

GENERAL INFORMATION

AIAA SPONSORS: AIAA LA, Orange County Sections and the AIAA Space and Transportation Systems Technical Committee

DATES: April 25–28, 2005

LOCATION: Westin Hotel LAX, Los Angeles, CA

WEBSITE: www.ResponsiveSpace.com

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SPONSORSHIP FOR THE THIRD RESPONSIVE SPACE CONFERENCE

April 25–28, 2005 Los Angeles, CA

Conference on Rapid Development,
Launch, Deployment, and Operations

RS3 2005
3rd Responsive Space Conference



Be an Identified Proponent of Responsive Space

The demand for truly responsive space assets is growing rapidly and has been officially recognized with documents such as the “Operationally Responsive Spacelift Mission Needs Statement,” and specific organizational characters. Establish your organization as a key participant in the drive to accomplish this goal which is critical to the national need in responding to a changing world. This Conference will address the vision and needs of DOD, NASA, and commercial missions.

The Responsive Space conference is organized by the Los Angeles and Orange County Sections, the Space Systems and the Space Transportation Technical Committees of the AIAA. Among the confirmed speakers are:

Lieutenant General Brian Arnold
USAF Commander, Space and Missile Center

Major General (ret) Robert S. Dickman
Deputy UnderSecretary AF—Military Space

Major General Craig Cooning
Director, Air Force Space Acquisition

Brig. General Larry James
USAF Vice Commander, Space and Missile Center

Joe Sciabica
Associate Director, AFRL—Moderator

Major General Michael Hamel
14th Air Force

Join these and others in supporting and sponsoring Responsive Space.

Conference Held in Conjunction with JPL/NASA Town Meeting

The NASA Town Meeting with high level representatives of JPL, Goddard Space Flight Center, and NASA HQ will immediately follow the conference on Thursday afternoon at the same hotel sponsored by AIAA and National Space Club. The Responsive Space sponsorship exhibits and posters will remain in place and be prominently displayed during the Town Meeting. Sponsors are welcome to participate in the town meeting as well but requires a separate registration. This both increases the number of attendees at the conference and ensures that more people will remain for the entire conference.

For more information, contact Dr. Robert Conger, at rconger@smad.com, (310) 726-4100

STATEMENT OF PURPOSE

Whether it's the growing market for satellite imagery, communication and navigation or the use of space as a force enabler in the war on terrorism, space has never been more critical. Yet the customers of space-based information and capabilities continue to suffer from a lack of responsiveness. While satellite communications and the Global Positioning System provide a certain level of continuous global capability, there remains a demand for increased SATCOM bandwidth, ISR and support for the Joint Warfighter. Additionally, current space systems cannot provide near continuous surveillance over a particular point on the earth's surface. Nor can we launch a satellite at a moment's notice and begin receiving information within hours. The current paradigm for space, where a few expensive satellites are launched after years of preparation to provide a highly focussed capability, must change. For space systems to provide a highly dynamic and focussed response, their development must be based on a new set of rules and new technologies.

Some recent programs have begun to return the space paradigm to its roots—missions that are built and launched in 10 to 30 months at a cost of millions or a few 10's of millions, rather than 5 to 15 years at a cost of hundreds of millions. This process can be continued, and improved, to the point where satellites are launched and data returned to the end

user within a day of the time an immediate need is identified or a payload is delivered to the launch site. Such systems will have an enormous advantage in military, commercial, education, and scientific missions, for example:

- Rapid and continuous battlefield intelligence
- Supplemental communications to handle short-term overload
- Ground-based, rather than space-based spares for communications constellations
- Science observations of transient phenomena
- Educational payloads launched while the student is still a student

Possible solutions to the responsive space question range from deployment on demand to satellites stored on-orbit and moved into position as needed. Each solution has strengths and weaknesses and places unique demands on spacecraft, payload, launch system, and operations. For example, deployment on demand requires the entire system—spacecraft, payload, launch system, ground system, launch and ground operations, and on-orbit check-out—be both responsive and sufficiently low cost to be built in advance of need (i.e., built to inventory). Technical, requirements, regulatory, operational and architectural issues must be discussed and resolved for space to truly become responsive.

TECHNICAL TOPICS

The Opportunities Provided by Responsive, Low-cost Space—Needs, Applications and Plans

- Military
- Commercial
- Scientific
- Educational
- Responsive Crewed and Passenger Flights

The Barriers and Lessons Learned—Why Isn't There Next Day Delivery to Space?

- Problem areas in responsive space
- Regulatory and operational issues
- Lessons learned from prior attempts at low cost, responsive space systems
- Suborbital rides and space tourism
- The role of the government and private industry
- What does it take to make responsive space a reality

Responsive Missions

- Responsive mission design
- Risk management vs. risk aversion
- Deploy on demand vs. on-orbit storage
- Enabling technologies for responsive missions
- Applications for the Joint Warfighter

Overcoming the Technology Barriers—Rapid Response and Low Cost

- Low cost space systems that can be built to inventory
- Payloads for responsive missions
- Low cost launch on demand
- Responsive launch, RLVs and ELVs
- Low-cost, responsive ground systems and operations
- Reconfigurable and maneuverable assets
- Plug and Play

Have We Made Progress?

COST OF SPONSORSHIP

Sponsorship Opportunity	Cost	Benefits	Choice
Continental Breakfast (Networking Session)	\$3,000	Acknowledgement in Conference Program Registration. Recognition from the lectern, sign acknowledgement, one free conference attendance, LOGO in Program Registration.	Tue. Wed. Thu.
Morning Coffee Break	\$1,800	Acknowledgement in Conference Program Registration. Recognition from the lectern, sign acknowledgement, one-half free conference attendance, LOGO in Program Registration.	Tue. Wed. Thu.
Lunches	\$6,000	Acknowledgement in Conference Program Registration. Recognition from the lectern, sign acknowledgement, two free conference attendance, LOGO in Program Registration. One Exhibit Space, 5 minutes intro of the luncheon speaker, lunch at speaker table.	Tue. Wed. Thu.
Afternoon Break	\$1,800	Acknowledgement in Conference Program Registration. Recognition from the lectern, sign acknowledgement, one-half free conference attendance, LOGO in Program Registration.	Tue. Wed.
Reception	\$5,000	Acknowledgement in Conference Program Registration. Recognition from the lectern, sign acknowledgement, one free conference attendance, LOGO in Program Reg	Mon. Tue.
Dinner	\$9,600	Acknowledgement in Conference Program Registration. Recognition from the lectern, sign acknowledgement, one free exhibit space, four free conference attendance, LOGO in Program Registration. 10 minutes intro of the dinner speaker, dinner at speaker table. Name on giveaway	Wed.
Badges and Lanyards	\$1,200	LOGO in Program Registration. Recognition from the lectern, LOGO on lanyard, one-half free conference attendance	
Notebooks	\$2,400	LOGO in Program Registration. Recognition from the lectern, LOGO on item, one-half free conference attendance	
Table Top Exhibit/Display (6 ft wide)	\$850	Acknowledgement in Conference Program Registration. Provide one table (6 ft), two chairs (no pipes and drapes). Display located in breakfast and break area. Includes continental breakfast and breaks. Must register for the conference to attend sessions, lunches and dinner.	
Exhibit/Display (10 ft wide)	\$1000	See specific exhibit information for accessories and needs.	