NASA SOFTWARE RELEASE REQUEST AUTHORIZATION (SRRA) (See Attachment 1) Full Name of Requester: Date of Request: Technology Case Number Version Version Software Title Abbreviation Date Number LAR -**Technical Point of Contact** Government Point of Contact (If Technical Point of Contact is a Contractor) (Person who knows the most about the software.) Full Name: Company Name and Address: Full Name: Agency Name and Address: Email: Email: Mail Stop: Org. Code: Org. Code: Phone: Phone: Brief Description of Software: What type of code will be released? ☐ Executable ☐ Source ☐ Executable and Source Type of Release Requested? ☐ Open Source Release (No Release Restrictions) Government Purpose Only Release U.S. Release (Recipient Must Be U.S. Person or Company) ☐ Public Release U.S. and Foreign Release (All U.S. Persons and Allowed Foreign Nationals) Will a user manual be released with the software? ☐ Yes ☐ No How do you plan to distribute your software? Download After CD-ROM Email ☐ Other Attachment **Email Password** (specify) ☐ Yes ☐ No Are there any programmatic restrictions on release of the software? If **YES**, explain: What is the classification of the software? NOTE: Refer to LPR 7150.2, Langley Software Engineering Requirements, Appendix D (for the explanation of the classifications). Does the software comply with the requirements of LPR 7150.2 for the applicable software classification? ☐ Yes ☐ No IMPORTANT: Attach a copy of the completed Compliance Matrix (for the applicable Class) to this document. If software does NOT comply, are the deviations/waivers documented and approved? ☐ Yes ☐ No If YES, attach relevant deviations/waivers. This section is not applicable to non safety-critical Class D, E, and H. ☐ Yes ☐ No Does the software comply with NASA STD-8739.8. Software Assurance Standard? (Contact the LaRC Mission Assurance Branch (MAB) for questions concerning NASA STD-8739.8.) If software does NOT comply, are the deviations/waivers documented and approved? ☐ Yes ☐ No If YES, attach relevant deviations/waivers. Is the software safety-critical as defined in NASA STD-8739.8, Software Assurance Standard, Appendix A? Yes
No (Safety criticality is determined in conjunction with MAB, following LMS-CP-4754, Software Assurance (SA) for Development and Acquisition) If YES, does it comply with the software safety requirements of NASA STD-8719.13, Software Safety Standard?  $\Box$  Yes  $\Box$  No If **NO**, are the deviations/waivers documented and approved? If YES, attach relevant deviations/waivers. What is the software's Technology Readiness Level (TRL) as defined in NPR 7120.8. (see Attachment 2 - TRL Level Chart) NASA Research and Technology Program and Project Management Requirements? Is the software Section 508 compliant as defined in NPR 2800.2, Electronic and Information Technology Accessibility? Tyes In No. Does the software include any embedded computer databases? ☐ Yes ☐ No If **YES**, explain: ☐ Yes ☐ No (a) Open Source: Does the software use or call any software or libraries? If YES, list the items used, under what license (b) Proprietary/Commercial: Yes No they were obtained, and the URL for the license:

NASA SOFTWARE RELEASE REQUEST AUTHORIZATION (SRRA) (continued) Are there any known export restrictions that apply to the software? ☐ Yes ☐ No If **YES**, explain (e.g., EAR or ITAR controlled): Was software development funded by the Military? Yes
No If **YES**, explain predominant application(s) (Military, Civil, or Both): Does the software contain embedded firewall information or require Yes
No ports to be opened in the firewall for proper operation? If **YES**, explain: Does the software contain embedded credentials (e.g., User Name/ Yes
No Password, Certifications, Encryption Keys?: If **YES**, explain: Does the software analyze network traffic: If **YES**, explain: ☐ Yes ☐ No Does the software use or include encryption? If YES, explain: Yes
No Has the software application data owner been consulted to ensure that the software Yes
No documentation, embedded files, code, or other artifacts do not contain residual SBU data? Has the software been screened to determine if the software documentation, embedded files, code or other ☐ Yes ☐ No artifacts contain any Personally Identifiable Information (PII)? If NO, explain. (If you have questions, contact your Center Privacy Manager for assistance.) If you do not possess the resources to perform this review, please contact your center Chief Information Security Officer (CISO) or the Agency OCIO (hq-dlitspm@mailnasa.gov) for assistance. A Frequently Asked Questions (FAQ) document addressing NASA PII can be found at: http://insidenasa.nasa.gov/ocio/information/info privacy/pii fag.html If the software is Safety-Critical as defined in NASA STD-8739.8 or if the type of release is General Public Yes
No release or Open Source release as defined in this form, has a code review been performed to discover any residual security and privacy risks? If NO, explain: SIGNATURE GUIDANCE: \*The Technical POC is the technical person listed on the first page of this form (can be either a contractor or a NASA employee \*\*The NASA POC is the NASA employee most familiar with the software (could be the COTR for the NASA contract/grant). \*Technical POC (printed name) \*Technical POC (signature) Date \*\*NASA POC (printed name) \*\*NASA POC (signature) Date Recommendations: **Project or Program Office Concurrence and Recommendations** CONCURRENCE GUIDANCE: The Project/Program Office person is the NASA lead for the project/program under which the software was developed. If the software is not specific to a project or program, this person would be the NASA manager for the organization responsible for creation of the software. Project/Program Office (printed name) Project/Program Office (signature) Date Recommendations:

## Attachment 1

## Instructions for completion of LF 7, NASA Software Release Request Authorization (SRRA)

NPR 2210.1C, Release of NASA Software, specifies that organizations or persons seeking to release NASA software must provide certain information to be used by the Software Release Authority (SRA) in determining an appropriate level of release. This form captures the information required for that process. If the form cannot be completed due to lack of information, then the software cannot be considered for release, and that would also indicate that not all processes required by other organizations have been completed. The information required here should be readily available if all other required processes have been completed.

The Technology Case Number will be provided by the Office of Chief Counsel after receiving a Disclosure of Invention or equivalent form.

All questions concerning LPR 7150.2 should be addressed to the designated Technical Authority, which is the software manager's Directorate Head, or to the Software Engineering Process Group Directorate representative.

All questions regarding NASA STD-8739.8 should be addressed to the LaRC Mission Assurance Branch.

All questions regarding Section 508 compliance should be addressed to the Center's Section 508 Coordinator, Mail Stop 158.

All general questions on the software release process, NPR 2210.1C, Release of NASA Software, or this form should be addressed to the Center's Software Release Authority.

When completed, please send this form to the Center's Software Release Authority, MS 158.

## **Attachment 2**

## SOFTWARE TECHNOLOGY READINESS LEVEL (TRL) CHART

(as defined in NPR 7120.8, NASA Research and Technology Program and Project Management Requirements)

LEVEL	DEFINITION	SOFTWARE DESCRIPTION	EXIT CRITERIA
1.	Basic principles observed and reported	Scientific knowledge generated underpining basic properties of software architecture and mathematical formulation.	Peer reviewed publication of research underlying the proposed concept/ application.
2.	Technology concept and/or application formulated	Practical application is identified but is speculative, no experimental proof or detailed analysis is available to support the conjecture. Basic properties of algorithms, representations & concepts defined. Basic principles coded. Experiments performed with synthetic data.	Documented description of the application/concept that addresses feasibility and benefit
3.	Analytical and experimental critical function and/or characteristic proof-of-concept	Development of limited functionality to validate critical properties and predictions using non-integrated software components	Documented analytical/ experimental results validating predictions of key parameters
4.	Component and/or breadboard validation in laboratory environment	Key, functionally critical, software components are integrated, and functionally validated, to establish interoperability and begin architecture development. Relevant Environments defined and performance in this environment predicted.	Documented test performance demonstrating agreement with analytical predictions. Documented definition of relevant environment.
5.	Component or breadboard validation in a relevant environment	End-to-end Software elements implemented and interfaced with existing systems/simulations conforming to target environment. End-to-end software system, tested in relevant environment, meeting predicted performance. Operational Environment Performance Predicted. Prototype implementations developed.	Documented test performance demonstrating agreement with analytical predictions. Documented definition of scaling requirements.
6.	System/subsystem model or prototype demonstration in a relevant environment	Prototype implementations of the software demonstrated on full-scale realistic problems. Partially integrate with existing hardware/software systems. Limited documentation available. Engineering feasibility fully demonstrated.	Documented test performance demonstrating agreement with analytical predictions.
7.	System prototype demonstration in an operational environment	Prototype software exists having all key functionality available for demonstration and test. Well integrated with operational hardware/software systems demonstrating operational feasibility. Most software bugs removed. Limited documentation available.	Documented test performance demonstrating agreement with analytical predictions
8.	Actual system completed and "flight qualified" through test and demonstration	All software has been thoroughly debugged and fully integrated with all operational hardware and software systems. All user documentation, training documentation, and maintenance documentation completed. All functionality successfully demonstrated in simulated operational scenarios. V&V completed.	Documented test performance verifying analytical predictions
9.	Actual system flight proven through successful mission operations	All software has been thoroughly debugged and fully integrated with all operational hardware/software systems. All documentation has been completed. Sustaining software engineering support is in place. System has been successfully operated in the operational environment.	Documented mission operational results