



## From Our Readers

### **FIST.Packs a Punch**

*The graphic article "FIST" in the March-April issue brought in a record number of e-mails to the editor (and they're still arriving). So far, we've received one e-mail that lauded the idea of trying new things but felt the cartoon was "forced," and one phone call asking, "What's the point?" but otherwise all comments have been positive. Below we print a selection. Thanks to everyone who wrote in.*

I just wanted to write and say "BRAVO!" That is good stuff there ... please keep 'em coming!

Jay Breuer, *Test & Evaluation Engineer*  
*Aegis Ballistic Missile Defense*

Congrats on intelligently, resourcefully, and, yes, humorously delivering the message on the stifling effects of bureaucracy—and the real merits of slicing through red tape. ... As I've said previously ["From Our Readers, *DAT&L*, January-February 2006], this is the consciousness-raising phase of the revolution.

Dick Field  
*TMA/OSD*

Can't say enough great things about the latest journal. The "Cartoon Classic" says more in its short 16 panels than many print articles say in as many pages. Thanks for supporting out-of-the-box contributors.

Maj. Phil Garrant, *USAF, Chief*  
*Advanced Airborne Sensors Branch*

On target and long overdue. We have been trying to do the same in the space business with SmallSats, single mission vehicles with limited lifetimes and objectives and very limited costs in comparison.

John D. Griffiths, *Col., USAF (Ret.)*

Exactly the type of short-and-to-the-point piece I need to get my engineering staff to understand how big-picture considerations translate into things they have an effect on during their daily work. I may not be able to motivate them to read long articles, but this "entertainment as education" goes a long way toward bringing them onto the same page with senior management.

The occasional (or regular!) addition of "attractive" material like this helps broaden the audience, and might even entice some of my younger project and mid-level program managers (who might not otherwise be in-

clined to read them) to take a second look at the surrounding articles.

Ray Harwood, *Director of Engineering*  
*Tucson Embedded Systems*

I posted some copies of the FIST cartoon, and the process Nazis are enraged—they're rioting in the VTC room! Someone just threw a burning copy of Hammer's *Beyond Reengineering: How the Process-Centered Organization Is Changing Our Work and Our Lives* through my window. I'm falling back to the vault, pulling the pins on the claymores, and burning all the crypto! Lt. Col. Harry J. Hewson, *USMC, Program Manager*  
*NAVAIRSYSCOM*

Another great article (cartoon-style this time ... FIST) in the latest issue of *Defense AT&L*. ... very refreshing for what could be a dry topic. Thanks to [the authors] for the innovation.

Jim Keen, *Capt., USN (Ret), Ops Officer*  
*NAVAIR*

It made me chuckle, and laughter is the catalyst of creativity. Keep up the good work.

Gary Markovits, *President*  
*Innovation Business Partners*

On target, and actually subtle—compared to how bad it really is in the AQ world these days.

Glenn M. Scott, *Principal*  
*Technology, Strategies & Alliances*

I like the idea of innovative and different things, but this one didn't really do much for me. It got the idea across and the artwork was great; I just felt that it was forced. ... I am just too much of a comic book purist, I guess. It was certainly worth a try and I salute you for the effort.

Wayne Turk, *Consultant*

### **Learning from George**

I enjoyed Andrew Crowley's article "Washingtonian Leadership in Project Management" in the January-February 2006 issue. George Washington was indeed a great leader, and thanks for pointing out three of his leadership qualities that project managers today should seek to emulate.



Perhaps another one of George's excellent leadership traits was "stick-to-it-iveness." The Revolutionary War, if I am not mistaken, dragged on for eight years (1775-1883), which, interestingly, is about the average development cycle time for a DoD project (see Figure 1 on page 16 of the same issue). George stuck it out as leader the whole eight years. I wonder how many project managers today stay for the entire project? Maybe if more did, our projects would have a better chance of success.

Thanks again for a great article.

Al Kaniss

*Naval Air Systems Command*

### Meaningful Metrics for Total Life Cycle Costs

In recent issues of *Defense AT&L*, much has been written about the importance of metrics. I would like to comment on the importance of tracking metrics associated with two aspects of total life cycle costs of an acquisition system: (1) MCTR (Mean Cost to Repair)—total cost to implement all corrective and routine maintenance actions over a specified number of missions/total number of corrective and routine maintenance actions during specified number of missions; and (2) MCTO (Mean Cost to Operate)—total cost to operate system during a specified number of missions/total number of missions

Currently, 70 to 80 percent of the total life cycle costs of an acquisition system are the operations and support costs of the system. Given the importance of having cost-effective systems, it would appear reasonable and good business sense to start specifying operations and support-cost goal targets. MCTR and MCTO thresholds and objectives could be specified in the capability needs documentation, such as the Initial Capabilities Document, Capability Development Document, and Capability Production Document. These targets could be refined when more data become available as the documents progress from ICD to CPD.

Data to support MCTR and MCTO targets could be obtained as part of the Joint Capabilities Integration & Development System (JCIDS) process. This could be accomplished during the functional area analysis, functional needs analysis, and/or functional solutions analysis.

MCTR and MCTO could be added as source selection technical and cost criteria, requiring the contractor to

develop and propose methods to predict these values and demonstrate methods to ensure systems are designed with the MCTR and MCTO targets in mind. The proposed values for MCTR and MCTO could be tied to contract line-item numbers for initial and follow-on spares. Eventually, the realization or failure of systems to meet their MCTR and MCTO targets could be used as a past performance criteria for weapon system source selections.

MCTR and MCTO could play a vital role early in a system's science and technology development, as well as in its concept development. Advanced technology developments could have MCTR and MCTO requirements added. Analysis of alternatives and formal risk assessment models and matrices could also be adjusted to include MCTR and MCTO considerations.

MCTR and MCTO could play a vital role early in the systems integration and demonstration phase. Most important, the systems engineering plan and the systems engineering trade-off studies and decision matrices could include MCTR and MCTO considerations. MCTR and MCTO considerations could be added as factors for award fee incentives.

MCTR and MCTO incentives could be added in procurement contracts.

Important to note is that MCTO and MCTR cannot replace reliability, availability, and mean time to repair requirements. These considerations include operational readiness capabilities that are independent of cost. However, given the growing importance of life cycle cost for DoD weapon systems, MCTR and MCTO could be added as a quantitative independent cost metric for systems acquisition to specifically ensure that life cycle cost metrics are measured and evaluated early in the development and procurement of the weapon system.

It will not be easy at first, but given the push to achieve acquisition transformation, DoD should work with its partners in industry to make MCTR and MCTO effective metrics to help reduce total system cost and continue to ensure America's armed forces remain the best-supported and -equipped in the world.

Cosmo Calobrisi

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