



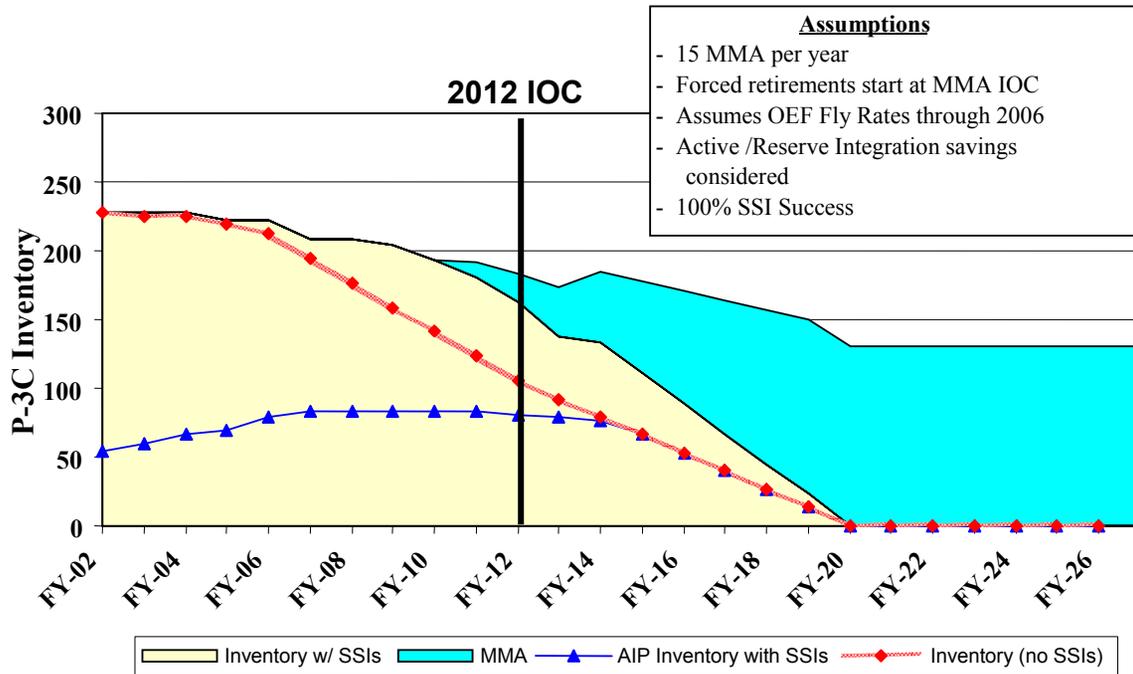
MMA Overview

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Purpose of MMA Program



To recapitalize the capabilities currently provided by the P-3 aircraft systems



The **P-3** aircraft provides the USN with strategic blue water and littoral Undersea Warfare (USW) capabilities, and performs armed intelligence, surveillance and reconnaissance functions.



Concept Exploration

April 2000-January 2002

Milestone 0 Approved by Defense Acquisition Board 22 MAR 00

Analysis of Alternatives (AoA):

- Manned aircraft identified as an element of the MMA system
- Unmanned aircraft have a role as an adjunct capability

Industry Concept Studies – June 2000 to January 2001 - supported the AoA:

- Lockheed Martin studied the P-3 derivative (Orion 21)
- Raytheon studied the P-3 derivative (Procyon)
- Boeing studied the 737 derivative
- Northrop Grumman studied the Global Hawk Adjunct Unmanned Aerial Vehicle (UAV)

Analysis of Alternatives Summary Findings

- Manned aircraft are key element of Navy Broad Area Maritime and Littoral Armed Intelligence Surveillance and Reconnaissance missions
- UAVs have a role as an adjunct system to the manned aircraft
 - Near term UAVs: Unable to perform full mission spectrum, adjunct capability only.
 - Conceptual UAVs: High risk, significant schedule delays, unbounded costs

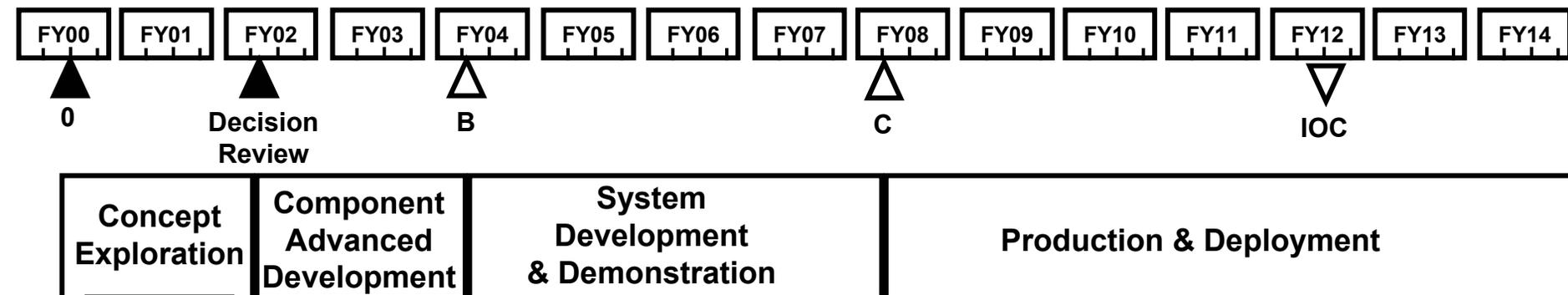
Manned Aircraft with Adjunct UAV



Recent Program Accomplishments

- Component Advanced Development Decision Review with OIPT - 11Jan02
- CAD Acquisition Strategy Briefed/Approved by USD(A,T,L) – 18Jan02
- MMA completed Concept Exploration and commenced Component Advanced Development on 18Jan02
- Designated a Major Defense Acquisition Program (MDAP) on 29May02
- CAD contracts awarded to Boeing for 737 Next Generation concept and Lockheed Martin for Orion 21 concept on 10Sept02
- CAD Kick-Off Meetings conducted with Boeing and Lockheed Martin on 18 & 19 Sept 02
- Acquisition Coordination Team briefing on 30Oct02
- Milestone B WIPT-Acquisition on 14Nov02

Acquisition Approach & Status



FY02-FY04

Component Advanced Development (CAD)

- Multiple contracts awarded for MMA system
 - Define the MMA system architecture for each alternative concept
 - Identify Total Ownership Cost (TOC) of MMA alternative concepts
 - Refine system requirements and support Operational Requirements Document (ORD) validation process
 - Unmanned Aerial Vehicle (UAV) interoperability requirements development

Component Advanced Development

- Contracts awarded on 10 September 2002
- Successful offerors:

<u>Company</u>	<u>System</u>
Boeing	737 Next Generation
Lockheed Martin	Orion 21



- **Phase I:** September 2002 to February 2003 (5 mos)
- **Phase II:** February 2003 thru 20 January 2004 (11 mos)
- **Milestone B – 20 January 2004**



Proposed Acquisition Approach -Long Term-

FY04-08 *System Development & Demonstration [SDD] Phase*

- Single prime contractor for MMA system
 - Develop detailed system and subsystem designs for the MMA system
 - Develop Systems Integration Labs (SIL) / Build Developmental test aircraft
 - Conduct integrated team development and integration tests
 - Develop / acquire ILS and training systems to support Developmental and initial Operational testing

FY08-TBD *Production & Deployment [P&D] Phase*

- Begin Low Rate Initial Production (LRIP)
- Complete Operational Evaluation (OPEVAL)
- Target Full Rate Production (FRP) decision to support 2012 Initial Operational Capability (IOC)
- Continue technology refresh in successive Blocks



Mission Systems

Will feature an open system architecture

- **Evolutionary mission system capability**
 - Initial production blocks must provide an overall mission system capability no less effective than the P-3C Update III AIP baseline
 - Open system architecture should ensure Command, Control, Communications, Computers, and Intelligence (C4I) interoperability and supportability throughout the MMA life cycle

AIP – Anti-Surface Warfare Improvement Program



Logistic Support

Maximize MMA Fleet Squadron support and achieve maximum aircraft availability at the lowest Operational and Support (O&S) costs.

- **Innovative logistic solutions**
 - Commercial support concepts to be evaluated during CAD
 - Establish Partnering / Teaming arrangements

- **O&S cost reductions**
 - Minimization of O&S costs in relation to the MMA Total Ownership Cost (TOC) through:
 - Logistics footprint reduction,
 - Organic manpower reduction,
 - Competitive base for depot level maintenance and component repair, and
 - Increased component reliability.



Acquisition Strategy - International

Current Worldwide P-3 Laydown - 15 Countries – 226 aircraft

CAD International Cooperation:

- Cooperative Avionics/Mission System Study MOU with Japan
 - Focus is on interoperability, period of performance – thru Jan2004
- Project Arrangement with Australia
 - MMA to share CAD data; RAAF to provide M&S support and data on commercial derivative experience

SDD International Cooperation:

- Japan – Pursuing indigenous aircraft, remaining engaged with MMA program in SDD for data exchange
- Australia – Significant interest to partner with US in MMA development



Fast Track Program

- MMA is one of two Navy programs ASN(RDA) is considering as “Fast Track Programs” (the other is Littoral Combat Ship – NAVSEA)
- Navy Fast Track Program modeled after USAF Pathfinder template crafted to streamline the acquisition process reducing cycle times:

The Challenges:

- Keep pace with the accelerating technology cycle
- Embrace innovation
- Adapt to and enable changing doctrine

The Solutions:

- People trained and encouraged to innovate and take risks
- Systems that produce -- or force -- decisions
- Professionals freed to execute their programs