Exhibit B
SES Labor Category Position Description

Core Labor Skill Category	Min Education	Min Exp (yrs)	Mapping	Job Description
Administrative Analyst (Principle)	BS	10	0	**Key Elements**: Provides administrative and or analytical support. Compiles and analyzes basic information for inclusion in reports or presentation materials. Coordinates schedules to facilitate project deliverables, briefings, and formal reviews. Assists in development and implementation of program administrative procedures. **Key Skills and Abilities**: Strong knowledge of general desktop software; including word processing, spreadsheets, presentation programs and project planning and analysis tools. Basic understanding of project budgeting, and variance analysis.
Administrative Analyst (Senior)	BS	5	0	
Administrative Analyst (Mid-Level)	AA	3	0	
Administrative Analyst (Associate)	AA	0	0	
Administrative Support (Principle)	AA	0	0	**Key Elements**: Provides general administrative support to project managers and employees. Prepares tables, charts, graphs for inclusion in reports and presentation materials. **Key Skills and Abilities**: Basic knowledge of general desktop software; including word processing, spreadsheets, and basic graph programs. Ability to exercise independent judgment and employ basic reasoning skills.
Administrative Support (Senior)	AA	0	0	
Administrative Support (Mid-Level)	HS	3	0	
Administrative Support (Associate)	HS	0	0	
Computer Operator (Senior)	AA	7	0	**Key Elements**: Operates and controls computers and peripheral equipment, such as printers, communications equipment and storage devices. Monitors computer systems using operating supplies, interprets console messages from system software or application program, and performs required actions. Performs daily system backups. Maintains records required to supplement console log; including problem documentation and actions taken, computer utilization logs, file identification and similar data. Researches error messages and manipulates console to re-sequence job steps after job interruption. Maintains applicable records, including user lists and equipment inventories. **Key Skills and Abilities**: Knowledge of assigned computer hardware, operating systems, and peripherals. Ability to perform local troubleshooting and minor repairs. Ability to initiate self-paced training to maintain technical fluency on current and new technical developments and trends. Basic knowledge in information technologies, operating systems, and implementation.
Computer Operator (Mid-Level)	AA	3	0	
Computer Operator (Associate)	AA	0	0	
Configuration Mgmt (Principle)	BS	12	0	**Key Elements**: Detailed recording and updating of configuration information that describes software applications, computer systems and networks, including all hardware and software components. Such information typically includes the versions and updates that have been applied to software builds, installed software packages and the locations and network addresses of hardware devices. And other aspects as they relate to the product life-cycle management tools and capabilities. **Key Skills and Abilities**: A degree in the disciplinary area of computer science, computer engineer, or management of information technology. Experience using build scripts and installer tools. Basic technical knowledge in software development methodologies, design and implementation.
Configuration Mgmt (Senior)	BS	7	0	
Configuration Mgmt (Mid-Level)	BS	3	0	
Configuration Mgmt (Associate)	BS	0	0	
Data Technician (Principle)	BS	12	0	**Key Elements:** Coordinate and participate in various duties involved in collecting, classifying, interpreting, documenting and summarizing descriptive, analytical and evaluative data in support of research and/or information gathering activities. Establish procedures for collecting data through observation or analyzing larger data sets. Coordinate preparation of data for computer pre-processing, processing, and post-processing to ensure quality control and appropriate security controls. Investigate and correct problems causing incorrect input or output. Recommend new methods for collection and documentation of data; write and revise procedural manuals as required. **Key Skills and Abilities:** Computer data entry skills. Ability to understand documentation and successfully perform data acquisition and reduction according to defined procedures and protocols. Understanding of data analysis, documenting source data, data interpretation, and report preparation.
Data Technician (Senior)	BS	7	0	
Data Technician (Mid-Level)	AA	5	0	
Data Technician (Associate)	AA	2	0	
Database Administrator (Principle)	BS	12	0	**Key Elements:** Designs, develops, and maintains project databases and master files. Maintains database dictionaries, ensures and monitors database performance, and resolves problems. Plans for and perform backups. Analyzes and forecasts long-range space requirements. Plan, coordinate and implement security measures to safeguard information in computer files against accidental or unauthorized damage, modification or disclosure. **Key Skills and Abilities**: Knowledge of database products, programming, and security measures. Ability to suggest and structure data fields in a logical, hierarchical fashion capturing critical project data and information. A degree in the disciplinary area of Computer Science, Computer Engineer, or Management of Information Technology.
Database Administrator (Senior)	BS	7	0	
Database Administrator (Mid-Level)	BS	3	0	
Database Administrator (Associate)	BS	0	0	

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Core Labor Skill Category	Min Education	Min Exp. (yrs)	Mapping	Job Description
Engineer (Principle)	BS	12	0	**Key Elements:** Applies specialized knowledge of primary technical discipline, e.g., software, mechanical, electrical, optics, controls, to support research, planning, development, design, analysis, production, maintenance, and operation of devices, equipment, complex systems, or processes. Design activities generally involve exacting customer specifications, low error margins, harsh operating environments, and autonomous, unattended operation. State-of-the-art product development activities may require modification and extension of existing methods and may require advanced techniques and/or tools. **Key Skills and Abilities:** Requires broad knowledge of several fields and extensive knowledge of own specialty. Must demonstrate solid judgment in evaluation, selection, and adaptation and/or modification of methodologies and tools. A degree in the disciplinary area of Engineering (e.g., Software, Electrical, Electronic, Optics, Mechanical).
Engineer (Senior)	BS	7	0	
Engineer (Mid-Level)	BS	3	0	
Engineer (Associate)	BS	0	0	
Flight Software System Developer (Chief)	BS/MS	20	0	**Key Elements:** Provides on-board, embedded software products that enable spacecraft hardware, science instruments and flight components to operate as an integrated on-orbit science observatory. Works in all levels and phases of flight software analysis and programming activities. Life-cycle of flight software engineering includes early mission formulations and designs, requirements analysis, development, verification and validation, and mission-life sustaining engineering. Flight software approach and methods maybe self-determined or part of a team collaboration involving Principal Investigators, other software developers, and software and systems engineers. **Key Skills and Abilities:** Proficiency in software development to include requirements development, software design, software coding and testing, integration, and acceptance testing. Ability to work in a team environment. Real-time, embedded software development knowledge/experience. A degree in the disciplinary area of Computer Science, Computer Engineer, Software Engineering, or Management of Information Technology.
Flight Software System Developer (Senior-Principle)	BS	20	0	
Flight Software System Developer (Principle)	BS	12	0	
Flight Software System Developer (Senior)	BS	7	0	
Flight Software System Developer (Mid-Level)	BS	3	0	
Flight Software System Developer (Associate)	BS	0	0	
Ground Software System Developer (Chief)	BS/MS	20	0	**Key Elements:** Provides software products and expertise that satisfy ground system requirements for Earth and space science missions. Perform requirements analysis, design, implementation, verification, validation, deployment and sustaining engineering for all types of ground software applications and architectures. System functionality may include spacecraft command and control, flight dynamics, mission planning and scheduling, event monitoring and assessment, and telemetry trend analysis. **Key Skills and Abilities:** Proficiency in software development to include requirements development, software design, software coding and testing, integration, and acceptance testing. Ability to work in a team environment. Real-time, embedded software development knowledge/experience. A degree in the disciplinary area of Computer Science, Computer Engineer, Software Engineering, or Management of Information Technology.
Ground Software System Developer (Senior-Principle)	BS	15	0	
Ground Software System Developer (Principle)	BS	12	0	
Ground Software System Developer (Senior)	BS	7	0	
Ground Software System Developer (Mid-Level)	BS	3	0	
Ground Software System Developer (Associate)	BS	0	0	
Network Engineer (Principle)	BS	12	0	**Key Elements:** Network operations; including installation, testing, servicing and analysis of network power, software, hardware, communications, cables and lines, modems and terminals. Monitors, controls, and optimizes the performance and status of network resources. Utilizes software and hardware diagnostic tools to identify and resolve operational problems and factors affecting network performance. Responds and resolves operational issues within established Service Level Agreements (SLAs). Supports large scale systems projects through vendor product evaluation and cost vs. performance studies. Performs on-site engineering when required. **Key Skills and Abilities:** Knowledge of LAN/MAN/WAN systems, network applications and their operation, maintenance, and sustaining engineering. A degree in the disciplinary area of Computer Science, Computer
Network Engineer (Senior)	BS	7	0	
Network Engineer (Mid-Level)	BS	3	0	
Network Engineer (Associate)	BS	0	0	

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				Engineer, Software Engineering, Engineering, or Management of Information Technology.
Software Developer (Principle)	BS	12	0	**Key Elements:** Develops or modifies application programs for operations ranging from routine to complex to highly specialized. Designs, codes, tests, debugs, documents, and maintains programs. Works in all levels and phases of application systems analysis and programming activities. Programming approach and methods maybe self-determined or part of a team collaboration involving Principal Investigators, other software developers, and software and systems engineers. **Key Skills and Abilities:** Knowledgeable in current software development techniques that exploit latest advances in computer technology to produce fast executing programs. Proficiency in software development to include requirements development, software design, software coding and testing, integration, and acceptance testing. Ability to work in a team environment. A degree in the disciplinary area of Computer Science, Computer Engineer, Software Engineering, or Management of Information Technology.
Software Developer (Senior)	BS	7	0	
Software Developer (Mid-Level)	BS	3	0	
Software Developer (Associate)	BS	0	0	

Core Labor Skill Category	Min Education	Min Exp. (yrs)	Mapping	Job Description
Software Engineer (Principle)	BS	12	0	**Key Elements:** Analysis, design, programming, and modification of computer programs for software products and customers applications. Develops overall system architecture, program specifications, and system test procedure. Converts project specifications and procedures to detailed logical flow charts for coding into computer language. Write code and complete programming, testing and debugging of applications. Determines forms, procedures and other documentation needed for the installation and maintenance of application programs. **Key Skills and Abilities:** Requires broad knowledge of several fields and extensive knowledge of own specialty. Must demonstrate solid judgment in evaluation, selection, and adaptation and/or modification of methodologies and tools. Skilled in high-level programming languages, e.g., C/C++, Java, Visual Basic, FORTRAN. A degree in the disciplinary area of Computer Science, Computer Engineer, or Software Engineering
Software Engineer (Senior)	BS	7	0	
Software Engineer (Mid-Level)	BS	3	0	
Software Engineer (Associate)	BS	0	0	
Software Test Engineer (Principle)	BS	12	0	**Key Elements:** Provides expertise in operations engineering, operations planning and systems validation to ensure optimal operability of Flight, Ground, Science and Information systems. Plan, coordinate, and take responsibility for the end-to-end testing of mission systems. Pre-launch end-to-end simulations of launch and early orbit scenarios are developed, coordinated and tested. Recognizes failures and set-up problems and determines procedures for appropriate verification. Assist in preparation of test reports. **Key Skills and Abilities:** Understanding of basic software engineering principles. Ability to follow test procedures and collect required test data. Basic mathematical ability to assist in test data reduction. Ability to present test results in text, tabular, or graphical format. Ability to work in a team environment. A degree in the disciplinary area of Computer Science, Computer Engineer, Software Engineering, or Management of information Technology.
Software Test Engineer (Senior)	BS	7	0	
Software Test Engineer (Mid-Level)	BS	3	0	
Software Test Engineer (Associate)	BS	0	0	
Systems Administrator (Principle)	BS	12	0	**Key Elements:** Installation, configuration, and maintenance of operating system workstations and servers, including web servers, in support of technical and programmatic processing requirements. Performs software installations and upgrades to operating systems and layered software packages. Schedules installations, upgrades, and maintenance in accordance with established IT policies and procedures. Ensures workstation and server security and data integrity by evaluating and implementing software and hardware solutions. Ensures data recoverability by regular system backups and database archive operations, including offsite storage and retrieval services. Conducts routine hardware and software audits of workstations and servers to ensure compliance with established standards, configuration guidelines, and IT security policies. Responds and resolves operational issues within established SLAs. **Key Skills and Abilities:** Knowledge of current operating systems software, workstations, and servers; and their operation, maintenance, and sustaining engineering. Familiar with latest IT security policies, threat practices and software, and software detection and remediation applications.
Systems Administrator (Senior)	BS	7	0	
Systems Administrator (Mid-Level)	BS	3	0	
Systems Administrator (Associate)	BS	0	0	
System Engineer (Chief)	BS/MS	20	0	**Key Elements:** Performs technical planning, system integration, verification and validation, cost and risk, and supportability and effectiveness analyses for total systems. Analyses of all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal. Ensures logical and systematic conversion of customer or product requirements into total systems solutions recognizing technical, schedule, and cost constraints. Performs functional analysis, timeline analysis, detail trade studies, requirements allocation and interface definition studies to translate customer requirements into hardware and software specifications. Provide proposal support including writing inputs for submittal. Provide
System Engineer (Senior-Principle)	BS	15	0	
Systems Engineer (Principle)	BS	12	0	
Systems Engineer (Senior)	BS	7	0	

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Systems Engineer (Mid-Level)	BS	3	0	evaluation of test procedures and plans along with test data submittals and reports. **Key Skills and Abilities:** Ability to understand systems level engineering requirements and drawings. Specialized knowledge in one technical discipline is supplemented with understanding of fundamentals in at least two other technical disciplines. Good communicator capable of working in a multi-disciplinary team of technologists as well as on an independent and self-directed basis. Must demonstrate solid judgment in evaluation, selection, and adaptation and/or modification of methodologies and tools. A degree in the disciplinary area of Computer Science, Computer Engineer, or Software Engineering
Systems Engineer (Associate)	BS	0	0	
Technician (Principle)	BS	12	0	**Key Elements:** Performs a variety of routine and non-routine tasks to ensure product specifications and quality standards are met. Assists in development of test procedures. Performs set-ups, calibration, testing and troubleshooting of analog and digital electronic circuits, components, instruments, and mechanical assemblies. Recognizes failures and set-up problems and determines procedures for appropriate verification. Operates programmable autonomous testers, samplers, oscilloscopes, pulse generators, meters, power supplies, and special test fixtures. Assist in preparation of test reports. **Key Skills and Abilities:** Understanding of basic engineering principles. Ability to follow test procedures and collect required test data. Basic mathematical ability to assist in test data reduction. Ability to present test results in text, tabular, or graphical format.
Technician (Senior)	AA	7	0	
Technician (Mid-Level)	AA	3	0	
Technician (Associate)	AA	2	0	

Core Labor Skill Category	Min Education	Min Exp. (yrs)	Mapping	Job Description
Test Engineer (Principle)	BS	12	0	**Key Elements:** Performs varied and complex assignments of engineering testing of standard and/or custom, one-of-a-kind devices and instruments. Designs and develops test procedures and assists in the evaluation of test equipment required to perform quality checks. Prepares recommendations for testing and documentation of procedures to be used from product design phase through initial production. Responsible for ensuring and certifying that all products meet quality and customer performance standards. Prepares final test report and provides recommendation on product acceptance or need for further development efforts. Provides leadership and training in new procedures to technician testing staff. **Key Skills and Abilities:** Broad understanding of engineering fundamentals over a number of disciplines. Understanding of research instrumentation and equipment functions and goals. Ability to develop test plans and procedures that verify that test objects successfully meets performance specifications. Ability to analyze test data to support final quantitative assessment of test article performance
Test Engineer (Senior)	BS	7	0	
Test Engineer (Mid-Level)	BS	3	0	
Test Engineer (Associate)	BS	0	0	
Web Developer (Principle)	BS	12	0	**Key Elements:** Supports technical aspects of an organization's internet web application/site suite and associated database development, technical programming, uploading content, and daily operations. Ensures all products developed are secure and free of know vulnerabilities. Works with multimedia specialists to develop security compliance, interface design and website architecture. Investigates system errors, performs backups, and ensures user accessibility and site performance. **Key Skills and Abilities:** Experience with web page maintenance, and programming scripting languages commonly used in web page development – HTML, JSP, Python, ColdFusion, PHP, JavaScript. Strong navigation and site-design instincts.
Web Developer (Senior)	BS	7	0	
Web Developer (Mid-Level)	BS	3	0	
Web Developer (Associate)	BS	0	0	
Software Systems Engineer (Chief)	BS/MS	20	0	**Key Elements:** Provides end-to-end software systems engineering for the development and support of conceptual design, requirements specification, implementation and maintenance of software systems. Works in all levels and phases of software systems analysis and programming activities. Software systems approach and methods maybe self-determined or part of a team collaboration involving Principal Investigators, other software developers, and software and systems engineers. **Key Skills and Abilities:** Knowledgeable in current software development techniques that exploit latest advances in computer technology to produce fast executing programs. A degree in the disciplinary area of Computer Science, Computer Engineer, or Software Engineering.
Software Systems Engineer (Senior-Principle)	BS	15		
Software Systems Engineer (Principle)	BS	12	0	
Software Systems Engineer (Senior)	BS	7	0	
Software Systems Engineer (Mid-Level)	BS	3	0	
Software Systems Engineer (Associate)	BS	0	0	
Software Process Engineer (Principle)	BS	12	0	**Key Elements:** Focal point for all software process improvement activities, including; developing and maintaining the process asset and tool library, deploying process assets and tools through mentoring and software training programs, and implementing the organization's measurement program. Provide oversight of software engineering processes across the software life-cycle. Work with organizational units and practitioners to ensure processes related to NASA's CMMI certification level and NASA Procedural requirements as related to software development, maintenance and operations are being addressed into the core business structure where applicable. **Key Skills and Abilities:** Knowledgeable in current software development techniques that exploit latest advances in
Software Process Engineer (Senior)	BS	7	0	
Software Process Engineer (Mid-Level)	BS	3	0	
Software Process Engineer (Associate)	BS	0	0	

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				computer technology to produce fast executing programs. A degree in the disciplinary area of Computer Science, Computer Engineer, or Software Engineering.
Flight Software Sustaining Engineer (Chief)	BS/MS	20	0	**Key Elements:** Provides on-board, embedded software products that enable spacecraft hardware, science instruments and flight components to operate as an integrated on-orbit science observatory. Work with the technical support team to investigate spacecraft and science instruments flight software components issues and to recommend resolutions accordingly. Analyze, troubleshoot, and set up test environments for debugging. Participate in root cause analysis of spacecraft and science instruments flight software components. Implement and unit test code changes to address software defects. Work with members of the development team to identify and implement needed product corrections. **Key Skills and Abilities:** Proficiency in software development to include requirements development, software design, software coding and testing, integration, and acceptance testing. Ability to work in a team environment. Real-time, embedded software development knowledge/experience. A degree in the disciplinary area of Computer Science, Computer Engineer, Software Engineering, or Management of Information Technology.
Flight Software Sustaining Engineer (Senior-Principle)	BS	15	0	
Flight Software Sustaining Engineer (Principle)	BS	12	0	
Flight Software Sustaining Engineer (Senior)	BS	7	0	
Flight Software Sustaining Engineer (Mid-Level)	BS	3	0	
Flight Software Sustaining Engineer (Associate)	BS	0	0	

Core Labor Skill Category	Min Education	Min Exp. (yrs)	Mapping	Job Description
Systems Integration Engineer (Principle)	BS	12	0	**Key Elements:** Work closely with the customer to identify and implement integrated data processes to provide intelligent solutions that enhance the ingestion of multiple data sources and/or systems. Elicit operating concepts, mission concepts from government customers and system users and translate into system requirements. Ensure proper traceability between documentation threads and system architecture. Brief proposed changes to various internal and government review forums. **Key Skills and Abilities:** Software integration experience; installation and maintenance experience with a variety of 3rd party software; integration experience with a variety of operating systems; and experience with data integration and relational databases. Knowledge of system engineering processes, particularly architecture analysis. Strong written and verbal communications skills. Ability to work independently and within a team environment. A degree in the disciplinary area of Computer Science, Computer Engineer, Software Engineering, or Management of Information Technology.
Systems Integration Engineer (Senior)	BS	7	0	
Systems Integration Engineer (Mid-Level)	BS	3	0	
Systems Integration Engineer (Associate)	BS	0	0	
Technical Writer (Principle)	BS	12	0	**Key Elements:** Create product instructions, reference and maintenance manuals, articles, project proposals, training materials, technical reports, catalogs, brochures, online documentation and help systems, Web pages, multimedia presentations, parts lists, and assembly instructions. Compose communication from product developers for users of the products. Users include scientists, engineers, and managers. Must write in a concise and easy-to-read manner for publications or in highly specialized language for experts. With the increased use of desktop publishing tools, responsibility is inclusive of the publication process involving graphics, layout, and document design. Analyze the needs of the target audience; study data and conduct in-depth interviews with subject matter experts to understand the product or procedure; produce or arrange for illustrations, charts, and photographs to be included in publications; and edit, standardize, or revise material prepared by other writers or personnel. **Key Skills and Abilities:** Communicating effectively with others in writing as indicated by the needs of the audience. Listening to what other people are saying and asking questions as appropriate. Finding ways to structure or classify multiple pieces of information. Inspecting and evaluating the quality of products. Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. Strong written and verbal communications skills. A degree in the disciplinary area of Marketing, Journalism, or English.
Technical Writer (Senior)	BS	7	0	
Technical Writer (Mid-Level)	BS	3	0	
Technical Writer (Associate)	AA	0	0	

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