



Illinois Society of Professional Engineers - University of Illinois  
College of Engineering  
Professional Engineer On-Line Seminars



**INSTRUCTIONS:**

1. View the on-line seminar.
2. Complete the quiz below.
3. Complete the "Engineer Information" section.
4. Make a copy for your records.
5. Mail the quiz along with your \$20 payment (credit card information or check payable ISPE) to:  
ISPE, 100 East Washington Street, Springfield, IL 62701.

If you score an 80% or better on the quiz, you will receive your certificate within 4 weeks. If you fail to earn an 80% score, the quiz will be returned to you and you will have the opportunity to retake it.

Each seminar/quiz is worth 1 Professional Development Hour.

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**QUIZ:** 04-04  
**TOPIC:** Components of Successful Failure Investigations  
**PRESENTER:** Gary Klein

1. According to Gary Klein, why would one investigate a structural failure?
  - a) To learn
  - b) To assign responsibility
  - c) To design repairs / retrofits
  - d) All of the above
2. What year did the walkways collapse in the Kansas City Hyatt?
  - a) 1982
  - b) 1984
  - c) 1981
  - d) 1983
3. According to Gary Klein, the laboratory tests of a connection similar to "9UE" provided failure loads lower than the actual failure load of the real "9UE" connection.  
(circle) TRUE FALSE
4. A design change in a connection detail was the main cause of the Kansas City Hyatt walkway collapse.  
(circle) TRUE FALSE
5. When carrying out a failure investigation one should rely heavily on codes of practice as a means of obtaining accurate results based on numerical analyses.  
(circle) TRUE FALSE
6. It is critical to arrive at the site of a failure quickly because \_\_\_\_\_.
  - a) Evidence may be disturbed or disappear
  - b) Clients appreciate quick response
  - c) There is a good chance you will make the national news
  - d) It give you an excuse to get out of the house

**QUIZ 04-04 CONTINUED**

- 7. Potential clients interested in failure investigations include which of the following?
  - a) Attorneys
  - b) Insurance companies
  - c) Government agencies
  - d) Injured parties
  - e) All of the above
  
- 8. In a failure investigation it is safe to assume that the material properties of a critical component met the standards that the manufacturer specified.  
(circle)            TRUE            FALSE
  
- 9. According to Gary Klein, eyewitness descriptions of a failure are always the best sources of critical information.  
(circle)            TRUE            FALSE
  
- 10. Who said, "Ask the structure?"
  - a) Bill Clinton
  - b) Jack Janney
  - c) Henry Petroski
  - d) Keith Hjelmstad

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**ENGINEER INFORMATION**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_ Daytime Phone \_\_\_\_\_  
Fax \_\_\_\_\_ E-Mail \_\_\_\_\_

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Fax with credit card information to 217-528-6545.  
Allow 4 weeks for certificate delivery. Certificate will be mailed to the address provided above.  
Contact ISPE at 217-544-7424 with any questions.*