Deadline: March 15, 2018
https://www.irf.global/event/grc18-lasvegas/
Next Webinar
Thursday, December 14, 2017 (1:00 – 2:00 p.m. Eastern)

Featured Presentation

Accelerated Bridge Strengthening using Ultra-High-Performance Fiber-Reinforced Concrete

by

Eugen Brühwiler, Ph.D., Professor, Dr Structural Engineer, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland

To register, visit: www.abc-utc.fiu.edu
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