

SECOND RSDO NEWSLETTER

October, 1998

Thoughts

So I've finally put the final touches on what is supposed to be a quarterly newsletter. It's only 6 months late. So what have we accomplished since the last newsletter was released? Here's a quick summary:

- Awarded the ICESAT Delivery Order
- Worked with 6 MIDEX Customers. All are still waiting to hear who'll be selected for the second phase
- Started the USAF Coriolis Acquisition with a down select to 3 vendors
- Supported 3 ESSP Customers
- Put the Quick Ride Program into place
- Made 19 Public Presentations about RSDO capabilities
- Supported the almost daily requests for sanity checks on a variety of missions in the advanced planning stages

Since we've been in business now for one year, I've asked Gary Dzurec of our human resources office to put together an RSDO "report card" with inputs from our Staff, our Suppliers, our Stakeholders and our Customers (No, I couldn't think of a synonym for customer that started with "S"!). When he calls, please be supportive and honest. We will hold an RSDO retreat October 20 through 22 to work through the results and adjust those processes that need adjusting.

We continue to promote the use of RSDO wherever possible. Next year we will likely put together a mobile display for conferences and poster sessions.

Regards,

Jim Adams

Personnel Changes

Recent changes in the GSFC Procurement organization have afforded Billie Smith the opportunity to take a position on the GSFC Procurement Officer's staff. Billie took the Rapid Spacecraft lead contracting officer role in January when Jeff Lamke was assigned a detail at NASA HQ. Billie's effective transition date is August 31st, but she has promised to continue to help us on a part time basis into the Fall. We wish Billie good luck in her new position, she will be missed at RSDO. Sharon Collignon has accepted an offer of a

promotion to fill the contracting officer slot vacated by Billie. Sharon has been with us since the inception of the Rapid Spacecraft Acquisition (RSA). Congratulations, Sharon.

A more formal notice of these changes to the RSA vendor points of contact will be forthcoming.

If the RSA vendors have personnel changes of their own involving the points of contact, please notify Sharon Collignon so we can keep our information flowing to the correct people.

Upcoming Missions/Studies, etc.

We continue to receive requests to use the Rapid Spacecraft contracts or for information about the satellites we have under contract. As most of you know we are in the midst of arranging for the USAF to procure the Coriolis mission through RSDO. The customer decided to select three RSDO vendors to provide offers after completing a 90 day study. We expect to have the Coriolis spacecraft procurement wrapped up by the end of January, 1999.

Most of the other inquiries we've been getting are for studies or data, since the mission planners are working out beyond the RSA ordering period. Coming up soon will be a mini-competition for studies for the next Solar-Terrestrial Probes mission called Magnetospheric Multiscale.

Finally, we seem to be getting some preliminary requests for an unnamed mission which isn't currently funded, if it happens, expect the mini-competition to be in the 2nd quarter of GFY 1999. The RSA vendors will need to sharpen their pencils on this one, we think the customer will have a cap for his spacecraft of \$20M, need to carry 90Kg to LEO with no propulsion requirements and a launch date 2 years after receipt of order.

What Happened to SOLSTICE?

A lot of us had very high hopes that we'd be running a mini-competition for the SOLSTICE mission. However, this Summer, the University of Colorado made the decision to strike out on their own procurement. Their decision was based on a determination that using RSDO would not allow them full control of the resulting delivery order. This is due to the fact that we cannot place non-civil servants in inherently governmental functions. Specifically, the contracting officer and COTR functions could not be transferred to the University. We are hopeful that the SOLSTICE team will be able to find as good a value on the open market as they might have through the RSDO. For those of you interested in starting a dialog with SOLSTICE about their procurement, give Dan Gablehouse a call at (303) 492-0283 or check out the Colorado procurement web site at: <http://www.gssa.state.co.us/BdSols.nsf/Open+Solicitations+By+Agency?OpenView>

Then open the University of Colorado at Boulder arrow.

SDB Reminder

Just a quick reminder that we strongly encourage the consideration of small and small disadvantaged business. When one of your core systems needs to find a new supplier, please take a little extra time to see if a business in this category can add value to suite of suppliers.

Rapid II

Due to the plans for the rounds of MIDEX and ESSP in calendar year 2000, the RSDO has received permission to put RAPID II in place by January of 2000. This is a nine month acceleration over what had been previously planned. This will enable RSDO customers to offer newer technology and more current core systems during the AO competitions. We've received all the permission we need to start the planning, now just need to know what we plan on buying. One of the hallmarks of RSDO is that we attempt to buy what industry has to offer. If you have any suggestions about what should be included in the catalog or ways to structure the program, please schedule some time with us. We'll be glad to listen.

Quick Ride

In late July we placed NASA's first FAR Part 12 acquisition for flight services, the Quick Ride program. We received one offer from Final Analysis and found their offer acceptable. Final has offer 10 rides over 3 years for payloads up to 20 Kg. We hope to be adding more ride opportunities and vendors using the unique contract feature called an On-Ramp. Check out our web site soon for more information.

Technology Transfer

From time to time GSFC will identify new technologies which are strategic to NASA missions in the future. The RSDO will showcase some here when they appear to be of benefit to either future RSDO customers or to the RSDO Vendors. Below is a brief article written by Janice Smith identifying a new communications package which several future NASA missions are excited about.

A number of small satellite related technology development programs are ongoing at GSFC which are intended for use by NASA's future science missions. These include the TDRSS Fourth Generation User Transponder, digital high rate receivers for ground stations, and active phased array antennas for downlinks in the X- and Ka-bands. In particular, active phased array antennas with integral high efficiency RF power amplifiers are seen as a solution to the problem of providing high gain for science downlinks without the deployable structures, moving parts and torque disturbances that are associated with current mechanically steered high-antennas.

It is also noted that increasing international competition for RF spectrum will force all users to utilize current allocations more efficiently and develop the technology to use new frequencies, such as Ka-band (25-27 GHz). This band is desirable in that it provides

both wider frequency allocations for higher downlink rates and smaller antennas for a given gain due to its shorter RF wavelengths. The 25 to 27 GHz range also contains overlapping allocations for both space-to-space and space-to-earth communications links.

A dual-use design phased array antenna is now under development for GSFC by Harris Corp., Melbourne, FL, which incorporates several hundred elements resulting in an Effective Isotropic Radiated Power (EIRP) of ≥ 33 dBW at a maximum scan angle of ± 60 degrees. That EIRP will allow the transfer of science data in two modes: at 4 Mbps via TDRS H,I,J; and 150 Mbps directly to a ground station with 1.8 meter dish. With a larger ground station dish, substantially higher rates can be accommodated.

Figures 1 and 2 illustrate these communications modes and the Harris phased array antenna. For further information please contact Fernando Pellerano of the Microwave Systems Branch at (301) 286-5774, or visit the URL:

<http://jazzman.gsfc.nasa.gov/technologies.htm>

