Mission Assurance Engineer

Defines and monitors mission assurance program specifications and processes to ensure mission success of programs. Performs or assures quality, risk management, safety, reliability and maintainability of program achievements, subcontractors and suppliers in accordance with contractual requirements. Assesses program performance and risks, and determines resources to ensure mission assurance. Work performed includes the following: Proposals, Contract Reviews and Requirements Flow Down, Design Reviews, Business Area Team Representative (PA Program Management), Cost Account and Schedule Management, Customer Liaison, Quality and Reliability Programs, Reliability/Maintainability Analysis/Techniques, FRACAS, Qualification/Reliability Tests, Engineering Change Board, Material Review Board, Support to Suppliers and Data Items.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Mission Assurance Engineer I	**Mission Assurance Engineer II**	**Mission Assurance Engineer III**	**Mission Assurance Engineer IV**	**Associate Principal Mission Assurance Engineer**	**Principal Mission Assurance Engineer**
Knowledge	Limited use and/or application of technical principles, theories and concepts.	Frequent use and application of technical standards, principles, theories, concepts and techniques.	Complete understanding and wide application of technical principle, theories and concepts in the field. General knowledge of other related disciplines. General understanding of application of Quality related technical principles, theories and concepts in the design, engineering, manufacturing, test and delivery of electronic systems. Possesses knowledge of the relationship of Quality and Mission Assurance with other disciplines. Understands the method for auditing, analyzing data and implementing corrective actions for administrative and manufacturing processes. Knows how to monitor budgets and work within defined schedules. Coordinates and participates in the control of budget and reduction of cost activities.	Applies extensive technical expertise and has full knowledge of other related disciplines. Possesses full knowledge of Quality Management Systems concepts, their relationships with other disciplines and effects on Mission Assurance. Basic understanding of financial, technical and schedule aspects of programs. Background provides for supporting creation of quality instructions, procedures, tests and reports. Understands supplier and customer relationships. Has hands-on knowledge from working with engineering and manufacturing, and testing and delivery of complex electronic products. Knows the basics of generating a detailed program proposal.	Applies advanced technical principles, theories and concepts. Contributes to the development of new principles and concepts. Possesses knowledge of advanced technical principles, theories and concepts, related to Quality Management Systems as pertinent to ensure mission success of programs. Understands how to implement and/or measure quality, risk, safety, reliability and cost, in accordance with company and customer requirements. Extensive background provides for creation of detailed quality instructions, procedures, tests and reports. Understands the intricacies and effectively participates in supplier and customer relationships. Broad knowledge of engineering, manufacturing and testing of complex electronic products. Knows how to prepare detailed proposals.	Exhibits an exceptional degree of ingenuity, creativity and resourcefulness. Applies and/or develops highly advanced technologies, scientific principles, theories and concepts. Viewed as an expert within the field.
Problem Solving	Develops solutions to routine technical problems of limited scope.	Provides solutions to a variety of technical problems of moderate scope and complexity.	Provides technical solutions to a wide range of difficult problems. Solutions are imaginative, thorough, practicable and consistent with organization objectives.	Develops technical solutions to complex problems which require the regular use of ingenuity and creativity.	Works on unusually complex technical problems and provide solutions which are highly innovative and ingenious.	Develops information which extends knowledge in a given field. Information may form the basis of newly developed concepts, theories and products.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Mission Assurance Engineer I	**Mission Assurance Engineer II**	**Mission Assurance Engineer III**	**Mission Assurance Engineer IV**	**Associate Principal Mission Assurance Engineer**	**Principal Mission Assurance Engineer**
Discretion/Latitude	Work is closely supervised. Follows specific detailed instructions.	Works under general supervision. Follows established procedures. Work is reviewed for soundness of technical judgment, overall adequacy and accuracy.	Works under only general direction. Independently determines and develops approach to solutions. Work is reviewed upon completion for adequacy in meeting objectives.	Work is performed without appreciable direction. Exercises considerable latitude in determining technical objectives of assignment. Completed work is reviewed from a relatively long-term perspective for desired results.	Works under consultative direction toward predetermined long-range goals and objectives. Assignments are often self-initiated. Determine and pursue courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior.	Often acts independently to uncover and resolve issues associated with the development and implementation of operational programs. Plans R&D programs and recommends technological application programs to accomplish long-range objectives. Work is checked only to the effectiveness of results obtained, typically requiring a long-term perspective. Virtually self-supervisory.
Impact	Contributes to the completion of routine technical tasks. Failure to achieve results can normally be overcome without serious effect on schedules and programs.	Contributes to the completion of milestones associated with specific projects. Failure to achieve results or erroneous decisions or recommendations may cause delays in program schedules and may result in the allocation of additional resources.	Contributes to the completion of specific programs and projects. Failure to obtain results or erroneous decisions or recommendations would typically result in serious program delays and considerable expenditure of resources.	Guides the successful completion of major programs and may function in a project leadership role. Erroneous decisions or recommendations would typically result in failure to achieve major organizational objectives.	Develops advanced technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical organizational objectives and affect the image of the organization's technological capability.	Designs research and develops highly advanced new applications resulting in new product/business opportunities for the company. Erroneous decisions or recommendations would have a long-term negative effect on organization's reputation and business posture.
Liaison	Contacts are primarily with immediate supervisor, project leaders and other professionals in the section or group.	Primarily internal company contacts. Infrequent inter-organizational and outside customer contacts on routine matters.	Frequent inter-organizational and outside customer contacts. Represents the organization in providing solutions to difficult technical issues associated with specific projects. Extensive internal contact with various groups and departments. Continuous contact with customer quality and technical reps, as well as subcontractors and suppliers.	Represents the organization as the prime technical contact on contracts and projects. Interacts with senior external personnel on significant technical matters often requiring coordination between organizations. Continual internal contacts with all other departments. Continual customer contact. Periodic DCMA contact and varying of subcontractor contact.	Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications. Continual internal contacts with all other departments. Continual customer contact. Periodic DCMA contact and varying of subcontractor contact.	Serves as consultant to top management in long-range company planning concerning new or projected areas of technological research and advancements. Prime spokesperson on company's technical capabilities and future directions. Often instrumental in attracting and obtaining major new company business. Continual internal contacts with all other departments. Continual customer contact. Periodic DCMA contact and varying of subcontractor contact.

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Mission Assurance Engineer I	**Mission Assurance Engineer II**	**Mission Assurance Engineer III**	**Mission Assurance Engineer IV**	**Associate Principal Mission Assurance Engineer**	**Principal Mission Assurance Engineer**
Work Products (Examples may include but are not limited to)	Quality System Databases & Software Applications; i.e., TIPQA and FRACAS. Microsoft Office Applications.	Quality System Databases & Software Applications; i.e., TIPQA and FRACAS. Microsoft Office Applications.	Quality System Databases & Software Applications; i.e., TIPQA and FRACAS. Microsoft Office Applications. Working knowledge of applicable MIL-SPECS, including quality, reliability, statistical techniques and principles; operational planning and budgeting. Basic Knowledge of manufacturing technologies.	Quality System Databases & Software Applications; i.e., TIPQA and FRACAS. Microsoft Office Applications. Working knowledge of ISO -9000 and Reliability Engineering including prediction and analyses as required by MIL-STD-785 and MIL-STD-470, design, manufacturing, and testing methods and procedures.	Quality System Databases & Software Applications; i.e., TIPQA and FRACAS. Microsoft Office Applications. Working knowledge of ISO -9000 and Reliability Engineering including prediction and analyses as required by MIL-STD-785 and MIL-STD-470, design, manufacturing, and testing methods and procedures.	Quality System Databases & Software Applications; i.e., TIPQA and FRACAS. Microsoft Office Applications. Knowledge expert of ISO -9000 and Reliability Engineering including prediction and analyses as required by MIL-STD-785 and MIL-STD-470, design, manufacturing, and testing methods and procedures.
Minimum Education and Experience	0 - 1 year with BS in Electrical Engineering.	2 - 4 years with BS in Electrical Engineering. 0 - 2 years with MS in Electrical Engineering.	5 - 8 years with BS in Electrical Engineering. 3 - 6 years with MS in Electrical Engineering.	9 - 13 years with BS in Electrical Engineering. 7 - 11 years with MS in Electrical Engineering.	14 - 19 years with BS in Electrical Engineering. 12 - 17 years with MS in Electrical Engineering.	20+ years with BS in Electrical Engineering. 18+ years with MS in Electrical Engineering.