

**FY2012 Q4
Quarterly Report
Center for the Advancement of Science in Space**

Cooperative Agreement Number:	NNH11CD70A
Name:	Center for the Advancement of Science in Space, Inc.
Date Submitted:	October 1, 2012
Section I	Technical Status Report
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Section III	Business Status Report

Section I: TECHNICAL STATUS REPORT

Board of Directors – status update: The interim board engaged executive search firm, Korn/Ferry International to vet nominated candidates according to the guidance provided in the reference model. The results of this effort have been provided to the interim board that has begun selection of the initial members of the permanent board in a step-wise manner, beginning with a core group. Once the core is in place the interim board will be terminated and the initial board core will continue the progress of populating all initial board positions and all other board business they deem appropriate. As of late September, the initial seven members are being briefed by the CASIS Interim ED and Chief Scientist on the status of business operations.

Jorge Fernandez: *Mr. Fernandez served as Celsia Technology, Inc.'s Chief Financial Officer from 2005-2012. Prior to joining Celsia, Mr. Fernandez served as the Finance Director for Tiger Direct (NYSE: SYX), a Fortune 1000 computer and electronics retailer, served as Finance Director-Latin America for PRG-Schultz (NASDAQ: PRGX), an accounts payable recovery audit services firm and held the position of VP Finance for Fiera Group, an e-commerce startup in Latin America. Mr. Fernandez began his career as part of the assurance practice at Arthur Andersen LLP, where he managed audit engagements in South Florida. Mr. Fernandez received his Bachelors and Masters degree in Accounting from the University of Florida, and is a Certified Public Accountant licensed in the State of Florida.*

Duane Ratliff: *Mr. Ratliff was identified to serve as the Interim Chief Operating Officer pending a permanent selection upon the identification and hire of the Executive Director. Mr. Ratliff continues to serve as the Director of Operations and NASA Liaison for CASIS during this period.*

Amendment of the Cooperative Agreement 00005: On May 29, 2012, NASA transmitted to CASIS a proposed modification to the Cooperative Agreement. CASIS has agreed to proposed changes that would: (1) amend certain sections of section 3.1 of the Agreement; (2) revise section 4.25 of the Agreement concerning "Allocation of Risk/Liability; and (3) add section 4.32 concerning "Use of NASA Name and Emblems." CASIS and NASA continue to discuss proposed modifications that would provide an understanding of the Intellectual Property terms concerning Patent Rights and Rights in Data, and the manner in which clauses concerning these matters will be implemented in CASIS agreements with commercial grantees and space station users. As of September 25th, NASA was drafting the terms for consideration of use.

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Section II: PERFORMANCE METRICS

Integrated Dashboard: (An integrated dashboard will be assembled to articulate strategic goals, define portfolio objectives and track organizational metrics.)

The Dashboard went live on the CASIS website on October 1, 2012 and can be found at <http://www.iss-casis.org/dashboard>

The Dashboard will be updated on a quarterly basis and new relevant metrics will be added to the Dashboard as they are identified.

Capacity Planning Established for Grants Management: (Capacity planning will be established for grants management, post transfer of ISS NL projects from the NASA National Lab Office)

CASIS completed the transition of current ISS National Lab projects from the NASA National Lab office. As part of this effort, CASIS adopted the commitments of the existing Space Act Agreements and entered into new Memorandums of Agreement with existing National Lab partners to ensure a continuation of project support and other commitments within CASIS's mission. Moving forward CASIS continues to create new relationships with its Implementation Partners and with the researchers and technology developers seeking to do business with the ISS National Lab. To date, these relationships have generated approximately 30 opportunities representing unsolicited proposals to conduct research or enable new technology on the ISS National Lab platform. For the fiscal year 2012, CASIS awarded three of these unsolicited proposals with one additional proposal estimated to complete the review and selection process in October and be considered for award. In addition to the transitional activities and unsolicited proposal processes, CASIS further established its grant process for formal solicitations.

In anticipation of the project management requirements of both the transitioned agreements and the grant solicitations, CASIS created a position within Science and Technology for grants and solicitation process management. This position supported the PCG solicitation process and functioned primarily to manage investigator/project reporting requirements, coordinate project and investigator needs with relevant CASIS departments, and work in conjunction with Compliance to ensure the execution of each grant according to established CASIS policies. In addition, the grants management position oversaw the planning and execution of the research panels selected to perform the science and economic evaluation of this solicitation. The resource modeling assumption CASIS used included: (i) 2-3 grant solicitation projects that would be awarded in fiscal year 2012 and require grants management in 2013, (ii) 3 unsolicited projects initiated through CASIS, and (iii) 3-5 projects transitioned through the ISS NL. We anticipate sufficient capacity to also manage the initial round of 2013 solicitations. If greater than expected numbers of grant-based projects are achieved early in 2013, we will supplement the permanent grants capacity with contracted services and adjust our capacity planning in 2013 accordingly.

CASIS Initial Research Solicitation: (CASIS initial research solicitation will be released in alignment with Board approved strategy and structured by research pathway maps. [Solicitation to be included in quarterly progress report.])

The initial approved research pathway driven solicitation for protein crystallization was released June 26 and has undergone evaluation through the CASIS prioritization process to become a near-term focus within life science research opportunities. This topic was identified by the interim Science Collegium and approved by the Board of Directors. The solicitation released for this pathway (attached) included

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background material, organizational objectives, scientific and economic goals. In addition, the overall review process as well as specific detailed descriptions of scientific review and economic valuation criteria were provided to inform and enable all prospective investigators.

Eighteen organizations submitted a letter of intent in response to this solicitation, resulting in 16 submitted applications, 12 of which satisfied the flight operational requirements. Project Selection Panels of subject matter experts were assembled to provide both scientific and economic assessment of this proposal. Using elements derived from traditional peer review, each application was carefully screened for both high caliber scientific impact and economic valuation. It is expected that three proposals will be funded and be flight ready for increment 37/38. Written reviews for each application were provided by the PSP to aid the Executive Director and Chief Scientist in final award decisions. The written reviews for each application will also be summarized and provided to the corresponding investigator, including payloads not selected.

Marketing and Communications: (Effective strategic communications will be demonstrated by obtaining favorable story placement in national media. Updates, as needed, will be made to web site and marketing and communications approaches.) (Refinement and facilitation of program offerings will be ongoing.)

Marketing and Communications: Over the past three quarters, the CASIS Communication strategy has focused on educating the general public and the space-experienced research community with a multi-media approach to delivering the organization's message. The output included a string of favorable news stories since July in key trade publications and major U.S. newspapers, as well as stories on National Public Radio and (soon) on the BBC. Among the headlines: "Fledgling NASA Nonprofit Starts to Lift Off" (NPR); "How Can I Get My Science Project on the International Space Station" (Houston Chronicle); "CASIS Looking for Materials Testing Projects on ISS" (Huntsville Times); "Merck to Conduct Drug Research on ISS" (Aviation Week.) Several positive stories by journalist Dan Leone have also appeared in Space News, online and in print. In addition, CASIS has been mentioned favorably in articles in Fast Company, the Sacramento Bee and in Texas A&M Engineering and the Palm Beach Post. The showing is strong especially considering that CASIS has yet to fly any research. The Marketing and Communications (MarComm) Director also made appearance on a syndicated Clear Channel Radio program dedicated to science and space. The focus of the 60-minute show was how CASIS was facilitating new uses for the ISS NL. In other areas, the CASIS MarComm team has also expanded the website and used it to promote ISS Research from NASA's Glenn Research Center as well as new opportunities and hardware from NanoRacks. A down select of a production company to produce weekly "webisodes" about news from the ISS National Lab is underway. A non-traditional but carefully targeted advertising and Public Service Announcement campaign strategy has been drawn up and will roll out in Q1 of FY2013 after the 2012 Presidential Election. A roll out strategy to announce and introduce the new CASIS Board of Directors awaits the induction of the first board members in the days and weeks ahead. On the marketing front, the website is growing and several CASIS image designs meant to evoke old Pan Am travel posters from the 1930s and 1940s have been created for use on the first merchandise -- such as mugs and posters -- which will be sold to supporters on the website in FY2013. Efforts are also underway to take over NASA social media accounts on October 1. An innovative LinkedIn advocacy strategy has also been drawn up to target Corporate Decision Makers to let them know the ISS National Lab is available to them for research as well as product development and testing.

Membership Program and Marketplace Online Hub: The membership program has been restructured to include benefits independent of the marketplace to "seed" the membership while the marketplace itself is maturing. As outlined in the Cooperative Agreement, the membership structure breaks down into three categories: individual membership, non-profit membership, and corporate membership. Each of the categories includes sliding scale contribution amounts. All members, regardless of category, will have

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access to the ISS NL Marketplace. A new more user-friendly membership portal is expected to be active before the close of FY2012. Technical and architectural hurdles have been overcome in the development of the online Marketplace Hub. Phase I of the Marketplace is currently under development and is scheduled to launch in the first few weeks of the Q1 of FY2013. Phase I of the online hub will include an independently functioning forum overlaid with a robust proprietary social networking capability, and will be ready for members to begin signing up and interacting with each other, primarily by participating in the forum. Phase II of the Marketplace is currently in the planning stages and will build out the systems to allow a crowd funding mechanism for users to access and engage proposals from other users. Phase II will also introduce an "investment hub" to facilitate easy interaction between researchers and funders. The architecture is currently being designed and stood up.

STEM Education: (An ISS-based STEM education project will be initiated in partnership with a national education organization (e.g., the National Science Teachers Association).)

CASIS has partnered with the National Center for Earth and Space Science Education (NCESSSE) and is supporting student experiments to the ISS through its Student Spaceflight Experiments Program (Mission 3). Mission 3 includes nearly 10,000 students fully engaged in experiment design and proposal writing.

Annual Report: (The first annual report will be developed.)

CASIS is compiling all information and relevant data from the various directorates that represent the activities of the organization's first year, as well as our long-term goals and strategic approach to increasing research payloads in the year to come. Interviews with partners and customers are being conducted and final financial data is being prepared along with their graphical representations. Work is also underway on the overall look of the report and several creative concepts are under consideration. Completion of the report is expected by mid-October and delivery is anticipated by mid-November.

IT Systems: (Continued upgrades and maintenance for IT systems will be ongoing.)

The following items highlight some of the upgrades in the IT systems during FY12:

- Headquarters office build-out finalized
- Asset tracking system implementation
- SharePoint expense report integration
- Disaster recovery for backup data center implemented
- Website core infrastructure migration to new platform
- Continued maintenance and upgrades for operating systems

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Section III: BUSINESS STATUS REPORT 31 August 2012			
	Budget	Actuals YTD 2011-2012	Variance
	\$19,958,755	\$9,557,566	\$10,401,189
Direct Labor	7,479,083	3,380,057	4,099,026
Grants to be Awarded	3,000,000	1,050,000	1,950,000
Equipment (Permanent > \$5k)		0	0
Equipment (Expendable and Supplies)	323,800	402,986	(79,186)
Other Direct Costs	2,552,978	643,288	1,909,690
Subcontract Costs	6,014,394	3,671,903	2,342,491
Travel	588,500	409,332	179,168