

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



May 19, 2009

Reply to Attn of: 820

Ms. Diane Samuel  
Assistant Director  
Regents of New Mexico State University  
Office of Grants and Contracts  
Physical Science Laboratory  
Las Cruces, NM 88003-0002

**Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the Columbia Scientific Balloon Facility (CSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (NMSU/PSL), Rating Period 12 – October 1, 2008, through March 31, 2009**

The performance evaluation for the above referenced contract, Performance Period 12, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan, Revision 5, effective May 20, 2008. I am very pleased to inform you that PSL's rating for this evaluation period was in the "excellent" range which is described as "Of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance." PSL has earned an overall rating of 94.9%. A maximum award fee of \$728,047 was possible, and your organization has earned \$690,756.43.

**Performance Factor 1**

**Technical Performance of Operations/30% Factor Weight - Rating – 95%**

Physical Science Laboratory/Columbia Scientific Balloon Facility's (PSL/CSBF's) activity relating to performance of operations was given an excellent rating. For the fourth rating period in a row, PSL/CSBF's performance under this factor was exemplary performance in a timely, efficient manner and responsive to all the requirements. PSL is applauded for the successful launch of three Antarctic heavy lift balloons resulting in 100% mission success. In addition, CSBF's partnership agreement-assistance with Esrange in the launch of their two atmospheric science balloons this past March, preparations for the spring Fort Sumner campaign, and preparations for the upcoming summer Sweden Long Duration Balloon (LDB) Campaign, have made for a busy period over the past several months to which PSL/CSBF has been fully responsive with support. Operations were completed in a substantially efficient and economical manner.

CSBF performed launch of all balloons this past rating period without incident and in a most timely manner. No delays of launch occurred or opportunities missed. Launch of all three Antarctic payloads in a little over one week further demonstrates excellence in planning, preparation, and efficiency, which insured maximum return on mission goals while at the same time realizing benefit in reduction of cost. Congratulations go to all of CSBF Operations, Engineering, Administrative Support, and PSL/CSBF Management.

The launch of the Cosmic Ray Energetics and Mass (CREAM) IV and Antarctica Impulsive Transient Antenna (ANITA) LDB missions in Antarctica far exceeded their minimum success criteria. NASA is pleased to know that both the CREAM and ANITA science teams were extremely pleased with their mission support and that they are very optimistic as to their science results. While the 7 Million Cubic Feet (MCF) Super Pressure Antarctic mission was for purposes of verification and qualification of the balloon vehicle, rest assured that the overwhelming success on this mission has provided NASA a much needed milestone, which was made possible by the outstanding launch and operations support provided by the PSL/CSBF team.

Several CSBF initiatives played a significant role in achieving the 7 MCF Super Pressure mission success criteria to include a record breaking 54-day flight duration. CSBF provided exemplary launch and flight management to include daily forecast of winds and trajectory in order to facilitate mission planning for both NASA and National Science Foundation (NSF) in order to maximize flight duration. CSBF's judicious planning and preparations provided for efficient and quick response in launch. The launch requirements for the Super Pressure balloon with use of the tow balloon and its unique inflation tube handling requirements are recognized as being different than that customarily used for zero pressure balloons launched in Antarctica. PSL/CSBF is commended for having the procedures, equipment, and a rehearsed choreography in-place, which lead to a highly successful launch in the more difficult Antarctic environment.

PSL/CSBF is again applauded for having an excellent safety record. NASA encourages PSL's continued proactive management in safety surveillance, safety training, and enforcement of procedures. The formal Lifting Device Equipment (LDE) training classes that were implemented 2 years ago and conducted again this past rating period are vital for maintaining proper operator competencies and awareness. CSBF is to be commended for its proactive role in keeping this training and the CSBF employees up-to-date.

PSL/CSBF is commended for its excellence in risk management. CSBF provided advance mission planning for the upcoming summer Sweden and spring Fort Sumner campaigns, which were planned and are now being executed with no liens or shortcomings. CSBF management was proactive in identifying potential issues of concern and in addressing these upfront before they had opportunity to become significant problems. Higher risk issues regarding reimbursable costs associated with the summer Sweden campaign were identified early on and were updated in real-time during

this period in support of NASA developing its letter of agreement and payment schedule with the foreign user.

## **Performance Factor 2**

### **Technical Performance of Engineering Support/21% Factor Weight – Rating – 93.6%**

PSL/CSBF has provided exceptional support of NASA's technical and engineering initiatives this past rating period. PSL/CSBF's participation in the Super Pressure project was instrumental towards the highly successful 54-day 7 MCF Super Pressure test flight during the last Antarctic campaign. CSBF's Quality Assurance of the balloon manufacturing helped insure success for each balloon mission. CSBF's new technology development and continued enhancements of flight support systems have increased reliability while expanding NASA's mission capabilities.

PSL/CSBF served key roles with members on the Super Pressure Balloon project team who were instrumental for insuring that balloon design and manufacturing processes were identified and that information was continually brought to the attention of NASA management. PSL/CSBF took the lead for implementing the successful 30-meter model indoor inflation test conducted at TCOM. PSL's photogrammetry measurements of bi-axial testing have been essential for NASA's ongoing development of the Super Pressure Balloon materials constitutive model. Analyses of flight trajectories against infrared plots of the flight environment have been critical for updating accuracies of Super Pressure Balloon performance models.

PSL/CSBF Super Pressure Balloon project engineering team members provided necessary expertise in Antarctica with preparations and launch of the 7 MCF Super Pressure Balloon. The Micro Instrument Package (MIP) engineering support team provided essential Antarctic field support for the 7 MCF Super Pressure Balloon. PSL/CSBF is commended for the excellent, error-free performance of the MIP over the 54-day Super Pressure Antarctic mission. The MIP fills the niche for a much needed capability for missions that require lower power and lighter weight telemetry, command, and control flight systems.

PSL/CSBF provided exceptional support to NASA's balloon program with ongoing enhancements and improvements of flight and ground support systems. The modification to the Super Pressure Balloon inflation tube attachment mechanism that failed last year proved highly successful during the past Antarctic campaign. The live video of the inflation port on top of the Super Pressure Balloon provided additional assurance of a healthy balloon at launch. CSBF's modification of the burst-detector switch resulted in a more simple and elegant design that will prove to be less costly to refurbish while at the same time eliminating inherent risks of the previous design by incorporating fewer mechanical parts. CSBF is commended in working with NASA by providing a prototype of the new burst switch for review and for incorporation of NASA's recommendation to further enhance the cable strain relief. CSBF is applauded for its continued shock-attenuation initiative by expanding of Rip-Stitch designs to support more parachute/payload combinations and by the addition of accelerometers on routine flights

in order to build up the performance database. NASA is pleased with PSL/CSBF's initiative to evaluate a replacement for the Support Instrument Package (SIP) flight computer and design of the high definition flight video and recording system. This new high definition flight video capability will greatly enhance NASA's capability with analysis and qualification of balloons undergoing test flights. The quick assessment of available Antarctic assets and then the subsequent procurement for the sled and hoist to be used to support future Antarctic large Super Pressure flights further highlights PSL/CSBF's initiative and excellence in planning.

CSBF is commended for its work on modification of SIP subsystems in order to accommodate the CREAM instrument while at the same time testing and refurbishing the Command Data Module (CDM) as a backup option. Having both the CDM and SIP provides enhanced support options for CREAM at a much reduced cost versus that of replicating a second set of CDM flight hardware. The progress to date of CSBF's support of the CREAM science team with software modifications, development of a power distribution system for the CREAM instrument and minor modifications of the SIP flight and ground support systems that are currently on schedule is to be commended. CSBF is commended for providing 100% surveillance at the balloon manufacturing facility. Surveillance at the film extrusion facility and maintaining two quality assurance (QA) auditors at the balloon fabrication facility during concurrent construction of zero pressure and super pressure balloons demonstrates commitment to excellence. Having the QA Manager step into backfill auditing functions when one of the three QA Technicians was not be available further demonstrates CSBF's commitment to quality and excellent utilization of personnel. CSBF's quality assurance efforts are commended for the success of the Antarctic 7 MCF Super Pressure test flight.

NASA shares PSL/CSBF's concerns for balloon quality as noted by the most recent balloon section audit showing an increase in the flaw index. NASA encourages CSBF to continue its candid consultation with the Balloon Program Office concerning balloon production issues and with working together toward resolving issues before they become bigger problems. While no degradation in performance has been encountered with any of the balloons flown this past rating period, NASA agrees with CSBF concerns as to how the pernicious nature of degraded quality can quickly and adversely impact NASA's flight program. NASA encourages PSL/CSBF to maintain close oversight over the coming months and to remain vocal with the manufacturer and NASA as to any concerns and suggestions for improvement. NASA encourages CSBF to continue to pay special attention to the manufacturer's compliance with procedures, including those used for repairs. NASA welcomes all suggestions as to how quality surveillance and control can be improved.

### **Performance Factor 3**

**Management/24% Factor Weight – Rating – 92.8%**

PSL/CSBF's management of planning, reporting, meeting milestones, working toward subcontracting goals, and maintaining a talented and versatile workforce has been done in an excellent manner this past rating period. PSL/CSBF has been fully responsive to

NASA's requests in all aspects of programmatic support. The FY 2009 Antarctic campaign and preparations for the spring Fort Sumner and summer Sweden campaigns have been exemplary of thoroughness in planning and preparation. All the long lead logistics items necessary to support both Antarctica and Sweden were completed without fail. Planning and preparations for the spring Fort Sumner campaign were excellent. PSL/CSBF has been fully responsive for required deliverables of the contract that were provided on or ahead of schedule. For the most part, documentation has been very thorough. Only minor errors have been noted in some of the documentation, but these have always been promptly corrected. No launch opportunities were missed or unnecessary delays incurred.

As previously noted, CSBF has done an outstanding job with planning and reporting on campaign preparations, mission execution, balloon production issues, and efficient utilization of personnel. CSBF is further commended for its delivery of the CSBF Emergency Response Plan at the end of the rating period. PSL/CSBF's support of weekly tagups with the Balloon Program Office and support of bi-monthly site visits have fostered a healthy, dynamic partnership between NASA and PSL management. PSL/CSBF continues to maintain a highly skilled workforce that is technically competent to perform all the missions and to provide needed engineering support. PSL/CSBF continues with support of its mentoring program through the Suborbital Center of Excellence, which has also provided Wallops with outstanding co-op student support.

NASA recognizes the difficulty that PSL/CSBF has had with meeting sub-contracting goals. PSL/CSBF has stated that this deficiency is due primarily to the loss of its principle target-goal supplier for helium, which was in place when PSL agreed to the sub-contracting goals at the beginning of the contract. This business has since been sold and no longer meets the qualification for the goal. PSL/CSBF is commended for its initiative to address this shortcoming by submitting a request for NASA review and concurrence on a suggested modification to the contract that would remedy this shortcoming. Pending the outcome of this review, PSL has taken additional steps to achieve sub-contracting target goals by going to other locally owned service providers. Although the volume of such purchasing may not reach the current contract target levels, PSL/CSBF is encouraged to continue its efforts to achieve sub-contracting goals or until changes to the contract might be put in place.

#### **Performance Factor 4**

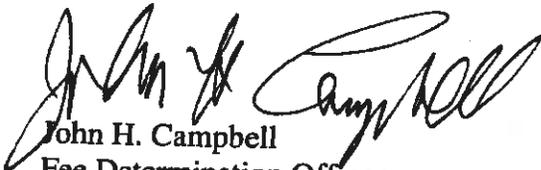
**Cost Control/25% Factor Weight – Rating – 97.8%**

PSL/CSBF is commended for keeping actual baseline and Indefinite Delivery Indefinite Quantity (IDIQ) costs under contract baseline and negotiated IDIQ cost limits. Cross utilization between engineering technical support and that of operations support has provided cost savings to NASA. This has been done while maintaining 100% mission success.

The CSBF waterfall along with timely and accurate submittals of 533's has provided the Program Office with necessary information to accurately plan and manage projects and

upcoming campaigns. NASA was able to meet SAP/CCR Center reporting deadlines. Accuracy, timeliness in reporting, and effective cost controls provided the program with needed assurance for planning of the upcoming summer Sweden campaign and the FY 2009 flight program. Effective cost controls has also allowed the program to maintain funding of the federally mandated National Environmental Protection Act study of the balloon program and the Super Pressure Balloon development project, as well as key CSBF technology development initiatives.

PSL/CSBF is commended for its effective management to achieve cost reduction and efficiency. Cross utilization of technical personnel in support of missions and operations is to be commended. This provides necessary responsiveness to bringing new technology on line along with realization of cost savings to NASA.



John H. Campbell  
Fee Determination Officer

cc:  
210/Ms. Stoltz  
210.I/Mr. Merritt  
210.I/Mr. Pagliaro  
820/Mr. Gregory  
820/Mr. Pierce

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of: 820

November 14, 2008

Ms. Diane Samuel  
Assistant Director  
Regents of New Mexico State University  
Office of Grants and Contracts  
Physical Science Laboratory  
Las Cruces, NM 88003-0002

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the Columbia Scientific Balloon Facility (CSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (NMSU/PSL), Rating Period 11 – April 1, 2008, through September 30, 2008

The performance evaluation for the above referenced contract, Performance Period 11, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan, Revision 4, effective June 7, 2007. I am very pleased to inform you that PSL's rating for this evaluation period was in the "excellent" range which is described as "Of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance." PSL has earned an overall rating of 94.25%. A maximum award fee of \$792,322 was possible, and your organization has earned \$745,416.54.

**Performance Factor 1**

Technical Performance of Operations/30% Factor Weight - Rating – 91%

PSL/CSBF's activity relating to performance of operations was given an excellent rating. For the third rating period in a row, PSL/CSBF's performance under this factor was exemplary performance in a timely, efficient manner and responsive to all the requirements. PSL is applauded for the successful launch of three operationally qualified balloons with 100% mission success. In addition, five qualification test flights were successfully flown, making for a busy launch season over the course of the last rating period. Operations were completed in a substantially efficient and economical manner.

PSL/CSBF's launch of five qualification test flights resulted in successful verification of new designs and materials. The newly designed 34H test flights have verified the much needed capability for launch of 8,000 pounds suspended mass. The materials qualifications test flights have moved us toward the ability to call upon more than one extrusion provider; and of paramount importance for the continued viability for the program, the 2 Million Cubic Feet (MCF) Super-Pressure test flight moved us another major milestone forward in qualification of a successful Super-Pressure vehicle design.

PSL is again commended for another perfect safety record during this rating period. PSL/CSBF showed great initiative by helping mitigate risk to the program with assisting Esrangle on their maiden Long Duration Balloon (LDB) mission this past July, thereby cultivating closer ties with Sweden that hopefully will result in NASA gaining an expanded Northern Hemisphere LDB capability. PSL/CSBF is commended for taking additional responsibility with greater involvement in support of readying the Command Data Module and subsequent integration with the Cosmic Ray Energetics and Mass (CREAM) IV payload at CSBF, thus mitigating additional cost and risk to the program. CSBF is encouraged to take a larger role for managing this effort and for the Engineering Support Center functions on future CREAM missions.

PSL/CSBF showed commendable initiative in mitigating risk to science readiness and the upcoming Antarctic Campaign through its preparations of the Antarctica Impulsive Transient Antenna (ANITA) payload at CSBF. In order to minimize time that the ANITA project would otherwise lose by shuttling the instrument between team institutions, PSL/CSBF hosted payload integration activities in Palestine, Texas. Normally, such modifications are taken care of by the instrument team prior to arrival at CSBF for the preshipment integration with the support instrumentation package. Because of the all-but-certain risk in the science team not making its schedule by shipping the instrument from the George Washington University back to Hawaii, CSBF eliminated such risk by not only accommodating work space, but by offering technical personnel and machine shop assistance in order to put these modifications in place. PSL/CSBF's support of ANITA and CREAM projects, assisting Esrangle with successful launch and recovery of their first LDB mission, and conducting of 8 highly successful missions from Fort Sumner was highly commendable. Congratulations go to all of CSBF Operations, Engineering, Administrative Support, and PSL/CSBF management.

There was one notable deficiency with the failure of the inflation tube coming off during inflation of the 7 MCF Super-Pressure test flight. PSL/CSBF is to be commended for the quick response to assess the weakness in the design and for providing a quick fix. Even though this failure occurred using a design that worked for several previous operations, this event highlights the importance for continually assessing our designs and configurations in terms of identifying potential failure modes. Such weaknesses in design can be elusive and not always obvious, but I encourage PSL/CSBF to routinely

take a fresh look at all flight and ground support systems from a fault/failure mode perspective in order to identify areas that might need to be addressed. In keeping with my previous request for more formal reporting of metrics on systems reliability, such periodic design reviews of potential fault/failure modes will prove invaluable for establishing priorities of future enhancements as well as provide the program with better insight into risk.

## **Performance Factor 2**

### **Technical Performance of Engineering Support/21% Factor Weight – Rating – 95%**

Performance of engineering support was given an excellent rating. Work was recognized to be of exemplary performance in a timely, efficient, and economical manner and was most responsive to NASA requirements.

PSL/CSBF's support for launch of the 2 MCF Super-Pressure test flight was executed with utmost professionalism and expertise. The successful accomplishment of this test flight was crucial for verifying the previous work on the small-scale model tests and corrections to the design to eliminate clefting. With the successful launch and flight of the 2 MCF balloon, NASA established the credentials necessary to progress to the next larger design of the 7 MCF balloon. PSL/CSBF's photogrammetric analyses, thermal modeling, materials testing for the constitutive model, and assistance with project coordination with Aerostar were instrumental in the successes enjoyed over the past 6 months. Proactive management of the balloon manufacturer's production of the 2 MCF and 7 MCF balloons insured timely delivery for the Fort Sumner test flights as well as timely delivery for shipment in preparation for the Antarctic test flight.

PSL/CSBF's assistance with Abort 21 on the 7 MCF was prompt and was punctuated by significant self-initiative and sense of urgency, which led to the discovery of the cause of the abort, thus alleviating concerns as to the balloon design or fabrication having caused this failure. PSL/CSBF's expertise along with CSBF's management focus on a timely resolution led to a more robust design for the connection of the inflation tubes with the apex fitting. They are to be congratulated for insuring this was resolved on time as to avoid any potential impact on the upcoming Antarctic test flight schedule.

NMSU/PSL again did an outstanding job in performing quality control surveillance efforts at the Aerostar plant and Raven Extended Films Division (EFD) facility. The new on-site Quality Assurance (QA) inspector has demonstrated excellence in coming up to speed with performance of duties. This also demonstrates excellent planning with hiring a QA inspector who lives closer to the manufacturing facility and thereby offering the convenience of supporting more time in the plant with greater economy. Judicious implementation of two Balloon Section Audits (BSAs) has been instrumental in maintaining focus on quality. Improvements in the second BSA over that of the first demonstrate the utility of these audits and proof of their effectiveness for maintaining

balloon quality and reliability. Enhancement upgrades to CSBF's materials lab bring more efficiency to QA testing. PSL/CSBF QA is to be congratulated. In turn, Aerostar and Raven are to be congratulated for excellence in quality control testing as well as their conscientiousness, efficiency and economy in balloon production.

Again, PSL/CSBF's engineering development and reliability enhancements as demonstrated by successful operation of the Micro Instrument Package on last July's Sweden to Canada LDB flight, continued development and testing of the prototype enhanced burst detector system, new parachute release system, enhanced helium valve and ballast valve designs, and Maximum Power Pointing Tracking (MPPT) charge controller highlight the excellence in proactive management and in-house capability for design enhancements that are essential to continued success of the program. The balloon rotation simulator holds promise for better reliability assurance of the SPS. The high definition flight video recorder system will provide enhanced tools for monitoring and assessment of performance of balloons, such as Super-Pressure while undergoing test flights. PSL/CSBF is again congratulated for its initiative to seek enhancements and improved reliability to ground and flight support systems, and I wholeheartedly encourage you to continue and expound upon this initiative.

### **Performance Factor 3**

Management/24% Factor Weight – Rating – 93%

Performance of Management was given an excellent rating. As previously noted, management has maintained excellence in balance of priorities and complete responsiveness to NASA requirements. One hundred percent mission success for balloons launched, dedication to support of ANITA and CREAM and support for the Super-Pressure project all highlight a highly effective management team. It is recognized that senior management is well served by excellence in Operations, Engineering and Administration Management.

PSL/CSBF continues a record of excellence with supporting weekly tagups with the Balloon Program Office (BPO), biweekly QA tagups, bimonthly site visits and quarterly reviews. Prompt reporting and accuracy of documents was once again noted by the BPO as being exceptional. Near daily coordination between senior management and BPO was noted and has gone a long way toward establishing closer coordination and cohesiveness within the program.

In addition to that already noted, management has been instrumental to insure timely progression of plans for a new payload building in Alice Springs in preparation for the upcoming 2010 conventional campaign. Documentation has been delivered in a timely manner and was complete. Accuracy in documents was especially noted this period. Support for Balloon Array for RBSP Relativistic Electron Losses (BARREL) has been instrumental for helping to keep the project on schedule. Quick response to NASA

requirements to mitigate risk of year-end uncommitted carry-over was noted. All flight missions were carried out on time as scheduled. It is noted that PSL/CSBF is still coming in under subcontracting goals, but it is noted that efforts are underway to document this and to submit to the contracting officer the documentation necessary by which modification to the contract can be made to adjust this goal. I encourage PSL/CSBF to complete and submit this documentation as soon as possible. Overall, management has demonstrated excellence in attention to details, maintaining focus on priorities, timely response, maintaining a diversified skilled staff, and thorough communication and reporting. Terms and conditions of the contract have been carried out in an exemplary manner.

**Performance Factor 4**

Cost Control/25% Factor Weight – Rating – 98%

Once again, PSL/CSBF's excellent performance in achieving cost controls resulted in coming in under budget. Timely response to NASA's requirement to mitigate risk for year-end uncosted carryover was fulfilled. Excellent management and accounting allowed for less than 2% variance at the end of fiscal year 2008, thus, demonstrating PSL/CSBF's commitment to NASA and the balloon program through maintaining planned levels of spending.

Documentation was very accurate and delivered on time consistently through this rating period. Administrative support at CSBF insured timely approval for above-baseline spending.

Staffing was utilized very well. Cross-utilization of personnel in support of engineering and operations allowed for economy of resources that resulted in savings to NASA. Engineering and Operations personnel were cross-utilized for flight operations support, development, and enhancement projects in order to achieve better economy of resources.

PSL/CSBF maintained its excellent track record for supporting the Suborbital Center of Excellence and the cooperative education program by which Wallops has been able to benefit each semester with highly talented undergraduate engineering students. These students have consistently brought a sufficient level of knowledge and capability, so as to make real and significant contributions to BPO technology development.

  
John H. Campbell  
Fee Determination Officer

cc:

100/Mr. Obenschain

210/Ms. Burr

210.I/Mr. Merritt

210.I/Mr. Pagliaro

820/Mr. Gregory

820/Mr. Pierce

National Aeronautics and  
Space Administration  
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May 19, 2008

Reply to Attn of: 820

Ms. Diane Samuel  
Assistant Director  
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Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the Columbia Scientific Balloon Facility (CSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (NMSU/PSL), Rating Period 10 – October 1, 2007, through March 31, 2008

The performance evaluation for the above referenced contract, Performance Period 10, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan, Revision 4, effective June 7, 2007. I am very pleased to inform you that PSL's rating for this evaluation period was in the "excellent" range which is described as "Of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance." PSL has earned an overall rating of 95.6%. A maximum award fee of \$640,686.67 was possible, and your organization has earned \$612,240.18.

**Performance Factor 1**

Technical Performance of Operations/30% Factor Weight - Rating – 96%

NMSU/PSL's activity relating to performance of operations was given an excellent rating. For the second rating period in a row, NMSU/PSL's performance under this factor was exemplary performance in a timely, efficient manner and fully responsive to all the requirements. PSL is applauded for the successful launch of all five operationally qualified balloons and 100% mission success due to your highly professional and well trained staff. Operations were completed in a substantially efficient and economical manner.

The record setting launch and operation of three heavy-lift science balloon missions during the last Antarctica campaign resulted in 79 days cumulative total flight time for all three instruments, thus resulting in NASA's most successful Antarctica campaign ever. Preflight preparations for three large Antarctic payloads and science support teams were outstanding. Launch of these three payloads over an 8-day period was unprecedented for

this number of payloads over a relatively short period of time. NMSU/PSL exercised excellent operations management and coordination with the National Science Foundation (NSF) for recovery of all three payload's on board data drives. Complete recovery of the Cosmic Ray Energetics And Mass (CREAM) and Advanced Thin Ionization Calorimeter payloads in the same season demonstrated highly effective planning and coordination. Only NSF's inability to provide dedicated aircraft support preempted complete recovery of the Balloon Experiment with a Superconducting Solenoid Spectrometer payload.

PSL is again commended for the 100% reliability of systems and a perfect safety record during this rating period. Systems reliability and the excellent safety record as demonstrated by NMSU/PSL this past rating period are also high priorities for NASA. NMSU/PSL is to be congratulated for being able to make operational the implementation of the Gondola Automatic Parachute Release and Rip Stitch shock attenuation system on the Antarctic Long Duration Balloon (LDB) payloads, thus enhancing flight system overall reliability. NMSU/PSL's continued attention to details regarding support systems and balloon systems quality, particularly for LDB missions, is critical for continued success of the NASA scientific balloon program. By way of additional enhancements, NMSU/PSL is encouraged to work with the NASA Balloon Program Office to enhance its formal reporting metrics on systems reliability of flight systems (e.g., hardware, software), problem failure/deficiency reporting, submittal of safety metrics, and submittal of top risks.

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## **Performance Factor 2**

### Technical Performance of Engineering Support/21% Factor Weight – Rating – 95%

Performance of engineering support was given an excellent rating. Work under this was recognized to be of exceptional merit; exemplary performance in a timely, efficient, and economical manner and was most responsive to NASA requirements.

NMSU/PSL's support of the Super-Pressure balloon development project has been crucial toward defining the cause of and resolving the clefting problem previously experienced with the pumpkin design. NMSU/PSL's support in defining and conducting the 27-meter hangar model tests and the subsequent laboratory strain/creep tests to enhance the materials model have been critical to reaching NASA's goal for re-implementing the flight test program phase with the upcoming 2 Million Cubic Foot (MCF) test flight.

It is particularly noteworthy that PSL completed the design, fabrication, and testing of the Micro Instrument Package (MIP), Gondola Automatic Parachute Release system, and the Rip Stitch shock attenuation system for timely implementation as operationally qualified systems to meet launch readiness dates for the Antarctic campaign. These new flight support systems represent significant enhancements to NASA scientific ballooning, and NMSU/PSL is highly commended for completing this work in a little over 1 year. Operational use of the Rip Stitch on the past Antarctic campaign demonstrates timely and effective technology enhancement for which NMSU/PSL is highly commended.

NMSU/PSL is applauded for these enhancements, and encouraged to continue working to provide technologies to meet our customer's needs.

NMSU/PSL's quality control surveillance efforts at the Aerostar plant continue to provide excellent insight into balloon production. The balloon section audit (BSA), conducted in February 2007, showed a 40% reduction in flaws over the previous BSA and is not only a testament of Aerostar's attention to detail, but is in large part due to PSL's excellent Quality Assurance (QA) program.

Support toward qualification of the Huntsman resin and Charter film demonstrates excellent risk management and initiative to increase reliability. NMSU/PSL support for the improved 8,000 lb heavy load development has been critical to achieving NASA's goal for conducting the upcoming 34 MCF 8,000 lb lift test flight. NMSU/PSL is encouraged to continue bi-weekly QA telecons and timely reporting of balloon manufacturing status. Again, PSL is commended for your demonstrated vigilance in the balloon plant, and you are encouraged to continue the proactive approach toward quality assurance with the goal that issues related to balloon quality are identified before they become problems.

### **Performance Factor 3**

#### **Management/24% Factor Weight – Rating – 94%**

Performance of Management was given an excellent rating. PSL demonstrated exemplary performance through management's responsiveness to NASA requirements, as well being efficient and economical. For instance, the timely submission of requested details of operation for the new NSF Environmental Assessment (EA) for the Antarctica campaign were instrumental in NASA's ability to review and release the new EA, and finalize campaign arrangements with NSF. Further, PSL met the new reporting obligations as specified in the EA without prompting or reminder by the program office for followup; thus demonstrating flow-down of requirements from senior PSL management.

PSL's timely response in support of the Balloon Array for RBSP Relativistic Electron Losses (BARREL) Concept Study Report demonstrated thorough planning to the selection panel and was a very significant contribution toward helping the BARREL team to win their Phase-B award. NMSU/PSL worked quickly and thoroughly to provide review and written recommendation needed by NASA export control for review of the MIP. NMSU/PSL responded quickly to reassess its "Engineering Plan" priorities in response to NASA's request to minimize end-of-year uncoded carryover. NMSU/PSL's performance in support with bi-weekly QA tag-ups, assertively responding to NASA's request to support the Command Data Module (CDM) for the CREAM IV mission, survey of candidate Southern Hemisphere launch sites, support of the SF430, SF450, 34H design and test flights, and the support on the 580NT investigation demonstrate quick response to changing requirements in a most excellent and professional manner.

NMSU/PSL performance in meeting milestones has been superb. Qualification of new flight support systems on schedule has been noteworthy. NMSU/PSL's maintenance of a very well trained and most capable staff has produced outstanding results this past period with completion of testing and qualification of critical flight support systems and operationally, with execution of a record setting Antarctica campaign.

All flight qualified balloon missions were launched and resulted in 100% mission success. Failure of the 580NT balloon has been determined to not be the result of operations neglect or oversight. PSL's quick, level-headed response to this failure by sending of the few remaining requisite MIP test commands during descent insured mission success. NMSU/PSL's continued support in the 580NT investigation and support of the subsequent 1.5 MCF test flight will provide valuable insight for the investigation team.

PSL is encouraged to continue their effort to meeting the subcontracting goals, particularly in the areas of Women Owned Small Businesses and Historical Black Universities. NMSU/PSL may consider offering a detailed written explanation as to why these goals cannot be met to submit for NASA consideration.

#### **Performance Factor 4**

Cost Control/25% Factor Weight – Rating – 97%

NMSU/PSL's excellent performance in achieving cost controls resulted in coming in under budget, which is recognized and appreciated. NMSU/PSL demonstrates understanding and quick responsiveness to changing requirements relative to the particular budget environment within the program.

In January, NMSU/PSL was directed to reduce uncosted carryover. Within a few days, PSL provided a comprehensive plan for spending for needed reliability and enhancements. This plan was reviewed and approved by NASA, and subsequently NMSU/PSL quickly put the plan into action, thus enabling the program maximum utilization and protection of program funding.

NMSU/PSL resource and manpower utilization was able to support a variety of activities by effective cross-training and cross-utilization, thus negating the necessity to hire additional personnel. PSL's staffing of exceptionally qualified personnel supports the program's dynamic requirements. NMSU/PSL support of the CDM for CREAM IV has resulted in a cost savings to NASA.

NMSU/PSL implemented many activities under baseline that normally would fall under indefinite delivery/indefinite quantity (IDIQ). This has resulted in tremendous cost effectiveness. Financial reports have been delivered on time, thus providing the program necessary information to make future plans and credibly adjust current plans. The NMSU/PSL BANNER financial reporting and accounting system continues to demonstrate high integrity and accuracy. NMSU/PSL's administrative personnel are highly talented and motivated and are to be commended as well.

Once again, NASA recognizes and appreciates NMSU/PSL's continued dedication, its pursuit of excellence in support of flight operations, its contributions towards enhancement of the Balloon Program's overall capabilities, and its responsiveness to NASA requirements.



John H. Campbell  
Fee Determination Officer

cc:

100/Mr. Obenschain

210/Ms. Burr

210.I/Mr. Merritt

210.I/Mr. Pagliaro

820/Mr. Gregory

820/Mr. Pierce

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



November 16, 2007

Reply to Attn of: 820

Regents of New Mexico State University  
Attn: Ms. Josie Jimenez  
Contract Officer  
Physical Science Laboratory  
Las Cruces, NM 88003-0002

MOD # 63

**Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the Columbia Scientific Balloon Facility (CSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (NMSU/PSL), Rating Period 9 –April 1, 2007 through September 30, 2007**

The performance evaluation for the above referenced contract, Performance Period 9, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan, Revision 3, effective June 22, 2004. NMSU/PSL has earned an overall rating of 95.5%. NMSU/PSL's performance was shown to be very effective, fully responsive to the Government's requirements; timely, efficient, and economical with only minor deficiencies noted. A maximum award fee of \$654,786.67 was possible, and your organization has earned \$625,786.65.

**Performance Factor 1**

**Technical Performance of Operations/30% Factor Weight - Rating – 95%**

NMSU/PSL's activity relating to performance of operations was given an excellent rating. Work performed under this factor displayed very effective performance and was fully responsive to all the requirements. Work was timely, efficient, and economical.

The successful launch of all operationally qualified balloons and 100% mission success for the 10 missions launched during a very busy flight period, concurrent with payload preparations for the upcoming Antarctic campaign, is the result of excellent management as well as a highly professional and well trained staff. Also, PSL is commended for the rapid response to NASA's support request by launching Dr. McConnell's instrument within 8 weeks of initial contact.

PSL's support of NASA's request for additional qualification flights for the new 37H and film qualification has been critical for moving forward NASA's goal of maintaining a diverse and

reliable fleet of balloon designs. Timely response to this request for support of additional qualification flights, on top of an already busy flight manifest, required PSL to juggle launch schedules to meet campaign deadlines, and demonstrates excellence in commitment and achievement in meeting NASA's goals.

One hundred percent reliability of systems and a perfect safety record during this rating period were especially noted. PSL is to be commended for completing its lifting device certification in a timely manner, and for its assistance in the crucial task of developing IT certification and accreditation packages to meet NASA approval schedules, which demonstrates your commitment to risk management. PSL is encouraged to place continued focus on systems reliability and safety as was demonstrated this past rating period.

## **Performance Factor 2**

### **Technical Performance of Engineering Support/21% Factor Weight – Rating – 96%**

NMSU/PSL's activity relating to performance of engineering support was given an excellent rating. The work performed under this factor displayed very effective performance and was responsive to the requirements.

NMSU/PSL's initiative to solve the problems caused by parachute opening shock is highly commended. The design and flight qualification of the Gondola Automatic Parachute Release (GAPR) and RipStitch systems in less than a year to meet this year's Antarctica launches shows excellence in management and engineering. Use of science and dedicated qualification flights to test the GAPR nine times to demonstrate its reliability shows excellence in utilization of resources. PSL is encouraged to continue its innovative evaluation of areas where balloon and flight systems can be improved, and to forward proposals for enhancements for NASA approval.

NMSU/PSL is highly commended for its qualification of the Micro-Instrument Package (MIP) on eight flights this past rating period. Enhancements made to the helium valve and ballast valve by incorporating new, lower cost motors show excellence in management toward reducing cost while increasing reliability with a simpler design. Completion of design and qualification of these aforementioned enhancements and improvements both on schedule and within baseline cost demonstrates excellence in management and technical innovation.

NMSU/PSL's continued support of the Ultra-Long Duration Balloon (ULDB) with the planning and execution of the 27-meter indoor test series has been instrumental in understanding the cause of the S-cleft phenomenon that has occurred in recent designs. PSL's development and use of the state-of-the-art photogrammetry technique has been instrumental in helping NASA understand the design boundary limits and the creep behavior properties of materials used in ULDB.

NMSU/PSL's quality control surveillance efforts at the Aerostar plant have provided excellent insight into production issues before they become problems in flight. The two balloon section audits have demonstrated an excellent trend of decreasing flaws in balloons. Continued support of NASA's bi-weekly QA telecons and timely updates regarding ongoing

balloon quality issues has been instrumental in helping to move the trend toward higher reliability of standard design balloons. PSL is encouraged to continue its proactive approach toward quality assurance with the goal that issues related to balloon quality are identified before they become problems.

### **Performance Factor 3**

#### **Management/24% Factor Weight – Rating – 95%**

NMSU/PSL has demonstrated excellent management of its operations and development initiatives. All flight qualified balloon missions were launched and resulted in 100% mission success. No opportunities were missed. PSL has demonstrated excellent flexibility and willingness in achieving NASA's requirements as illustrated by its stepping forward in support of added qualification flights and additional science piggyback missions of opportunity. Maintenance of a diversified and talented workforce coupled with a focus by management has led to the timely design and qualification of GAPR, MIP, and RipStitch systems to reduce parachute shock loads. Daily management of balloon production schedules and reporting of progress and status to the program office have been exemplary. Timely response with completion of information technology documentation was noted to be among the first to be accredited by the Goddard Space Flight Center Information Technology Management. NASA appreciates PSL's commitment to the Balloon Program, which was demonstrated through your motivation to successfully meet milestones and delivery dates.

PSL is encouraged to continue their effort to meeting the subcontracting goals, particularly in the areas of Women Owned Small Businesses and Historical Black Universities, while NASA appreciates your efforts to mentor students from minority institutions in the United States and Mexico.

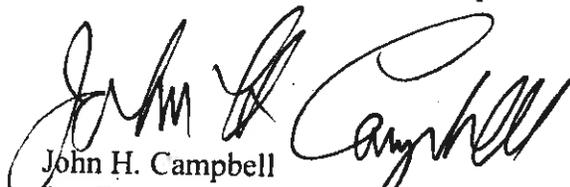
### **Performance Factor 4**

#### **Cost Control/25% Factor Weight – Rating – 97%**

NMSU/PSL's excellent performance in achieving cost controls resulted in coming in under budget. PSL worked out fiscal year (FY) 2007 and FY 2008 baseline constraints that were less than the amount proposed by NASA. As a result, NASA was able to complete its mission within budget with no compromise to science. PSL's excellent management of obligation/cost phasing coincided well with NASA's receipt of funds, thus resulting in avoidance of cost over obligation situations at the beginning and end of the fiscal year.

NASA views favorably PSL's oversight of Aerostar's production teams and its daily production oversight to avoid situations where production is moving along too fast. Avoidance of completing balloon orders too quickly with its three production teams, where NASA only requires two teams, helps to avoid work slowdowns and associated risks that can impact cost and workforce maintenance.

In conclusion, NASA recognizes and appreciates NMSU/PSL's continued dedication, its pursuit of excellence in support of flight operations, its contributions towards enhancement of the Balloon Program's overall capabilities, and its responsiveness to NASA requirements.



John H. Campbell  
Fee Determination Officer

cc:

100/Mr. A. Obenschain

210/Ms. V. Burr

210.W/Mr. M. Merritt

210.W/Mr. B. Pagliaro

820/Mr. D. Gregory

820/Mr. D. Pierce

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



June 6, 2007

Reply to Attn of: 820

*mod #60*

Regents of New Mexico State University  
Attn: Ms. Josie Jimenez  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88003-8001

Subject Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the Columbia Scientific Balloon Facility (CSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (NMSU/PSL), Rating Period 8 – October 1, 2006, through March 31, 2007

The performance evaluation for the above referenced contract, Performance Period 8, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan, Revision 3, and effective June 22, 2004. NMSU/PSL's has earned an overall rating of 87.5%. NMSU/PSL's performance was shown to be very effective, fully responsive to the Government's requirements; timely, efficient, and economical with only minor deficiencies noted. A maximum award fee of \$719,848 was possible and your organization has earned \$627,491.51.

**Performance Factor 1**

Technical Performance of Operations/30% Factor Weight - Rating – 84%

NMSU/PSL's activity relating to performance of operations was given a very good rating. Overall, the work performed under this factor displayed very effective performance and was fully responsive to all the requirements. Work was timely, efficient and economical. Responsiveness to the first-ever launch of three heavy-lift balloons in the same season as demonstrated during the past Antarctica campaign showed excellent management and utilization of resources. Favorable recognition is given for the support of the Antarctica campaign and support of the Sweden campaign in January and February wherein six remote flights were conducted in timely manner during this rating period. NASA viewed favorably NMSU/PSL's efforts to quickly recover the Mark IV instrument for a second launch shortly after failure of the first mission to achieve its required science objectives. NASA is concerned with the cause and resultant damage to the Antarctica Balloon-borne Large Aperture Submillimeter Telescope (BLAST) payload and with the failure of the two

Mark IV flights launched in Sweden. NASA recognizes that with regard to these unfortunate events, NMSU/PSL was very forthcoming in supporting the follow-on investigations with informed assessments as to possible causes and with knowledgeable suggestions for corrective actions. NASA favorably viewed NMSU/PSL's self-initiative to have Pioneer Parachutes evaluate the application of rip-stitch technology to the flight system as a possible solution for mitigation of parachute opening shock and responsiveness with development of the Gondola Automatic Parachute Release (GAPR) system.

### **Performance Factor 2**

#### Technical Performance of Engineering Support/21% Factor Weight – Rating – 85%

NMSU/PSL's activity relating to performance of engineering support was given a very good rating. Overall, the work performed under this factor displayed very effective performance and was responsive to the requirements.

NMSU/PSL's continued participation and contributions to the Ultra Long Duration Balloon (ULDB) vehicle development project, specifically with the 27 meter indoor test, was excellent. NMSU/PSL personnel remain instrumental in the progress of this effort. NASA is concerned with the oversight of not placing the ULDB tendon samples on each of the three Antarctica missions that were launched this past season, which were intended for Ultraviolet (UV) exposure tests. NASA views favorably NMSU/PSL's support in the balloon materials lab with materials and cylinder testing. NASA looks forward to timely support as may be required for failure investigations, development projects, and new materials qualification tests.

NMSU/PSL's quality control surveillance efforts at the Aerostar plant are commendable. NASA views favorably NMSU/PSL's efforts to provide NASA with more insight into the balloon quality assurance process. Going into this rating period, NMSU/PSL raised to NASA's attention several balloon production and quality issues. The investigation of the failed High Energy Replicated Optics (HERO) mission underscored these concerns with its finding that the failure was attributed to balloon quality. Overall, NASA is pleased with the more proactive approach in balloon quality assurance that has been developed this past period. Along with the action plan that has been identified and steps toward remediation that have already been put in place, NASA looks forward to continued improvements with overall balloon quality.

Development of the Micro-Instrument Package (MIP) is commendable. NASA looks forward to successful completion of follow-on qualification testing and the expanded mission opportunities it will provide for smaller balloon payloads.

### **Performance Factor 3**

#### Management/24% Factor Weight – Rating – 88%

Once again, NMSU/PSL's management displayed its firm commitment and willingness to further the NASA's Balloon Program mission. All missions were

launched as required. No opportunities were missed. In response to a constrained budget, NMSU/PSL worked diligently to minimize costs associated with the last record-setting Antarctica campaign in support of three flights. Maintenance of a diversified and talented workforce coupled with a focus by management has yielded timely response to program requirements as demonstrated by the work to date on the GAPR, MIP, potential solutions to reduce parachute shock loads as well as other flight systems enhancements. Reporting of progress has been exemplary. Responsiveness to newly instituted monthly NASA site visits has provided NASA with timely insight into activities and issues as they arise. NASA recognizes the timely response with risk mitigation by the implementation of updated IT Security plans and training for the lifting device certification of CSBF employees. NASA continues to look forward to final acceptance of the BANNER reporting system which is now undergoing extended verification and validation comparisons with CSBF reports.

PSL is encouraged to continue efforts toward meeting established subcontracting goals, particularly in the areas of Women Owned Small Businesses and Historical Black Universities. PSL management's initiative to increase Balloon Section Audits (BSA) is commendable. Support of NASA's Phase II Environmental Assessment of the CSBF property is appreciated.

#### **Performance Factor 4**

Cost Control/25% Factor Weight – Rating – 92%

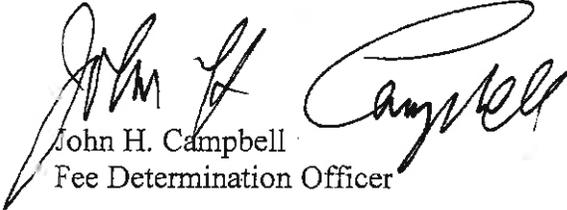
NMSU/PSL continues to perform in an excellent manner with controlling costs, thus allowing NASA to stay within guidelines of a constrained budget without compromise of support of the science community. Formatting CSBF reports to coincide with NASA's "waterfall" has dramatically eased monthly reconciliation between PSL costs and NASA's planned costs. This new format not only saves time, but it also presents a much clearer picture of the budget for PSL and NASA.

NASA views favorably the dual reporting from both the BANNER and CSBF financial reporting systems. The assurance this dual effort provides is greatly appreciated. NMSU/PSL should insure sufficient time is given for verification and validation before moving all reporting exclusively onto BANNER.

Although your rating for this period was 87.5 %, thereby achieving a very good rating, NASA is still concerned about the failure of the BLAST parachute release system and the failures of the two MARK IV balloons in Sweden. For the next reporting system NASA will be very closely monitoring your progress in reducing these types of failures. The balloon program has a real potential to grow in the future but that growth will partly rely on increasing the reliability of balloons and support systems.

In conclusion, NASA recognizes and appreciates NMSU/PSL's continued dedication, its pursuit of excellence in support of flight operations, its contributions towards

enhancement of the Balloon Program's overall capabilities, and its responsiveness to NASA requirements.



John H. Campbell  
Fee Determination Officer

cc:

100/Dr. M. Ryschkewitsch

210/Ms. V. Burr

~~210~~/W/Mr. M. Merritt

210.W/Mr. B. Pagliaro

800/Mr. C. Purdy

820/Mr. D. Pierce

820/Mr. D. Gregory

820/Ms. B. Merritt

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of: 820

November 16, 2006

Regents of New Mexico State University  
Attn: Mr. Stan Wright  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88003-0002

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the Columbia Scientific Balloon Facility (CSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (NMSU/PSL), Rating Period 7 – April 1, 2006 through September 30, 2006

The performance evaluation for the above referenced contract, Performance Period 7, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan, Revision 3, and effective June 22, 2004. NMSU/PSL has earned an overall rating of 90%, or very good range. NMSU/PSL's performance was shown to be very effective, fully responsive to the Government's requirements; timely, efficient, and economical with only minor deficiencies noted. A maximum award fee of \$628,123 was possible and of that amount your organization has earned \$565,311.

#### **Performance Factor 1**

##### Technical Performance of Operations/30% Factor Weight - Rating – 93%

NMSU/PSL's activity relating to performance of operations was given an excellent rating. All work performed under this factor displayed exemplary performance; i.e., timely, efficiently, economically and met the requirements of the Balloon Program. Favorable recognition is given to efforts associated with the very successful conduct and completion of the 3 flight 2006 Sweden Balloon Campaign, the successful flight of the Absolute Radiometer for Cosmology (ARCADE) payload from Palestine, Texas, and the successful completion of the 2006 Fall Fort Sumner, New Mexico Campaign. The Ft. Sumner campaign included successful flights for the High Altitude Student Platform (HASP), and the Far Infrared Spectroscopy of the Troposphere (FIRST) payload. NASA also appreciates NMSU/PSL's efforts relative to the flight failure investigation currently being conducted for the High Energy Replicated Optics (HERO) payload. Issues

pertaining to the findings associated with the HERO investigation will be discussed and evaluated during the next performance period.

**Performance Factor 2**

**Technical Performance of Engineering Support/21% Factor Weight – Rating – 88%**

NMSU/PSL's continued participation and contributions to the ULDB vehicle development project, specifically with regard to project meetings, milestones, design reviews, mission readiness reviews, flight preparations and documentation is recognized. NMSU/PSL personnel remain instrumental in the progress of this effort.

CSBF quality control (QC) surveillance efforts at the Aerostar plant are commendable as was the quality improvements made, including: development of a more stable film cart, efforts to minimize handling damage of the balloon film, and improved film extrusion quality control, all of which were put into place during this period. However, NASA remains concerned about this period's data relating to production quality problems at the Aerostar plant in Sulphur Springs, Texas. Based on recent quality meetings with Aerostar, NASA has reviewed and agreed with the Aerostar's corrective action plan. NASA looks forward to immediate, marked improvements in this area and requests to be apprised of progress as it occurs.

**Performance Factor 3**

**Management/24% Factor Weight – Rating – 88%**

NMSU/PSL's management efforts continue to display your firm commitment and willingness to further the NASA's Balloon Program mission. NMSU/PSL's cooperation in meeting FY 2006 budget constraints has been instrumental to the successful completion of this year's Program activities. NMSU/PSL's voluntary budget reductions allowed the Program to successfully conduct all campaigns and flights requested by the science community as well as move forward with the development of the ULDB vehicle.

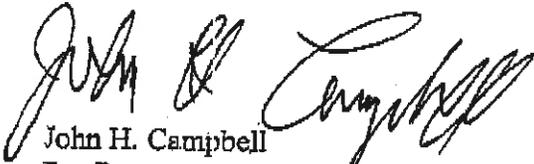
NASA recognizes the substantial gains made by the BANNER implementation team in recent weeks and looks forward to the completion of this implementation effort within the current contract year.

**Performance Factor 4**

**Cost Control/25% Factor Weight – Rating – 90%**

NMSU/PSL's continuing efforts to reduce and control costs to the Balloon Program are recognized and very much appreciated. PSL is encouraged to ensure that costs and projections are accurate and timely during the final phase of the implementation of the new accounting system at NMSU. However a lower evaluation score resulted in this area because of the delays encountered in completing the implementation of the University's BANNER system and the resulting impact to NASA's ability to cost expenditures, travel and manpower.

In conclusion, NASA recognizes and appreciates NMSU/PSL's continued dedication to the success of balloon operations and enhancement to the overall capability of the Balloon Program.



John H. Campbell  
Fee Determination Officer

cc:

100/Dr. M. Ryschkewitsch  
210/Ms. V. Burr  
210.W/Mr. M. Merritt  
210.W/Mr. B. Pagliaro  
800/Mr. C. Purdy  
820/Mr. D. Gregory  
820/Ms. B. Merritt  
820/Mr. D. Pierce

<b>AMENDMENT OF SOLICITATION/ MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF 1   2
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2. AMENDMENT/MODIFICATION NO. 45	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. See Page 2	5. PROJECT NO. (If applicable)
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6. ISSUED BY NASA/Goddard Space Flight Center Wallops Flight Facility, Procurement Office Bldg. E-105, 3 <sup>rd</sup> Floor Wallops Island, VA 23337-5099	CODE 210.W	7. ADMINISTERED BY (If other than Item 6) Mickey M. Merritt, NASA, GSFC, WFF, (GDM) (757) 824-1492
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ach PAID PP44 ✓  
 Amount: \$ 250,000.00  
 Paid By: SM 8/15/06  
 Date Due: 8/16/06

5600602634  
122453

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, city, state, zip) Regents of New Mexico State University Physical Science Laboratory (19) Attn: Mr. Stan Wright P.O. Box 30002 Las Cruces, NM 88030-8002	
---	--

CODE (X) 9A. AMENDMENT OF SOLICITATION NO.	FACILITY CODE 9B. DATED (SEE ITEM 11)
X 10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-03003	10B. DATED (SEE ITEM 13) 4/01/03

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning  copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) B/NC: GDM	Total Funding: \$54,059,821.07	Total Est. Cost: \$238,700,000.00
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**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,  
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.(x)**

(x)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.:
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, Appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	d. OTHER (Specify type of modification and authority) NFS Clause 1852.216-78, Limitation of Funds

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. description of amendment/modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The purpose of this modification is to adjust the contract for the amount of earned award fee. The Government has determined that a award fee of \$250,000.00 has been earned for the period of October 1, 2005 through March 31, 2006. Accordingly-

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mickey M. Merritt	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 6/22/2006

\$ 250,000.00

Block 14 – Description of Modification (Cont'd)

- A. Clause B.8, Contract Funding is revised as follows:

Under paragraph (B), the total amount allotted for payment of award fee is Decreased  
FROM: \$ 598,189.35                      BY: \$ 250,00000                      TO: \$ 348,189.35

- B. The amount of **\$250,000.00** shall be paid to the Contractor for award fee **upon execution of this modification** by the Contracting Officer.
- C. The total adjusted award fee earned from April 1, 2003 through March 31, 2006 is **\$2,621,480.44**.
- D. The total CPAF remains unchanged.
- E. There are no obligated or deobligated funds or other revisions to the contract by issuance of this modification.

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of:

820

June 12, 2006

Regents of New Mexico State University  
Attn: Mr. Stan Wright  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88003-0002

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the Columbia Scientific Balloon Facility (CSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (NMSU/PSL), Rating Period 6 – October 1, 2005 through March 31, 2006

The performance evaluation for the above referenced contract, for Period 6, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan, Revision 3, effective June 22, 2004. While NMSU/PSL's rating was in the "Satisfactory" range, the scoring reflects a reduction due to shortfalls from the implementation of the new PSL financial system, and operational deficiencies as discussed below. These shortfalls had identifiable impacts on the operation of the Balloon Program. Your organization has earned an award fee of \$439,137 from a maximum available fee of \$645,866 and received a cumulative rating of 68.9%. Based on the PSL's voluntary acceptance of \$500,000 in award fee during the current fiscal year due to the Program's constrained budget, your organization will receive a total award fee of \$250,000 for this period.

**Performance Factor 1**

Technical Performance of Operations/30% Factor Weight - Rating – 63.8%

NMSU/PSL's activity relating to performance of operations is satisfactory. All work was performed efficiently, effectively, and in a quality manner relative to the Balloon Program's requirements. However, the result of CSBF's investigation of the mission failure during the launch of ATIC III in Antarctica has caused concern. NASA requested that CSBF's investigation report would include information as to the root cause and recommendations for future fixes.

The CSBF report as delivered was inadequate in describing the failure, its root causes, and the necessary corrective actions. NASA's Mishap Investigation Board convened and determined the root cause for the failure was due to operational deficiencies relating to collar release and abort of an anomalous shaped balloon during the launch sequence.

NMSU/PSL planned an operational flight of a newly configured terminate fitting (flight critical equipment) on upcoming Sweden flights. PSL had previously proceeded with this new design, including five flight qualification flights without having proper Balloon Program Office (BPO) authorization. Review and approval by BPO of flight critical hardware is mandatory to ensure the Agency is not put at additional liability and risk.

NMSU/PSL's successful support of the Fall Fort Sumner, New Mexico and Antarctic Campaigns is admirable and PSL is commended for the continued efficient use of their personnel by cross-training personnel to perform several functions. This greatly aids the Program in maintaining steady operations now as well as for future campaigns.

### **Performance Factor 2**

Technical Performance of Engineering Support/21% Factor Weight -- Rating -- 86.5%

Most noteworthy during this reporting period was NMSU/PSL's continued participation and contributions to the ULDB vehicle development project, specifically with regard to telecons, design reviews, mission readiness reviews, flight preparations and documentation. PSL personnel are instrumental in the forward progress of this effort.

CSBF quality control surveillance efforts at the Aerostar plant are commendable, with NMSU/PSL's presence in the plant during balloon production and the institution of routine balloon materials audits. The use of PSL personnel in the Aerostar plant not only improves production quality, but is recognized for the resulting production economies provided the Program. However, during balloon production with one of the new co-extruded films, sealing issues arose. It was discovered that Aerostar and NMSU/PSL did not have full knowledge of the additives used during film production. As corrective action, it is requested that in addition to the standard acceptance testing performed on each film lot, NMSU/PSL is to obtain detailed information on all components, including additive packages, used in the extrusion of balloon film.

### **Performance Factor 3**

Management/24% Factor Weight -- Rating -- 63.4%

Newly instituted administrative changes at NMSU continue to significantly impact the Balloon Program's planning capabilities; specifically, the new accounting system that

was rolled out in July 2005. NMSU/PSL failed to maintain an adequate backup system during the start up of the new system and failed to communicate resulting deficiencies in a timely manner. Impacts to the Program included late submission of monthly contract deliverables for several months (533 reports and Project Status reports) resulting in erroneous end-of-fiscal year projections and planning for costing, etc. However, NMSU/PSL's recent dedication of personnel to alleviate the problems is recognized. NASA expects this situation will soon be resolved and all lessons learned will be applied for this and other activities related to this effort.

NASA remains concerned about the leave pool balance prior to BANNER conversion, and looks forward to a briefing on the leave pool at the next quarterly review, now scheduled for July 10, 2006, at NMSU.

NMSU/PSL's management efforts continue to display your firm commitment and willingness to further the NASA's Balloon Program mission. PSL is encouraged to continue their effort to meeting the subcontracting goals, particularly in the areas of Women Owned Small Businesses and Historical Black Universities.

**Performance Factor 4**

Cost Control/25% Factor Weight – Rating – 61.8%

NMSU/PSL's continuing efforts to reduce and control costs to the Program are recognized and very much appreciated. PSL is encouraged to ensure that costs and projections are accurate and timely during the final phase of the implementation of the new accounting system at NMSU. However a lower evaluation score resulted in this area relative to the complications encountered implementing the University's BANNER system and the resulting impact to NASA travel and manpower.

In conclusion, NASA recognizes and appreciates NMSU/PSL's continued dedication to the success of balloon operations and enhancement to the overall capability of the Balloon Program.

  
John H. Campbell  
Fee Determination Officer

<b>AMENDMENT OF SOLICITATION/ MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF 1 2
2. AMENDMENT/MODIFICATION NO. 39	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. See Page 2	5. PROJECT NO. (if applicable)
6. ISSUED BY NASA/Goddard Space Flight Center Wallops Flight Facility, Procurement Office Bldg. E-105, 3 <sup>rd</sup> Floor Wallops Island, VA 23337-5099	CODE 210.W	7. ADMINISTERED BY (if other than Item 6) Mickey M. Merritt, NASA, GSFC, WFF, (GDM) (757) 824-1492	CODE 210.W

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)  
 Regents of New Mexico State University  
 Physical Science Laboratory (PSL)  
 Attn: Mr. Stan Wright  
 P.O. Box 30002  
 Las Cruces, NM 88030-8002

CODE (X)	9A. AMENDMENT OF SOLICITATION NO.	FACILITY CODE 9B. DATED (SEE ITEM 11)
X	10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-03003	10B. DATED (SEE ITEM 13) 4/01/03

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS  
 The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning  copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)  
 B/NC: GDM Total Funding: \$48,541,157.38 Total Est. Cost: \$238,700,000.00

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.(x)

(x)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.:
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, Appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	d. OTHER (Specify type of modification and authority) NFS Clause 1852.216-78, Limitation of Funds

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. description of amendment/modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The purpose of this modification is to adjust the contract for the amount of earned award fee. The Government has determined that a award fee of \$250,000.00 has been earned for the period of April 1, 2005 through September 30, 2005.  
 Accordingly-

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mickey M. Merritt
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA BY	16C. DATE SIGNED 3/7/2006 (Signature of Contracting Officer)

Block 14 – Description of Modification (Cont'd)

A. Clause B.8, Contract Funding is revised as follows:

Under paragraph (B), the total amount allotted for payment of award fee is Decreased  
FROM: \$ 614,040.28                      BY: \$ 250,00000                      TO: \$ 391,040.28

B. The amount of **\$250,000.00** shall be paid to the Contractor for award fee **upon execution of this modification** by the Contracting Officer.

C. The total adjusted award fee earned from April 1, 2003 through September 30, 2005 is **\$2,371,480.44**.

D. The total CPAF remains unchanged.

E. There are no obligated or deobligated funds or other revisions to the contract by issuance of this modification.

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of: 820

February 22, 2006

Regents of New Mexico State University  
Attn: Mr. Stan Wright  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88003-0002

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the National Scientific Balloon Facility (NSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (PSL), Rating Period 5 – April 1, 2005, through September 30, 2005

The performance evaluation for the above referenced contract, for Period 5, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan effective April 1, 2004. While PSL's rating was in the "Very Good" range, the scoring reflects a reduction due to shortfalls from the implementation of the new PSL financial system, and operational deficiencies as discussed below. These shortfalls had significant impacts on the operation of the Balloon Program. Your organization has earned an award fee of \$ 687,926 from a maximum available fee of \$ 775,541 and received a cumulative rating of 88.75%. Based on the PSL's voluntary acceptance of \$500,000 in award fee during the current fiscal year due to the Program's constrained budget, your organization will receive an award fee of \$250,000 for this period.

**Performance Factor 1**

Technical Performance of Operations/30% Factor Weight - Rating - 89.8%

PSL's activity relating to performance of operations has been effective. All work was performed efficiently, effectively, and in a quality manner relative to the Balloon Program's requirements. PSL achieved a 91% success rate in flight operations.

PSL's successful support of ten missions for science and seven student outreach missions is recognized. PSL's contribution to the launch failure investigation for ARCADE is appreciated. While the final results of the investigation are still pending, PSL's responsiveness to the investigation enabled a four-day turnaround and a successful launch.

of the ARCADE payload. Scoring was lower due to delays in providing international over-flight information for the Sweden campaign. It is requested that campaign over-flight information be provided in a timelier manner to ensure adequate time for NASA Headquarters to coordinate international over-flight notification.

During the reporting period, the new launch vehicle in Palestine was not adequate to handle launch operations. The certification deficiencies in the replacement launch vehicle resulted in unplanned work to recommission the retired Tiny Tim launch vehicle. NASA is concerned about the potential impact on future launches conducted from Palestine if PSL cannot modify and certify the replacement launch vehicle.

PSL is recognized for an excellent safety record with no close-calls or mishaps affecting personnel safety reported during this period.

### **Performance Factor 2**

Technical Performance of Engineering Support/21% Factor Weight – Rating – 94.8%

Most significant during this reporting period was PSL's continued participation and contributions to the ULDB vehicle development through support of project telecons, design reviews, mission readiness reviews, flight preparations and documentation.

Quality control efforts at the Aerostar balloon plant continued to improve, as a result of PSL's presence in the balloon plant during production and through performance of routine audits.

### **Performance Factor 3**

Management/24% Factor Weight – Rating – 80%

Administrative system changes implemented at NMSU during the performance period significantly impacted the financial management of the Balloon Program; specifically the new accounting system put into service in July 2005. NASA views NMSU's failure to maintain a backup system during the start up of the new system as being careless, particularly near the end of the government fiscal year. Late submission of monthly reports impacted the Program's business management, and resulted in erroneous end-of-fiscal year projections and financial costing. In the current environment of constrained budgets, timely provision of cost projections, and reporting of actual expenditures is extremely important and necessary to maintain the fiscal health of the Program. The Program expects future reporting will be submitted with accurate and timely information and appreciates PSL responsiveness to this issue.

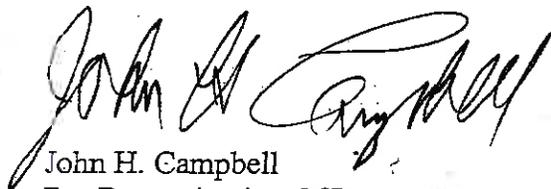
PSL's management efforts continue to display your firm commitment and willingness to further the NASA's Balloon Program mission. PSL is encouraged to continue their effort to meeting the subcontracting goals, particularly in the areas of Women Owned Small Businesses and Historical Black Universities.

**Performance Factor 6**

Cost Control/25% Factor Weight -- Rating -- 90.4%

PSL's continuing efforts to reduce and control program costs, and PSL's voluntary acceptance of reduced award fee during the FY2006 rating periods 6 and 7 are recognized and very much appreciated.

In conclusion, NASA recognizes and appreciates PSL's devotion to the success of balloon operations and enhancement to the overall capability of the Balloon Program.



John H. Campbell  
Fee Determination Officer

cc:

100/Mr. M. Ryschkewitsch  
210/Ms. V. Burr  
210.W/Mr. M. Merritt  
210.W/Mr. B. Pagliaro  
820/Ms. B. Merritt  
820/Mr. D. Pierce



**Physical Science Laboratory**

11 January 2006

Mickey M. Merritt  
Contract Officer/ NAS5-03003  
NASA/Goddard Space Flight Center  
Wallops Flight Facility  
Wallops Island, Virginia 23337

Subject: Temporary Fee Adjustment Agreement  
Ref: Contract NAS5-03003

Dear Mr. Merritt,

This letter is to confirm our discussion on 12 October 2005, to a one time reduction in our fee payment due to NASA funding issues for FY06. Pursuant to the Performance Evaluation Plan (reference page 10 Rev 2) relative to our Contract, this revision will effect performance periods 5 and 6 as follows:

Period	Maximum Fee Available	Proposed Maximum Fee to be Paid Baseline and IDIQ Total
	Baseline (IDIQ To Be Determined)	Baseline and IDIQ Total
5 (4/1 – 9/30/05)	\$359,366	\$250,000
6 (10/1 /05- 3/31/06)	\$359,366	\$250,000

Additionally, to help alleviate NASA's immediate funding problem, PSL agrees to defer payment of the fee associated with Period 6 until after NASA receives their FY07 funding allocation.

NMSU/PSL is willing to consider a similar fee reduction for FY07 if the NASA funding short-fall continues, although this would be a serious hardship to PSL.

We consider ourselves long time members of the NASA Balloon Program Team and have made this fee reduction offer in that spirit.

Sincerely,

Stephen B. Hottman, Program Manager  
PSL Balloon Program

sbh:rlb

cc: Bernice Merritt  
Ball, Danny/NSBF  
Ermelinda Quintela/NMSU/PSL

**AMENDMENT OF SOLICITATION/  
MODIFICATION OF CONTRACT**

2. AMENDMENT/MODIFICATION NO. 27		3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. See Page 2	5. PROJECT NO. (If applicable)
6. ISSUED BY NASA/Goddard Space Flight Center Wallops Flight Facility, Procurement Office Bldg. E-105, 3 <sup>rd</sup> Floor Wallops Island, VA 23337-5099		CODE 210.W	7. ADMINISTERED BY (If other than Item 6) Mickey M. Merritt, NASA, GSFC, WFF, (GDM) (757) 824-1492	

ICN 5600428004  
VID 122453

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and Zip Code) Regents of New Mexico State University Physical Science Laboratory (PSL) Attn: Mr. Stan Wright P.O. Box 30002 Las Cruces, NM 88030-8002	<p><b>PAID</b> 11/31</p> <p>Amount: <u>609,644.00</u></p> <p>Paid By: <u>SPR 7/14/05</u></p> <p>Date Due: <u>7/21/05</u></p>
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9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
X 10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-03003	10B. DATED (SEE ITEM 13) 4/01/03

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning  copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

B/NC: GDM Total Funding: \$39,178,856.63 Total Est. Cost: \$238,700,000.00

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.**

IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.(X)

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.:
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, Appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	d. OTHER (Specify type of modification and authority) NFS Clause 1852.216-78, Limitation of Funds

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. description of amendment/modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

The purpose of this modification is to adjust the contract for the amount of earned award fee. The Government has determined that a award fee of \$609,644.00 has been earned for the period of October 1, 2004 through March 30, 2005. Accordingly-

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JUN 21 AM 7:41

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mickey M. Merritt
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED
(Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA BY
	16C. DATE SIGNED 6/2/2005

Contract NAS5-03003

Modification 27

Page 2 of 2/SF-30

Block 14 – Description of Modification (Cont'd)

A. Clause B.8, Contract Funding is revised as follows:

Under paragraph (B), the total amount allotted for payment of award fee is Decreased

FROM: \$ 899,260.10

BY: \$ 609,644.00

TO: \$ 289,616.10



- B. The amount of **\$609,644.00** shall be paid to the Contractor for award fee **upon execution of this modification** by the Contracting Officer.
- C. The total adjusted award fee earned from April 1, 2003 through March 30, 2005 is **\$2,121,480.44**.
- D. The total CPAF remains unchanged.
- E. There are no obligated or deobligated funds or other revisions to the contract by issuance of this modification.

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of: 820

May 24, 2005

Regents of New Mexico State University  
Attn: Mr. Stan Wright  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88003-0002

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the National Scientific Balloon Facility (NSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (PSL), Rating Period 4 – October 1, 2004, through March 30, 2005

The performance evaluation for the above referenced contract, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan dated April 1, 2003. I am pleased to inform you that PSL's rating for this evaluation period was in the "Excellent" range which is described as performance of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance. Your organization has earned an award fee of \$609,644 from a maximum available fee of \$644,289 and received a cumulative rating of 94.7%.

**Performance Factor 1**

Technical Performance of Operations/30% Factor Weight – Rating – 90.6%

PSL's activity relating to performance of operations has been of exceptional merit and professionalism. All work was performed efficiently, effectively, and in a quality manner relative to the Balloon Program's requirements

Most notable during this period was the successful completion of the 2004-2005 Antarctic Balloon Campaign. Both flights exceeded minimum success criteria and resulted in complete payload recovery. The record-breaking balloon flight of the CREAM payload, nearly 42 days of flight and three circumnavigations of the Antarctica, has been recognized by NASA as an outstanding accomplishment in support of space science. PSL is to be

commended for their outstanding effort in conducting the Antarctic campaign, including the launch, flight, and recovery operations of the CREAM balloon mission.

PSL must strive to meet all safety related issues on a continuing basis, specifically, lifting device certifications and processes. NASA recognizes the severity of the gantry crane mishap that took place in the Antarctic campaign and its potential safety impact to personnel and equipment. In the future, PSL must take all necessary steps to ensure lifting devices are properly certified, personnel are properly trained, and they follow established procedures in the use of lifting devices. This will ensure safety and protection of PSL personnel at its domestic and remote campaign sites.

### **Performance Factor 2**

#### Technical Performance of Engineering Support/21% Factor Weight – Rating – 92.4

Most significant during this reporting period was PSL's participation in the reorganization of the ULDB project relative to quality control issues, specifically seal integrity. PSL's initiative to address the quality control process at the balloon plant and the resulting improvement plan is applauded. It is NASA's hope that the QA process improvements associated with the ULDB will be implemented successful, and we look forward to realizing increased efficiency at the plant that will result in even higher reliability for both ULDB and zero-pressure balloons. These improvements will be assessed in the next reporting period.

### **Performance Factor 3**

#### Management/24% Factor Weight – Rating – 97.6

PSL's management efforts continue to display your firm commitment and willingness to further the NASA's Balloon Program mission.

PSL management's negotiation with the Swedish Space Corporation for joint operational support and international collaborative flights is recognized to be instrumental in the restoration of Northern Hemisphere LDB flights. Additionally, your efforts to implement cost sharing scenarios with the Swedish launch range will enable the Balloon Program Office to reduce NASA campaign costs in the future.

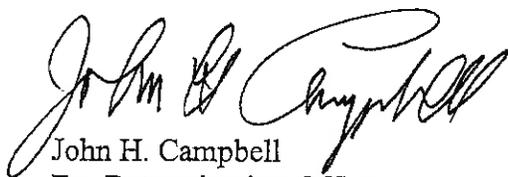
The accuracy of information submitted in contract deliverable reports, specifically the contractor's Financial Management Report, SF 533, is recognized and applauded. The Program Office continues to rely heavily on the SF 533 information to make accurate projections of costs, phasing, etc., relative to the Balloon Program's yearly budget cycles.

**Performance Factor 4**

Cost Control/25% Factor Weight – Rating – 98.2%.

PSL's continuing efforts to reduce and control costs to the program are recognized and very much appreciated. As noted above, cost projections are consistently on target, allowing NASA more reliability when forecasting obligations, costs, etc.

In conclusion, NASA recognizes and appreciates PSL's concerted efforts to deliver customer satisfaction and continually augment the Balloon Program Office's mission by enhancing the overall capability of the program.



John H. Campbell  
Fee Determination Officer

cc:

100/Mr. C. Scolese  
210/Ms. V. Burr  
210.W/Mr. B. Pagliaro  
210.W/Mr. M. Merritt  
820/Ms. B. Merritt  
820/Mr. D. Pierce

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of: 800

December 1, 2004

Regents of New Mexico State University  
Attn: Mr. Stan Wright  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88002-0002

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the National Scientific Balloon Facility and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (PSL), Rating Period 3 – April 1, 2004, through September 30, 2004

The performance evaluation for the above referenced contract, for Period 3, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan dated April 1, 2003. I am extremely pleased to inform you that PSL's rating for this evaluation period was in the "Excellent" range which is described as performance of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance. Your organization has earned an award fee of \$498,643.44 from a maximum available fee of \$517,614 and received a cumulative rating of 96.3%.

**Performance Factor 1**

Technical Performance of Operations/30% factor weight – Period 3 rating – 96.75%.

PSL's activity relating to performance of operations has been of exceptional merit and professionalism. All work was performed efficiently, effectively, and in a quality manner relative to the Balloon Program's requirements. PSL is again commended for the 100% success in flight operations and 100% balloon success of the 10 flights conducted during this marking period. PSL's 48 consecutive operational successes are applauded. Also, noted was the concerted effort expended in preparation for the fiscal year 05 Antarctic Campaign, including the integration of three payloads for shipment during this period. The high quality of performance and dedication exhibited by the PSL staff continues to enhance NASA's Balloon Program's capabilities to meet the needs of the science community.

NASA also recognizes PSL's contribution to the new process of supplying comprehensive Conventional Mission Project Plans that are required under NPG 7120 guidelines. This activity has greatly increased efficiency in mission organization and results in NASA's ability to maintain tight schedules while providing flight opportunities to multiple science disciplines.

**Performance Factor 2**

Technical Performance of Engineering Support/21% factor weight – Period 3 rating – 96.75%.

Most significant during this reporting period was PSL's participation in the reorganization of the Ultra Long Duration Balloon (ULDB) project and Progress thus far demonstrates the soundness of design and approach through the utilization of the newly developed analytical tool by PSL's subcontractor, TENSYS Ltd. NASA's Balloon Program requirements have been fully met and PSL's efforts have been critical to the continued advancements in the Long Duration Balloon area as well as other ongoing technology activities.

Regarding the issue of the lost weights during the manufacture of the balloon at the Raven plant, although NASA's recognizes the efforts to mitigate and/or prevent possible safety issues during launch of the balloon in the future, NASA's feels that this balloon should be tracked and precautions taken to prevent any possibility of injury or damage at the time of launch. Please submit a plan of action regarding this particular balloon before it is used.

**Performance Factor 3**

Management/24% factor weight – Period 3 rating – 94.5%.

PSL management continues to be instrumental in advancing progress on the development of the ULDB vehicle; specifically oversight relative to the design and development of the vehicle. This endeavor has greatly enhanced efforts to keep the team focused and moving forward.

Management's efforts to actively pursue new customers for the Balloon Program, particularly in the area of planetary exploration initiative, is recognized and appreciated. However, PSL should maintain close cooperation and immediate involvement with the Program Office when new business opportunities are apparent. This will ensure full compliance to Program policy and goals and accountability of the Program's resources.

The accuracy of information submitted in contract deliverable reports, specifically the contractor's Financial Management Report, SF 533, is recognized as an enhancement to the conduct of the Program. The Program Office continues to rely heavily on the SF 533 information to make accurate projections of costs, phasing, etc., relative to our yearly budget cycles.

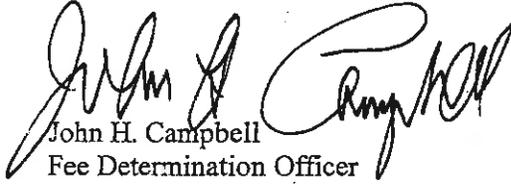
PSL's management efforts continue to display your firm commitment and willingness to further the NASA's Balloon Program mission.

**Performance Factor 4**

Cost Control/25% factor weight – Period 3 rating – 97.4%.

PSL's continuing efforts to reduce and control costs to the Program are recognized and very much appreciated. As noted under above, cost projections are consistently on target, allowing NASA more reliability when forecasting obligations, costs, etc.

In conclusion, NASA recognizes and appreciates PSL's concerted efforts to deliver customer satisfaction and continually augment the Balloon Programs Office mission by enhancing the overall capability of the Program.



John H. Campbell  
Fee Determination Officer

cc:

100/Dr. Weiler

100/Mr. Scolese

210/Ms. Burr

210.W/Mr. Pagliaro

210.W/Mr. Merritt

210.W/Mr. Dolan

820/Ms. Merritt

<b>AMENDMENT OF SOLICITATION/ MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF 1   2
2. AMENDMENT/MODIFICATION NO. 23	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. See Page 2	5. PROJECT NO. (If applicable)
6. ISSUED BY NASA/Goddard Space Flight Center Wallops Flight Facility, Procurement Office Bldg. E-105, 3 <sup>rd</sup> Floor Wallops Island, VA 23337-5099	CODE 210.W	7. ADMINISTERED BY (If other than Item 6) Mickey M. Merritt, NASA, GSFC, WFF, (GDM) (757) 824-1492	CODE 210.W

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)  
 Regents of New Mexico State University  
 Physical Science Laboratory (PSL)  
 Attn: Mr. Stan Wright  
 P.O. Box 30002  
 Las Cruces, NM 88030-8002

CODE (X)	9A. AMENDMENT OF SOLICITATION NO.	FACILITY CODE	9B. DATED (SEE ITEM 11)
X	10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-03003		10B. DATED (SEE ITEM 13) 4/01/03

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning  copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
 B/NC: GDM Total Funding: \$29,353,856.63    Total Est. Cost: \$238,700,000.00

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14 (X)

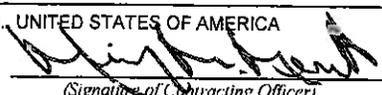
(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, Appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	d. OTHER (Specify type of modification and authority) NFS Clause 1852.216-78, Limitation of Funds

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. description of amendment/modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The purpose of this modification is to adjust the contract for the amount of earned award fee. The Government has determined that a award fee of \$498,643.44 has been earned for the period of April 1, 2004 through September 30, 2004. Accordingly-

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mickey M. Merritt
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA BY 	16C. DATE SIGNED 12/08/04

Block 14 – Description of Modification (Cont'd)

A. Clause B.8, Contract Funding is revised as follows:

Under paragraph (B), the total amount allotted for payment of award fee is Decreased

FROM: \$ 845,392.74

BY: \$ 498,643.44

TO: \$ 346,749.30

B. The amount of **\$498,643.44** shall be paid to the Contractor for award fee **upon execution of this modification** by the Contracting Officer.

C. The total adjusted award fee earned from April 1, 2003 through September 30, 2005 is **\$1,511,836.44**.

D. The total CPAF remains unchanged.

E. There are no obligated or deobligated funds or other revisions to the contract by issuance of this modification.

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of: 820

July 15, 2004

Regents of New Mexico State University  
Attn: Mr. Stan Wright  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88003-0002

H  
mod - 19

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the National Scientific Balloon Facility (NSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (PSL), Rating Period 2 – October 1, 2003, through March 31, 2004

The performance evaluation for the above referenced contract, for Period 2, was conducted in accordance with the criteria set forth in the Performance Evaluation Plan dated April 1, 2003. I am pleased to inform you that PSL's rating for this evaluation period was in the "Excellent" range which is described as performance of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance. Your organization has earned an award fee of \$541,344 from a maximum available fee of \$563,020 and received a cumulative rating of 96.15%.

**Performance Factor 1**

Technical Performance of Operations/30% factor weight – Rating –95.8%.

PSL's activity relating to performance of operations has been of exceptional merit and professionalism. All work was performed efficiently, effectively, and in a quality manner relative to the Balloon Program's requirements. You are commended for the 100% success of flight operations conducted during this marking period as well as the completion of the FY 2004 Antarctic campaign. Also notable is the fact that there were no safety-related or Information Technology security issues during this evaluation period.

**Performance Factor 2****Technical Performance of Engineering Support/21% factor weight – Rating – 97%.**

PSL has been extremely timely in providing information, proposed solutions and progress relative to the Long Duration Ballooning vehicle development activities. A very significant amount of work has been accomplished and PSL's effort and application of resources has been critical in advancing the development of this project. In general, the quality of engineering effort has been exemplary. However, in view of the pending investigation results from the malfunction of the Semi-Automatic Parachute Release (SAPR) system in Antarctica, this issue will be assessed during the next evaluation period.

**Performance Factor 3****Management/24% factor weight – Rating – 94.4%.**

PSL's management efforts continue to enhance the goals of NASA's Balloon Program by displaying an extremely firm commitment for customer satisfaction. The highly effective management of these efforts is displayed daily with the obvious high employee morale at NSBF and timely responses to Program requirements. Please note the importance of PSL's active participation at various project reviews at Wallops and other locations, when requested. During these reviews, personal interaction facilitates success more than long distance participation.

The accuracy of submission of contract deliverable reports, specifically the contractor's Financial Management Report, SF 533, is recognized as a definite enhancement to the conduct of the Program. This effort enables the Program Office to rely heavily on information received to make accurate projections of costs, phasing, etc., relative to our yearly budget cycles. However, it is noted at this time that there has been a slight deficiency in the past with formal reporting procedures pertaining to EEO, subcontracting, etc. It is hoped that more attention will be given to the formal submission of this information in the future.

**Performance Factor 4****Cost Control/25% factor weight – Rating – 97.4%.**

PSL's continuing efforts to reduce and control costs to the Program are recognized and appreciated. Cost projections are consistently on target, allowing NASA more reliability when forecasting obligations, costs, etc.

In conclusion, NASA recognizes and appreciates PSL's concerted efforts to provide sustained excellence in support of NASA's Balloon Program, while also enhancing the program's overall capabilities, and at the same time, providing customer satisfaction.



John H. Campbell  
Fee Determination Officer

cc:

- 100/Mr. W. Townsend
- 210/Ms. V. Burr
- 210.W/Mr. B. Pagliaro
- 210.W/Mr. M. Merritt
- 820/Ms. B. Merritt
- 820/Mr. D. Pierce

<b>AMENDMENT OF SOLICITATION/ MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE		PAGE OF 1   2	
2. AMENDMENT/MODIFICATION NO. 19		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO. See Page 2	
6. ISSUED BY NASA/Goddard Space Flight Center Wallops Flight Facility, Procurement Office Bldg. E-105, 3rd Floor Wallops Island, VA 23337-5099		CODE 210.W		5. PROJECT NO. (if applicable)	
				7. ADMINISTERED BY (if other than Item 6) Mickey M. Merritt, NASA, GSFC, WFF, (GDM) (757) 824-1492	
				CODE 210.W	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)  
 Regents of New Mexico State University  
 Physical Science Laboratory (PSL)  
 Attn: Mr. Stan Wright  
 P.O. Box 30002  
 Las Cruces, NM 88030-8002

CODE		FACILITY CODE
(x)	9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
X	10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-03003	10B. DATED (SEE ITEM 13) 4/01/03

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS  
 The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning  copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)  
 B/NC: GDM  
 Total Funding: \$26,810,901.49 Total Est. Cost: \$238,700,000.00

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.(x)

(x)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.:
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, Appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	d. OTHER (Specify type of modification and authority) NFS Clause 1852.216-78, Limitation of Funds

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. description of amendment/modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The purpose of this modification is to adjust the contract for the amount of earned award fee. The Government has determined that a award fee of **\$541,344.00** has been earned for the period of October 1, 2003 through March 31, 2004. Accordingly-

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Mickey M. Merritt	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY 	16C. DATE SIGNED 07/2/04

Block 14 - Description of Modification (Cont'd)

A. Clause B.8, Contract Funding is revised as follows:

Under paragraph (B), the total amount allotted for payment of award fee is Decreased  
FROM: \$ 1,291,284.14      BY: \$ 541,344.00      TO: \$749,940.14

- B. The amount of **\$541,344.00** shall be paid to the Contractor for award fee **upon execution of this modification** by the Contracting Officer.
- C. The total adjusted award fee earned from April 1, 2003 through March 31, 2005 is **\$1,013,193.00**.
- D. The total CPAF remains unchanged.
- E. There are no obligated or deobligated funds or other revisions to the contract by issuance of this modification.

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of:

820

December 11, 2003

TO: Chairman, Performance Evaluation Board for NASA Contract  
NAS5-03003 - Operations and Maintenance of the NSBF and Engineering  
Support for NASA's Balloon Program

FROM: NAS5-98009 Contracting Officer's Technical Representative (COTR) *Asmerritt*

SUBJECT: Evaluation report for NAS5-03003 Rating Period No.1, March 1, 2003  
through September 30, 2003

### **Introduction and General Information**

The contract for the Operations and Maintenance of the National Scientific Balloon Facility (NSBF) and Engineering Support for NASA's Balloon Program became effective on April 1, 2003. The contract was awarded to New Mexico State University/Physical Science Laboratory (PSL) and is an Award Fee Contract. No transition period was necessary because PSL was the incumbent contractor.

PSL is eligible for a maximum of \$347,020.00 per evaluation period of award fee. This does not include IDIQ Award Fee. Due to the IDIQ nature of a portion of this contract, the award fee pool for each potential period will vary based upon the Task Orders issued against the contract. Award Fee will be distributed during the evaluation periods that coincide with the period of performance of the Task Order. Maximum award fee available to PSL during the current period is \$451,342 (\$347,020 for baseline plus \$104,322 for IDIQ tasks).

Evaluation metrics are established in the Performance Evaluation for Implementation of Operations and Maintenance of the NSBF and Engineering Support for NASA's Balloon Program, effective April 1, 2003

### **Performance Factors**

There are four performance evaluation factors with applicable evaluation criteria. A description of each follows:

Factor No. 1 – TECHNICAL PERFORMANCE OF OPERATIONS/Factor Weight 30%  
Technical – Performance of Missions/Criteria Weight 9  
Technical – Performance of Launch Operations/Criteria Weight 7  
Technical – Reliability of Support Systems/Criteria Weight 6  
Safety – Health & Safety 5  
Risk Management – Critical Processes/Criteria Weight 3

Performance Monitor –David Gregory, Operations Manager, NASA's Balloon Program Office, Code 820

Factor No. 2 – TECHNICAL PERFORMANCE OF ENGINEERING SUPPORT/ Factor Weight 21%

Technical – Technology Support/Criteria Weight 7  
Technical – Enhancements/Criteria Weight 6  
Quality – Quality Assurance of Balloons and Balloon Films/Criteria Weight 8

Performance Monitor –Debra Fairbrother, Technology Manager, Balloon Programs Office, Code 820

Factor No. 3 – MANAGEMENT/Factor Weight 24%

Management – Planning and Reporting/Criteria Weight 4  
Schedule – Meetings and Milestones/Criteria Weight 2  
Subcontracting/Criteria Weight 8  
Staffing – Maintaining a Viable Workforce/Criteria Weight 8  
EEO/Criteria Weight 2

Performance Monitor –Bernice A. Merritt, Business Manager, Balloon Programs Office, Code 820

Factor No. 4 – COST CONTROL/Factor Weight 25%

Labor and other Cost Performance/Criteria Weight 20  
Economies and Cost Reduction/Criteria Weight 5

Performance Monitor – Sandra Bowden, Resource Analyst, Code 801

**Award Fee Scoring** - Cumulative Scoring for PSL's award fee for this period falls within the excellent range – numerical composite 97.

National Aeronautics and  
Space Administration

**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of: 800

January 7, 2004

Regents of New Mexico State University  
Attn: Mr. Stan Wright  
Contract Officer  
Physical Science Laboratory  
Box 30002  
Las Cruces, NM 88003-0002

Subject: Results of Performance Evaluation for Contract NAS5-03003, Operations and Maintenance of the National Scientific Balloon Facility (NSBF) and Engineering Support for NASA's Balloon Program – Awarded to New Mexico State University/Physical Science Laboratory (PSL), Rating Period 1 – April 1, 2003, through September 30, 2003

The performance evaluation for the above referenced contract was conducted in accordance with the criteria set forth in the Performance Evaluation Plan dated April 1, 2003. I am extremely pleased to inform you that PSL's rating for this evaluation period was in the "Excellent" range which is described as performance of exceptional merit; exemplary performance in a timely, efficient and economical manner; very minor (if any) deficiencies with no adverse effect on overall performance. Your organization has earned an award fee of \$432,190 from a maximum available fee of \$451,342 and received a cumulative rating of 95.7%.

**Performance Factor 1**

Technical Performance of Operations/30% factor weight – Rating – 96.2%.

Notable performance under this factor includes the achievement of the 100% balloon success for the long duration and conventional balloon flights during FY03. This achievement clearly displays PSL's efforts in the areas of balloon quality assurance and launch/flight support. PSL's efforts to further enhance NASA's Ballooning mission is displayed through your continued development of enhancements such as the padded boot for launch spools, remote access meteorological stations for remote sites, and the qualification of the Iridium links for long duration flights.

Only one minor deficiency was identified. It appears that minor anomalies relative to subsystem operability were identified but not relayed to the appropriate Balloon Program Office personnel in the time or manner as prescribed. Mission success was not impacted

as a result of this oversight; however, adherence to notification processes should be followed in the future.

### **Performance Factor 2**

Technical Performance of Engineering Support/21% factor weight -- Rating -- 96%.

It was noted that PSL has been extremely responsive to technology issues; specifically in the areas of redesigning the 40H balloon and the Ultra Long Duration Balloon Anomaly Review Board action items disposition. PSL is commended on the maintenance of 80% surveillance at the Raven Plant. This effort certainly contributed to the achievement of the 100% success rate for balloons.

### **Performance Factor 3**

Management/24% factor weight -- Rating -- 97%.

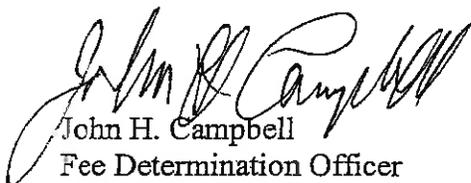
PSL's performance was rated "Excellent" for Management activities. PSL's continued focus on Safety Reliability & Quality Assurance through the hiring of the SR&QA Manager, as well as the cross training of employees was noted and PSL is commended for these efforts. Additionally, PSL's timely and accurate submission of contract deliverable reports is recognized as a definite enhancement to the conduct of the Program. This effort has enabled the Program Office to proceed with plans much earlier in the fiscal year cycle.

### **Performance Factor 4**

Cost Control/25% factor weight -- Rating -- 96%.

PSL's continuing efforts to reduce and control costs to the Program are recognized and appreciated. Cost projections are consistently on target, allowing NASA more reliability when forecasting obligations, costs, etc.

In conclusion, NASA recognizes a sustained effort on PSL's part to enhance the Balloon Programs Office mission and greatly adding to the capability of the Program.



John H. Campbell  
Fee Determination Officer

cc:

100/Mr. A. Diaz

100/Mr. W. Townsend

210/Ms. V. Burr

210.W/Mr. B. Pagliaro

820/Ms. B. Merritt

820/Mr. C. Purdy (Acting)

<b>AMENDMENT OF SOLICITATION/ MODIFICATION OF CONTRACT</b>	1. CONTRACT ID CODE	PAGE OF 1   2
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2. AMENDMENT/MODIFICATION NO. 12	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. See Page 2	5. PROJECT NO. (If applicable)
6. ISSUED BY CODE 210.W NASA/Goddard Space Flight Center Wallops Flight Facility, Procurement Office Bldg. E-105, 3rd Floor Wallops Island, VA 23337-5099		7. ADMINISTERED BY (If other than Item 6) CODE 210.W Mickey M. Merritt, NASA, GSFC, WFF, (GDM) (757) 824-1492	

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State, and Zip Code)  
 Regents of New Mexico State University  
 Physical Science Laboratory (PSL)  
 Attn: Mr. Stan Wright  
 P.O. Box 30002  
 Las Cruces, NM 88030-8002

CODE (X)	FACILITY CODE
9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
X 10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-03003	10B. DATED (SEE ITEM 13) 4/01/03

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended.  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning  copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
 B/NC: GDM Total Funding: \$12,905,301.49 Total Est. Cost: \$238,700,000.00

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.(x)

(x)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.:
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, Appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	d. OTHER (Specify type of modification and authority) NPS Clause 1852.216-78, Limitation of Funds

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. description of amendment/modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The purpose of this modification is to adjust the contract for the amount of earned award fee. The Government has determined that a award fee of \$432,190.00 has been earned for the period of April 1, 2003 through September 30, 2003.  
 Accordingly-

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) James R. Dolan
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED
	16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)
	16C. DATE SIGNED 1/22/04

Block 14 – Description of Modification (Cont'd)

A. Clause B.8, Contract Funding is revised as follows:

Under paragraph (B), the total amount allotted for payment of award fee is Decreased

FROM: \$ 835,907.16

BY: \$ - 432,190.00

TO: \$ 403,717.16

- B. The amount of **\$432,190.00** shall be paid to the Contractor for award fee **upon execution of this modification** by the Contracting Officer.
- C. The total award fee earned from April 1, 2003 through September 30, 2003 is **\$432,190.00**.
- D. The total CPAF remains unchanged.
- E. There are no obligated or deobligated funds or other revisions to the contract by issuance of this modification

National Aeronautics and  
Space Administration  
**Goddard Space Flight Center**  
Wallops Flight Facility  
Wallops Island, VA 23337-5099



Reply to Attn of:

820

December 11, 2003

TO: Chairman, Performance Evaluation Board for NASA Contract  
NAS5-03003 - Operations and Maintenance of the NSBF and Engineering  
Support for NASA's Balloon Program

FROM: NAS5-98009 Contracting Officer's Technical Representative (COTR) *Asmerritt*

SUBJECT: Evaluation report for NAS5-03003 Rating Period No.1, March 1, 2003  
through September 30, 2003

### **Introduction and General Information**

The contract for the Operations and Maintenance of the National Scientific Balloon Facility (NSBF) and Engineering Support for NASA's Balloon Program became effective on April 1, 2003. The contract was awarded to New Mexico State University/Physical Science Laboratory (PSL) and is an Award Fee Contract. No transition period was necessary because PSL was the incumbent contractor.

PSL is eligible for a maximum of \$347,020.00 per evaluation period of award fee. This does not include IDIQ Award Fee. Due to the IDIQ nature of a portion of this contract, the award fee pool for each potential period will vary based upon the Task Orders issued against the contract. Award Fee will be distributed during the evaluation periods that coincide with the period of performance of the Task Order. Maximum award fee available to PSL during the current period is \$451,342 (\$347,020 for baseline plus \$104,322 for IDIQ tasks).

Evaluation metrics are established in the Performance Evaluation for Implementation of Operations and Maintenance of the NSBF and Engineering Support for NASA's Balloon Program, effective April 1, 2003

### **Performance Factors**

There are four performance evaluation factors with applicable evaluation criteria. A description of each follows:

Factor No. 1 – TECHNICAL PERFORMANCE OF OPERATIONS/Factor Weight 30%  
Technical – Performance of Missions/Criteria Weight 9  
Technical – Performance of Launch Operations/Criteria Weight 7  
Technical – Reliability of Support Systems/Criteria Weight 6  
Safety – Health & Safety 5  
Risk Management – Critical Processes/Criteria Weight 3

Performance Monitor –David Gregory, Operations Manager, NASA's Balloon Program Office, Code 820

Factor No. 2 – TECHNICAL PERFORMANCE OF ENGINEERING SUPPORT/ Factor Weight 21%  
Technical – Technology Support/Criteria Weight 7  
Technical – Enhancements/Criteria Weight 6  
Quality – Quality Assurance of Balloons and Balloon Films/Criteria Weight 8

Performance Monitor –Debra Fairbrother, Technology Manager, Balloon Programs Office, Code 820

Factor No. 3 – MANAGEMENT/Factor Weight 24%  
Management – Planning and Reporting/Criteria Weight 4  
Schedule – Meetings and Milestones/Criteria Weight 2  
Subcontracting/Criteria Weight 8  
Staffing – Maintaining a Viable Workforce/Criteria Weight 8  
EEO/Criteria Weight 2

Performance Monitor –Bernice A. Merritt, Business Manager, Balloon Programs Office, Code 820

Factor No. 4 – COST CONTROL/Factor Weight 25%  
Labor and other Cost Performance/Criteria Weight 20  
Economies and Cost Reduction/Criteria Weight 5

Performance Monitor – Sandra Bowden, Resource Analyst, Code 801

**Award Fee Scoring** - Cumulative Scoring for PSL's award fee for this period falls within the excellent range – numerical composite 97.