

Design of Blast Resistant Structures

Course Summary

This course acquaints practicing engineers with procedures used in the analysis and design of structures subjected to loads from accidental, industrial, and terrorist explosions. The course content relies heavily on UFC 3-340-02, *Structures to Resist the Effects of Accidental Explosions* (2008) and the recently revised ASCE publication, *Design of Blast Resistant Buildings in Petrochemical Facilities* (2010), as well as on BakerRisk's own extensive experience in this field.

The course lectures are interlaced with numerous examples and student problems for direct application of the design principles discussed.

Course Objectives

- Familiarize participants with the issues, standards, and procedures used to design structures that resist blast loads.
- Provide participants with in-depth knowledge of the principles of dynamic analysis.
- Develop basic competence in the use of available engineering methods for calculating blast loads and dynamic structural response.
- Provide an overview of the design approach used for typical construction materials (steel, concrete, masonry), systems (shear walls and frames), non-structural components (doors and windows).

Participants receive:

- Blast loading software
- Dynamic analysis software
- Reference documents
- Hands-on instruction in use of software and references
- Binder with course notes

"The Baker course is the most valuable course I have taken; the tools and references that were provided will be very helpful in practice."

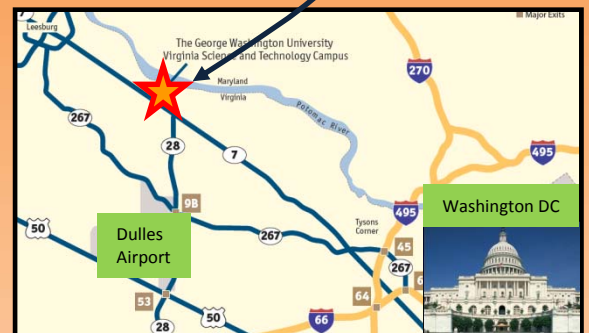
– C. L., Baton Rouge, LA

Dates: March 12-16, 2012

Time: 8:30 am – 4:30 pm

Location:

The George Washington University
National Crash Analysis Center
20101 Academic Way
Ashburn, VA 20147



Conducted By:



Instructors: Khaled El-Domiaty, P.E.
(course manager)
David Bogosian, P.E.

In Association With:



THE GEORGE
WASHINGTON
UNIVERSITY
WASHINGTON DC



Khaled El-Domiaty, P.E.



Mr. El-Domiaty is the Senior Structural Lead Supervisor for BakerRisk's Washington, D.C. office. He holds over ten years of experience in performing dynamic analysis of new or existing buildings and innovative upgrade designs for blast loads and/or fragment hazards. His project portfolio includes petrochemical facilities, governmental buildings, military installations, airports and commercial facilities. He also has experience in research, design and application of advanced fiber polymer systems, high-performance concrete, polyurea, and other innovative materials for structural upgrades.

David Bogosian, P.E.



Mr. Bogosian is the manager of the BakerRisk office in Los Angeles, California. His more than 25 years of professional experience have focused primarily in the areas of blast effects on structures, including loads from accidental explosions, conventional weapons, and terrorist bombs. He has been active in developing and validating fast-running engineering models for blast loads and structural response for both industrial and government clients. His technical publications include 25 conference and symposium papers and contributions to several U.S. government published manuals.

About BakerRisk

Baker Engineering and Risk Consultants, Inc. (BakerRisk) is an internationally recognized engineering firm specializing in blast effects and the response of structures to dynamic loads. Since its formation in 1984, BakerRisk has been dedicated to advancing these technologies and enhancing its capabilities through research and development.

Need More Information? E-mail

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or call Esther Garza at
(210) 824-5960

To register, return this completed form with your check or payment information to:

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Fax: (210) 824-5964

Course Fee: \$2,280 (USD)



Registrant Information

Name & Title

Company Name

Mailing Address

City, State, Zip, Country

Phone

Email

Payment Information

Check (payable to: **Baker Engineering and Risk Consultants, Inc.**)

Visa/MasterCard (Only) Account #: _____

Name as it appears on card: _____ Exp. Date: _____

Registrants will receive an email upon receipt of payment. **Please do not make travel arrangements before receiving written confirmation.**

Call or email for substitution and cancellation policies