

# **MSA PARTNERING AGREEMENT**

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**(MSA LOGO)**

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## **SUMMARY**

***“WE WILL WORK TOGETHER, SHARING RESPONSIBILITY AND ACCOUNTABILITY FOR PRODUCT DEVELOPMENT AND SUPPORT”.***

***“WE WILL ELIMINATE REDUNDANCY AND REDUCE COST BY USING A COMMON. INTEGRATED ENGINEERING ENVIRONMENT AND WORK FORCE”.***

This Partnering Agreement between the Navy (PMA-290) and Lockheed Martin (Eagan and Manassas) is intended to satisfy the challenge given by PMA-290 to define a strategy to lower the life cycle cost of developing, delivering and sustaining Maritime Surveillance Aircraft (MSA) Fleet software products. It is anticipated that the agreement will affect all MSA Integrated Product Team (IPT) members, including both government and industry. The operating principles of this Agreement will form the framework for the decision making processes that will guide the Software Products Life Cycle Development and Support Functions of all products of the MSA Team. This Partnering Agreement is intended to guide the P-3 and S-3 IPTs, who will implement the operating principles contained herein as soon as it is programmatically and technically reasonable. Each product IPT will develop the necessary plans to transition their program to incorporate these partnering principles.

### **1.0 INTRODUCTION**

A partnering agreement is a mutual commitment between government and industry to work cooperatively as a team to identify and resolve problems and facilitate contract performance. Partnering requires the parties to look beyond the strict bounds of the contract in order to formulate actions that promote their common goals and objectives. It is a relationship that is based upon open and continuous communication, mutual trust and respect, and the replacement of the “us vs. them” mentality of the past with a “win-win” philosophy for the future. Partnering also promotes synergy, creative thinking, pride in performance, and the

creation of a shared vision for success. It is a natural extension of the IPT concept. It provides a flexible framework for government and industry team members to work together to solve problems and informally

Too often the acquisition process is undermined by adversarial relationships, suspicion between government and industry, volumes of paperwork and costly litigation. PMA 290 can no longer afford to do business in this manner. Partnering provides the Navy acquisition community with a tool that can maximize the potential for achieving contractual objectives. Although the partnering agreement itself is not a contractual document, it serves to define a long term relationship between the government and industry and will form the basis of future contracting actions.

## **2.0 VISION**

The MSA Team will provide the Fleet with the highest quality software products on time and at the best value. Employing the tenets of Cost As an Independent Variable (CAIV), the team will establish aggressive, achievable cost targets which reflect affordability constraints. The team will challenge processes and activities in order to eliminate non-value added effort and conduct tradeoffs to optimize cost, schedule, performance and risk.

## **3.0 STRATEGY**

The strategy to be implemented, in order to reduce the life cycle costs associated with MSA Fleet software products, requires the MSA IPTs to embrace the following tenets:

### ***Accountability and Risk Sharing***

Shared accountability that provides for contractor and Navy partnering in every phase of the product life cycle, sharing risk and responsibility.

### ***Requirements Definition***

Requirements definition that provides for inclusive stakeholder agreement to performance-based requirements.

### ***Common Integrated Engineering Environment.***

A common integrated engineering environment that supports all product improvements and which is shared among the teams eliminating redundancy and reducing cost.

### ***High Fidelity Laboratory***

A ground-based, high fidelity, multi-platform laboratory, including a robust modeling and stimulation/simulation capability, providing for efficient, effective testing for the entire product lifecycle.

### ***Systems Engineering Environment***

A system engineering environment (SEE) supporting the entire product lifecycle to a geographically dispersed team. The SEE provides software development toolsets and hardware, documentation generation, configuration management, problem and resolution tracking, requirements management and tracking, and product archival.

### ***Unified System Test***

Joint Navy and contractor test definition and execution eliminating redundancy and optimizing test resources.

### ***Aircraft Assets***

Elimination of the use of actual aircraft assets for all testing except product validation.

### ***Aircraft Configuration***

Reduction of the number of unique Avionics and Software configurations, by moving to an open architectural environment on all platforms.

## 4.0 OPERATING PRINCIPLES

Delivering software products to the Fleet in a responsive and efficient manner can be accomplished by incorporating the following operating principles in all MSA related development and support activities.

### ***Requirements Generation and Definition***

Operational requirements will continue to be received through the Fleet OAG process and the CNO sponsor. Assimilation of operational requirements into software product requirements will occur through a continuous and open process to ensure the widest possible understanding of those requirements by the product IPT. It is crucial that all team members understand the operational need.

The software requirements process will examine cross platform issues so that, when a requirement is implemented, maximum utility and commonality can be achieved. In addition, reuse of other platform solutions will be considered when attempting to satisfy the requirements of any particular platform.

Throughout the development cycle, Cost As an Independent Variable (CAIV) principles will be applied.

Additionally, product requirements will be defined so as to establish performance “trade space” and all levels of the IPT will be empowered to make trade decisions. Product requirements will be:

- Performance based, not design based;
- Categorized into mission critical and desired; and
- Assessed with respect to cost, schedule and performance risk.

## ***Design***

The design process will provide an environment for innovative thinking and be unencumbered by non-value added processes such as formal design reviews and oversight documentation.

### **Design Generation**

Design teams will be formed between government and industry personnel based upon skills, not by who they report to. Co-location of personnel, either physically or virtually, will be required. Design teams will be involved with development of product requirements and charged with understanding the system concept of operation. Each design team is accountable for ensuring their products comply with the system performance design including sub-element testing. When each design team believes their design meets all requirements then they will proceed to implementation.

### **Design Reviews**

Formal design reviews are not required. Periodic briefings to program management may be required but only as a natural progression of the work products. Peer reviews will be conducted between design teams for operational, functional and interface compliance

## ***Integration and Test***

The software product integration and test phase will be a joint effort executed by the test team, which should include members of the operational test community. This approach of unified system test will eliminate redundant levels of testing. The common integrated engineering environment, including the PAX River high fidelity test and integration facility, will be utilized with the objective of minimizing the requirement to use aircraft assets for verification testing. One set of integration and test plans, procedures and documentation will be jointly developed and executed by the Navy/contractor team. Test readiness will be periodically reviewed by program management to obtain the test team's

assessment of system maturity. Culmination of team testing activities will result in the successful completion of an Operational Test Readiness Review.

### ***Documentation***

All documentation requirements will be reduced to only that required to conduct the appropriate development or sustainment activities and to maintain configuration management of the product. Documentation which is directed toward procurement or oversight (e.g., Level 3 drawings) will not be routinely developed. Should “full documentation” be needed, it will be produced using the Common Integrated Engineering Environment. The product IPT will determine the level of documentation required and select the media deemed most appropriate for usage by the various teams. The media may be electronic databases, traditional paper, mark-ups of existing manuals, etc.

## **5.0 IMPLEMENTATION APPROACH**

### ***Partnering Agreement Guidelines***

The MSA Partnering Agreement will be signed by PMA-290 and Lockheed Martin management . These signatories form the MSA Partnering Executive Committee (PEC). It will be the PEC’s responsibility to insure that all Navy, Lockheed Martin and other corporate members of the MSA product IPTs are aware of and conform to the principles of the Agreement. The PEC will also establish an MSA Steering Committee, consisting of members from the various MSA product IPTs, which will meet and review individual program status and issues to insure that there is maximum utilization of similar efforts across all MSA programs and that total MSA program resources are being employed effectively. The Steering Committee is empowered to redirect individual program efforts where cost and schedule savings can be demonstrated to have no impact in satisfying individual program operational needs.



## ***Product IPT Guidelines***

The MSA product IPT organization, membership and responsibilities will be as described in the IPT Manual and the MSA Program Operating Guidelines. The product IPT will operate as a unified team, sharing risk and accountability. Program success *or* failure will be a reflection on the entire product IPT, not upon a single team member. The product IPT will be *empowered to make* all *necessary* decisions regarding the development of the products required to satisfy the operational needs, within the specified boundaries established by the PEC, (e.g. budgets and schedules). The product IPT members should be assigned for the entire duration of the program, from identification and analysis of the operational need, through product development and life cycle support. product IPT leaders should be selected based upon the best person available regardless of Navy or industry affiliation.

## ***Project Planning.***

Each P-3/S-3 product IPT, developing or sustaining software, will prepare an implementation plan. The plan will provide alternative approaches intended to fully implement the operating principles discussed in this Partnering Agreement. The alternatives will be aimed at mitigating various degrees of cost and schedule risk, including an incremental approach and a full implementation approach. The product IPT will also provide their recommended alternative.

## ***Software Development and Sustainment Activity***

Essential elements of this Partnering Agreement will be implemented by modifying existing contracts, if appropriate, and initiating a long term, risk sharing Software Development and Sustainment Activity (SDSA) contract in FY 99. This SDSA contract will include all elements discussed herein, Navy/Industry partnering, and the Common Integrated Engineering Environment. Metrics will be developed by each product IPT and used to assess their progress.

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# **PARTNERING AGREEMENT**

between

PMA-290 and Lockheed Martin

# PARTNERING AGREEMENT

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- ***“WE WILL WORK TOGETHER, SHARING RESPONSIBILITY AND ACCOUNTABILITY FOR PRODUCT LIFE CYCLE DEVELOPMENT AND SUSTAINMENT”.***
- ***“WE WILL ELIMINATE REDUNDANCY AND REDUCE COST BY USING A COMMON, INTEGRATED ENGINEERING ENVIRONMENT AND WORK FORCE”.***

# PARTNERING AGREEMENT

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- INTENDED AS OPERATING GUIDELINES FOR ALL MSA S/W DEVELOPMENT AND SUSTAINMENT EFFORTS
- APPLIES TO ALL P-3/S-3 PRODUCT IPTs
  - REQUIRES IPT IMPLEMENTATION PLANS WITH A RANGE OF ALTERNATIVES FOR CURRENT PROGRAMS
  - ESTABLISHES A LONG TERM SDSA (Software Development and Sustainment Activity) CONTRACT IN FY99 FOR ALL OF MSA

# PARTNERING AGREEMENT

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- REQUIRES NAVY/INDUSTRY TEAMS TO PERFORM ALL WORK JOINTLY  
(Requirements/Design/Implementation/Test)
- REQUIRES THE USE OF A “COMMON INTEGRATED ENGINEERING ENVIRONMENT” (SEE and Hi Fi Lab with site connectivity)
- SIGNED BY PMA-290 & LOCKHEED MARTIN

# PARTNERING AGREEMENT

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- ESTABLISHES AN MSA “Partnering Executive Committee” (PMA 290/LM)
  - TO COMMUNICATE AND INSURE “TEAM” CONFORMS TO PARTNERING AGREEMENT PRINCIPLES
- FORMS A STEERING GROUP TO WORK ACROSS PLATFORMS
  - TO MAXIMIZE THE USE OF SIMILAR EFFORTS ACROSS MSA PLATFORMS
  - TO INSURE EFFECTIVE USE OF TOTAL MSA RESOURCES

# NEXT STEP

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- PARTNERING AGREEMENT  
AVAILABLE FOR REVIEW **11/4/97**
- BUILD PEO (A) BRIEF **11/6/97**
- PREPARE POA&M ?
- BRIEF PEO (A) (HADDOCK) ?
- BRIEF PEO (A) (NEWSOME) ?
- BRIEF NAWCAD ?
- BRIEF P-3/S-3 TEAMS ?