

# The RSDO News

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## **A Message From the Chief of the RSDO**

Greetings! We published our last newsletter on September 12, while the Goddard Space Flight Center was closed, and a shocked Nation prepared to respond to the events of September 11. In the following weeks, the RSDO responded to inquiries from several agencies—word has gotten out about the resource we have created.

We are in the midst of a flurry of activity here at the RSDO. The fourth Rapid II On-Ramp opportunity continues to progress to selections, albeit slowed by the complexity and nuance of what constitutes a commercial spacecraft supplier. The NPOES Preparatory Project (NPP) acquisition process is in high gear, and the Gamma-Ray Large Area Telescope (GLAST) project is close behind.

During GSFC's recent restructuring of the Systems, Technology, and Advanced Concepts Directorate (Code 700), the RSDO assumed responsibility for the highly regarded Access To Space web site (<http://ats.gsfc.nasa.gov>). Bruce Clark will oversee the management and development of this site.

Last November, we implemented a newly designed RSDO web site, including the latest browser technology to allow more flexible navigation. From anywhere in the site, users can now access any other site area with only a few "clicks." This capability has proven useful during teleconference briefings to potential RSDO customers.

This newsletter chronicles several of our other recent activities. Last fall, we conducted a survey of our customers and suppliers. A

summary of the survey results, including a comparison with a similar survey undertaken in 1999, is located in this issue. Also detailed is the very successful RSDO team retreat, which we conducted to discuss our business processes and determine the best ways to serve our customers.

In addition, there are articles describing the status of three RSDO customers—the Geospace Electrodynamics Connection (GEC), the Gamma-ray Large Area Space Telescope (GLAST), and the NPP. All of these projects have important milestones approaching.

Lastly, please join me in welcoming Lori Levine, who was assigned to the RSDO in December as a Contract Specialist. A brief biographical statement about Lori is included in this issue of the newsletter.

I hope 2002 will be a successful year for all of us. As always, if you have comments or questions regarding the RSDO web site, or any of our business processes or programs, please feel free to contact me ([bill.watson@gsfc.nasa.gov](mailto:bill.watson@gsfc.nasa.gov), or 301-286-1289).

Bill

## **Staffing Updates**

### **Meet Lori Levine, RSDO Contract Specialist**

Lori Levine joined the RSDO on December 17, 2001 as a Contract Specialist. She holds a B.A. from Towson University in German Literature, with a minor in Medieval and Renaissance Studies. After graduating in 1997, Lori began her career in procurement as a Contract Specialist with the Naval Air Systems Command in Patuxent River, MD. While there, she worked on the AH-1W/UH-1N Helicopter Procurement Team. In May 1999, she transferred to NASA GSFC to work in the Space Sciences Procurement Office. Her responsibilities included awarding and administering scientific support services contracts. Welcome to RSDO, Lori!

## **CO's Corner**

### **RSDO Surveys Stakeholders**

Since its inception in October 1997, the Rapid Spacecraft Development Office (RSDO) has strived to bring innovative new procurement options to its customers and suppliers. In fact, the RSDO team has established business practices and processes that were previously unheard of. As with any new endeavor, we are learning what works (and what does not) as we go along. Over the years, we have made many changes designed to improve our offerings and procedures. For example, when establishing the processes for Rapid II, we incorporated many lessons we learned from the Rapid I program, such as the need to provide regular on-ramp opportunities to allow vendors to add buses to the catalog.

As part of a constant effort to improve the services we offer, we periodically survey RSDO stakeholders. Last fall, we conducted such a survey, asking our customers and vendors to rate the value of RSDO services, processes, and products. The results of the survey are summarized in the table below. For comparison, the table also contains the results of a similar survey we conducted in 1999.

| <b>Party Surveyed</b> |   |   |
|-----------------------|---|---|
|                       | <b>Customers</b>  | <b>Vendors</b>  |
| <b>Pluses</b>         |   |   |
| 1999                  | ?? Extremely pleased with service<br>?? Happy with products<br>?? All would use RSDO process again  | ?? Pleased with process in general  |
| 2001                  | ?? RSDO people are knowledgeable<br>?? This is the easiest procurement I have ever used   | ?? People in RSDO are very knowledgeable regarding the development and use of their process/ product.   |
| <b>Minuses</b>        |   |   |
| 1999                  | ?? None identified  | ?? Concerned about volume of opportunities<br>?? Desire to establish consistency between customer evaluations   |
| 2001                  | ?? Principal Investigator needs explanation of RSDO processes<br>?? Need to add more types of spacecraft to catalog<br>?? Need option for Cost Plus | ?? Payback replacement<br>?? Clarify proposal evaluation process<br>?? Focus RFO or increase proposal page count<br>?? Difficulties with electronic proposal submission |
| <b>Overall Rating</b> |   |   |
| 1999                  | 9.2 out of 10.0, rating Satisfaction with RSDO service  | 8.1 out of 10.0, on a combined scale rating communication, competence, consistency, integrity, and value of RSDO  |
| 2001                  | 9.6 out of 10.0 rating Satisfaction with RSDO service   | 8.5 out of 10.0 on a combined scale rating: communications, competence, consistency, integrity, and value of RSDO   |

It is interesting to note the differences between the comments and concerns from the two surveys. For instance, in 1999, suppliers were concerned that there would not be ample opportunities to utilize RSDO services for upcoming missions. In 2001, now that the significant number of opportunities has been established, vendors are now concerned about issues regarding the RSDO processes.

In November 2001, the RSDO team conducted a retreat to discuss the results of this survey, and determine ways to improve service to our customers (*see the article about the RSDO retreat*). As a result of the discussions during the retreat, we will continue to refine RSDO business methods, striving for consistency throughout the procurement process.

We are very interested in obtaining feedback from our stakeholders at any time. Please contact Jerry Edmond ([jedmond@pop200.gsfc.nasa.gov](mailto:jedmond@pop200.gsfc.nasa.gov) or 301-286-7586) with your comments or questions.

### **Small Disadvantaged Business Reminder**

When arranging for business partners or subcontractors, please remember to consider teaming up with one or more of the many small and/or disadvantaged businesses in the space industry. The RSDO strongly supports the Small and Disadvantaged Businesses (SDB) goals stated in the Rapid II IDIQ contract.

## **New Business**

### **Draft RFO Released for GEC Mission**

The purpose of the Geospace Electrodynamic Connections (GEC) mission is to study Earth's complex Ionosphere-Thermosphere (I-T) region. GEC, targeted for launch on a Delta II 2920 in 2009, consists of four satellites, each with nine different instruments to measure plasma and neutral atmosphere parameters in-situ. The satellites will be placed in an elliptical "Pearls-On-a-String" orbital configuration (~185 km by 2000 km) at a relatively high inclination (83°).

On November 30, 2001, the RSDO, in conjunction with the GEC Project, released a draft Request For Offer (RFO) for a GEC Mission Accommodation Study. Industry representatives were to comment on the draft RFO by January 14, with the final version to be released on January 23. Proposals are due to the RSDO by February 6, 2002.

NASA will evaluate the proposals by February 20, and may award up to two delivery orders for the study. The studies will begin no earlier than March 1, 2002, and will conclude by June 30, 2002.

Additional details regarding the GEC mission are available online at <http://stp.gsfc.nasa.gov/missions/gec/gec.htm>.

## **NPOESS Preparatory Project RSDO Study 2 Nears Completion**

The NASA Goddard Space Flight Center's NPOESS Preparatory Project (NPP) Office will reach a significant milestone in January 2002, with their efforts to procure a major earth observation satellite via the RSDO RAPID II contract. During the second and third weeks of January, two RSDO RAPID II contractors—Ball Aerospace Systems Corporation of Boulder, Colorado and Spectrum Astro Incorporated of Phoenix, Arizona—will each present to the government their satellite Preliminary Design Reviews (PDRs) at GSFC.

In late February 2001, these two contractors were each awarded \$3M study delivery orders to continue to advance the satellite conceptual designs they initiated in NPP RSDO Study 1. The Study 1 effort concluded that the Rapid II contract was a feasible and reasonable approach for the NPP satellite development. The NPP office now looks forward to seeing the completed preliminary designs. Both studies have significantly aided the development and refinement of the NPP requirements.

The purpose of the NPP mission is to provide an early first flight for three of the major instruments now being developed for use on the National Polar-orbiting Operational Environmental Satellite System (NPOESS): the Visible Infrared Imaging Radiometer Suite (VIIRS), Cross-track Infrared Sounder (CrIS), and Advanced Technology Microwave Sounder (ATMS). NPP will provide risk reduction demonstration of these sensors and their data processing and algorithms for the National Oceanographic and Atmospheric Administration (NOAA) and Defense Department weather forecast and

climate data communities. NPP will also provide data continuity for NASA's Earth Observation System (EOS) Terra satellite.

The joint agency Integrated Program Office (IPO), which manages the procurement of the NPOESS Satellite and its associated ground system, will provide systems for NPP satellite command, control, and communications, as well as instrument data processing, and evaluation of instrument performance and algorithms. IPO also manages procurement of the CrIS and VIIRS sensors. NASA GSFC manages the development of the NPP Satellite, the ATMS instrument, and the Science Data Segment (SDS), which will provide various higher-level data products and support to the research community. NOAA will provide the archival and distribution of NPP mission data.

The VIIRS instrument is a multi-spectral (visible through infrared) scanning radiometer, similar to the Terra satellite's Moderate Resolution Imaging Spectroradiometer (MODIS) instrument. It will gather full global coverage of land, oceanic, and atmospheric data with spatial resolution of 600 to 1200 meters over a swath width of 3000 km. Its average data rate will be approximately 10 Mbps.

The CrIS instrument is a Michelson-interferometer infrared sounder that operates in conjunction with the ATMS instrument to provide daily global profiles of the Earth's atmospheric temperatures and humidity. It operates in the 3.5 to 16 micrometer region, over a swath width of 2300 km producing an average data rate of approximately 2 Mbps.

The ATMS instrument is a multi-channel scanning total power microwave radiometer with a swath width of 2300 km, producing an average data rate of approximately 30 Kbps.

Following the presentation of RSDO contractor PDRs and the completion of Study 2 in late January 2002, the RSDO will release a Request for Order (RFO) for the NPP satellite system final design, fabrication, integration, test, launch and early orbit operations support.

*By Arthur M. Unger/ NPP Spacecraft Manager*

### **GLAST To Utilize RSDO Services**

The Gamma-ray Large Area Space Telescope (GLAST) project is scheduled to release a draft RFO and SOW for review by potential GLAST spacecraft bidders by the end of January. Comments from potential bidders will be accepted shortly after the draft is released. An information session to discuss the draft documents will be scheduled through the RSDO office. Release of the GLAST's final RFO and SOW is scheduled for mid-February.

## **Other RSDO News**

### **RSDO Retreat A Success!**

On November 8th and 9th, the Rapid Spacecraft Development Office staff conducted a retreat at the Habourtowne Conference Center in St. Michael's, Maryland. I found it to be a beautiful and serene place, with good food and a great view of the bay. While there, I gained a whole new perspective of what RSDO really does, and got a better understanding of how some of our processes work. With the help of a great facilitator, this retreat provided the RSDO team with a valuable opportunity to focus on important issues. It helped us think about the best ways to serve our customers. We decided that we no longer want to focus on what we cannot do, but investigate ways (within the law) to do some things that have never been done before. One of the best ways to accomplish our objectives is to solicit open, honest, and detailed feedback from our vendors and customers. That feedback will also help us develop ways to help our customers—old and new—to better understand our processes. In addition, we agreed that one of our goals is striving for continued consistency.

*By LaVada G. Harris/RSDO Administrative Assistant*

## **RSDO Roadmap**

We are currently updating the RSDO Roadmap. The new version will be available for download at this site shortly.

Please visit <http://rsdo.gsfc.nasa.gov/newsletter/roadmap1.cfm> to download the current version of the Roadmap.