



SEAoAL Spring Seminar Alternate Means and Methods & Dynamic Analysis of Structures

7 PDHs (AL/FL approved)

THURSDAY, APRIL 26TH, 2018

Pelham Civic Center

500 Amphitheater Rd, Pelham, AL 35124

(205) 620-6448

SEAoAL member price: \$195 early registration/ \$230 late registration (Includes BINDER)

Non-member price: \$235 early registration/ \$285 late registration (Includes BINDER)

Non-licensed member engineers \$100/\$130 non member (includes BINDER)

8:00 a.m.—8:30 a.m.	Registration
Morning Session	Alternate Means and Methods: Practical Applications to Engineering Design
12:00 p.m.—1:00 p.m.	Lunch
Afternoon Session	Dynamic Analysis of Structures (ends at 4:30)

REGISTRATION DETAILS ON BACK

Tim Mays Books!

“Alternate Means and Methods”

“Dynamic Analysis of Structure”

\$64.00 each—Regular price \$89.00

Purchase both books for only \$128!

SEMINAR OVERVIEW: TOTAL OF 7 PDHS

Timothy Wayne Mays, Ph.D., P.E. is President of SE/ES and a Professor of Civil Engineering at The Citadel in Charleston, SC. Dr. Mays previously served as Executive Director of the Structural Engineers Associations of South Carolina and North Carolina. He currently serves as NCSEA Publications Committee Chairman. He has received three national teaching awards (ASCE, NSPE, and NCSEA) and both national (NSF) and regional (ASEE) awards for outstanding research. He is the recipient of the 2009 NCSEA Service Award. He is a prolific speaker who participates in code development and his areas of expertise are code applications, structural design, seismic design, steel connections, structural dynamics, and civil engineering aspects of antiterrorism.

COURSE DESCRIPTION: ALTERNATE MEANS & METHODS

Unfortunately, some of the most important yet commonly disregarded sections of the building and residential codes in the United States are those dealing with alternate means and methods (AM&M) in regards to materials and design approaches. These provisions are intended to allow the use of new materials, advanced technology, and design approaches that result in code compliant designs that may not meet the prescriptive requirements in the codes. AM&M designs often offer significant construction cost savings to the client while resulting in a final design that better meets the intent of the code's prescriptive design philosophy. Authored by Timothy W. Mays, Ph.D., P.E., *Alternate Means and Methods: Practical Applications to Engineering Design* is a comprehensive and example filled design guide on everything from simplified to extremely detailed applications of alternate means and methods to the design of structural systems. The new, standalone publication contains page after page of comprehensive technical content and easy to read theoretical applications followed by practical, fully worked out, design examples.

This course is a one of a kind introduction to the alternate means and methods process as stipulated in the 2015/2018 International Building Code (IBC) and the 2015/2018 International Residential Code (IRC). The course begins with a detailed overview of the alternate means and methods provisions, the rationale for their use, and current practice as utilized in the United States. Problems inherent with the prescriptive nature of the IBC and the IRC are discussed (with examples) and the need for a performance based approach is argued. Example applications included in this course include: designing lateral force resisting systems not listed in the code, justifying that prescriptive code provisions can be neglected in certain applications, using design approaches not presented in the code and its referenced standards, using new materials not listed in the code, and performance based design for fire. Each design example includes an overview of applicable code provisions, a discussion of appropriate analysis and design requirements, determination of key system demands, and design of select example elements contained in the building's load path.

DYNAMIC ANALYSIS OF STRUCTURE

Authored by Timothy W. Mays, Ph.D., P.E., *Practical Applications of Structural Dynamics* is a comprehensive and example filled design guide on everything from simplified to extremely detailed applications of structural dynamics to the design of structural systems including but not limited to buildings, bridges, marine structures, foundation systems, antiterrorism systems, and even retrofitting structures to reduce vibrations. The new, standalone publication contains page after page of comprehensive technical content and easy to read theoretical applications followed by practical design examples. All relevant code provisions (e.g., 2015 IBC, 2014 AASHTO, 2017 MOTEMS) for applying the approaches used in the guide are fully presented in the guide. Simplified design aids are also included in the publication. Part I of the course provides a detailed overview of structural dynamics as needed to fully understand the material presented in the book and to make the remaining portions of the course very easy for the attendee to follow. Part II of the course presents simplified, yet code compliant, applications of structural dynamics to the design of marine structures and other structures where impact is the prime concern. Part III moves into the world of linear and nonlinear analysis and the design of structural systems for blast loads. A comparison of example problem results for nonlinear static versus traditional dynamic methods used by engineers is also presented in this section. Part IV covers all remaining topics to include, but not limited to, floor vibrations, structural system vibrations, and soil structure interaction with an emphasis on preventing damage from pile driving.

REGISTRATION FORM

Please print legibly. Companies with multiple attendees, please fill out a form for each person.

Name

Company

Address

City

Zip

Email

Phone

Cell

Registration received by Friday, April 20th, 2018

- SEA Member \$ 195 X _____ = \$ _____
- Non Member \$ 235 X _____ = \$ _____
- Non-Licensed Member \$100 X _____ = \$ _____
- Non-Licensed Non-Member \$130X _____ = \$ _____



Late Registration: received after Friday, April 20th, 2018

- SEA Member \$ 235 X _____ = \$ _____
- Non Member \$ 285 X _____ = \$ _____

Registration includes **YUMMY** breakfast, snacks and lunch.
(all day beverage station)

*TO PAY BY CREDIT CARD www.seaoal.com

To join SEAoAL

SEAoAL Membership Registration

- Professional \$ 95 X _____ = \$ _____
- Associate \$ 40 X _____ = \$ _____
- Student \$ 25 X _____ = \$ _____
- Affiliate \$150 X _____ = \$ _____
- Alternate Means & Methods \$64 = \$ _____**
- Dynamic Analysis of Structures \$64 = \$ _____**

Tim Mays BOOKS!

“Alternate Means & Methods”
“Dynamic Analysis of Structures”

Discounted Price for SEA Engineers
Only \$64.00—Regular Price \$89.00!

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If paying by check, make checks payable to:

SEAoAL

Mail check and registration form to:

Structural Engineers Association of Alabama
P.O. Box 660584
Birmingham, AL 35266-0584

Email registrations to:

rhea@karmamanagementinc.com

Rhea Williams
Executive Director, SEAoAL
(205) 601-2345

SEMINAR LOCATION

PELHAM CIVIC CENTER
500 AMPHITHEATER RD,
PELHAM, AL 35124
(205) 620-6448

HOTELS NEAR PELHAM CIVIC CENTER

Hampton Inn & Suites
232 Cahaba Valley Rd
Pelham, AL 35124

Visit their website here:
<http://bit.ly/2uDTWFH>

SEAoAL membership is open to all structural engineers and companies affiliated with the structural engineering profession. For more information about SEAoAL membership: professional, associate, student, retired or affiliate, please contact Rhea Williams, Executive Director, 205-601-2345 or email: rhea@karmamanagementinc.com