Appendix C: Rotational Assignment Position Descriptions

Systems Review Manager (1 year)

Description: The Systems Review Manager is assigned to the Safety and Mission Assurance Directorate, Systems Review Office. The work involves managing the systems review process for the assigned areas of responsibility, including defining overall review guidelines and developing the review programs for specific projects, chairing the reviews, reporting the results and following up on related actions.

Qualifications: Desirable experience is 10 years providing engineering, systems development, and project management to NASA flight projects or programs. Desirable experience is two years in a management role. Desirable experience is in technical areas such as requirements definition, design, requirements management, or interface management with discipline expertise in several of the following areas: avionics, mechanical, or guidance, navigation, and control. Achieved and operating successfully at the GS-14 level. Ability to successfully negotiate with flight projects criteria, recommendations, and technical issues. Requires the ability to work collaboratively.

A core competency required for this position is the ability to lead a multi-disciplined team covering discipline areas such as avionics, mechanical, and guidance, navigation, and control.

Expertise in several of the following discipline area: avionics, mechanical engineering, GNC, or high-level systems development.

Special Skills: Special skills desired are dependent on the specific rotational assignment and will include strong engineering skills, in-depth knowledge of the GSFC Project Lifecycle, competency in Team Dynamics and Management and Leadership.

CSO (1 year)

Description: The Chief Safety and Mission Assurance Officer (CSO) is assigned to a GSFC flight program or project and serves as the single point of contact for mission assurance matters. The CSO is responsible to his/her assigned project(s) for the development and management of the project mission assurance program. The mission assurance program includes the system safety, reliability, quality assurance, software assurance, parts control, materials and process control, environmental verification, contamination control, and design review aspects of the project. The CSO has the responsibility and authority to lead and coordinate the project mission assurance team, consisting of civil servants and contractors with specific technical expertise in each the SMA areas. The CSO will serve on the project senior management team and will matrix directly to the Project Manager. The CSO will coordinate the development of mission assurance requirements, manage the performance of mission assurance analyses/testing, and assure the verification of these requirements throughout the project lifecycle. The project mission assurance program is applied to those design, fabrication, assembly, integration, and test operations performed at GSFC and at off-site contractor facilities. The work involves engineering, analysis, testing, and other mission assurance functions from design through flight operations with the objective of increasing the safety and mission success of GSFC projects.

Qualifications: Desirable experience is 10 years providing engineering, systems development, and project management to NASA flight projects or programs. Desirable level of experience is of two years in a management role of a technical area such as requirements definition, design,

requirements management, or interface management. Achieved and operating successfully at the GS-14 level.

Special Skills: Special skills desired are dependent on the specific rotational assignment and will include strong engineering skills, in-depth knowledge of the GSFC Project Lifecycle, competency in Team Dynamics and Management and Leadership. Applicants should have demonstrated capability in leading a major engineering effort.

Reliability Engineer/Project Reliability Lead (6 months to 1 year)

Description: Serves as the reliability consultant to NASA programs and works independently with other NASA Centers and HQ. The work involves establishing, maintaining, and evaluation reliability engineering and assurance programs through all phases of complex engineering systems, development from design through operation use. The focus is providing leadership to GSFC programs and projects by assisting them to design-in reliability, availability, and if required, maintainability to their systems. The work also includes task leadership for numerous reliability, maintainability, and risk assessment functions: ensuring adequacy and consistency of work across all GSFC projects. Duties may also include monitoring contractors engaged in this work. The engineer will focus on development and implementation of a reliability, availability, and maintainability (RAM) plan for his/her assigned project, and then leading the project team through the process of identifying failure modes and mitigating. This will entail use of analysis tools, verification techniques, and soft skills to deliver value to the project.

Qualifications: Desirable experience is 5 years in any of the engineering fields. Preferably, experience will be on GSFC programs and projects in either the systems engineering or project engineering areas.

Special Skills: Special skills desired are excellent people skills, good analytical skills, and understanding of the GSFC project engineering lifecycle.

Safety Engineer/Project Safety Manager (1 year)

Description: The project safety manager is responsible for ensuring that system safety is designed into all systems for a particular GSFC project. This entails focusing on hazard identification and mitigation. The work involves advising on, coordinating, monitoring, and maintaining surveillance over engineering systems safety programs, as well as performance hazard analysis and generating safety data packages, for all aerospace and aeronautical programs through definition, design and development, and operations of space systems, launch, aerospace and aeronautical vehicles, and /or associated ground and support equipment. Duties may also include monitoring contractors engaged in this work.

Qualifications: Desirable experience is 5 years in any of the engineering fields. Preferably, experience will be on GSFC programs and projects in either the systems engineering or project engineering areas.

Special Skills: Special skills desired are excellent people skills, good analytical skills, and understanding of GSFC project engineering lifecycle.

Supply Chain Manager (6 to 12 months or one audit)

Description: The work involves engineering and quality assurance functions for GSFC and provides integrated technical leadership for mission assurance issues across multiple projects related to mission contractors and suppliers. The incumbent serves as one for the Supply Chain Managers for Goddard. The incumbent supports the Chief of the Institutional Support Office who is responsible for the development and management of a comprehensive process to track mission assurance issues across all Goddard projects, identify and analyze trends, and

develop corrective action plans to improve the quality of procured systems, spacecraft, instruments, components, parts and materials.

The incumbent must exercise a high degree of initiative, creativity, and sound engineering and management judgment in the development and implementation of this process. Close coordination with individual Chief Safety and Mission Assurance Officers, Project Managers and the Applied Engineering and Technology Directorate, DCMA and other organizations is essential for successful performance.

Qualifications: Desirable experience is 5 years of GSFC project and program experience. A degree in engineering or equivalent is also desired. Experience with quality process and knowledge of the GSFC quality management system is a plus.

Special Skills: Special skills desired are excellent people skills, good analytical skills, and understanding of GSFC project engineering lifecycle. Experience auditing is a plus.

Operations Research Analyst or Resource Analyst (6 months to 1 year)

Description: This opportunity contributes to the soundness of budget, procurement, and resource planning at the Center. The Operations Research Analyst is assigned to the Resource Analysis Office (RAO), Code 305. He/she collects historical cost, technical and programmatic project data that are used in the development of proposed and on-going flight projects, and other major procurements at the Center. Working with the RAO team, he/she analyzes and normalizes data and captures project lessons learned as well as cost drivers for entry in RAO historical databases. He/she will learn the mathematical model development and independent assessments as well.

Qualifications: Desirable experience is 5 years supporting GSFC projects or programs in a professional administrative or engineering capacity. A Bachelor's degree in an appropriate field of engineering, mathematics, physical science, or business administration (or a combination of appropriate education and experience) is required.

Special Skills: Special skills desired include understanding of an engineering discipline, theories, concepts, and experience. Understanding of the GSFC project lifecycle is desirable.