

THE POLICY SIDE OF THINGS: A STUDENT'S VIEW OF AIAA'S SPACE 2010 CONFERENCE & EXPOSITION

COMMENTARY
September 7, 2010

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The confluence of the familiar and the unknown struck me almost as soon as I arrived in California to attend my first AIAA annual conference, this year known as "Space 2010."¹ As a graduate student at George Washington University's Space Policy Institute, I was delighted to be there to make my first conference presentation (more on that to come).

Having grown up in Puerto Rico, known to me were the palm trees and the tropical décor, but the cool breeze that was felt even at midday was unfamiliar. In much the same way, discussions held at the conference which revolved around space law and policy were familiar although much of the science and engineering was new. It served as a reminder that in this field what eventually happens in the space program has just as much to do with amazing science and engineering as it does with the politics and policy surrounding it. A good example is shared space situational awareness, which was the topic of an afternoon session on Tuesday. That's an issue that envelopes not only the technical issues of how to obtain accurate knowledge about objects in orbit, but also policy and legal questions on information sharing standards, national security, and international cooperation.

An earlier session entitled "Coping with Law and Policy" was geared at looking at a number of issues from this blended perspective. The Aerospace Corporation's James Vedda presented an alternative approach to National Space Policy and included criticisms of what he described as the "destination fetish" plaguing space policy discussions. Despite being markedly different in tone, he concluded that the 2010 National Space Policy is "still too destination driven." Vedda finished his presentation with a quote by Albert Einstein: "We cannot solve problems with the same thinking we used when we created them."

Bran Ferren, Co-Chairman and Chief Executive Officer of Applied Minds, Inc., who gave the keynote speech at the conference's opening ceremony, would at least agree with him that a change of attitude is needed, even while they would disagree on the solutions. Among his list of things to "get right," Ferren spoke about the need to strengthen education, to better our "story-telling" tools in order to engage the public, and to prepare for the "top fight for the top talent." But his conviction that one of the major goals of the space program is to inspire children would not be in line with Vedda's assessment that inspiration is one of a number of its secondary, not primary, benefits.

¹ AIAA's Space 2010 Conference and Exposition took place in Anaheim, CA, from August 29-September 2, 2010.

Similarly, despite drawing audible support from the hundreds of people in the audience, Ferren's comments coincided less with my own perspective on the issue, not only on the emphasis on inspiration, but also on the idea that a visionary space program should not look at space from a utilitarian point of view. We do agree that the culture of NASA turned "risk-averse" following the successes of Apollo, but I would not describe what followed as the "era of boring space." The era starring the Space Shuttle and the International Space Station is, after all, my generation's own era in space.

It is perhaps a sign of a healthy community that everyone has an opinion about what the guiding policy should be for the U.S. space program. Where differences turn into common ground is often in the goals of specific programs, where general agreement over their fundamental purpose has translated into more durable commitment. One such area that was discussed in a very interesting session pertained to the search for water in our Solar System as the hoped-for clue in the search for life on other planets. Scientists may disagree on how to approach the quest for life, what clues to look for and what tools to use, but the conviction that this is both an interesting and important field of research has led to an expanding robotic presence in the Solar System. Dan McCleese, from NASA's Jet Propulsion Laboratory, talked about an exciting next step in this search - the Mars Science Laboratory, which will be launched in 2011 and hopefully will help determine Mars' ability to sustain life. And just as the questions we ask keep evolving, so will the strategies used to attempt to answer them. That is part of the excitement.

A glimpse at what the future in space may hold for human beings was the focus of Tuesday afternoon's plenary session "Space – the Next 50 years." Gwynne Shotwell, President of Space Exploration Technologies (SpaceX), joked that she lacked imagination and so her outlook on the future consisted of things she truly expected to happen - including that spaceflight becomes as commonplace and routine as boarding an airplane.

I was happy to present my paper that compares diverging perspectives from the space policy community and from science fiction movies over the issue of space commercialization.² Essentially my paper points out that the benevolent view of space commercialization embodied in the National Space Policy and generally held throughout the space community is quite different from what the public has been exposed to over the years through science fiction movies like Blade Runner and Wall-e. In the movies, corporations often are the "bad guys," not the saviors making spaceflight routine and affordable for everyone to enjoy. Far from suggesting that any of these viewpoints should be corrected, I argue that awareness of these perspectives is important in the formulation of policy.

Although I had to return to Washington for the first week of class and could not take advantage of more of the conference's activities, I was very pleased at having the opportunity to present a paper and participate in several of its sessions. As someone

² For access to this and other presentations given during the conference, please go to the [AIAA website](#).

who is fascinated by the politics of science and policy, I also appreciated that at the Space 2010 Conference the message brought home was that while scientific and engineering challenges will continue to puzzle us as we move forward in space, the policy side of things will gain ever increasing importance.