

**POST ACCEPTANCE REVIEW FOR CAUSE
COMPLIANCE REPORT FOR THE
LOCKHEED MARTIN AERONAUTICS COMPANY
FORT WORTH, TEXAS**

**PREPARED BY:
DEFENSE CONTRACT MANAGEMENT AGENCY (DCMA)
EARNED VALUE MANAGEMENT (EVM) CENTER
REPORT NUMBER CTR-2007-002
ALEXANDRIA, VA | PATUXENT RIVER, MD**



**PREPARED FOR:
OFFICE OF THE UNDER SECRETARY FOR DEFENSE
FOR ACQUISITION, TECHNOLOGY, & LOGISTICS**

NOVEMBER 19, 2007

FOR OFFICIAL USE ONLY. LOCKHEED MARTIN AERONAUTICS COMPANY PROPRIETARY.
THIS DOCUMENT CONTAINS CONTRACTOR INFORMATION WHICH MAY BE PROPRIETARY
AND PROTECTED BY THE TRADE SECRETS ACT OR OTHER INFORMATION PROTECTION
LEGISLATION. DO NOT RELEASE UNDER FOIA WITHOUT REVIEW AND REDACTION.
EXEMPTION B4 MAY APPLY.

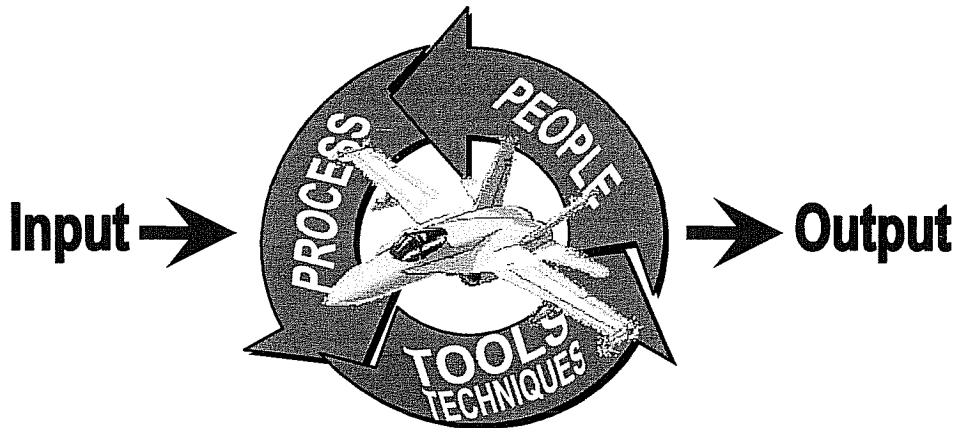
TABLE OF CONTENTS

PREFACE _____	3
EXECUTIVE SUMMARY _____	4
RECOMMENDATIONS _____	5
SECTION A. INTRODUCTION	
BACKGROUND _____	7
TEAM ROSTER _____	8
EVM POLICY _____	9
OBJECTIVES _____	10
SCOPE _____	10
METHODOLOGY _____	10
GUIDELINE RATINGS _____	11
SECTION B. MAJOR SUMMARY FINDINGS _____	13
SECTION C. ANSI-748 GUIDELINE ASSESSMENT _____	20

FOR OFFICIAL USE ONLY. LOCKHEED MARTIN AERONAUTICS COMPANY PROPRIETARY.
THIS DOCUMENT CONTAINS CONTRACTOR INFORMATION WHICH MAY BE PROPRIETARY
AND PROTECTED BY THE TRADE SECRETS ACT OR OTHER INFORMATION PROTECTION
LEGISLATION. DO NOT RELEASE UNDER FOIA WITHOUT REVIEW AND REDACTION.
EXEMPTION B4 MAY APPLY.

PREFACE

Earned Value Management (EVM) plays an increasingly important role for successfully delivering acquisition programs at the desired cost, schedule, and technical performance levels. Since 1996, when the Defense Contract Management Agency (DCMA) was appointed DoD Executive Agent for Earned Value Management Systems (EVMS), the responsibility to oversee the Department's primary program management process has never been more vital than it is today. In its simplest form, EVM is the discipline of managing programs successfully by planning and controlling authorized work to achieve cost, schedule, and performance objectives. EVM places special emphasis on efficiently and effectively executing work through the development and operation of management control system that includes people, systematic processes, and innovative tools and techniques. The intent of EVM is to help program managers, and the teams who support them, be successful by allowing them to operate productively in the high-risk environments surrounding them.



FOR OFFICIAL USE ONLY. LOCKHEED MARTIN AERONAUTICS COMPANY PROPRIETARY. THIS DOCUMENT CONTAINS CONTRACTOR INFORMATION WHICH MAY BE PROPRIETARY AND PROTECTED BY THE TRADE SECRETS ACT OR OTHER INFORMATION PROTECTION LEGISLATION. DO NOT RELEASE UNDER FOIA WITHOUT REVIEW AND REDACTION. EXEMPTION B4 MAY APPLY.

EXECUTIVE SUMMARY

The DCMA EVMS compliance review, conducted 20-31 August 2007, found that Lockheed Martin Aeronautics Company (LM-Aero), Fort Worth, Texas, is not following, nor consistently applying, the American National Standard Electronic Industries Alliance Earned Value Management Systems (ANSI/EIA-748-A) guidelines during the execution of Department Programs. The findings of the review indicate that, under LM-Aero stewardship, the utility of the EVMS has declined to a level where it does not serve its intended purpose and the government is not obtaining useful program performance data to anticipate and mitigate program risks.

Key LM-Aero EVMS processes and procedures are below standard and do not provide the requisite definition and discipline to properly plan and control complex, multibillion dollar weapon systems acquisition programs. Documented findings indicate that a large percentage of LM-Aero Control Account Managers (CAM) are disconnected from basic LM-Aero EVMS functions and can not satisfactorily demonstrate that they understand and use documented EVM processes, procedures and tools to manage their work. These weaknesses adversely impact the validity of the data used in internal and external decision-making processes and are fully discussed in this report.

Specifically, LM-Aero was found to be non-compliant in 19 of 32 industry guidelines. Significant findings, resulting in lack of planning and control disciplines include:

- Using vague and confusing EVMS documentation;
- Lack of clearly delineated roles and responsibilities;
- Using management reserve to alter internal and subcontract performance levels and overruns;
- Work authorization and change control processes that do not extend to appropriate levels;
- Cost and schedule integration problems that undermine the validity of data;
- Inappropriate earned value techniques used for the assessment of material, subcontracts, and rework; and
- The inability of LM-Aero CAMs to demonstrate a working level understanding of key EVMS processes including the definition and use of a

FOR OFFICIAL USE ONLY. LOCKHEED MARTIN AERONAUTICS COMPANY PROPRIETARY. THIS DOCUMENT CONTAINS CONTRACTOR INFORMATION WHICH MAY BE PROPRIETARY AND PROTECTED BY THE TRADE SECRETS ACT OR OTHER INFORMATION PROTECTION LEGISLATION. DO NOT RELEASE UNDER FOIA WITHOUT REVIEW AND REDACTION. EXEMPTION B4 MAY APPLY.

program critical path, situational awareness of cost and schedule variances for course correction, and the substantiation of completion cost estimates.

These and the other identified deficiencies raise significant concerns regarding LM-Aero management processes and practices and the Company's ability to mitigate emerging cost and schedule issues in a timely manner. Because the accuracy and validity of LM-Aero performance measurement data is suspect, the Department's ability to use EVM data to determine product delivery dates and to develop timely and accurate estimates of program completion costs is adversely impacted.

It was apparent during discussions with LM-Aero CAMs that their involvement in performing their EVM responsibilities was superficial at best. Most CAM functions are being performed, with little management control, by the business operations personnel assigned to Integrated Product Teams (IPT). The result is a serious deterioration of system discipline.

This undisciplined approach to program management and towards the maintenance of the EVMS, will ultimately jeopardize the long-term stability of LM-Aero programs at Fort Worth, Texas facilities and diminishes the purchasing power of the Department.

Given the nature of the risks involved in the achievement of programmatic objectives, the LM-Aero management systems and processes reviewed did not provide reasonable assurance that established Department objectives for supplier EVMS would be achieved. Therefore, we believe significant corrective actions are needed immediately to help ensure compliance with applicable regulations, policies and procedures, and good business practices.

RECOMMENDATIONS

We recommend that:

1. Under Secretary of Defense for Acquisition, Technology, and Logistics should establish incentives for implementing and maintaining EVM Systems. For all new contracts include a contract clause for withholding up to 5-10 percent from supplier payments for failure to adequately implement and maintain a validated EVM System. For existing contracts, add a provision within the program award fee plan to establish similar incentives;
2. Lockheed Martin should review each LM-Aero location to ensure that the LM-Aero EVMS is properly implemented and that LM-Aero Fort Worth, TX findings are not systemic throughout the LM-Aero division;

FOR OFFICIAL USE ONLY. LOCKHEED MARTIN AERONAUTICS COMPANY PROPRIETARY. THIS DOCUMENT CONTAINS CONTRACTOR INFORMATION WHICH MAY BE PROPRIETARY AND PROTECTED BY THE TRADE SECRETS ACT OR OTHER INFORMATION PROTECTION LEGISLATION. DO NOT RELEASE UNDER FOIA WITHOUT REVIEW AND REDACTION. EXEMPTION B4 MAY APPLY.

DCMA EVMS COMPLIANCE REPORT | LOCKHEED MARTIN AERONAUTICS CO.

3. LM-Aero and the Program Management Office should jointly develop and provide to the DCMA, no later than February 8, 2008, a plan of corrective action plan and milestones to address all compliance and program application issues in order to retain EVMS certification. The corrective action plan should contain a root cause analysis of system deficiencies and include measurable steps to correct them. The action plan should conclude with a follow-on compliance review in 4Q CY2008;
4. DCMA CMO Fort Worth should notify relevant Department stakeholders, including service SAE and PEO of the results of the compliance review and next steps; and
5. DCMA CMO Fort Worth should develop and adopt a risk based staffing approach to ensure for the proper levels of oversight needed for supplier EVMS implementation.

FOR OFFICIAL USE ONLY. LOCKHEED MARTIN AERONAUTICS COMPANY PROPRIETARY. THIS DOCUMENT CONTAINS CONTRACTOR INFORMATION WHICH MAY BE PROPRIETARY AND PROTECTED BY THE TRADE SECRETS ACT OR OTHER INFORMATION PROTECTION LEGISLATION. DO NOT RELEASE UNDER FOIA WITHOUT REVIEW AND REDACTION. EXEMPTION B4 MAY APPLY.