Integrated Teams and Sound Processes Bring Success

This month, CROSSTALK is pleased to publish articles from the five winning programs of the Top 5 Department of Defense Program Awards 2004 contest. As one of the judges on this year's selection committee, I was delighted to see that many of the nominees were fine examples of projects that are succeeding at developing, sustaining, or integrating software into government systems today. Too often we hear of projects that are failing. It's refreshing to see projects that are triumphant given continual advances in software technology along with the challenging goals of producing quality software faster, better, and cheaper.

A common theme among the Top 5 winners is having an integrated team that continually involves its stakeholders. Success can be realized when customers, acquirers, developers, testers, configuration managers, end users, etc. all work together throughout the system life cycle, especially during requirements analysis.

Following sound processes is another key factor to this year's Top 5 winners' success. Whether it means employing a spiral development approach, or agile programming practices, or Capability Maturity Model Integration practices, a common thread is to implement and follow well-defined processes to ensure quality and customer satisfaction. Congratulations to all those involved in these programs.

Continuing on this theme of developing software with proven practices, a caution to involve management in process implementation is discussed in *The Myth of the Best Practices Silver Bullet* by Michael W. Evans, Corinne Segura, and Frank Doherty. These authors discuss why it is critical that management select the organization's best practices and understand the costs and impacts involved; otherwise, practices may not be followed and can instead be harmful to a project.

Next, Joe H. Lindley brings us *Measure Like a Fighter Pilot*. Learn how measurement analysts can benefit from a focused strategy such as the Observe, Orient, Decide, and Act Loop. In *Applying Functional TSP to a Maintenance Project*, Ellen George and Dr. Steve Janiszewski share their success in employing both the Personal Software Process and Team Software Process in maintenance project environments. Finally, David P. Quinn discusses why organizations need to be careful when using project measures as a means of rewarding employee good performance in *Tying Project Measures to Performance Incentives*.

As software acquisition, development, and sustainment in the Department of Defense continues to challenge us, I hope this month's set of articles provides helpful information as your team strives to succeed and meet customer needs.

Top 5 Department of Defense Program Awards 2004

The Office of the Under Secretary of Defense and the National Defense Industrial Association present the Top 5 Department of Defense Program Awards 2004. These programs were chosen for their excellence and success at using well-defined and proven processes to develop, manage, and integrate software into deliverable systems. The programs are listed alphabetically and do not indicate a place order.

- **Lightweight Handheld Mortar Ballistic Computer**
  Service: U.S. Army
  Industry Contractor: None
- **Marine Corps Total Force System**
  Agency: Technology Services Organization, Defense Finance and Accounting Service
  Industry Contractor: Computer Sciences Corporation
- **Near Imaging Field Tower Implementation**
  Agency: Naval Research Laboratory Midway Research Center
  Industry Contractor: Joint effort between Mnemonics, Inc., Assurance Technology Corp., Harris Corp., Blaseware, Analex, and SAIC
- **SmartCam3D System**
  Agency: NASA
  Industry Contractor: Rapid Imaging Software
- **Warfighter's Simulation**
  Service: Program Executive Office-Simulation, Training, and Instrumentation, U.S. Army
  Industry Contractor: Lockheed Martin Simulation Training and Support

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