Systems Engineering Conference Program Managers Panel

## MK 6 MOD 1 Guidance System Development

CDR John Gerken Strategic Systems Program(SSP) Fire Control/Guidance Branch Head October 2012

## **SSP Organizational Relationships**



## **Strategic Systems Program Organization**



Streamlined Organization – Critical Partnerships

### **SP23 Guidance Organization**



### **Objectives of the MK 6 MOD 1 Guidance System Development**



	Concept Dev Prelim Design		Design	Detailed Design		Prototype Integration and Test					Production		
	03	04	05	06	07	80	09	10	11	12	13	14	
Major Milestones	Arcl Rev	nitecture iew		IDR		1 <sup>s</sup> HWIL	<sup>st</sup> Prototype		EGT	1 <sup>st</sup> Flt	2 <sup>nd</sup> Flt △	1 <sup>st</sup> Prod	

## MK 6 MOD 1 Guidance in Context



# **MK 6 MOD 1 Design Goals**

- Develop an architecture/ approach that:
  - Optimizes supportability (reduce Life Cycle Cost)
  - Addresses known obsolescence, reliability, and maintainability issues
  - Enables efficient integration with early identification of technical risks

#### • Long-term Supportability

- Architecture modular to critical guidance functions and technologies
  - ➤ Modular to accelerometers, gyros, stellar
  - Indifferent to memory, processors (future technology insertion)
- Reduce out-year repair complexity and cost

#### • Future Flexibility

- Minimize impact to tactical hardware / software and crew for future flexibility