**V&V Output Products by Project NPR 7120.5D Lifecycle Phase (Software output products reflect NPR 7150.2A Class A requirements.)**

| **Pre-Phase A:**  Concept Studies | **Phase A:**  Concept & Technology Development | **Phase B:**  Preliminary Design & Technology Completion | **Phase C:**  Final Design & Fabrication | **Phase D:**  System Assembly, Int, & Test, Launch | **Phase E:**  Operations & Sustainment |
| --- | --- | --- | --- | --- | --- |
| Preliminary Mission Concept Documentation Evaluation Report | Baseline Mission Concept & Prel. Mission Ops Concept Doc Eval Report | Baseline Mission Ops Concept Eval Report |  |  |  |
| [SWE-132] Preliminary Independent SW Assurance Classification Report prepared by SW Assurance | Updated Software Assurance Classification Assessment | Updated Software Assurance Classification Assessment Report | Updated Software Assurance Classification Assessment Report | Software Assurance Classification Final Assessment |  |
| Preliminary Hazard Analysis Report | Updated Hazard Analysis | Update Hazard Analysis Report | Hazard Analysis Report Update | Updated Hazard Analysis Report | Updated Hazard Analysis Report |
| Preliminary Security and Risk Analysis Report | Updated Risk and Security Analysis | Update Security and Risk Analysis Report | Security and Risk Analysis Report Update | Updated Security and Risk Analysis | Updated Security and Risk Analysis Report |
|  | Traceability Analysis | Traceability Analysis Report Update | Updated Traceability Analysis Report | Traceability Analysis Final Report |  |
|  | Interface Analysis | Interface Analysis Report | Interface Analysis (source code) Report |  |  |
|  | Configuration Management (CM) Assessment |  |  |  |  |
|  | [SWE-136] Software Tool Validation Reports |  |  |  |  |
|  | Preliminary System Requirements Evaluation | Baseline Sys Requirements Eval Report |  |  |  |
|  |  | Baseline Software Requirements Eval Report |  |  |  |
|  |  | Architectural Software Design Evaluation Report |  |  |  |
|  |  |  | Detailed Software Design Evaluation Report |  |  |
|  |  |  | Source Code Evaluation Report |  |  |
|  |  |  | [SWE-077] Software Delivery Documentation and [SWE-116] Software Version Description Report |  |  |
|  |  |  | Installation Configuration Audit |  |  |
|  |  |  |  | As-built Documentation Report |  |
|  |  |  |  | Installation Checkout Report |  |
|  |  |  |  |  | Maintenance and Sustaining Eng. Outputs |
|  | System V&V Test Plan (Software Test Plans = End-to-end Testing) |  |  |  |  |
|  |  | System V&V Test Procedure (Software Test Proc. = End-to-end Test) |  |  |  |
|  |  |  |  | System V&V Test Report (Software Test Report = SW End-to-End Test Report) |  |
|  | Acceptance V&V Test Plan (Software Test Plans = Acceptance Testing) |  |  |  |  |
|  |  | Acceptance V&V Test Procedure (Software Test Proc. = SW Accept. Test) |  |  |  |
|  |  |  |  | Acceptance V&V Test Report (Software Test Report = SW Acceptance Test Report) |  |
|  |  | Integration V&V Test Plan (Software Test Plan = SW Integration Test and System Integration Test) |  |  |  |
|  |  |  | Integration V&V Test Proc. (Software Test Proc. = SW and System Integ. Test Proc.) |  |  |
|  |  |  | Integration V&V Test Report (Software Test Report = SW and Sys. Integ Test Report) |  |  |
|  |  |  | Component (Unit) V&V Test Plan (Software Test Plan = Unit Test Plan) |  |  |
|  |  |  | Component (Unit) V&V Test Proc. (Software Test Proc. = Unit Test Proc.) |  |  |
|  |  |  | Component (Unit) V&V Test Report (Software Test Report = Unit Test Report) |  |  |
|  | **Software Peer Review /Inspection Reports:** | **Software Peer Reviews / Inspection Reports:** | **Software Peer Reviews / Inspection Reports:** |  |  |
|  | - Preliminary Software Development or  Management Plan | - Baseline Software Development or  Management Plan |  |  |  |
|  | - Preliminary Software Assurance and  Software Safety Plans | - Baseline Software Assurance and Software  Safety Plans |  |  |  |
|  | - Software Configuration Management Plan |  |  |  |  |
|  | Preliminary Software Maintenance Plan |  | - Baseline Software Maintenance Plan |  |  |
|  | - Software Test Plans | - Software Test Plans | - Software Test Plans |  |  |
|  | - Preliminary Software Requirements Spec | - Baseline Software Requirements |  |  |  |
|  |  | - Software Design Descriptions | - Software Detailed Design and Interface Design  Description |  |  |
|  |  |  | - Source Code |  |  |