The purpose of the APPL Masters Forum is to bring together some of the best project managers at NASA, as well as those in industry and other government agencies, for 2 1/2 days of knowledge sharing. The project managers come eager to reflect on their project experiences, to learn new things from one another—and to unlearn a few things, too.

This was the fourth Masters Forum, and the first one held outside Washington, DC. Fifty participants from across the country came to Dallas at the American Airlines Conference Center, a wonderful facility that was conveniently located by the airport and yet still seemed isolated from the rest of the world. Masters Forum IV was also the first one held during the winter. Previous Masters Forums have been during the summer. Hot, sticky Washington, D.C. in the summer may sound unpleasant, but frankly the popularity of earlier Forums is what led to this annual event becoming a semiannual one.

Monday, February 11, 2002
On the first night, the keynote presentation was by Judy Stokely, a program manager in the Air Force, who discussed the Advanced Medium Range Air to Air Missile (AMRAAM) program; however, the most compelling part of her presentation was about leadership.

For Stokely, leading is more than just motivating, it’s empowering people to be leaders themselves. The ones who rise to the challenge in an organization are whom she calls the “change agents,” and she had some advice on how to spot these people and how to nurture them. “You must find them, trust them, and reward them, because your change agents are the most precious resource you have as a project or program manager.”

There were many notable observations in her presentation. For instance, on learning to think like a project manager, Stokely talked about how she had to “unlearn” to think like a scientist.

On the subject of metrics, she advised, "Ask[ing] the people doing the work what you should be measuring. Tell people what you want to achieve and ask them what should you measure."

And more about her favorite topic, leadership: "Don’t toss out the problem and expect the workforce to manage it. Toss out the vision, what we want to achieve, and then let people go off and create it."
At the outset of the Masters Forum, Alex Laufer told the participants that one of the objectives, beyond those mentioned in my first paragraph, is to help participants become more reflective practitioners. Stokely seemed to be the quintessential reflective practitioner, inspiring us to reflect on ways that we can be better leaders on our own projects, and so it seemed fitting that she be the first speaker at this Forum. In the evaluations at the end of the Masters Forum, several people pointed to Stokely’s presentation as the high point of the whole thing. Maria Littlefield, a project manager from Kennedy Space Center, remarked, "Judy Stokely was inspirational. She was successful in spite of typical government garbage, which is hopeful and refreshing. I wish I could bottle and distribute her sense of duty for her country."
Later in the evening, participants teamed up in small groups to participate in a fun little "learning activity" organized by Craig Lawrence of the Silicon Valley-based design firm IDEO. For those whose day had begun with a flight in another part of the country, it seemed to be just what they needed to inspire a second wind. Groups of small teams were given a deck of cards, a large marble, and a roll of tape in a container, and were instructed to try and launch the marble from as far away as possible so that it landed inside the container. There were several ingenious designs, but then what do you expect at a NASA conference? Joseph Rothenberg, a retired Associate Administrator at NASA and a guest speaker the next night, arrived about the time the teams were ready to go head to head. A good thing he recognized some faces. Otherwise he might have thought he had stumbled into the wrong conference—or a marbles tournament.

**Tuesday, February 12, 2002**

Among the many virtues of stories, one is how they disentangle contradictions in such a remarkably concise way. Some things may well be black-and-white issues, but in project life these sorts of distinctions do not always exist. Stories typically allow the many hues of gray to show through.

For instance, Ken Schwer's story about the QuikToms mission demonstrates that a story about a catastrophic project failure can also be a success story. Although QuikToms was lost at sea, Schwer understood it was his responsibility as the project manager to prevent his team's heartbreak from destroying all that they'd accomplished before the launch. What he did in the aftermath transcends the loss of the launch vehicle. His presentation opened the conference on Tuesday morning, and his story about the QuikToms mission, "Loss and Recovery," appears in this issue.

We also heard presentations by NASA project managers Dennis Grounds (JSC), Tim Owen (MSFC), Joan Salute (ARC), Jeff Bauer (DRFC), Lynne Cooper (JPL), Julie Pollit (HQ), and Ed Mauldin (ARC). In the evening, Joseph Rothenberg spoke about his career with NASA from being a project manager during the Apollo era to retiring as an Associate Administrator for Space Flight in charge of Human Exploration and Development of Space a few months earlier.

**February 13, 2002**

The final day of the Masters Forum was over by lunchtime. It was a short day, yes, but it was chock full of excitement. Chuck Duff, Procurement Officer out of Ames Research Center, opened with a presentation on the relationship of pro-
curement to project management. Duff flew in the night before just to give this presentation and had to leave immediately after. Believe it or not, he had just had surgery!

Watching Duff, I couldn’t help but be reminded of a wonderful story I’d heard about Teddy Roosevelt. Having barely survived an assassination attempt, the bullet still in his breast and his suit soaked in blood, Roosevelt told a crowd who had come to hear him speak, “I will give this speech or die!” We have since learned that Chuck is doing well and showing great signs of a full recovery. We were delighted he could make it, but would certainly have understood had he decided to cancel under the circumstances.

Following Duff came Greg Howell. According to most evaluations, this was another of the high points of the Forum. Bob Menrad, a project manager at Goddard, stated, “All the folks were very good, but this one hit the chord the
most for me." Don Margolies, also from Goddard, remarked, "Greg Howell's talk was among the highlights of the meeting for me. Thought provoking, radical (in my experience) and screaming out for future considerations."

Howell is an expert on planning, especially as it bears on large construction projects, and that was the subject of his presentation "Lean Project Delivery." Howell has thought long and hard about planning--maybe longer and harder than anyone. He shared with us how his ideas have evolved, and that in itself was fascinating. Like Stokely, Howell is another exemplary reflective practitioner. Here is a man who has spent the better part of his life thinking about why things occur, and what is the most likely way to get a desired result on a project. Howell dazzled the audience with graphs and interactive slides to spice up his Powerpoint. It reminded me very much of listening to a college professor again--one of the good ones--and that image was reinforced afterwards by the number of people surrounding him, unwilling to let him go without bending his ear.

After Howell's presentation there were some remarks by a handful of guests outside of NASA regarding what they'd heard over the past 2 1/2 days and how it compared to project life in their domains. Irv Kieback, a project manager from Proctor and Gamble, put it best: "This was a great experience. It helped me to see how other organizations are dealing with the same problems, and through stories I can go utilize the knowledge."

All that was left then was to lock up the room, head to lunch, and say our farewells. Many seemed to think this was the best Masters Forum yet. Indeed there were a rich variety of presentations and some exceptional discussions by the small and large groups. All I can say is keep up the good work APPL.

Talk with you next time about Master's Forum V at Tysons Corner in August '02.