

The RSDO News

May 2006

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A Message from the Chief of the RSDO

“Hello!” from the RSDO. In this newsletter, we explore several of the activities and events that are ongoing in our office. I’d like to begin by introducing our newest team member, Laurie Kleppin, to the RSDO community. As a Mission Integration Manager, Laurie will be responsible for interfacing with our customers and ensuring that their mission spacecraft requirements are satisfied. Please get acquainted with Laurie by reading her brief biographical statement in this issue.

This edition also contains updates regarding two major RSDO efforts support of the Global Precipitation Measurement (GPM) and GLORY Projects. We are currently involved in several other initiatives as well, providing mission spacecraft information to a wide variety of potential space missions, including missions from other agencies. In addition, this past April we had the privilege of attending the National Space Symposium, representing Goddard Space Flight Center in the ‘One NASA’ exhibit booth. Art Unger provides a summary of that valuable experience in this issue.

The RSDO team is also busy preparing for the Rapid-III program, and will have a Rapid-III schedule of events available in the fall 2006 newsletter. Stay tuned!

Please do not forget that if you are in the market for spacecraft components, let us show you the procurement options available through RSDO before you set about developing your own contract. We may be able to help you get what you need more quickly.

As always, please do not hesitate to contact me with questions and comments regarding RSDO services or processes. Or, if you are in the neighborhood, feel free to pay us a visit.

Sincerely,

Greg Smith

RSDO Chief
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STAFFING UPDATES

Meet Laurie Kleppin, Newest RSDO Team Member

Laurie Kleppin is on detail to the RSDO office as Mission Integration Manager. She is transitioning here from her current duties as Systems Assurance Manager for the projects under the Heliophysics Division. Her transition to the RSDO office will be complete after the STEREO mission launch, which is presently scheduled in July 2006.

Laurie has worked at the NASA Goddard Space Flight Center since 1994. She began her federal career in 1983, when she was employed as a Cartographer with the Defense Mapping Agency's Hydrographic/Topographic Center in Louisville, Kentucky. Laurie moved to Maryland in 1987 to join the Air Force Plant Representative Office (AFPRO) at Westinghouse's facility near Baltimore. She was employed at the AFPRO as an Industrial Engineer, monitoring contracts for DoD at Westinghouse and specializing in manufacturing and work measurement. When the government's Contract Administration Services joined together in the late 1980s, she became a founding member of the Defense Contract Management Agency. Laurie came to NASA/GSFC as a contractor and then was reinstated as a civil servant within the Assurance Management Office of the Office of Systems Safety and Mission Assurance.

Laurie's undergraduate degree is in industrial engineering from the Tennessee Technological University (1981). She earned a Masters of Science in Engineering Management degree in Spring 2001 from the University of Massachusetts in Amherst. Laurie is a mother of two—her daughter is attending Georgia Tech and majoring in mechanical engineering, while her younger son is a freshman in a public high school in Anne Arundel County. Laurie enjoys home improvement, gardening, and flat-water kayaking. She also plays the piano and the flute. She is a member of Tau Beta Pi and the American Society of Quality (ASQ) and holds credentials as an ASQ Certified Quality Engineer and Certified Quality Auditor.

Please join the entire RSDO team in welcoming Laurie to the RSDO community!

Current Business

Glory Project Released RFO Through RSDO

On March 27, 2005, the Glory Project released a Request for Offer (RFO) to Ball Aerospace and Technologies, Corporation (BATC) through RSDO for the delivery of the Cloud Camera Sensor Package for NASA's Glory spacecraft. The proposal due date was 21 April 2006.

Deploying two remote sensing instruments, Glory will help contribute to our knowledge and understanding of the factors that influence the world's climate. The Aerosol Polarimetry Sensor (APS) instrument will collect data on the chemical, microphysical, and optical properties, as well as the spatial and temporal distributions of aerosols. The Total Irradiance Monitor (TIM) instrument will collect total solar irradiance data for the long-term climate record. The Glory Cloud Camera Sensor Package is a component of the APS instrument, and is designed to perform cloud screening within the APS field of view. The Sensor Package consists of two cloud cameras with different band pass filters at 443 nm and 865 nm to distinguish between cloud fields and clear scenes over both land and ocean.

The Glory Project has been working with BATC over the past year to reduce the risks associated with this procurement. BATC was awarded a sole-source study contract in 2005 to provide a "Preliminary Design Review-level" analysis and design of the Cloud Camera Sensor Package for Glory. BATC completed that initial study in January 2006, producing a heritage design for the Glory Sensor Package based on the cloud camera the company developed for the CALIPSO spacecraft.

After its scheduled launch in December 2008 from Vandenberg AFB, California, the Glory spacecraft will join the NASA Afternoon Constellation (a.k.a., the A-Train) of Earth Observing Satellites in sun-synchronous orbit at an altitude of 705 km. The Glory science team will utilize data obtained by the Moderate Resolution Imaging Spectroradiometer (MODIS) instrument on the NASA Aqua spacecraft (also a member of the A-Train) to better understand the effects of reflected sunlight on Glory's APS aerosol data. The Glory spacecraft and instruments are being developed for a three-year mission life with a five-year goal.

The spacecraft contractor for the Glory Project is Orbital Sciences Corporation. Raytheon Santa Barbara Remote Sensing (SBRS) is developing the APS Instrument and the University of Colorado's Laboratory for Atmospheric and Space Physics (LASP) is developing the TIM Instrument.

For additional information, please contact the author (jsatrom@pop400.gsfc.nasa.gov).

By John Satrom/Glory Mission Systems Engineer

Current Business (continued)

New GPM Development Approach Utilizes RSDO Services

Last year, NASA Headquarters approved a new approach to building the GPM Core Spacecraft. Under this innovative plan designated the Hybrid Approach the government will be responsible for the design and production of certain elements of the GPM Core Spacecraft, and a contractor will be selected to provide the remaining subsystems. The previous strategy had called for procurement of the entire spacecraft via the RSDO's acquisition process.

The Hybrid Approach, however, will still take advantage of benefits available through the RSDO's fixed price contract arrangements. Fixed price contracts are advantageous for the purchase of systems that can be used "off the shelf" without many modifications. The GPM Core Spacecraft Avionics Package (AP) fits this bill well. The AP consists of a number of subsystems (command and data handling; guidance, navigation and control; communications; etc.) that are very similar to those built for other missions. Thus, GPM will utilize the RSDO acquisition process to select a vendor to provide the Core Spacecraft AP. The remainder of the spacecraft's components is unique and consequently will be developed by the civil servant workforce.

In January 2006, GPM utilized RSDO services to select two vendors (Orbital Sciences Corporation and General Dynamics Spectrum Astro Space Systems) to study the Hybrid Approach and AP development effort. During this GPM AP Study, participating vendors will develop a complete set of requirements for the AP acquisition. The vendors will also investigate details regarding the implementation of the Hybrid design, such as the level of insight the contractor will provide into the AP design, the AP environmental test program, AP delivery schedule, and simulator requirements. The vendors will be required to conduct an Avionics Design Review (ADR) and produce a final report at the completion of the study in Fall 2006. The results of the AP Study will enable GPM to select the optimal developer to implement the new Hybrid Approach for the Core Spacecraft.

For additional information, please contact the author (Steven.J.Horowitz@nasa.gov)

By Steve Horowitz/GPM Core Observatory Manager

Other RSDO News

RSDO Attends National Space Symposium 2006

Five members of the RSDO team (Greg Smith, Art Unger, Janet Osterman, Laurie Kleppin and Kevin Maloney) attended Space Symposium 2006, held in Colorado Springs, April 3-6, 2006. This year the RSDO was integrated with the One-NASA Booth, giving us the opportunity to meet and interface with staff from many of the NASA centers. This was the fourth year we utilized the Space Symposium as a forum to communicate with representatives from the aerospace industry, military, and government regarding the availability and functions of the RSDO contract.

We also spoke to visiting students, as well, informing them about aerospace careers, work at NASA, and Goddard Space Flight Center (GSFC) endeavors, past and present. “Goddard what? Where’s that?” was the refrain we heard from some students. In reply to their queries, we explained GSFC’s role in the NASA organization, citing specific GSFC achievements that underscore the Center’s success. One highlight of the interactions was introducing a young, high school space enthusiast to Joseph Rothenberg, former Director of GSFC and former Chief of NASA’s Office of Space Flight. Mr. Rothenberg happened to come by at the right moment to provide the student with an insightful overview of the challenges involved in long duration manned missions, and the factors involved in extending spaceflight well beyond the protection provided by the near-Earth environment. Based on the interest level we observed, that student may have “then and there” decided to work to solve some of these problems!

During the symposium, we also noted that industry continues to exhibit strong interest in involvement in the RSDO process. Common themes emphasized at the Symposium—taking advantage of commercial space, and lowering overall cost and “time-to-launch”—are goals shared by RSDO as well. The RSDO team left the Symposium feeling our efforts were successful; our integration with the One-NASA movement was helpful and useful, we developed or renewed government and industry contacts, and we enhanced awareness of the Rapid contract, catalog, and GSFC.

By Art Unger/RSDO

Small Disadvantaged Business Information

We encourage all our vendors to consider the use of small or disadvantaged businesses when enacting subcontracting agreements. For more information on official policies and goals concerning the integration of these companies into the NASA business environment, please visit the web site of NASA’s Office of Small and Disadvantaged Business Utilization (OSDBU) at <http://www.hq.nasa.gov/office/codek/>.