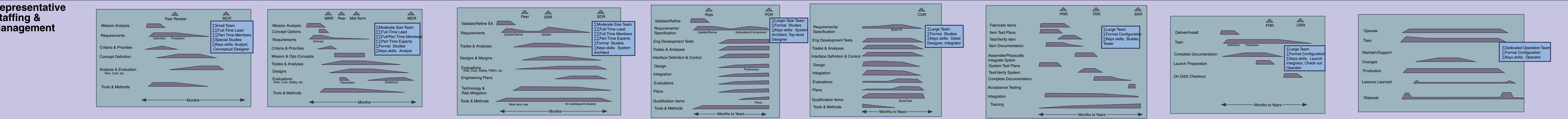
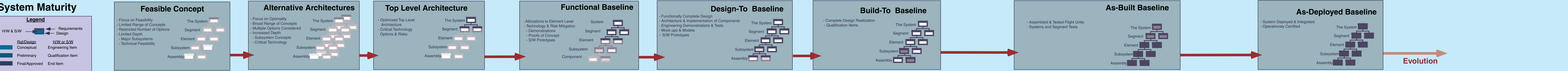
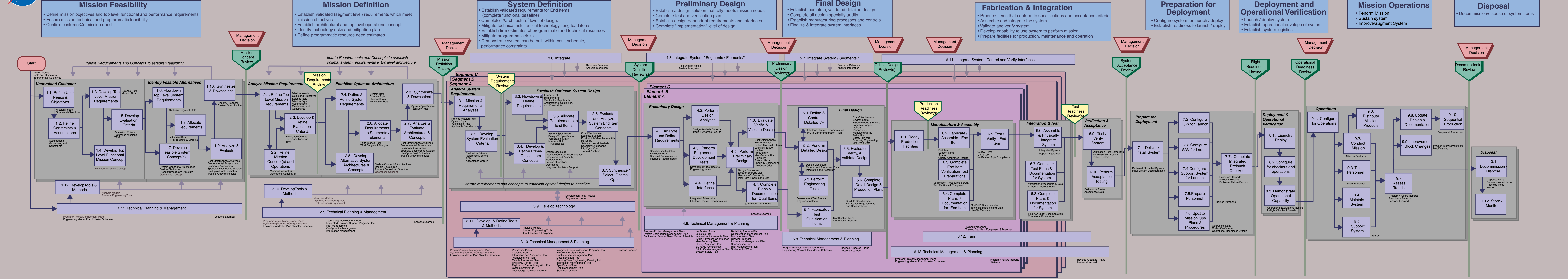


The NASA Program/Project Life Cycle Process Flow



Review & Control Gate	Mission Concept Review	Mission Requirements Review	Mission Definition Review	System Definition Review	Preliminary Design Review	Critical Design Review	Production Readiness Review	Test Readiness Review	System Acceptance Review	Flight Readiness Review	Operational Readiness Review	Decommissioning Review
Objective:	Validate mission needs and mission objectives. Is mission fully defined? Do mission requirements fulfill mission needs? Is mission feasible? Technically? Programmaticaly?	Validate mission requirements. Do mission requirements fulfill mission needs? Do mission requirements fulfill mission needs?	Validate system requirements. Do functional and performance meet original mission objectives? Can system be built to meet mission objectives? Are requirements complete & consistent?	Demonstrate system architecture is acceptable and allocations to element level. Technology & Risk Mitigation. Demonstrations. Prototypes of Concept. SW Prototypes.	Demonstrate System Design is complete, optimal, and meets system requirements. Is the design correct considering system requirements, verification methodologies, production, and operations? Does the design meet cost and schedule constraints?	Verify detail design meets system requirements. Are system performance, operations defined? Are verification and acceptance testing defined? Release design for production.	Verify production facilities and processes are ready to begin actual construction of end-item.	Verify design meets system requirements. Are test facilities and personnel in place? Are verification plans and criteria in place?	Demonstrate that system elements as constructed meet requirements. Is the system quality verified? Are hardware/software verified?	Demonstrate System is ready for launch.	Demonstrate that deployed system is ready to perform the mission. Does deployed system meet mission requirements? Can system transition from developers to operators? Do plans & procedures reflect actual performance and operations?	Ratify that disposal is appropriate. Is removal from service acceptable? Are plans and procedures in place? Have necessary preparation been made?
Results:	Approve proposal or submit RFP for Phase A or Accept report as potential input into later RFP or Recommend further concept exploration	Proceed with System and Mission Definition	Release Mission level requirements and program needs	Release System level requirements	Release specifications, drawings, ICDS	Begin building qualification hardware	Release design for production	Release design for production	Accept system from developers	Accept system from vendors	Transition to mission operations	Removal of item from service
Major Products:	Mission/Proposal	Mission Requirements	Architecture System Operations Concept System Requirements Risk Planning & Mitigation	Identification of End Items End Item Specifications	Design-to baseline Qualification Plans	Build-to Baseline	Manufacturing/Production Plans Manufacturing/Production Schedule Quality requirements	Complete Set of Procedures Quality Control Plans/Procedures Acceptance Criteria	Approved system from vendors	System Deployed & Integrated Operationally Certified	Operational System	Major Products Decommissioned/disposed items
Checklist:	Mission Goals and Objectives Mission Needs System Requirements System Constraints and Constraints System Cost/Estimates & Analysis System Feasibility Assessment Trade & Analysis Results	Mission Requirements System Requirements System Constraints and Constraints System Cost/Estimates & Analysis System Feasibility Assessment Trade & Analysis Results	Specialty Engineering Studies System Requirements System Constraints and Constraints System Cost/Estimates & Analysis System Feasibility Assessment Trade & Analysis Results	Reliability Assessment Safety/Hazard Analysis Life Cycle Cost Estimates Reliability Assessment System Requirements System Constraints and Constraints System Cost/Estimates & Analysis System Feasibility Assessment Trade & Analysis Results	Design-to baseline Qualification Plans Build-to Baseline	Manufacturing/Production Plans Manufacturing/Production Schedule Quality requirements	Complete Set of Procedures Quality Control Plans/Procedures Acceptance Criteria	Approved system from vendors	System Deployed & Integrated Operationally Certified	Operational System	Major Products Decommissioned/disposed items	Removal of item from service Major Products Decommissioned/disposed items

