Welcome and Overview

Barry Boehm, USC-CSE
Steve Cross, CMU-SEI
Spiral Experience Workshop
February 9, 2000

Acknowledgements: USC-CSE Affiliates (30)

- Commercial Industry (11)
  - C-Bridge, EDS, Fidelity, Hughes, Lucent, Microsoft, Motorola, Rational, Sun, Telcordia, Xerox

- Aerospace Industry (10)
  - Boeing, Draper Labs, GDE Systems, Litton, Lockheed Martin, Northrop Grumman, Raytheon/East, Raytheon/West, SAIC, TRW

- Government (4)

- FFRDC's and Consortia (4)
  - Aerospace, IDA, SEI, SPC

- International (1)
  - Chung – Ang U. (Korea)
Workshop goals

- to provide a forum for practitioners and technologists to share ideas
- to create a common understanding of current state of practice ("as is")
- to create a vision of best practice ("to be")
- to identify barriers/inhibitors
- to identify next steps toward realizing best practice

'Spiral Development' vital to creating future army

by Jim Caldwell

FORT MONROE, Va. (Army News Service, Oct. 28, 1997) - The army warfighting experiment process has created a development method that could result in cutting the time for fielding equipment from seven to 10 years down to two or three.

That process is called spiral development, and it's a partnership between Army development and acquisition agencies, contractors and soldiers.

"When you say spiral development, you're talking more than just hardware and software," said Col. Joe Leigh, commander of the digital force coordination cell at Fort Hood, Texas.

"You're talking about the development of hardware, software, training, leader development, TTP (tactics, techniques and procedures) development and, to some degree, doctrinal development. That spiral development is very powerful."

When a concept or design is generated by one part of the partnership, it is studied and used by the other members. Through feedback from the entire partnership, the concept or equipment is improved.

The alternative to spiral development is to continue equipment development in its current linear, step-by-step method, according to Gen. William M. Hartzog, command of Training and Doctrine Command.
Prototyping Life Cycle Concept "Stacked Spirals"  
— Steve Cross, 1991

Intended Outcome

- "Proceedings" incorporating the case reports and summarizing the assessment and challenges discussions
- Prioritized Topics for further technical and/or future meetings (eventual Roadmap for improving the practice)
- Actionable Ideas for communicating workshop findings and recommendation to the community of users of the Spiral Model
Workshop Approach

Wed, Feb 9
Plenary talks and discussion: Executive Perspectives, Commercial, Govt/Aerospace, Solution Provider Experiences

Thurs, Feb 10
Plenary talks: Spiral Experiences
Breakout Groups:
1. Critical Success Factors
2. Integrating Software and Systems
3. Changing Role of Requirements
4. Institutional Challenges
5. Process Issues

Fri, Feb 11
Breakout Group Summaries and Discussion