



Report

Regarding

NASA Large Conferences

May – September 2012

January 2013

FY 2012 Report on Large Conferences

Overview. In accordance with Office of Management and Budget (OMB) Memorandum M-12-12, Section 2 – Conferences, the National Aeronautics and Space Administration (NASA) is providing this report on conferences. This report provides a summary of conference activities by the National Aeronautics and Space Administration (NASA) in Fiscal Year 2012. It includes a brief overview of some of the valuable roles that conferences play, such as in key dissemination and exchange of cutting edge science and technology. A description of each of the largest conferences, those conferences in which NASA spent over \$100,000, is also included for those conferences that were approved subsequent to the issuance of Memorandum M-12-12.

The Space Act of 1958 requires NASA to “provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof.” Conferences provide a key vehicle for accomplishing this mandate. NASA scientists, engineers, and leaders present scientific and technical papers and participate in interchanges on leading-edge research and technology with peers in the Federal government, the science community, the aeronautics and aerospace industries, and our international partners at conferences. Conferences attended and sponsored by NASA address a broad and diverse range of scientific and engineering challenges faced by NASA in carrying out its missions, including climate and other Earth science research, advanced aeronautics, and the cutting-edge technologies needed for both current and planned robotic and human space flight programs.

In addition to facilitating the dissemination and advancement of scientific research, conferences also serve as a cost-effective way for NASA to carry out other mission-related purposes, such as educational outreach and program development, planning, and information gathering. For example, conferences on program management provide opportunities for examination of current trends in aerospace project and engineering management; offering forums for the exchange and dissemination of best practices, new ideas, and training for managers across NASA to help the Agency cost-effectively meet the toughest challenges in space exploration today.

FY 2012 Conferences. Since OMB M-12-12 was issued, NASA has participated in 14 large conferences for which it spent more than \$100,000. Six of these conferences are reported in Section A pursuant to M-12-12. NASA had committed to eight additional conferences as of issuance of M-12-12 and, therefore, they were not subject to the additional approvals and justifications required in M-12-12. Detailed information on the six events approved under the enhanced justification and approval process under M-12-12 is included in Section A; summary information about the remaining eight conferences is included in Section B.

Of these 14 events, all were scientific and technical conferences. Two were hosted by NASA; the other 12 are leading Aerospace and technical meetings where important scientific exchanges have been taking place, almost all as annual conferences convened by leading Aerospace and Engineering associations of the United States.

Changes in FY 2012. While NASA has been steadily enhancing its conference review processes since 2008, it made a number of significant improvements in FY 2012. Starting in October 2011, in accordance with Administration direction, NASA required all NASA sponsored conferences to be centrally reviewed and approved by NASA’s Deputy Administrator. This process also required improved documentation of

the planning and justification for the investments made in conferences hosted by NASA. Starting in May 2012, again in accordance with Administration guidance, NASA implemented reviews of spending and senior approvals for all conferences with estimated costs over \$100,000 for which the agency was not already committed. In June 2012, NASA also updated its conference policies to enhance review and approval requirements for NASA sponsored conferences that total less than \$100,000, and to ban industry and others' widely attended gatherings and NASA-directly funded meals at NASA sponsored conferences. This focus, along with the overall emphasis placed on travel savings at all levels, led to millions of dollars in reduced spending on conferences in FY 2012.

NASA also spearheaded several key internal initiatives, including savings in connection with NASA's three largest internal conferences by directing that all three be changed in the coming years to a virtual format (and piloting the first of these as a virtual event in October 2012). For one event that was already essentially underway, NASA reduced its size significantly. These changes are conservatively estimated to have saved over \$2 million in FY 2012. NASA additionally centralized a conference database tool to permit better coordinated planning across the agency and expanded the scope of events tracked as "conferences" consistent with OMB's May 2012 guidance in M-12-12.

Section A: FY 2012 Large Conferences Approved under M-12-12 Requirements

Conference	Total Cost	Location	Dates	NASA Attendees
23rd Annual NASA Space Radiation Investigators' Workshop	\$104,108.30	Durham, NC	7/8-7/11/2012	32
<p>Sponsor: NASA. Website Link: http://www.dsls.usra.edu/meetings/radiation2012</p> <p>Purpose: The purpose of this workshop was to provide an opportunity for active researchers in the NASA Space Radiation Program to share the results of their work and to explore new directions for research that may benefit NASA programs. The workshop format included plenary sessions, short talks, poster sessions, and a poster competition to recognize and honor student investigators. In addition, there were special sessions on space physics and technology allowing opportunities for a comprehensive discussion on NASA's overall space radiation protection goals.</p> <p>This workshop allowed researchers in the field of space radiation to present their findings (interim and final) to NASA technical managers as well as other Space Radiation researchers, fostering collaboration across the field of Space Radiation Research. The workshop also provided the forum for the NASA technical managers to ensure that research continues to maintain relevance to the current NASA strategic goals, and allowed NASA to look for potential areas to integrate and focus the research to more effectively meet the needs of NASA. There is no existing association sponsored conference that calls together these investigators to discuss their findings in this focused, efficient manner.</p>				

Conference	Total Cost	Location	Dates	NASA Attendees
IEEE Geoscience and Remote Sensing Society Symposium	\$126,312.10	Munich, Germany	7/23-7/27/2012	32
<p>Sponsor: IEEE. Website Link: http://www.igarss2012.org/</p> <p>Purpose: The IEEE Geoscience and Remote Sensing Society (IGARSS) annual symposium is the major international event in remote sensing for Earth observation, gathering world-class scientists, engineers and educators engaged in the fields of geoscience and remote sensing. The 2012 themes for this annual meeting focused on the characterization of dynamic Earth processes, data assimilation techniques, integrated Earth observing systems, and current as well as upcoming satellite missions.</p> <p>Attendance by NASA scientists and engineers was deemed critical for both the new information they learn about the latest technologies and techniques being developed at other institutions, and the knowledge they impart to university and industrial colleagues about inventions and discoveries being made at NASA. Large attendance at the IGARSS meetings have proven especially efficient venue for widely disseminating NASA know-how and for stimulating intellectual exchange leading to new collaborations and promising new directions in research.</p>				

Conference	Total Cost	Location	Dates	NASA Attendees
AIAA Joint Propulsion Conference 2012	\$264,373.27	Atlanta, GA	7/30-8/1/2012	136
<p>Sponsor: AIAA. Website Link: https://www.aiaa.org/EventDetail.aspx?id=4689</p> <p>Purpose: This annual conference serves as a key forum for review of propulsion research and development activities in both the US and internationally. It is attended by propulsion specialists from government, industry and academic institutions throughout the US and the world. The conference provides NASA engineers and managers an opportunity to stay abreast of the status and accomplishments of global activities in propulsion technology and development. It also enables NASA to present its propulsion-related accomplishments at a national and international level. The event also offers opportunities to meet and discuss mutually beneficial future collaborations.</p> <p>NASA's participants were an integral part of this conference, and their participation was essential to the goals of exchanging the results of scientific space research. High-quality technical exchanges occurred, with over 100 senior NASA employees invited and jury-selected to speak.</p>				

Conference	Total Cost	Location	Dates	NASA Attendees
AIAA Guidance, Navigation and Control	\$163,894.40	Minneapolis, MN	8/13-8/15/2012	43
<p>Sponsor: AIAA. Website Link: https://www.aiaa.org/EventDetail.aspx?id=4692</p> <p>Purpose: The AIAA Guidance, Navigation, and Control Conference and Co-Located Conferences are the largest forum dedicated to guidance, navigation, and control (GNC) serving the aerospace community. It brings together experts from industry, government, and academia on an international level to present and discuss all technical areas related to GNC for aerospace applications. Besides the GNC, there are three additional Co-Located Conferences: the AIAA Atmospheric Flight Mechanics (AFM) Conference, the annual AIAA Modeling and Simulation Technologies (MST) Conference, and the 2012 Astrodynamics Specialist Conference.</p> <p>In order to share the latest technological information and keep up on advances by other companies and organizations, attendance at these concurrently held conferences is critical. Panel sessions and subject topics have a distinct correlation to work at several NASA Centers. In particular, centers supporting the conduct of research for those programs have a strong involvement in this conference supporting their work in the areas of guidance, navigation, control, modeling and simulation. Each NASA attendee presented a paper or participated in a meeting at the conferences. Many were also active members on a formal Technical Committee, are Chairing Sessions at the conference. These conferences also featured a large contingent of government and industry exhibits, showcasing leading products and services.</p>				

Conference	Total Cost	Location	Dates	NASA Attendees
Thermal and Fluids Analysis Workshop	\$247,279.90	Pasadena, CA	8/13-8/17/2012	60
<p>Sponsor: NASA. Website Link: http://tfaws.nasa.gov/TFAWS12</p> <p>Purpose: The Thermal and Fluids Analysis Workshop (TFAWS) is an annual training and professional workshop designed to facilitate knowledge sharing, professional development, and networking throughout the thermal and fluids engineering community within NASA and the aerospace community. It features paper sessions, short courses, panel discussions, speakers, and software training; it encompasses all three sponsoring N Engineering and Safety Center's (NESC's) disciplines—Passive Thermal, Life Support/Active Thermal, and Aerothermal. Annual sharing of knowledge across the thermal community allows engineers to benefit from the lessons learned and helps to ensure that the knowledge of the entire community is maintained. TFAWS also provides opportunities for enhancing collaboration between NASA centers, government agencies, industry, academia, and the international thermal fluids engineering community.</p> <p>NASA participation is considered critical at this workshop, particularly since the primary goal of the workshop is to provide the latest thermal and fluids analysis training for NASA employees. This is accomplished through theory-based short courses, thermal and fluids analysis tool training, and includes interaction with thermal and fluids analysis tool and hardware vendors, and the larger thermal and fluids community, comprised of practitioners from other government organizations, military, industry (foreign and domestic) and academia. The best value for the government includes broad participation of NASA employees so that as many as possible may benefit from this training and interaction.</p>				

Conference	Total Cost	Location	Dates	NASA Attendees
AIAA Space 2012	\$262,576.13	Los Angeles, CA	9/11-9/13/2012	137
<p>Sponsor: AIAA. Website Link: https://www.aiaa.org/space2012/</p> <p>Purpose: The AIAA Space 2012 Conference is AIAA's premier event on space technology, policy, programs, management and education, and has been recognized for the depth and breadth of sessions and information-sharing on space systems and technology. NASA attendees represent the Agency as keynote speakers, paper presenters, or panel or meeting chair at the conference.</p> <p>NASA's participants are an integral part of this conference. Their participation is essential to the goals of exchanging the progress made on proposed architectures, America's future deep-space exploration vehicles, and the development of long-range technologies to enable human exploration beyond Earth orbit. In view of this, NASA has historically provided a significant level of participation of NASA leaders and space systems technology experts and practitioners at this event.</p>				

Section B: FY 2012 Additional Large Conferences Committed to Prior to M-12-12 Requirements

Conference	Sponsor	Location	Dates	NASA Attendees	Total Cost
Global Space Exploration Conference (GLEX)	Lockheed Martin	Washington, DC, USA	5/22-5/24/2012	77	\$139,733.89
220th Meeting of the American Astronomical Society (AAS)	American Astronomical Society	Anchorage, AK, USA	6/10-6/14/2012	29	\$107,365.03
12th International Conference on Space Operations (SpaceOps 2012)	International Committee on Technical Interchange for Space Mission Operations and Ground Data System	Stockholm, FC, SWE	6/11-6/15/2012	27	\$156,654.56
American Society of Mechanical Engineers (ASME) Turbo Expo 2012	ASME	Copenhagen, FC, DNK	6/11-6/15/2012	17	\$105,511.81
AIAA Fluid Dynamics and Co-Located Conferences and Exhibit	AIAA	New Orleans, LA, USA	6/25-6/28/2012	92	\$195,017.99
SPIE Astronomical Telescopes + Instrumentation	SPIE	Amsterdam, FC, NLD	7/1-7/6/2012	39	\$193,274.36
42nd International Conference on Environmental Systems (ICES)	AIAA	San Diego, CA, USA	7/15-7/19/2012	47	\$120,719.41
26th Annual AIAA/USU Conference on Small Satellites: Enhancing Global Awareness through Small Satellites	Utah State University / AIAA	Logan, UT, USA	8/13-8/16/2012	49	\$107,547.04