



# P-8A Poseidon Program Description



## Mission & Requirements

- Replacement for P-3C Orion
- System requirements based on the P-8A CPD, validated and approved 22 Jun 09
- Principal mission areas are persistent ASW, ASUW, and ISR
- Inventory objective is 117 aircraft (IOC 2013)
- Future Increments:
  - Increment 2 - MAC (AEER) / AIS / High Altitude ASW Capability (HAAWC) , Fleet introduction in FY16
  - Increment 3 - Net-Ready / Net-enabled ASuW weapon / Wide Band SATCOM / Architecture upgrade, Fleet introduction in FY20

## Program Status

- SDD program conducting IOT&E, with continuing development in support of FOT&E & FRP milestone
- Three LRIP production contracts awarded
  - LRIP 1: 6 aircraft (4 aircraft delivered to date)
  - LRIP 2: 7 aircraft ( delivery start March 2013)
  - LRIP 3: 11 aircraft (delivery start June 2014)
- 1<sup>st</sup> Fleet training devices delivered Dec 2011
- Fleet transition underway- IOC 2013
- Increment 2 capabilities to be integrated via ECPs
  - Cooperative program with the Australian government
- Increment 3 potential MDAP, pre-Milestone A
- PSFD MOU signed with Australian government

## P-8A Program Schedule

P-8A Poseidon	FY11			FY12			FY13			FY14			FY15			FY16			FY17					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Increment 1 (PU: 2696)</b>																								
Reviews & Milestones																								
Contract Awards																								
System Development & Demonstration																								
Correction of Deficiencies Engineering																								
Reviews																								
Production and Deployment																								
LRIP																								
FRP																								
T&E																								
Ground Testing																								
Integrated Flight Testing																								
Fatigue Testing																								
IOT&E/ FOT&E																								

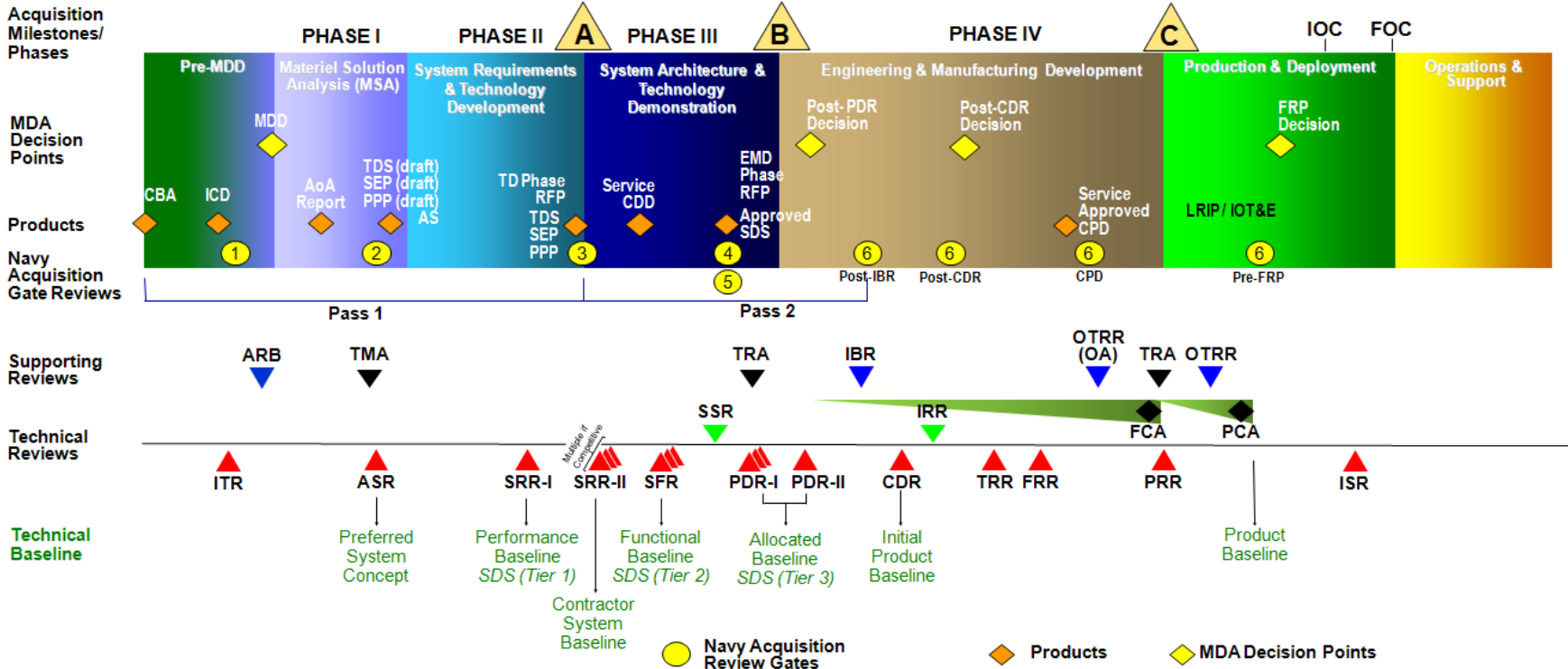
## Production Process



Existing commercial air vehicle with proven processes in place  
US Navy Production Deliveries FY12 – FY20

# NAVAIR Systems Engineering Technical Review (SETR) Process

## Systems Engineering Technical Review Timing



NAVAIRINST 4355.19 (SEDC Rev 3.4)

AoA – Analysis of Alternatives	FRR – Flight Readiness Review	PDR – Preliminary Design Review
ARB – Acquisition Review Board	IBR – Integrated Baseline Review	PRR – Production Readiness Review
AS – Acquisition Strategy	ICD – Initial Capabilities Document	SEP – Systems Engineering Plan
ASR – Alternative System Review	IOC – Initial Operational Capability	SFR – System Functional Review
ARB – Acquisition Review Board	IRR – Integration Readiness Review	SRR – System Requirements Review
CBA – Capabilities-Based Assessment	ISR – In-Service Review	SSR – Software Specification Review
CDD – Capability Development Document	ITR – Initial Technical Review	TDS – Technology Development Strategy
CDR – Critical Design Review	MDD – Materiel Development Decision	TMA – Technology Maturity Assessment
CPD – Capability Production Document	MSA – Materiel Solution Analysis	TRA – Technology Readiness Assessment
FCA – Functional Configuration Audit	OTRR – Operational Test Readiness Review	TRR – Test Readiness Review
FOC – Final Operational Capability	PCA – Physical Configuration Audit	



# SETR Key Points/Lessons Learned



- SETR Purpose: To provide the program manager with an integrated technical baseline evaluation, and confidence that the technical baseline is mature enough for the next phase of development
  - Conducted with an AIR 4.1 designated independent chair, who forms a board of non-advocate SMEs in the relevant technical disciplines
  - Governed by NAVAIRINST 4355.19, which includes detailed entry criteria and recommended checklists for each review. Exit criteria limited to RFA resolution.
- Lessons Learned:
  - There is no “one size fits all” checklist applicable to all programs. Time spent tailoring the checklist to the specific program, in coordination with the review chair, ensures the best application of program resources.
  - The value to the program is primarily in the preparation for the review- a well-tailored checklist can ensure that preparing for the review aligns to the necessary core work of the program
  - The process serves as a forcing function, in combination with a healthy risk management process, to identify risk, issues and opportunities and drive to resolution
  - Recurring non-advocate SME participation via SETR reviews also of high value to ensure cross-program lessons learned are understood and considered



# Risk Management



- Risk Management Process has consistently provided positive ROI for P-8, and serves as a core process to both manage the day-to-day program activities and provide leadership insight
- Lessons Learned:
  - The key first step is developing a Risk Management Plan which identifies leadership responsibilities and quantified criteria for characterizing risk. Consistent application of the quantified criteria is critical and time consuming, but is worth the investment to ensure optimal use of limited program resources
  - The process should be led by someone with overall responsibility for cost, schedule, and performance, with active participation from all program disciplines forming a risk board
  - There is a subjective element to the process- differentiating between risk and “normal development activity” can be challenging.
  - The development of a quality mitigation strategy is often challenging, but also worth the investment
    - Steps that don't change likelihood/consequence should be questioned
    - Meetings rarely mitigate risk
    - Use the mitigation strategy to establish the necessary drumbeat via risk board
  - Recommend establishing a lower frequency leadership drumbeat of verifying that the current program risk cube truly represents the core risks to the program