

Tuesday,  
February 3, 2009

## “THE RED BEAD EXPERIMENT”

### LOCATION:

**Shilo Inn**  
50 Comstock  
Richland, Washington

**5:30 p.m.** - Check in/Networking  
and no-host cocktail service

**6:00 p.m.** - Dinner

**7:00 p.m.** - Presentation



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During the Red Bead Experiment, Fluor Hanford's Steve Prevette ensures procedure compliance while a willing worker attempts to produce 50 white beads and others await their turns.

## Steve Prevette, CQE Statistician

### DINNER BUFFET:

The Chef and crew at O'Callahan's Restaurant always provide a great – and varied – buffet dinner for us at the Shilo Inn.

This usually includes two entrée choices, plus accompanying vegetable, a number of tasty salads, and a vegetable and/or fruit tray. Your choice of coffee, tea or decaf is included with dinner.

And don't forget to save some room for dessert!

### Cost:

\$ 17 ASQ members

\$ 20 non-members

\$ 5 presentation only

Reservations are requested by January 29. Send an e-mail to [panda\\_2@charter.net](mailto:panda_2@charter.net) with your name, phone number, company affiliation, and type of reservation, or call Alvin at 371-2221.

NOTE: All no shows will be billed unless canceled 48 hours in advance. For more information about ASQ, our local section, and other upcoming events, please check our web site at [www.asq614.org/](http://www.asq614.org/).

The “Red Bead Experiment” is an interactive teaching tool that Dr. W. Edwards Deming made use of in his four-day seminars. In the experiment, a corporation is formed from “willing workers,” quality control personnel, a data recorder, and a foreman. The corporation's product is white beads, which are produced by dipping a paddle into a supply of beads. The paddle has 50 holes in it, and each hole will hold one bead. Unfortunately, there are not only white beads in the bead supply, but also some defective red beads. The production of the beads is strictly controlled by an approved procedure.

Various techniques are used to ensure a quality (no red bead) product. There are quality control inspectors, feedback to the workers, merit pay for superior performance, performance appraisals, procedure compliance, posters and quality programs. The foreman, quality control, and the workers all put forth their best efforts to produce a quality product. The experiment allows the demonstration of the effectiveness (or ineffectiveness) of the various methods. Some humor is also included along the way. Describing the Red Bead Experiment has all the dangers of writing a good movie review.

If you have not experienced the Red Bead Experiment, we won't say too much here, because it is something you really need to see for yourself. At the end of the experiment, a Statistical Process Control chart is utilized to examine the results of the experiment. We will discover which actions taken (many of which are commonly seen every day in the workplace) were helpful -- or detrimental -- to the employees and the workplace, or had no improving effect on the process. The concluding comments point out the hazards of misuse of performance data, and how to properly use performance data in a quality environment in order to achieve continual improvement.

### About the Speaker:

*Steve Prevette is a statistician for Fluor Government Group. He has been an instructor for evening courses at the City University Richland site. Steve is an advocate of the use of Dr. Deming's management theories, Systems Thinking, and Statistical Process Control. He has been active in Section 614 since 1999, and served five years as Section Chair. Steve has authored several articles in Quality Progress. Prior to coming to Hanford, he was an officer in the US Navy submarine force.*