

February 16, 2011

Office of the Chief Engineer

TO: Officials-in-Charge of Headquarters Offices
Directors, NASA Centers

FROM: Chief Engineer
Chief Safety and Mission Assurance
Chief Information Officer

SUBJECT: Call for Nominations for the 18th Annual NASA Software of the Year
(SOY) Award

As sponsors for the 18th Annual NASA SOY Award, we are pleased to announce the call for nominations. This prestigious award is designed to give recognition to developers of exceptional software created for or by NASA and owned by NASA. Every NASA Center and Facility is cordially invited to participate in this competition. The award includes the NASA Software Medal, Inventions and Contributions Board (ICB) certificate(s), and monetary compensation.

The NASA ICB website (<http://www.nasa.gov/offices/oce/icb/index.html>) contains information about the yearly competitions (<http://www.nasa.gov/offices/oce/icb/reqs.html>). The enclosure contains eligibility information and describes the selection process. Nomination packages are due to the ICB staff by close of business May 2, 2011. The competition for the 2011 SOY winner will be held June 12-17, 2011, at the Ames Research Center.

Excellence in software is vital to the Agency's leadership role in developing aeronautics and space technologies and transferring them to government and industry. The SOY Award competition allows us to recognize and appreciate the NASA team members that set high standards for significant software that is creative, usable, transferable, and possesses inherent quality. Please join us in fully supporting this year's competition.

“original signed by”

Michael G. Ryschkewitsch

“original signed by”

Bryan O'Connor

“original signed by”

Linda Y. Cureton

Enclosure

Officials-in-Charge of Headquarters Offices

Administrator/Mr. Bolden

Deputy Administrator/Ms. Garver

Associate Administrator/Mr. Scolese

Chief of Staff/Mr. Radzanowski

Associate Deputy Administrator/Mr. Keegan

Associate Deputy Administrator for Policy Integration/Dr. Keiser

Assistant Associate Administrator/Mr. Maples (Acting)

Deputy Chief of Staff and White House Liaison/Mr. Noble

Chief Financial Officer/Dr. Robinson

Chief Health and Medical Officer/Dr. Williams

Chief Scientist/Mr. Abdalati

Chief Technologist/Dr. Braun

General Counsel/Mr. Wholley

Inspector General/Mr. Martin

Associate Administrator for Communications/Mr. Weaver

Associate Administrator for Diversity and Equal Opportunity/Ms. Manuel

Associate Administrator for Education/Mr. Melvin

Associate Administrator for Independent Program and Cost Evaluation/Dr. Hawes

Associate Administrator for International and Interagency Relations/Mr. O'Brien

Associate Administrator for Legislative and Intergovernmental Affairs/Mr. Statler

Associate Administrator for Small Business Programs/Mr. Delgado

Associate Administrator for Aeronautics Research Mission Directorate/Dr. Shin

Associate Administrator for Exploration Systems Mission Directorate/Mr. Cooke

Associate Administrator for Science Mission Directorate/Dr. Weiler

Associate Administrator for Space Operations Mission Directorate/Mr. Gerstenmaier

Associate Administrator for Mission Support Directorate/Dr. Whitlow

Assistant Administrator for Human Capital Management/Mr. Henn (Acting)

Assistant Administrator for Strategic Infrastructure /Ms. Dominguez

Executive Director, Headquarters Operations/Mr. Jedrey

Executive Director, NSSC/Mr. Arbuthnot

Assistant Administrator for Agency Operations/Mr. Luedtke

Assistant Administrator for Internal Controls and Management Systems/Mr. Becker

Assistant Administrator for Procurement/Mr. McNally

Assistant Administrator for Program Protection/Mr. Forsythe

Director, NASA Management Office/Dr. Trinh

Directors, NASA Centers:

ARC/Dr. Worden

DFRC/Mr. McBride

GRC/Mr. Lugo

GSFC/Mr. Strain

JPL/Dr. Elachi

JSC/Mr. Coats

KSC/Mr. Cabana

LaRC/Ms. Roe

MSFC/Mr. Lightfoot
SSC/Mr. Scheuermann

cc:

Deputy Chief Financial Officer/Mr. Bowie
Deputy AA for Public Outreach/Mr. Ladwig
Director, Budget Management and Systems Support/Mr. Bridge
Executive Secretariat/Mr. Box
Office of the Administrator/Ms. Palacios
Office of the Administrator/Ms. Simms
Office of the Administrator/Ms. Sweeney
Office of the Administrator/Ms. Washington
Office of the Deputy Administrator/Ms. Holland
Office of the Deputy Administrator/Ms. Manuel
Office of the Deputy Administrator/Mr. McIntosh
Office of the Associate Administrator/Ms. Reynolds

Board Members

Office of the Chief Engineer/ Mr. Ryschkewitsch
Mr. Maturo

ARC/Dr. Freund

Dr. Kwak

Dr. Stone

GRC/ Dr. Braun

Dr. Meador

GSFC/Mr. Bristow

Ms. Cauffman

Mr. McComas

Dr. Peters-Lidard

JSC/ Dr. Arndt

Mr. James

Mr. Savely

KSC/ Dr. Quinn

Dr. Youngquist

LaRC/ Dr. Pater

Ms. Rinsland

MSFC/Dr. Bhat

Mr. Malone

Ms. Wang

Counsel to the Board

Office of General Counsel/Ms. Galus

Awards Liaison Officers:

Office of Institutions and Management/Ms. Hong
ARC/Ms. Orans
DFRC/Ms. Gibbs
GRC/Ms. Stauber
GSFC/Ms. Clarke
JPL/Dr. Jagers
NMO-JPL/Mr. Rosca
JSC/ Ms. Andrews
KSC/ Ms. Dunn
LaRC/Ms. Young
MSFC/Mr. McGroary
SSC/ Mr. Bryant

Board Staff:

Office of the Chief Engineer/Ms. Butler
Ms. Greene
LaRC/Mr. Midgett

2011 SOY Panelists

SSC/Mr. Grant
GSFC/Mr. Green
ARC/Mr. Gross
GRC/Mr. Horowitz
HQ/Mr. Kelly
KSC/Mr. Little
HQ/Mr. Leven
JPL/Mr. Soderstrom
DFRC/Mr. Truax
JSC/Mr. Vernon
HQ/Ms. Wetherholt
LARC/ Ms. Wright
JPL/Ms. Zamani

Chief Information Officers

Headquarters/Ms. Carter
ARC/Mr. Williams
DFRC/Mr. Norlin
GRC/Mr. Humphries
GSFC/Mr. Gardner
JPL/Mr. Rinaldi
JSC/Mr. Sweet
KSC/Mr. Bolger
LaRC/Ms. Mangum
MSFC/Mr. Pettus

NSSC/Mr. Odell
SSC/Ms. Cottrell

Office of the Chief Engineer/Mr. Robinson
Ms. Sorrels
Mr. Bell
Dr. Kelly

Office of Safety and Mission Assurance/Ms. Bodeau
Ms. Wetherholt

Chief Information Officer/Ms. Parker
Goddard Institute for Space Studies/Dr. Hansen
NASA IV&V Facility/Mr. Blaney
Plum Brook Station/Mr. Stringer
Wallops Flight Facility/Mr. Wrobel
White Sands Test Facility/Mr. Benz

Eligibility

NASA is looking for innovative *software* itself, rather than projects or products that use routine software. Software techniques, methods, languages, and functions are advancing and the applications of these advancements are allowing NASA to do more than it could ever have done before. The NASA Software of the Year (SOY) Award is about finding and rewarding these advances. It is important that the software not only be technologically advanced and of high quality, but can also demonstrate that safety and reliability have been **applied as required to make the software product(s) robust and safe to operate per relative NASA standards and directives available at <http://standards.nasa.gov/> and http://nodis3.gsfc.nasa.gov/main_lib.cfm respectively. The competition is open to author(s) of outstanding scientific and technical software** which has:

- (1) been officially released by the project within the last 3 years. Note: Software may only be considered officially released after all experimental phases have been successfully completed to the satisfaction of the customer;
- (2) a current Technology Readiness Level (TRL) of 7 or higher;
- (3) a NASA intellectual property interest;
- (4) been supported, adopted, sponsored, or used by NASA;
- (5) made a significant scientific or technical contribution to the NASA mission;
- (6) documentation from the local NASA Safety and Mission Assurance organization that identifies
 - a. Software classification as defined by [NPR 7150.2A](#), Appendix E.
 - b. Safety criticality based on the Software Assurance Assessment as described in [NASA-STD-8739.8](#), Appendix A.
 - c. Software release status.
 - d. Processes followed for development and acceptance based on a compliance matrix against applicable Center or Agency software requirements as described in [NPR 7150.2A](#), Appendix D.
 - e. If classified as safety critical, include the compliance matrix as described in [NASA-STD 8719.13](#) Appendix B, section 6.
- (7) demonstrated compliance with NASA security procedures per [NASA Policy Directive 2810, NASA Information Security Policy](#)
- (8) demonstrated compliance to [Section 508 of the Rehabilitation Act of 1973, as amended 29 U.S.C. § 794 \(d\)](#).

NASA Centers, NASA Facilities (e.g., Independent Verification and Validation Facility, Wallops Flight Facility, White Sands Test Facility, Goddard Institute for Space Studies, Plum Brook Station), contractors, and supporting universities may participate.

Entries

Each individual entry package must be submitted electronically by the Center Awards Liaison Officer (ALO), and include the ICB Space Act Award Application (NASA Form 1329), the NASA Software Summary Evaluation Document, and other supporting documentation. A scanned copy of the NASA Form 1329 Section II must also be submitted through the ALO, which shows the signatures of the official NASA technical management reviewers. The entry should be supplemented by evidence, such as letters from software users demonstrating the software's impact, degree of innovation, and suitability. All files and documentation must be organized and named as specified in the "Submission Guidelines" attached. This information will be the primary data used in the selection of the NASA SOY, and will be electronically submitted to the NASA SOY Panel and ICB.

Each NASA Center will evaluate entries from its associated activities.

Each NASA Center or Facility may select and submit a nominee. NASA Centers may submit additional nominees if the entry was initiated by a Facility under its cognizance (e.g., GSFC could submit one entry for its Greenbelt main campus and another from the Wallops Flight Facility and/or the Independent Verification and Validation Facility).

Deadlines

Each NASA Center will forward its top selection(s) to the ICB by COB May 2, 2011.

Judging

Entries will be judged by a NASA SOY Panel comprised of software domain experts from each NASA Center. Each NASA Center will have the opportunity to make a short presentation on their nominated package at the judging location or via recorded video, videoconference or teleconference.

Representatives should bring a copy of their final presentation on flash media and provide it to the NASA SOY Panel chairperson prior to making their presentation.

After their review, the NASA SOY Panel will submit a ranking of the nominations to the ICB and the competition sponsors.

The ICB will then recommend monetary award amounts for the cases to the competition sponsors for confirmation by the Administrator, under the auspices of the Space Act of 1958, as amended.

NASA officials will present the award later in the year. Additional inquiries on award criteria should be made through the ALO at any NASA Center or through the ICB (<http://icb.nasa.gov/alos.html>).

Submission Guidelines

Please submit all files electronically in a master folder named “**(CenterID) (Nominee Acronym) Software of the Year**” (e.g., GRC LEWICE Software of the Year). This master folder should contain the following seven subfolders, named as indicated:

1. “(CenterID) (Nominee Acronym) Required”, containing the following required files:
 - a. “(CenterID) (Nominee Acronym) 1329.pdf”, or
“(CenterID) (Nominee Acronym) 1329A.pdf” (if reevaluation)
 - b. “(CenterID) (Nominee Acronym) 1329 Section II.pdf”
 - c. “(CenterID) (Nominee Acronym) Summary Evaluation Document.pdf”
 - d. “(CenterID) (Nominee Acronym) Software Classification.pdf”
 - e. “(CenterID) (Nominee Acronym) Safety Criticality.pdf
 - f. “(CenterID) (Nominee Acronym) Release Status.pdf”
 - g. “(CenterID) (Nominee Acronym) Software Compliance Matrix.pdf”
 - h. “(CenterID) (Nominee Acronym) Safety Compliance Matrix.pdf”
 - i. “(CenterID) (Nominee Acronym) Information Security Compliance.pdf”
 - j. “(CenterID) (Nominee Acronym) 508 Compliance.pdf”
2. “(CenterID) (Nominee Acronym) ICB Award Waivers”, containing ICB Award Waivers for each awardee
3. “(CenterID) (Nominee Acronym) Reference Letters”, containing up to 10 letters of recommendation/reference
4. “(CenterID) (Nominee Acronym) Technical Publications”, containing technical publications, conference publications, and multimedia files
5. “(CenterID) (Nominee Acronym) General Publications”, containing press releases and general publication articles
6. “(CenterID) (Nominee Acronym) Project Documentation”, containing project-related documentation (e.g., user manuals, management plans, development documents)
7. “(CenterID) (Nominee Acronym) Web Links”, containing project website links

Subfolders 1 and 2 are required for each nominee; all other subfolders should be used, where applicable, to document the software’s impact, innovation, and suitability to the NASA Software of the Year Panel.

File Type	Preferred Format	Alternate Format
Documents	Portable Document Format (.pdf)	Microsoft Word (.doc, .docx)
Graphics	JPEG Image File (.jpg)	Portable Network Graphic (.png)
Spreadsheets	Microsoft Excel (.xls, .xlsx)	
Presentations	Microsoft PowerPoint (.ppt, .pptx)	
Audio	MP3 Audio File (.mp3)	
Video	Windows Media Video (.wmv)	Apple QuickTime Movie (.mov) or MPEG-4 Video File (.mp4)
World Wide Web	HyperText Markup Language (.htm, .html)	

All audio, video, and executable files, including video embedded in presentations, must be compatible with both Windows and Macintosh platforms.

Documents, files, and handouts that include Sensitive But Unclassified (SBU) or International Traffic in Arms Regulations (ITAR) information should be avoided.

Source code files should not be submitted.