



## Dr. Mom's Approach to Improved Capabilities



“*Over budget, behind schedule.*” These are words that send chills through a customer’s spine and words that no one acquiring systems wants to hear; however, they are words that are deeply ingrained and heard all too frequently in the culture of systems development.

If you’re like me, you have been in countless meetings where project managers have reported their programs to be either over-expensing or past the target date. Such announcements also seem to be followed by a get-well plan. With nearly 40 percent of all embedded software development projects reported to be behind schedule, it appears there are an enormous number of these infamous get-well plans.

This year’s Systems and Software Technology Conference (SSTC 2005) runs from April 18-21. The focus of SSTC 2005 is on showcasing new tools to help improve the capabilities we provide our customers. Throughout the conference, attendees concentrate on acquiring new systems as well as building and delivering better systems, and highlighting future concepts such as automated code restructuring. They also explore how modern networking is being used on the battlefield. The ideas presented at SSTC 2005 center on the theme of building and delivering needed capabilities to customers, ultimately the warfighters.

I’d like to compare SSTC this year to a steaming bowl of mom’s homemade chicken soup: designed to soothe the ills of any sick program. As you read through this month’s articles, which are compiled from a few of the excellent papers presented at SSTC, you will note that in particular Dr. (not the medical kind) Richard Turner’s article about the Department of Defense’s (DoD) Acquisition Best Practices Clearinghouse uses a medical analogy to illustrate some acquisition best practices. With so many sick programs out there, let’s continue this medical metaphor to describe what else is in this month’s CROSSTALK.

You will find great prescriptions for implementing DoD regulation, policies, and mandates such as Technology Readiness Assessments mandated by the DoD 5000 regulations series, and an article by David R. Basel, Dana Foat, and Cragin Shelton describing requirements regarding the Ports, Protocols, and Services Management Process. For many of us, implementing these types of requirements is like having mom suddenly appear above you with a teaspoon, filled to capacity with the most vile, dreaded fluid imaginable – cough medicine, which she demands we take, all because of being unable to stifle that single pillow-muffled cough that her super-human hearing detected through a closed door. Just thinking about that nasty stuff makes my taste buds cringe – YUCK!

Also in this month’s lineup are articles by Robert A. Martin, Dr. David A. Cook, Dr. James M. Skinner, and Paul E. McMahon that address some formidable issues, which when implementing these great ideas, at times feels like swallowing large, bitter pills. Drs. (also, not the medical kind) Cook and Skinner delve into good uses of modeling and simulation in creating software. They explore how models have grown in complexity and give some techniques of verification and validation that will help improve modeling life-cycle costs. McMahon helps diagnose what agile software development is and how to extend agile development methods to large dispersed environments. He also dispels some old wives’ tales and myths regarding agile. Martin’s article helps triage issues of managing transformational vulnerabilities with standards.

Lastly, Robert Gold and David Jakubek discuss the preventative health measures of Technology Readiness Assessments (TRA) when conducted on major defense acquisitions. Prior to system development, a TRA documents that there is a reasonable expectation that the acquisition is technically feasible.

Now, I hope my descriptions haven’t scared you away from reading these great articles. I promise reading them won’t be like going to the doctor (yes, the medical kind). Every article has some great ideas for improving the overall health of programs and projects. I do hope you will enjoy this dose of CROSSTALK. It may not be sugar-coated, but just like Mom would say about a little chicken soup, “It’s good for you!”

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