



**DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
MANPOWER AND RESERVE AFFAIRS
111 ARMY PENTAGON
WASHINGTON, DC 20310-0111**

July 21, 2008

The Honorable Scott J. Bloch
The Special Counsel
U.S. Office of Special Counsel
1730 M Street, N.W., Suite 300
Washington, D.C. 20036-4505

Re: Whistleblower Investigation—Department of
the Army Aviation and Missile Lifecycle
Management Command, Redstone Arsenal,
Huntsville, Alabama (Office of Special Counsel
Case File Number DI-00-1499)

Dear Mr. Bloch:

In accordance with Title 5, United States Code (USC), Sections 1213(c) and (d), this report partially responds to the Office of Special Counsel's (OSC) referral of information requesting an investigation and report of findings in the above-referenced case. The Secretary of the Army has delegated to me his authority, as agency head, to review, sign, and submit to you the report required by Title 5, USC, Sections 1213(c) and (d) [Tab 1].

This report and its exhibits contain the names and duty titles of employees of the Department of the Army, Aviation and Missile Lifecycle Management Command (AMCOM),¹ as well as of other Department of the Army soldiers and civilian employees. Release of this information could violate the Privacy Act² and breach personal privacy interests. Accordingly, releases required by Title 5, USC, Section 1213(e) excepted, the Department of the Army requests the opportunity to coordinate in advance on any proposed release of this report, or portions thereof, outside the OSC.

The subject OSC referral of the instant case to the Department of the Army comprised six allegations. For reasons addressed more fully below, this report provides the Army's final assessment of three of these six allegations (Allegations 2, 5, and 6). In the interests of obtaining and providing to the OSC accurate and complete information

¹ Approximately three years ago, in 2005, subsequent to the OSC's referral of the allegations at issue to the Secretary of the Army, the Department of the Army, Aviation and Missile Command, located at Redstone Arsenal, Huntsville, Alabama, was renamed the Aviation and Missile *Lifecycle Management* Command. For ease of understanding, the acronym AMCOM will be used throughout this report to refer to the command.

² The Privacy Act of 1974, Title 5, USC, Section 552a.

regarding the three other allegations (Allegations 1, 3, and 4), the Commander, AMCOM has initiated an administrative investigation.³ On completion of the administrative investigation, the Department of the Army will submit to the OSC a supplementary report addressing the remaining three allegations.

This report provides the information required by Title 5, USC, Section 1213(d). In addition, the report includes a "Background" section that addresses the MLRS program, the contracts at issue, and AMCOM's organization.

INFORMATION INITIATING THE INVESTIGATION

By letter dated August 20, 2003 [Tab 2], the OSC referred to the Secretary of the Army its conclusion that a substantial likelihood existed that information provided by Mr. Clarence Daniels, a contract specialist employed at AMCOM, disclosed violations of law, rule, or regulation; a gross waste of funds; and a substantial and specific danger to public safety. Mr. Daniels's allegations concerned operations at AMCOM's Multiple Launch Rocket System (MLRS) Project Office,⁴ Redstone Arsenal, Huntsville, Alabama. The MLRS Project Office is charged to administer and oversee the Army's MLRS M270 and M270A1 contracts with Lockheed Martin Missile and Fire Control (hereinafter Lockheed Martin or Lockheed).

THE OSC REFERRAL

Summary of the Allegations:

Mr. Daniels essentially made six allegations:

OSC Allegation 1: The MLRS Project Office used Technical Direction Letters (TDLs) to assign work against the wrong contract to enhance Lockheed Martin profits.

OSC Allegation 2: Lockheed Martin mischaracterized costs it incurred in developing Value Engineering Change Proposals (VECPs), for which costs it was solely responsible under the Reduced Range Practice Rocket (RRPR) and Low Cost Reduced

³ See *infra* p. 9 and note 25. On April 28, 2008, the Commander, AMCOM, appointed an investigating officer under provisions of Army Regulation (AR) 15-6, *Procedures for Investigating Officers and Boards of Officers*, to gather evidence and to make findings and recommendations regarding Mr. Daniels's Allegations 1, 3, and 4.

⁴ Approximately three years ago, in 2005, subsequent to the OSC referral of the allegations at issue to the Secretary of the Army, the MLRS Project Office was reorganized as a component of AMCOM's newly established Precision Fire Rockets and Missile Systems (PFRMS) Project Office. Pursuant to this reorganization, the MLRS Project Office was redesignated as the MLRS *Program Office*. Presently, the MLRS *Program Office* is managed by the MLRS *Program Manager* under the supervision of the PFRMS Project Manager. For ease of understanding, the designation "MLRS Project Office" and the duty title "MLRS Project Manager" will be used throughout this report to identify the AMCOM component, and the supervisor thereof, charged to manage the technical aspects of the development and production of the family of MLRS launchers, rockets, and missiles.

Range Practice Rocket (LCRRPR) contracts, as Engineering Change Proposals (ECP) that were reimbursable by the government. Further, the Army failed to assert proprietary rights over the RRPR and LCRRPR as required by the Federal Acquisition Regulation (FAR) and Defense Federal Acquisition Regulation Supplement (DFARS).

OSC Allegations 3 and 4: The government accepted non-conforming and unsafe M2701A MLRS launchers from Lockheed Martin without reducing the price paid to reflect the launchers' defects. The Army deployed these launchers, placing soldiers at risk. Lockheed Martin failed to provide a safety assessment report for the M270A1 launcher as it was contractually obligated to do. The Army expended additional funds to hire another contractor to prepare that report. The MLRS Project Office failed to notify the AMCOM Acquisition Center that the launchers were noncompliant with contract performance specifications. Subsequently, the Project Office failed to follow the Acquisition Center's advice to seek corrective action before accepting more launchers. The Army expended additional appropriated funds to render the launchers safe, a cost that Lockheed Martin should have borne.

OSC Allegation 5: The Army accepted five M270A1 launchers lacking Fire Control Systems (FCSs), but failed to reduce payments to Lockheed Martin to reflect the launchers' diminished value.

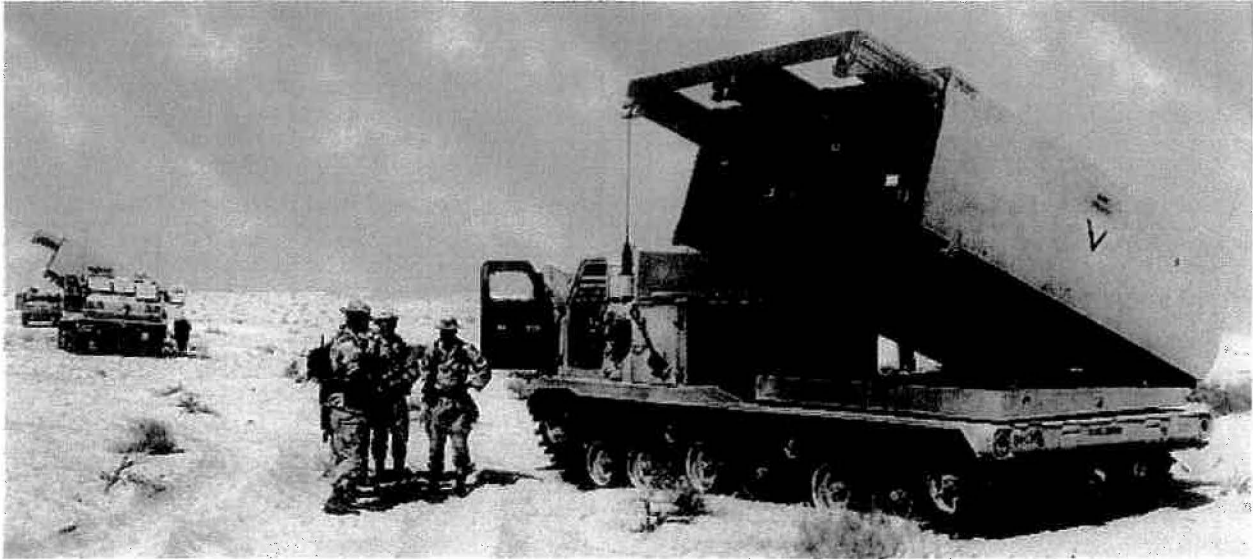
OSC Allegation 6: Lockheed Martin improperly used and failed to account for warranty spare launcher parts that belonged to the Army.

BACKGROUND INFORMATION

The MLRS:

The MLRS is a rocket artillery system that fires surface-to-surface rockets and ballistic and semi-ballistic missiles. The MLRS launcher unit is mounted on a stretched Bradley tank chassis and is loaded with 12 rockets, packaged in two six-rocket pods. Without leaving the cab, a crew of three (driver, gunner and section chief) can fire up to 12 MLRS rockets, individually or in ripples, in less than 60 seconds, striking targets at ranges exceeding 32 kilometers.

The MLRS is highly automated, self-loading, and self-aiming. Its on-board fire control computer (the hardware component of the FCS) integrates vehicle and rocket-launching operations, allowing both manual and automatic firing. Typically, a command post transmits selected target data directly to the MLRS FCS, which then aims the launcher and prompts the crew to arm and fire a pre-selected number of rockets. Accuracy is maintained in all firing modes because the computer re-aims the launcher between rounds. Multiple mission sequences can be preprogrammed and stored in the computer. The MLRS can be transported to an area of operations by aircraft or by train and operated in all weather on most terrain. The MLRS provided combat capability in support of Operation Iraqi Freedom in 2003.



Contracts with Lockheed Martin to Develop and Produce the MLRS:

The MLRS was developed as a result of a cooperative agreement between the United States, Great Britain, France, Germany, and Italy, signed on July 14, 1979.

AMCOM's typical contracting strategy for weapons system production long has involved the award of both a firm-fixed-price (FFP)⁵ production contract for the delivery of the system end-items and one or more concurrent cost-reimbursement⁶ Industrial Engineering Services (IES) contracts to solve emergent technical problems in production processes and make technical improvements in, or adjustments to, the end-items produced.⁷ In 1989, the U.S. Army awarded a five-year, FFP to Lockheed Martin⁸

⁵ A fixed-price production contract provides a price that is not subject to adjustment based on the contractor's cost experience in performing the contract, placing the risk on the contractor to keep costs within the contractually obligated price; the contractor bears responsibility for costs and the resulting profit or loss. A fixed-price contract incentivizes the contractor to control costs and imposes less administrative burden on the government. See generally Defense Acquisition University, *Glossary of Defense Acquisition Acronyms and Terms*, Appendix B, 12th Edition (July 2005).

⁶ A cost-type contract provides for the government's payment to the contractor of contractually allowable costs incurred in the performance of the contract. The government bears some of the cost risk in these sorts of contracts. See generally Defense Acquisition University, *Glossary of Defense Acquisition Acronyms and Terms*, Appendix B, 12th Edition (July 2005).

⁷ Frequently over the course of developing and producing a new weapon system (particularly during the low-rate, initial production phase), issues arise that require engineering effort to resolve. IES contracts are cost-type contracts used to acquire fixed quantities of engineering service labor hours from a contractor. Generally, an IES contract adopts a broad scope of work, enumerating general categories of engineering services that the government might require of the contractor (e.g., systems and production engineering; configuration of hardware and software; product assurance and testing; logistics support; and other engineering services that might be required to solve technical problems in processes and to design and implement technical fixes to the weapon system being produced under companion production contracts). The contractor is not required to guarantee that its work will achieve a particular result; rather, the contractor agrees to provide only its "best efforts" toward the government's objective. Work under IES contracts associated with the MLRS was initiated by a Technical Direction Letter (TDL). AMCOM would

to produce MLRS M270 rocket launchers. Companion cost-type IES contracts were in place with, or were subsequently awarded to, Lockheed.⁹

In the early 1990s, the Army began upgrading the M270 launcher to the M270A1 launcher, awarding Lockheed two research and development contracts: one to improve the launcher's fire control system (FCS) and another to improve the launcher's mechanical system.¹⁰ In the late 1990s, the U.S. Army awarded a low-rate initial production contract for the M270A1 launcher.¹¹ In ensuing years, two companion IES contracts were awarded to address technical issues arising in the production of the M270A1.¹² In December 2000, the Army awarded Lockheed Martin a FFP production contract for 66 M270A1 launchers.¹³

issue a TDL to direct Lockheed Martin to provide a specific engineering service encompassed in the IES contract's statement of work and to allocate a specific number of labor-hours purchased under the contract for the provision of that specific service. Generally, IES contracts cite only an estimated cost; the government bears the cost risk and must reimburse the contractor for all reasonable, allocable, and allowable costs incurred in providing the engineering services directed. Among other things, use of IES contracts prevents the contractor from pricing the substantial cost risk associated with engineering services efforts in the fixed-price production contract, which would obligate the government to pay a higher fixed-price whether or not additional engineering services were needed or utilized.

⁹ Contract No. DAAH01-89-1C-0336. Loral Vought Systems and LTV Aerospace and Defense Company are predecessors-in-interest to Lockheed Martin and are named in many of the government contracts at issue in this investigation. Note that the two-number grouping in the middle of the contract number identifies the year of contract award (e.g., as to DAAH01-89-1C-0336, the numbers "89" indicate that this contract was awarded in 1989).

⁹ Contract Nos. DAAH01-92-C-0243 and DAAH01-96-C-0295.

¹⁰ Contract Nos. DAAH01-92-C-0432 and DAAH01-95-C-0329. "Research and development" contracts may also be termed "engineering and manufacturing" contracts. Contract Nos. DAAH01-92-C-0432 and DAAH01-95-C-0329 developed the improved FCS and mechanical systems, respectively, for the M270A1 launcher. Research and development contracts commonly provide the vehicle by which a weapon system is fully designed and tested. The objectives of such contracts are to translate a promising design into a stable system design, validate manufacturing or production processes, and demonstrate through testing whether the system will meet stated requirements.

¹¹ Contract No. DAAH01-98-C-0138. A low-rate initial production contract produces the minimum quantity of a weapon system necessary to provide production-configured or representative articles for operational testing and evaluation, to establish an initial production base for the system, and to permit an orderly increase in the production rate to lead to full-rate production.

¹² Contract Nos. DAAH01-98-C-0157 and DAAH01-01-C-0141.

¹³ Contract No. DAAH01-00-C-0109.

The following chart summarizes the MLRS-related contracts¹⁴ relevant to this report:

Contract Number	Description of Contract
DAAH01-89-C-0336	A five-year, FFP production contract for MLRS M270 launchers. The Reduced Range Practice Rocket (RRPR) was developed as a Value Engineering Change Proposal (VECP) to this contract.
DAAH-01-94-C-A005	Follow-on, FFP production contract for additional M270 launchers.
DAAH01-92-C-0243 DAAH01-96-C-0295	Cost-reimbursable contracts for industrial engineering services (IES), intended to solve technical problems in production processes or to make technical improvements to MLRS M270 launchers being produced in companion production contracts.
DAAH01-92-C-0432 DAAH01-95-C-0329	Cost-type Research and Development Contracts for the purpose of upgrading the M270 launcher to the M270A1 model. Contract No. DAAH01-92-C-0432 developed the M2701 launcher's improved FCS. A funding "cap" was eventually established for this contract. Contract DAAH01-95-C-0329 developed the M270A1 launcher's improved mechanical system. This contract was never subject to a funding "cap."
DAAH01-98-C-0138	A FFP, low-rate initial production contract for M270A1 launchers.
DAAH01-00-C-0109	Follow-on FFP production contract for M270A1 launchers.
DAAH01-98-C-0157 DAAH01-C01-0141	Cost-reimbursable contracts for IES intended to solve technical problems in production processes or to make technical improvements to launchers being produced in companion production contracts. The Army issued TDL TR-99-001 (with Revisions A and B), against IES Contract No. DAAH01-98-C-0157 for engineering services to develop the LCRRPR.
DAAH01-00-C-0084	A fixed-price contract for production of the LCRRPR.

¹⁴ Each of the cited contracts, together with its modifications and allied papers, comprises hundreds, if not thousands of pages. Accordingly, the full contracts are not attached as enclosures to this report. Rather, as appropriate, excerpts of relevant documents are enclosed for OSC review.

AMCOM Organization Related to the MLRS:

AMCOM manages the Army's aviation and missile acquisition programs, one of which is the MLRS. Both during the period relevant to the OSC-referred allegations and today, two AMCOM organizational elements were and are primarily responsible for developing and producing the MLRS: the MLRS Project Office, charged to manage MLRS launchers, rockets, and missiles¹⁵; and the Acquisition Center, comprised of several divisions that provide functional contracting and acquisition support to the MLRS Project Office and other AMCOM project offices, and to which all AMCOM contracting officers and contract specialists are assigned.¹⁶ Both during the period relevant to the OSC-referred allegations and today, Mr. Daniels was and is employed as a contract specialist in the Acquisition Center.

The MLRS has long been one of the missile programs under the executive management of the AMCOM Program Executive Officer for Missiles and Space (PEO MS). During the period relevant to the OSC-referred allegations, the MLRS Project Office was supervised by the MLRS Project Manager, who reported directly to the PEO MS; the PEO MS, in turn, reported directly to Headquarters, Department of the Army.¹⁷ The Director of the Acquisition Center reported directly to the Commander of AMCOM.

CONDUCT OF THE INVESTIGATION

Receipt of OSC Allegations and Referral to CID for Criminal Investigation:

On August 25, 2003, the Army Office of the General Counsel (OGC) forwarded the OSC request for investigation to the Army Materiel Command (AMC) Office of Command Counsel [Tab 3]. This referral was appropriate because AMC was, and is, AMCOM's superior command. On August 27, 2003, the AMC Command Counsel forwarded the OSC referral to the AMCOM Legal Office for action.

In September 2003, the U.S. Army Criminal Investigation Command (often called "CID") agreed to investigate Mr. Daniels's allegations. CID Special Agent (SA) [REDACTED], a procurement fraud investigator at Redstone Arsenal, Alabama, initiated an investigation. Consistent with standard practices espoused by the Department of Justice and other federal criminal investigative agencies and designed to emphasize the primacy of, and to minimize potential interference in, the criminal investigation, [REDACTED]

¹⁵ See *supra* note 4. Today the MLRS Project Office is known as the MLRS Program Office. In this context, "management" includes the design, development, production, and maintenance of the MLRS through both in-house and contractual efforts.

¹⁶ The Director of the Acquisition Center, AMCOM, is dual-hatted as the AMCOM Principal Assistant for Contracting (PARC). The PARC issues each contracting officer a warrant authorizing that contracting officer to bind the U.S. Government up to a specified dollar amount.

¹⁷ See *supra* note 4. Today, the MLRS Project Manager is known as the MLRS Program Manager. The MLRS Program Manager reports through the PFRMS Project Office to the PEO MS, who now reports directly to the Commander, AMCOM.

██████████ requested that AMCOM take no independent investigative action regarding Mr. Daniels's complaints during the pendency of CID's investigation.

During the course of ██████████ criminal investigation, fellow agents from the Redstone Arsenal CID office deployed to Southwest Asia to support the wars in Iraq and Afghanistan. These deployments left the Redstone Arsenal CID office short-handed and significantly increased ██████████ caseload. Sometimes she was the acting special agent in charge of the office, which required her to perform managerial and administrative duties in addition to carrying a heavy investigative caseload. Also, for a considerable period, ██████████ was required to devote all of her effort to support a special Task Force investigation of a major fraud case arising in Iraq.

By law, an agency is allotted 60 days to investigate and submit to the OSC a written report of findings as to the matters referred.¹⁸ In the instant case, however, frequent co-worker deployments, ██████████ work on the special Task Force, and the breadth and complexity of the allegations referred by OSC resulted in CID completing its investigation on November 30, 2007. The OGC requested, and the OSC granted, a series of 18 extensions, all but one in increments of 90 days, to bring the CID investigation to closure [Tab 4].¹⁹

A final summary of CID's findings with regard to each OSC-referred allegation is attached at Tab 5. The only criminal offenses that CID ultimately substantiated related to a component of Allegation 3: CID determined that Lockheed Martin had violated criminal statutes prohibiting false claims²⁰ and false statements²¹ when it claimed to have prepared, and had accepted payment for preparing, a safety assessment report for the M270A1. In fact, in the face of Lockheed's failure to prepare and submit the report as required by the contract, AMCOM had contracted with an outside contractor who had prepared the safety report.

¹⁸ Title 5 USC, Section 1213(c)(1)(B).

¹⁹ See *id.* (authorizing the Special Counsel to agree to a longer period of time for the agency to investigate and report its findings). See Extension 1, requested October 14, 2003 (granted by OSC on October 14, 2003, for 90 days); Extension 2, requested January 9, 2004 (granted by OSC on January 12, 2004, for 90 days); Extension 3, requested April 20, 2004 (granted by OSC on April 21, 2004, for 90 days); Extension 4, requested July 21, 2004 (granted by OSC on July 22, 2004, for 90 days); Extension 5, requested October 19, 2004 (granted by OSC on October 22, 2004, for 90 days); Extension 6, requested January 21, 2005 (granted by OSC on January 24, 2005, for 90 days); Extension 7, requested April 28, 2005 (granted by OSC on April 28, 2005, for 90 days); Extension 8, requested July 25, 2005 (granted by OSC on July 25, 2005, for 90 days); Extension 9, requested October 24, 2005 (granted by OSC on October 25, 2005, for 90 days); Extension 10, requested January 24, 2006 (granted by OSC on January 25, 2006, for 90 days); Extension 11, requested April 21, 2006 (granted by OSC on April 24, 2006, for 60 days); Extension 12, requested June 26, 2006 (granted by OSC on dated unknown, for 90 days); Extension 13, requested August 25, 2006 (granted by OSC on August 28, 2006, for 90 days); Extension 14, requested November 28, 2006 (granted by OSC on date unknown, for 90 days); Extension 15, requested February 28, 2007 (granted by OSC on February 28, 2007, for 90 days); Extension 16, requested May 31, 2007 (granted by OSC on May 31, 2007, for 90 days); and Extension 17, requested September 4, 2007 (granted by OSC on September 6, 2007, through November 27, 2007); Extension 18, requested November 23, 2007 (granted by OSC November 28, 2007, for 90 days) [Tab 4].

²⁰ Title 18 USC, Section 287.

²¹ Title 18 USC, Section 1001.

The U.S. Attorney's Office for the Northern District of Alabama ultimately declined to prosecute any of the six allegations investigated by CID [Tab 6].²² Further, the statute of limitations applicable to the sole criminal offense substantiated by CID (with regard to OSC-referred allegation 3) had expired, barring prosecution. The U.S. Attorney recommended that AMCOM review all the allegations for possible administrative action, however.²³

AMCOM Legal Office Administrative Review:

Shortly after CID completed its investigation, the AMCOM Legal Office reviewed Mr. Daniels's allegations to determine whether administrative or remedial contractual action was appropriate and, more broadly, to assess AMCOM's business practices and procedures. To date, OGC has requested, and OSC has granted, three extensions, in increments of 60 days each, to facilitate AMCOM's conduct of its review and the drafting, review, and submission of the associated reports [Tab 7].²⁴

The AMCOM Legal Office review resolved OSC-referred Allegations 2, 5, and 6; findings with regard to these three allegations are presented herein. However, the AMCOM Legal Office determined that further administrative investigation of OSC-referred allegations 1, 3, and 4 was required. Accordingly, on April 28, 2008, the Commander, AMCOM, appointed an investigating officer under provisions of Army Regulation 15-6, *Procedures for Investigating Officers and Boards of Officers*, to gather evidence and to make findings and recommendations regarding OSC-referred Allegations 1, 3, and 4 [Tab 8].²⁵ On completion of the administrative investigation, the Department of the Army will submit to the OSC a supplementary report addressing these three allegations.

²² See U.S. Department of Justice Letter, subject: *Lockheed Martin Matters*, dated March 16, 2005 (pertaining to CID investigation 0024-03-CID13-34960, addressing OSC-referred allegations 1, 2, 5, and 6) [Tab 6A]; U.S. Department of Justice Letter, subject: *Lockheed Martin Matters*, dated March 16, 2005 (pertaining to CID investigation 0024-03-CID13-34961, addressing OSC-referred allegations 3 and 4) [Tab 6B]. As set forth in the final summary of CID findings at Tab 5, *supra*, on August 8, 2005, the Office of the Army General Counsel requested that CID reopen its investigation of the allegations. CID complied and developed new information. Based on this new information, CID "unfounded" all but one allegation; CID founded the criminal offenses of false claims and false statements related to OSC-referred allegation 3, as discussed in the text above, *supra* p. 6. CID presented these findings to the Assistant U.S. Attorney (AUSA) for prosecution. The AUSA verbally declined to prosecute on April 27, 2007, noting a lapse in the statute of limitations applicable to prosecution of these offenses.

²³ The entirety of Allegation 3 is the subject of the on-going additional administrative investigation by AMCOM. Therefore, Allegation 3 is not addressed in the instant report, but will be addressed in a subsequent supplementary report.

²⁴ See Extension 19, requested February 28, 2008 (granted by OSC on March 3, 2008, for 60 days); Extension 20, requested May 2, 2008 (granted by OSC on May 19, 2008, for 60 days); Extension 21, requested July 1, 2008 (granted by OSC on July 9, 2008, for 60 days) [Tab 7].

²⁵ See *supra* note 3. AR 15-6 promulgates guidelines for Army administrative investigations. Army commands and organizations appoint investigating officers under provisions of AR 15-6 to investigate a wide variety of allegations and concerns.

SUMMARY OF EVIDENCE OBTAINED FROM THE INVESTIGATIONS AND AGENCY DISCUSSION

OSC Allegation 1: The MLRS Project Office used TDLs to assign work against the wrong contract to enhance Lockheed Martin profits.²⁶

This allegation is the subject of an on-going administrative investigation by AMCOM. This allegation, not addressed herein, will be addressed in a subsequent supplementary report.

OSC Allegation 2: Lockheed Martin mischaracterized costs it incurred in developing VECs,²⁷ for which costs it was solely responsible under the RRPR and LCRRPR contracts,²⁸ as Engineering Change Proposals (ECP)²⁹ that were reimbursable by the

²⁶ The use of TDLs is a common business practice in AMCOM acquisitions. See generally Carol A. Mallow, *Acquisition of Engineering Services*, Naval Post-Graduate School, Monterey, California, December 2001. available at Defense Technical Information Center, <http://handle.dtic.mil/100.2/ADA401404>. AMCOM may issue a TDL at any time during the course of contract performance when the contractor requires specific instruction, direction, or clarification on a matter of contract performance not addressed in the base production contract. In AMCOM, TDLs are issued only in conjunction with an IES contract. AMCOM uses TDLs to document its direction to the contractor to allocate specific engineering services and labor hours purchased under an IES contract to resolve a technical issue or to generate a technical fix to a problem that has arisen in the context of the production of the weapons system under the companion contract. The use of TDLs is particularly common in AMCOM acquisitions in which the exact specifications of the end-state product and the precise processes used to arrive at that end-state are not known with precision at the time of contract formation.

²⁷ Value Engineering is a functional analysis methodology that identifies and selects the best value alternative for designs, materials, processes, systems, and program documentation. Value Engineering may apply to any aspect of contract performance: hardware and software; development, production, and manufacturing; specifications, standards, contract requirements, and other acquisition program documentation; facilities design; and the management of organizational systems and processes to improve the resulting product. Contractors are encouraged to develop and propose VECs and other types of cost-saving changes to the government for review and approval. If a contractor-developed VEC is accepted by the government and incorporated into the contract to which it applies, the contractor is normally compensated for saving the government money and may both recover the costs of developing and implementing the VEC and share in the resulting contract savings. The government also recovers any developmental and implementation costs it incurs and shares in the contract savings. See generally Defense Acquisition University, *Glossary of Defense Acquisition Acronyms and Terms*, Appendix B, 12th Edition (July 2005).

²⁸ The RRPR is an MLRS rocket designed for training. The RRPR was developed as a VEC to Contract No. DAAH01-89-C-0336. The range of the original MLRS training rocket exceeded the size of many Army test ranges; the RRPR was fashioned with a special blunt warhead to be used on a range of reduced size, at reduced cost to the Army. The RRPR also cost less to manufacture. The LCRRPR is essentially an RRPR constructed from old explosive MLRS rockets whose shelf-life has expired (whereas the RRPR is made from new materials) and from which the original explosive warhead has been removed and replaced with the special blunt warhead. The LCRRPR was developed under TDL TR 99-001 (with Revisions A and B) issued against IES Contract No. DAAH01-98-C-0157. Note that the RRPR is, on occasion, referred to as the Reduced Range Training Rocket (RRTR); the LCRRPR is, on occasion, referred to as the Low Cost Reduced Range Training Rocket (LCRRTR).

²⁹ An ECP is a proposal, usually made by the contractor to the government, recommending the incorporation of a specific design or engineering change to an original item of equipment to modify, add to, delete from, or supersede that original. See generally Defense Acquisition University, *Glossary of*

government. Further, the Army failed to assert proprietary rights over RRPR and LCRRPR technical data as required by the FAR and DFARS.

- **Allegation 2a.** Mr. Daniels asserted that the RRPR and the LCRRPR were developed solely at government expense under four separate IES contracts.³⁰ According to Mr. Daniels, these contracts did not authorize Lockheed Martin to charge the government for costs Lockheed incurred in developing VECPs. Rather, according to Mr. Daniels, these IES contracts provided that Lockheed alone would bear such costs in accordance with FAR 52.248-1, *Value Engineering*.³¹ Mr. Daniels contended that despite the contracts' prohibitions against reimbursement for VECPs, Lockheed Martin charged the government for VECPs by mischaracterizing them as ECPs, which were reimbursable by the government under terms of the IES contracts at issue. Mr. Daniels alleged that as the result of Lockheed's mischaracterization of these costs, the MLRS Project Office improperly paid Lockheed Martin more than \$33 Million.³²

- **Allegation 2b.** Mr. Daniels alleged that pursuant to both the FAR and the DFARS, the government should have retained "unlimited rights" to these VECPs because their development was funded with appropriated dollars. Mr. Daniels contended, however, that the government failed to assert proprietary rights in the design concepts and technical data associated with the RRPR and LCRRPR VECPs and paid Lockheed Martin a "royalty" of \$5000 for every rocket pod delivered.³³

Defense Acquisition Acronyms and Terms, Appendix B, 12th Edition (July 2005). A VECP is essentially a contractor-sponsored ECP that will generate cost savings when applied to the contract; both the government and the contractor usually will share in those cost savings. If the government accepts the contractor's VECP, the requisite technical changes required to give effect to the VECP subsequently may be incorporated in the contract through established modification processes. Not all ECPs generate cost savings, however; a particular ECP may benefit a manufacturing process, increase the performance capabilities of a weapon system, or enhance end-item safety, but at an increased contract cost. Notwithstanding the increased cost, the government may elect to adopt an ECP and incorporate it into the contract given the benefit it imparts to the project. Further, not all ECPs are contractor-initiated. In AMCOM it is common to task a contractor, via a TDL issued against an IES contract, to develop a desired ECP. In fact, the typical IES contract lists the development of ECPs among the engineering services to be performed as set forth in the contract's statement of work. In such cases, the government retains any contract savings that may result from the ECP because the government funded the costs of ECP development. The authority for the government and the contractor to share cost savings pursuant to the FAR *Value Engineering* clause applies only to a contractor-sponsored VECP that results in actual cost savings.

³⁰ Mr. Daniels alleges that these four IES contracts were Contract Nos. DAAH01-92-C-0243, DAAH01-96-C-0295, DAAH01-98-C-0157, and DAAH01-01-C-0141.

³¹ FAR 52.248-1, *Value Engineering*. The FAR is continuously updated. Accordingly, references to FAR clauses are to that iteration of the clause in effect as to the specific contract at issue as indicated by the date parenthetical included in the clause citation.

³² According to Mr. Daniels, the contract provisions under which these VECP costs were improperly charged included: Modification P00241 to Contract No. DAAH01-89-C-0336; TDL number TR-99-001A (Revision B) to IES Contract No. DAAH01-98-C-0157; RRPR VECP Nos. MI-C-1450, MI-C-1658V, MI-C-1397, and MI-C-1352R1; and LCRRPR ECP No. MI-M9041. Note that the letters "MI" in a VECP or ECP designation indicate that the document relates to an AMCOM "missile" project.

³³ By way of example, Mr. Daniels asserted that in January 1996, the government approved future royalty payments to Lockheed of \$393,400 via Modification P00260 to Contract No. DAAH01-89-C-0336. According to Mr. Daniels, other documents in which Lockheed improperly asserted propriety rights

References:

- **Allegation 2a.**

FAR 48.201, *Clauses for Supply or Service Contracts.*

FAR 52.248-1, *Value Engineering.*

- **Allegation 2b.**

DFARS 227.7102-3, *Contract Clause – Rights in Technical Data.*³⁴

DFARS 252.227-7013, *Rights in Technical Data – Noncommercial Items.*

DFARS 252.227-7037, *Validation of Restrictive Markings on Technical Data.*

The Contracts Disputes Act of 1978, as amended, Title 41 USC, Sections 601-613.

CID Investigative Finding: CID ultimately found no evidence of criminal misconduct associated with Allegation 2 [Tab 5].

Evidentiary Summary:

- **Allegation 2a.**

RRPR:

Voluntary value engineering is a process in which a contractor, at its own risk, spends its money to develop improved processes or products associated with an ongoing contract in the hopes that the government will approve a VECP, modify the contract to implement those improvements, repay the contractor's VECP investment, and share with the contractor savings resulting from VECP implementation.³⁵

included: Modification P00241 to Contract No. DAAH01-89-C-0336; ECPs MI-C-1973FR0A0 and MI-M9041; and specifications MIS-35095/19 and MIS-35094/19 to Contract No. DAAH01-C-01-0141.

³⁴ See generally DFARS 227.7102-3, *Contract Clause—Rights in Technical Data* (prescribing the use of DFARS 252.227-7013 and other technical data clauses in solicitations and contracts when the contractor will be required to deliver technical data pertaining to noncommercial items, components, or processes and the Government will pay a portion of the development costs). The DFARS is continuously updated. Accordingly, references to DFARS clauses are to that iteration of the clause in effect as to the specific contract at issue as indicated by the date parenthetical included in the clause citation.

³⁵ In certain contracts the government may require the contractor to engage in "mandatory" value engineering. In such cases, a line item for mandatory value engineering is included and priced in the base contract. Because the contractor is guaranteed some payment under the contract for value engineering efforts, the contractor's share of any present and future cost savings resulting from the mandatory value engineering process is significantly decreased. See generally FAR 48.101(b)(2), *Value Engineering, Policies and Procedures.*

Generally, the government's acceptance of a VECP authorizes the contractor to recoup its investment in the voluntary value engineering process. In most cases, the contractor is entitled both to government reimbursement of allowable costs associated with development and implementation of the VECP and to a 50% share of VECP-attributable savings realized in present and future contracts.

The RRPR was not developed under an IES contract as Mr. Daniels alleged. Rather, between 1989 and 1991, Lockheed Martin voluntarily expended its own resources to develop a VECP [Tab 9]³⁶ to Contract No. DAAH01-89-C-0336, a multi-year contract for the production of M270 launchers. The development of the RRPR VECP was solely at Lockheed's election and within Lockheed's discretion. Lockheed alone bore the costs of VECP development. Lockheed's VECP proposed changing the standard practice rocket for the MLRS launcher by reducing its range. A shorter range would allow use of the RRPR at more Army facilities, many of which did not have a training area of sufficient size to permit safe use of the original practice rocket. Coupled with the reduction in costs associated with the manufacture of the RRPR as compared to the original training rocket, this VECP had the effect of increasing the affordability of live fire MLRS training.

In 1989, the year that AMCOM awarded Contract No. DAAH01-89-C-0336, FAR 48.201, *Clauses for Supply or Service Contracts*, mandated inclusion of the *Value Engineering* clause set forth at FAR 52.248-1 in all contracts in which the contract amount was expected to exceed \$100,000.³⁷ Accordingly, Contract No. DAAH01-89-C-0336 included the *Value Engineering* clause required by FAR 52.248-1 [Tab 11].³⁸

Contrary to the assertion set forth in the OSC-referred allegation, the *Value Engineering* clause included in the contract expressly authorized Lockheed Martin to recover from the Army certain allowable costs associated with development and implementation of the VECP after AMCOM approved the VECP.³⁹ Additionally, the

³⁶ LTV Aerospace and Defense Company, Missiles Division, Letter 3-62100/91L-781, subject: *Contract DAAH01-89-C-0336, Multiyear II Production Preliminary Value Engineering Change Proposal for the Reduced Range Practice Rocket Number MI-C1423*, dated 28 October 1991, and the associated DD Form 1692, *Preliminary VECP*, No. MI-C1423, pages 1 and 1d, block 17, submitted by Lockheed Martin on October 28, 1991 and approved by AMCOM on the same date [hereinafter *Preliminary RRPR VECP*] [Tab 9]. Paragraph 3 of Lockheed's letter submitted with the Preliminary RRPR VECP provided, "[i]t is understood that upon completion of the [RRPR] development program, the Contractor will submit a formal VECP to reflect the applicable data as well as a firm fixed priced proposal." Lockheed submitted the formal RRPR VECP on February 7, 1992 and AMCOM approved it on March 22, 1992. DD Form 1692, *Formal RRPR VECP*, No. MI-C1450, [hereinafter *Formal RRPR VECP*] [Tab 10].

³⁷ See generally FAR 48.201, *Clauses for Supply or Service Contracts*. The value of Contract No. DAAH01-89-C-0336 far exceeded \$100,000. Accordingly, inclusion of the FAR *Value Engineering* clause was mandated.

³⁸ Excerpts from Contract No. DAAH01-89-C-0336, Clause I-15, *Value Engineering*, FAR 52.248-1 (Dec 1986), pp. 118-124 of 127 [Tab 11].

³⁹ *Id.* Clause I-15, paragraph (b), (defining "contractor's development and implementation costs" as "those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP"); Clause I-15, paragraph (b)(1) (defining "instant contract savings" as "the net cost reductions . . . less the contractor's allowable development and implementation costs" and

contract clause authorized Lockheed to share in present and future contract cost savings attributable to the VECP.⁴⁰

Modification P00111 to Contract No. DAAH01-89-C-0336, dated July 10, 1992, documented the Army's acceptance of Lockheed's Formal RRPR VECP [Tab 12].⁴¹ Modification P00111 accepted the VECP based on a projected minimum net savings of \$4.6 Million on Contract No. DAAH01-89-C-0336, with allowable contractor and government development and implementation costs not to exceed \$4.8 Million and \$2 Million, respectively.⁴² Section A-4 of Modification P00111 provided that "a definitization proposal for the cost of the VECP configuration [would] be submitted by [Lockheed] on or before October 20, 1992."⁴³

After negotiations, an audit of the RRPR VECP by the Defense Contracting Audit Agency (DCAA), and a technical review of Lockheed Martin's development and implementation costs by the MLRS Project Office, the financial aspects of the VECP were definitized and added to Contract No. DAAH01-89-C-0336 by Modifications P00241⁴⁴ [Tab 14] and P00260⁴⁵ [Tab 15]. Pursuant to these Modifications, Lockheed

effectively allocating all contract savings to the contractor until the contractor recoups its VECP development and implementation costs); and Clause I-15, paragraph (c)(4) (providing that "the cost reduction associated with the VECP shall take into account the contractor's allowable development and implementation costs") [Tab 11].

⁴⁰ *Id.* Clause I-15, paragraphs (f) [Sharing Rates], (h) [Contract Adjustment], and (i) [Concurrent and Future Contract Savings] [Tab 11].

⁴¹ Amendment of Solicitation/Modification of Contract, Modification P00111, dated July 10, 1992 (modifying Contract No. DAAH01-89-C-0336) [Tab 12].

⁴² *Id.* Clause A-2.

⁴³ *Id.* Clause A-4. Pursuant to DFARS 217.74, *Un definitized Contract Actions*, the Department of Defense may award a contract in which the government and the contractor have agreed to a ceiling price, but have not agreed either to an actual price or to all contract terms and conditions. Such contracts are termed "undefinitized." See DFARS 217.7401(d) (defining an "undefinitized contract action" as "any contract action for which the contract terms, specifications, or price are not agreed upon before performance is begin under the action," and citing "letter contracts" as an example). The government may award an "undefinitized" contract when it needs the contractor to start production immediately to meet an urgent delivery schedule. It is contemplated that the contract will later be "definitized" by a subsequent modification incorporating all required terms and conditions. See DFARS 217.7401(b) (defining "definitization" as "the agreement on, or determination of, contract terms, specifications, and price, which converts the undefinitized contract action to a definitive contract") [Tab 13].

⁴⁴ Amendment of Solicitation/Modification of Contract, Modification P00241, dated December 8, 1995 (modifying Contract No. DAAH01-89-C-0336) [Tab 14].

⁴⁵ Amendment of Solicitation/Modification of Contract, Modification P00260, dated January 26, 1996 (modifying Contract No. DAAH01-89-C-0336) [Tab 15].

Martin and the government received the following respective allocations of costs and savings generated by the VECP (as relevant to the OSC-referred allegation):

Lockheed Martin –

- reimbursement of \$4.8 Million in development and implementation costs;⁴⁶
 - a 50% share of the savings on the current and future contracts identified in the modification;⁴⁷
 - \$393,400 as a lump-sum royalty representing *its share of savings on future Foreign Military Sales (FMS) contracts*;⁴⁸
- (emphasis added)

The Government –

- reimbursement of \$2,087,057 in development and implementation costs;⁴⁹
 - a 50% share of the savings on the current and future contracts identified in the modification;⁵⁰
 - all savings on future FMS contracts, *except the above lump-sum royalty paid to Lockheed Martin*;⁵¹
- (emphasis added)
[Tabs 14 and 15].

Payments to Lockheed associated with acceptance and implementation of the RRPR VECP comported with law and regulation. FAR 52.248-1 and Clause I-15, paragraphs (b)(1), g, and h of Contract No. DAAH01-89-C-0336 provides for the reimbursement of Lockheed's development and implementation costs. FAR 52.248-1(f) and Clause I-15, paragraph (f) of Contract No. DAAH01-89-C-0336 expressly allotted Lockheed a 50% share of all savings on the current contract and a percentage of savings on future contracts. Finally, FAR 52.248-1 and Clause I-15, paragraph (i)(4) of Contract No. DAAH01-89-C-0336 authorized the Army to pay Lockheed its share of projected savings on future FMS contracts in a single lump-sum "royalty," effectively allowing the Army to retain all savings on future FMS contracts, except for the lump-sum paid to Lockheed Martin. It is important to note that the term "royalty" in this context refers *only* to the lump-sum payment to Lockheed of its agreed share of projected FMS contract savings attributable to the RRPR VECP.⁵²

⁴⁶ See Modification P00241, *supra* note 44, paragraph A-2(e); see also *supra* notes 39 and 42 (establishing the contractor's entitlement to recoup allowable development and implementation costs).

⁴⁷ See Modification P00241, *supra* note 44, paragraph A-3(e).

⁴⁸ See Modification P00260, *supra* note 45, Section A; see also Modification P00241, *supra* note 44, paragraph A-5.

⁴⁹ See Modification P00241, *supra* note 44, paragraph A-2(f).

⁵⁰ *Id.* paragraph A-3(d).

⁵¹ See Modification P00260, *supra* note 45, Section A (authorizing Lockheed a lump-sum royalty for its share of savings on future FMS contracts). By inference, all other savings related to future FMS contracts are reserved to the government. See also paragraph A-5.

⁵² As will be set forth in more detail in the discussion of Allegation 2b, the use of the term "royalty" in the contractual instruments setting forth the agreements between Lockheed and the Army with regard to the sharing of future FMS contract cost savings generated by the RRPR VECP does not in any way imply

The AMCOM Legal Office's administrative review assessed the merits of Mr. Daniels's assertion that the RRPR was developed under an IES contract. The RRPR was developed by Lockheed beginning in 1989 and was first produced in 1992 and 1993.⁵³ Of the four IES contracts cited by Mr. Daniels, only IES Contract No. DAAH01-92-C-0243 was in effect during that period, although it was not yet in effect when Lockheed submitted either the Preliminary or Formal RRPR VECP.⁵⁴ Additionally, the AMCOM Legal Office advises that its review of IES Contract No. DAAH01-92-C-0243 and its allied papers found no evidence that RRPR development occurred under this contract. Hence, the assertion that AMCOM developed the RRPR under an IES contract is erroneous; the implication that the government paid twice for the development of the RRPR (under both an IES contract and Lockheed's VECP) is without merit.

that the government paid Lockheed for technical data rights or other intellectual property associated with the RRPR. Instead, the term "royalty" in this context referred to a lump-sum payment that AMCOM was authorized to make for future contract savings pursuant to FAR 52.104-2(a)(6), provided that the contracting officer established that providing a lump-sum payment was the best way to proceed and Lockheed agreed.

⁵³ Lockheed first proposed the RRPR VECP in 1991. *See supra* note 38, Preliminary RRPR VECP, initial submission by Lockheed Martin, dated October 28, 1991 [Tab 9]. Lockheed submitted the Formal RRPR VECP on February 7, 1992 [Tab 10]. The government accepted the VECP and modified base production Contract No. DAAH01-89-C-0336 to include the RRPR VECP on July 10, 1992. *See supra* note 42, Modification P00111, dated July 10, 1992. Modification P00111, paragraph A-1, authorized Lockheed to start producing RRPRs in place of the training rockets originally required under the base contract; paragraph A-6 called for RRPR qualification testing in March 1993 [Tab 12].

⁵⁴ Contract No. DAAH01-92-C-0243 was awarded on April 30, 1992. AMCOM awarded the other three IES contracts cited by Mr. Daniels much later in time—Contract No. DAAH01-96-C-0295 was awarded on June 26, 1996; Contract No. DAAH01-98-C-0157 was awarded on June 30, 1998; and Contract No. DAAH01-01-C-0141 was awarded on August 16, 2001. Thus, these IES contracts could not have been related to the initial development of the RRPR. Note, however, that in the years subsequent to the acceptance of the Formal RRPR VECP and the initial production and fielding of RRPR training rockets, some consideration was given to redesigning the RRPR and testing the redesigned rocket under provisions of IES Contract No. DAAH01-96-C-0295. *See* Lockheed Martin Vought Systems, Letter 3-19210/1998L-5093, subject: *Contract DAAH01-96-C-0295, Industrial Engineering Services (IES) Option Year 1997, Budgetary Cost Estimate for Reduced Range Practice Rocket (RRPR) Redesign and Testing*, dated 10 June 1998 [Tab 16B], responding to Department of the Army, United States Army Aviation and Missile Command, MLRS Contracting Office Letter, dated April 14, 1998 (revising the tasks required for inclusion in a Budgetary Cost Estimate requested from Lockheed related to a proposed redesign of the RRPR) [Tab 16A]. It is unclear whether this effort was ever approved and undertaken by the parties. Regardless, any follow-on effort would have been distinct from the initial RRPR development process undertaken pursuant to the Formal RRPR VECP. As another example, Missile Specification (MIS)-35095/19, issued on December 11, 2001 [Tab 17], was developed under IES Contract No. DAAH01-98-C-0157 and established the performance specification for the RRPR weapon special applications computer software component of the MLRS FCS electric unit central processor. *See also* RRPR VECP MI-C-1658V, DD Form 1692, VECP, No. MI-1658, submitted by Lockheed Martin on June 8, 1994 and approved by AMCOM on June 24, 1994 [Tab 18]. The purpose of this VECP was to effect a design change to the RRPR to "eliminate spin balancing and the installation of spin balanced weights on the RRPR." Such design modifications and the development of related products subsequent to the initial production and fielding of an end-item are neither unexpected nor improper.

The AMCOM administrative review further evaluated the allegation that Lockheed had disguised the RRRP VECP as an ECP as a subterfuge to support an unmerited reimbursement claim. As stated above, the record is replete with evidence that Lockheed overtly submitted the RRRP proposal as a VECP, that the government accepted the VECP, that the base contract was modified accordingly to reflect changes associated with VECP implementation, and that AMCOM legally paid Lockheed for the VECP.

LCRRPR:

The LCRRPR was not developed as a VECP. As Mr. Daniels averred, the LCRRPR was developed solely at Army expense under TDL TR 99-001 (with Revisions A and B) [Tab 19] against IES Contract No. DAAH01-98-C-0157.⁵⁵ Essentially, the LCRRPR is a RRRP made from old, unserviceable MLRS rockets that otherwise would have been destroyed and on which a blunt warhead has been substituted for the original explosive warhead.⁵⁶

As TDL TR 99-001 was being formulated, Mr. Daniels objected to its issuance against IES Contract No. DAAH01-98-C-0157 on the grounds that the TDL required work outside the scope of that contract [Tab 20].⁵⁷ The AMCOM legal advisor cautioned against the use of the IES contract to engage in "new effort," but acknowledged that "solving issues and problems" with regard to "a component which is expensive, unreliable, or difficult to replace (and thereby reducing cost) is covered" by the IES contract. Asserting that he did not have "enough background on LCRRPR to tell where it falls" (whether within or outside of the scope of work of the IES contract), it appears that the legal advisor deferred to the technical experts to make the "scope" determination [Tab 21].⁵⁸ Given that TDL TR 99-001 was issued days later, it appears that AMCOM officials determined that the purpose of the LCRRPR development effort was to "solve issues and problems" with the original MLRS practice rocket and the RRRP, and thus fell within the scope of work authorized by IES Contract No. DAAH01-98-C-0157 [Tab 22].⁵⁹

⁵⁵ TDL TR-99-001 was issued on May 19, 1999 and authorized Lockheed to expend 12,161 engineering services labor hours pursuant to IES Contract No. DAAH01-98-C-0157 to develop the LCRRPR [Tab 19A]. Revision A to this TDL was issued on September 15, 2000 and authorized Lockheed to expend an additional 6,102 hours of work to fabricate a number of LCRRPRs [Tab 19B]. Revision B issued on July 23, 2001 and authorized Lockheed to expend 870 hours to effect a change in the LCRRPR software. The AMC Form 1095G documents the issuance of Revision B and the allocation of \$85,460.10 in appropriated funds to pay for the engineering hours to be expended in execution of the task [Tab 19C]. Note that the cover email directing the issuance of Revision B erroneously cites to TDL TMI-99-001; the AMC Form 1095G properly cites to TDL TR-99-011.

⁵⁶ The RRRP, in contrast, was comprised of new materials and components.

⁵⁷ Memorandum from Mr. Daniels to TDL Board Chairman [REDACTED] subject: *Acquisition Comments on Technical Direction Letter (TDL), TR 99-001 proposed for incorporation into Industrial Engineering Services (IES) DAAH01-98-C-0157*, dated May 13, 1999 [Tab 20].

⁵⁸ Handwritten memorandum signed by [REDACTED] former AMCOM legal advisor for the MLRS [Tab 21].

⁵⁹ Excerpt from IES Contract No. DAAH01-98-C-0157, Statement of Work (SOW), Industrial Engineering Services for Multiple Launch Rocket System, dated October 15, 1998 [Tab 22]. There appears to be

Mr. Daniels had opined that Lockheed Martin should continue to develop the LCRRPR concept and design and to engineer the LCRRPR at its own expense, then submit it as a VECP.⁶⁰ Presumably, had the Army followed Mr. Daniels's advice, either Lockheed Martin may not have elected to risk investing its own money in the concept without any guarantee of recoupment and the LCRRPR never would have been developed, or Lockheed would have submitted the project as a VECP, the government's acceptance of which would have required the Army both to reimburse Lockheed's allowable development and implementation costs and to share with Lockheed any current and future cost savings.

TDL TR-99-001 (with Revisions A and B) did require Lockheed Martin to submit an ECP on completion of LCRRPR development and testing.⁶¹ As previously discussed an ECP may be generated to reflect the product design changes resulting from work performed under an IES contract in accordance with a TDL; the ECP would serve to incorporate these design changes in the existing RRPR specifications and drawings.⁶² Because the LCRRPR ECP was developed under an existing IES contract for which the government already had paid, Lockheed received no additional payments associated with this ECP.

As to the specific documents alleged by Mr. Daniels to reflect improper RRPR and LCRRPR VECP payments from the Army to Lockheed Martin:

- Modification P00241 to Contract No. DAAH01-89-C-0336 [Tab 14]—

ample justification for the contracting officer's decision. TDL TR 99-001 required Lockheed Martin to build 18 test and qualification LCRRPRs with a modification to ensure a smoke/flash signature and to provide support for qualification testing of the LCRRPRs (TDL TR 99-001, Task 1 [Tab 19A]); update the MLRS rocket firing algorithms to support the LCRRPR (TDL TR 99-001, Task 2 [Tab 19A]); and prepare an ECP to incorporate the LCRRPR design into MIS-31710A (the RRPR specification) and a Technical Data Package (TDP) (TDL TR 99-001, Task 3 [Tab 19A]). Part II, System and Production Engineering, paragraph 2.8 of the SOW [Tab 22, p. 6], directs the contractor to provide "engineering support for revision or redesign of manufacturing methods, equipment, and special tooling which result from technical changes required as a result of field problems." This service would address the modification of the LCRRPR to ensure a smoke/flash signature as set forth in Task 1 of the TDL. Part II, System and Production Engineering, paragraph 2.11 of the SOW [Tab 22, p. 6], provides for "qualification testing of new hardware" and appears to authorize the building and qualification testing of the test rockets, also required by Task 1. Part II, System and Production Engineering, paragraph 2.7 of the SOW [Tab 22, p. 6], provides for contractor "support for . . . post-deployment software support . . . on the MLRS FCS." This service would cover updating the MLRS algorithms to accommodate the LCRRPR as set forth in Task 2 of the TDL. Part III – Configuration Management, paragraph 3.1.2 of the SOW [Tab 22, p. 7], requires the contractor to prepare ECPs authorized by the Government, the same requirement set forth in Task 3.

⁶⁰ See *supra* note 57, paragraph 1 [Tab 20].

⁶¹ See TDL TR 99-001, *supra* note 55, "Task 3: Prepare Engineering Change Proposal (ECP) to incorporate LCRRPR design into MIS-31710A specification and TDP." [Tab 19A].

⁶² See *supra* note 29.

This modification definitized the financial aspects of the Formal RRPR VECP and incorporated them in the base contract. As discussed above, all payments rendered to Lockheed pursuant to this modification complied with the FAR.⁶³

- TDL TR-99-001 (with Revisions A and B) to IES Contract No. DAAH01-98-C-0157 [Tab 19]—This TDL directed Lockheed to provide engineering services to develop the LCRRPR. The Army paid only for the number of labor-hours (allocated and purchased under the IES contract) that Lockheed expended in developing the LCRRPR. Because the LCRRPR was not developed by Lockheed as a VECP, Lockheed received no VECP-related payments. As discussed above, no ECP-related payments were made to Lockheed for the development of the LCRRPR because AMCOM had fully funded the LCRRPR's development under the existing IES contract with appropriated funds.⁶⁴

- RRPR VECP MI-C-1450 [Tab 10]—This is the Formal RRPR VECP that was approved properly by the government and incorporated in Contract No. DAAH01-89-C-0336.⁶⁵

- RRPR VECP MI-C-1658V [Tab 18]⁶⁶—This is another VECP submitted by Lockheed subsequent to the initial development and fielding of the RRPR. The purpose of this VECP was to effect a design change to the RRPR to “eliminate spin balancing and the installation of spin balanced weights on the RRPR.”⁶⁷

⁶³ See *supra* pp. 14-15.

⁶⁴ See *supra* p. 18.

⁶⁵ See Formal RRPR VECP, *supra* note 36.

⁶⁶ RRPR VECP MI-C-1658V, *supra* note 54 [Tab 18]. AMCOM issued Modification P00172, accepting the Lockheed-proposed VECP and incorporating its revisions to the RRPR design in the base contract. See Amendment of Solicitation/Modification of Contract, Modification P00172, dated July 25, 1994 (modifying Contract No. DAAH01-89-C-0336) [Tab 23]. As discussed above, Contract No. DAAH01-89-C-0336 included the *Value Engineering* clause, authorizing Lockheed to submit VECPs. See *supra* pp. 13 and 14 and note 37. The development of VECP MI-C-1658V was solely at Lockheed's election and within Lockheed's discretion. Lockheed alone bore the costs of VECP development. Subject to government acceptance of the VECP, the *Value Engineering* clause included in Contract No. DAAH01-89-C-0336, expressly authorized Lockheed Martin to recover from the Army certain allowable costs associated with development and implementation of the VECP and to share in present and future contract cost savings generated by the VECP. See *supra* notes 39 and 40. While noting that the amount of savings attributable to the VECP was subject to final negotiations between AMCOM and Lockheed, Modification P00172 calculated the VECP-related minimum net savings to Contract No. DAAH01-89-C-0336 as \$31,200.62. See Modification P00172, paragraph A-3 (defining “minimum net savings” as the total savings generated by the VECP, less any applicable development and/or implementation costs, prior to adjustment for contractor share of savings) [Tab 23]. Accordingly, AMCOM immediately reduced the appropriated funds obligated against the contract by \$15,600.31 to reflect the government's 50% share of those savings. *Id.* See Excerpts from Contract No. DAAH01-89-C-0336, Clause I-15, *Value Engineering*, pp. 121-122, paragraph (f) [Sharing Rates] and associated Table (allocating a 50% share of contract savings to the contractor and, by implication, a 50% share to the government) [Tab 11].

⁶⁷ See RRPR VECP MI-C-1658V, *supra* note 54, p. 1b, block 17 [Tab 18].

- VECP MI-C1397 [Tab 24]⁶⁸—This VECP modified the carrier plate casting of the MLRS launcher. Characterizing this document as relating to the RRPR is erroneous; it relates to neither the RRPR nor the LCRRPR.

- VECP MI-C1352R1 [Tab 25]⁶⁹—This VECP deleted the hydraulic oil spill container of the MLRS launcher. Characterizing this document as relating to the RRPR is erroneous; it relates to neither the RRPR nor the LCRRPR.

- ECP No. MI-M9041 [Tab 26]⁷⁰—This ECP amended the Missile Performance Specification (MIS-PRF)-35520A associated with the MLRS M270A1 FCS and established new FCS performance and test requirements for inclusion in the M270A1 contract. Characterizing this document as relating to the LCRRPR is erroneous; it relates to neither the LCRRPR nor the RRPR.

- **Allegation 2b.**

RRPR:

As to the technical data rights retained by the Army in the RRPR, Modification P00111 to Contract No. DAAH01-89-C-0336⁷¹ stated in pertinent part:

A. The contractor developed the RRTR concept under LTVAD Research and Development Project No. 531M during the FYs 1988, 1989, and 1990. This concept was developed at private expense and any technical data reflecting such concept which is delivered to the Government under VECP MI-C-1450⁷² qualifies for limited rights and restrictive rights as defined in Clause I-6 "Rights in Technical Data and Computer Software," DFARS 252.227-7013, paragraphs (b)(3) and (c)(1). . . . [Tab 12, para A-8A].

B. The Government has neither agreed to or verified such allegations and reserves the right to investigate the propriety of such limited rights and restricted rights allegations in accordance with the criteria and procedures in Clause I-6, paragraph (d) thereof. . . . [Tab 12, para A-8B].

See paragraph A-8 of Modification P00111 [Tab 12].

As noted above, Modification P00111 served merely to document the government's incorporation of Lockheed's Formal RRPR VECP into the base contract and to authorize the production of the practice rockets according to the new RRPR

⁶⁸ DD Form 1692, VECP, No. MI-C1397, submitted by Lockheed Martin on May 20, 1993 and approved by the government on July 15, 1993 [Tab 24].

⁶⁹ DD Form 1692, VECP, No. MI-C1352R1, submitted by Lockheed Martin on October 13, 1993 and approved by the government on December 21, 1993 [Tab 25].

⁷⁰ ECP No. MI-M9041, submitted by Lockheed Martin on September 11, 2002 [Tab 26].

⁷¹ See *supra* note 41. Modification P00111 to Contract No. DAAH01-89-C-0336 documented the Army's acceptance of Lockheed's Formal RRPR VECP and incorporated the VECP design changes into the base contract [Tab 12].

⁷² See Formal RRPR VECP, *supra* note 36 and Tab 10.

VECP design. The Modification makes clear in several contexts that further definitization of the VECP would be accomplished through subsequent modifications as more information became available.⁷³ As to technical data rights in particular, Clause A-8 of the Modification goes on to state that "[p]ending any such investigation [by the government of the contractor's claims as to the government's rights in the proprietary data associated with the RRPR] the government will treat any technical data and computer software identified in (a) above which is delivered hereunder and properly marked with limited rights and restricted rights legends, in accordance with such legends."

Also relevant to this allegation is Modification P00241 to Contract No. DAAH01-89-C-0336.⁷⁴ Modification P00241, paragraph A-8, further definitized the RRPR VECP, providing that "by incorporation of this modification[,] the Government Data Rights resulting from the settlement of VECP MI-C1450R1⁷⁵ shall be governed by Clause I-6, *Rights in Technical Data and Computer Software*, DFARS 252.227-7013, Paragraphs (b)(3) and (c)(1)." More importantly, Modification P00241 paragraph A-9, provided, "[t]he clause entitled 'License Rights for U.S. Government for VECP MI-C1450R1' is hereby incorporated in Section H of this contract. (Attachment 01)" [Tab 14].⁷⁶

In referring to Clause I-6 of the base contract [Tab 27], which incorporated DFARS 252.227-7013, paragraphs (b)(3)⁷⁷ and (c)(1),⁷⁸ paragraph A-8 of Modification

⁷³ See e.g., Modification P00111, paragraphs A-2, A-4, and A-8 [Tab 12]. Modification P00111 accepted the new design proposed by Lockheed's VECP and directed Lockheed to change the old practice rocket design to conform to it. The issues of financial compensation and intellectual property rights were deferred for negotiation. See also *supra* note 43 (discussing contract definitization).

⁷⁴ After negotiations, an audit of the RRPR VECP by the DCAA, and a technical review of Lockheed's development and implementation costs by the MLRS Project Office, the financial aspects of the VECP were added to Contract No. DAAH01-89-C-0336 by Modifications P00241 [Tab 14] and P00260 [Tab 15].

⁷⁵ VECP MI-C-1450R1 is the final version of the Formal VECP pertaining to the RRPR. The addition of the letters "R1" to the end of the VECP numeric designation simply indicates that this VECP is the "first revision" to Formal RRPR VECP MI-C-1450, *supra* note 36.

⁷⁶ Clause A-9 and Attachment 01 to Modification P00241 added Clause H-52 to the contract [Tab 14].

⁷⁷ Contract No. DAAH01-89-C-0336, Clause I-6, *Rights in Technical Data and Computer Software*, DFARS 252.227-7013 (Oct 1988), paragraph (b)(3), provided that:

(3) Limited Rights. Unless otherwise agreed[,], the Government shall have limited rights in.

(i) Technical data pertaining to items, components, processes or computer software developed exclusively at private expense, except for data in the categories in (a)(1) above.

(ii) Technical data that the parties have agreed will be subject to limited rights for a specified period of time, and

(iii) Technical data listed or described in a license agreement made a part of the contract and subject to conditions other than those described in the definitions of limited rights. Notwithstanding any contrary provisions in the license agreement, the Government shall have the rights included in the definition of "limited rights" in paragraph (a)(15) above.

Limited rights will remain in effect so long as the technical data remains unpublished and provided that only the portions of each piece of data subject to limited rights are identified (for example, by circling, underscoring, or a note), and the piece of data is marked with the legend below containing:

(A) The number of the prime contract under which the technical data is to be delivered; and

(B) The name of the Contractor and/or any subcontractor asserting limited rights.

(C) The date the data will be subject to unlimited rights (if applicable).

[Tab 27, pp. 105-106 of 27].

P00241, standing alone, purported to grant the government only *Limited Rights* and to vest all other technical data rights in Lockheed Martin. Clause I-6, paragraph (b)(3)(i) stated that "[u]nless otherwise agreed[,] the Government shall have limited rights in . . . [t]echnical data pertaining to items, components, processes, or computer software developed exclusively at private expense." [Tab 27, pp. 105-106 of 127]. As defined in Contract No. DAAH01-89-C-0036, Clause I-6, *Limited Rights* preclude the government from releasing the technical data to any entity outside of the government, except under very limited circumstances.⁷⁹ However, paragraph A-9 of Modification P00241 also incorporated Attachment 01, adding Clause H-52 to the base contract [Tab 14]. Clause H-52 expressly conferred on the government more expansive *Government Purpose License Rights*⁸⁰ in the technical data associated with the RRPR, as follows:

Technical data pertaining to items, components or processes developed exclusively at private expense, which the Government would be entitled to

⁷⁹ Contract No. DAAH01-89-C-0336, Clause I-6, *Rights in Technical Data and Computer Software*, DFARS 252.227-7013 (Oct 1988), paragraph (c)(1), provided that

(c) Rights in Computer Software

(1) Restricted Rights. (i) The Government shall have restricted rights in computer software, listed or described in a license agreement made a part of this contract, which the parties have agreed will be furnished with restricted rights. Notwithstanding any contrary provision in any such license agreement, the Government shall have the rights included in the definition of "restricted rights" in paragraph (a)(17) above[, u]nless the computer software is marked by the Contractor with the [prescribed] legend [Tab 27, pp. 106-107 of 127]

⁸⁰ Contract No. DAAH01-89-C-0336, Clause I-6, *Rights in Technical Data and Computer Software*, DFARS 252.227-7013 (Oct 1988), paragraph (a)(15), defined "limited rights" as:

[R]ights to use, duplicate, or disclose technical data, in whole or in part, by or for the Government, with the express limitation that such technical data shall not, without the written permission of the party asserting limited rights, be: Released or disclosed outside the Government; used by the Government for manufacture; or in the case of computer software documentation, for preparing the same or similar computer software; or used by a party other than the Government, except that the Government may release or disclose technical data to persons outside the Government or permit the use of technical data by such persons, if

(i) Such release, disclosure, or use—

(A) Is necessary for emergency repair and overhaul; or

(B) Is a release or disclosure of technical data (other than detailed manufacturing or process data) to, or use of such data by a foreign government that is in the interest of the Government and is required for evaluation or informational purposes.

(ii) Such release, disclosure, or use is made subject to a prohibition that the person to whom the data is released or disclosed may not further release, disclose or use such data; and

(iv) the contractor or subcontractor asserting the restriction is notified of such release, disclosure, or use. [Tab 27, p. 103 of 127].

⁸⁰ Contract No. DAAH01-89-C-0336, Clause I-6, *Rights in Technical Data and Computer Software*, DFARS 252.227-7013 (Oct 1988), paragraph (b)(2), provides that "[t]he government shall have government purpose license rights (GPLR) in technical data which the parties have agreed will be furnished with GPLR," and paragraph (a)(14) defines GPLR as: "rights to use, duplicate, or disclose data . . . in whole or in part and in any manner, for Government purposes only, and to have or permit others to do so for Government purposes only [, to] include competitive procurement, but [] not [] the right to have or permit others to use technical data . . . for commercial purposes. [Tab 27, pp. 103 and 105 of 127].

have furnished with "Limited Rights" as defined in . . . [DFARS] 252.227-7013, shall, at no additional cost to the government, be furnished with the following *additional right*:

The right to disclose or to provide the technical data, in whole or in part and in any manner, for Government Purposes only, . . . to any U.S. person or corporation that has executed a Standard-Non-Disclosure Agreement which establishes third party beneficiary status in the contractor. If the recipient of the technical data has executed the Standard Non-Disclosure Agreement, the Contractor shall have no claim or right of action against the Government for damages related to misuse or authorized disclosure of the data. For purposes of this clause, "Government Purposes" shall include competitive procurement in the United States, but do not include any rights to have or permit others to use technical data for commercial purposes, or for purposes for foreign manufacture or foreign procurement. Contractor shall have and shall retain, all commercial and foreign rights including Foreign Military Sales (FMS).

All technical data furnished to the Government that is marked with "Limited Rights" legend shall be marked with the following additional statement:

"In addition to the "Limited Rights" specified in . . . the clause at 252.227-7013 of the contract listed above, the Government has "License Rights" as specified in Clause H-52 of said contract."

[Tab 14, Clause H-52, *emphasis added*].

Accordingly, Mr. Daniels's allegation that the government retained no proprietary rights in the design concepts or technical data associated with the RRPR VECP is incorrect. The government received *Government Purpose License Rights*,⁸¹ which at minimum enabled the government to provide the data to a third-party contractor on any domestic government contract. Given that the RRPR technical data was developed exclusively at Lockheed's expense as part and parcel of the RRPR VECP, it is a tribute to AMCOM negotiating capabilities that the government secured *Government Purpose License Rights* rather than the more restrictive *Limited Rights*.⁸²

The allegation that the Army must pay Lockheed a "royalty" to use this data also is incorrect. Under terms of Clause H-52, only commercial and foreign military sales—not sales to or within the U.S. government—fell outside the scope of the *Government*

⁸¹ See *supra* note 80.

⁸² See *supra* pp. 21 and 22 (noting that a grant to the government of *Limited Rights* is not inappropriate when the technical data at issue has been developed exclusively at private expense)

Purpose License Rights granted to the United States. Further, paragraph A-7 of Modification P00241 provided that:

By incorporation of this modification Loral Vaught System agrees to establish an option entitled "Granting of Manufacturing License for the Reduced Range Practice Rocket Warhead." This license is sufficient to allow for a foreign country, after acquiring the license, to contract with one of its national industries to manufacture and deliver [the RRPR] provided that the contractor has the remainder of the MLRS technical data package. The cost of the license option is five million dollars (\$5,000,000) per country, plus a royalty of five thousand dollars (\$5000) per warhead manufactured. The option may be exercised, more than once, at any time from the effective date of this modification until twenty-four (24) calendar months after the final delivery under this contract.

[Tab 14, para A-7].

Should any foreign government elect to produce the RRPR with a company other than Lockheed Martin, that foreign government (and only that foreign government) would be required to pay Lockheed an up-front royalty of \$5 Million and a \$5000 per rocket royalty to license the applicable design concepts and technical data. Of note, AMCOM's administrative review has found no evidence that foreign governments sought a technical data license to facilitate production of the RRPR by a contractor other than Lockheed Martin (under which circumstance the foreign government would have paid Lockheed an "up-front" royalty and a \$5000 royalty per rocket produced); evidence reviewed by the AMCOM Legal Office indicates that Lockheed has served as the contractor on all such contracts with foreign governments.

It is understandable that the complex language of the contract modifications adopting the RRPR VECP may have confused Mr. Daniels as to the precise scope and nature of technical data rights vested in the Army. For example, the modifications use the term "royalty" in two different contexts, both of which are recognized as proper: the Army's payment, in a single lump-sum "royalty," of an amount reflecting Lockheed's share of future FMS contract savings generated by the RRPR VECP;⁸³ and the technical data license fee required of foreign governments (but not of the U.S. government) seeking to produce the RRPR through a contractor other than Lockheed Martin.⁸⁴ According to ██████████ of the AMCOM Legal Office, these diverse usages of the term "royalty" are common acquisition practice. He notes that great care must be taken to ensure application of the correct definition of "royalty" in any context.

LCRRPR:

██████████ administrative review determined that the government generally holds the same rights to the technical data associated with the LCRRPR as for the RRPR (*Government Purpose License Rights* as defined in Clause H-52 of Contract No.

⁸³ See Modification P00260, *supra* note 45, Section A [Tab 15]; see also Modification P00241, *supra* note 44, paragraph A-5 [Tab 14].

⁸⁴ See Modification P00241, *supra* note 44, paragraph A-7 [Tab 14].

DAAH01-89-C-0336). As stated above, the LCRRPR was developed via TDL TR 99-001 (with Revisions A and B) [Tab 19] issued against IES Contract No. DAAH01-98-C-0157. The TDL task most critical to the LCRRPR's evolution was Lockheed's development of an ECP pursuant to which the RRPR technical data package (TDP)—comprising technical drawings and data—was modified to document the technical modifications differentiating the new LCRRPR line from the old RRPR.

The “legend” or “markings,” or the absence of same on the technical drawings associated with an end-item and its components, often are interpreted as dispositive as to the ownership of proprietary rights in the design concepts and technical data the drawings depict. If the contractor prepares and provides drawings without markings, the presumption attaches that the government maintains unlimited rights in the associated data.⁸⁵ In all other cases, the inscribed legend or marking is deemed to reflect the government's rights in technical data, or any limitations thereon.

In support of Mr. Daniels's allegation that the government failed to assert proprietary rights in the design concepts and technical data associated with the RRPR and LCRRPR, the OSC forwarded to the Army a letter, circa 2001, by which Lockheed Martin had submitted for AMCOM review, the “company's position reference to ‘Limited Data Rights’ markings on the Low Cost Reduced Range Practice Rocket (LCRRPR) TDP documentation.” In an attached chart, Lockheed listed each item comprising the TDPs for both the RRPR and the LCRRPR and Lockheed's “position” as to the scope of proprietary rights retained by the government as to each such item [Tab 30].⁸⁶ At first blush the chart would appear to support Mr. Daniels's contentions.

██████████ assessed the technical drawings associated with each technical data component referenced in the Lockheed letter and chart. ██████████ discovered that subject to minor exceptions, discussed below in more detail, and contrary to both the 2001 Lockheed letter referenced above and Mr. Daniels's allegations, each drawing was either devoid of markings (thus conveying to the government unlimited rights in the associated data) or bore the legend “H-52” (conveying *Government Purpose License Rights* in accordance with Modification P00241 to Contract No. DAAH01-89-C-0336).

██████████ noted, however, that drawing 13031052, pertaining to the RRPR Nose Cap, was marked as conveying to the government only *Limited Rights* in its

⁸⁵ See Contract No. DAH01-89-C-0336, Clause I-6, *Rights in Technical Data and Computer Software*, DFARS 252.227-7013 (Oct 1988), paragraph (b)(1)(vi) (relating to the RRPR Nose Cap) [Tab 27, pp. 104-105 of 127]; IES Contract No. DAAH01-98-C-0157, Clause I-99, *Rights in Technical Data—Noncommercial Items*, DFARS 252.227-7013 (Nov 1995), paragraph (b)(1)(vii), incorporated by reference (relating to MIS-35095/19 as it pertains to the RRPR) [Tab 28]; and IES Contract No. DAAH01-C-01-0141, Clause I-77, *Rights in Technical Data—Noncommercial Items*, DFARS 252.227-7013 (Nov 1995), paragraph (b)(1)(vii), incorporated by reference (relating to MIS-35095/19 as it pertains to the LCRRPR) [Tab 29].

⁸⁶ Lockheed Martin Missiles and Fire Control – Dallas, Letter 3-19210/2001L-5388, subject: *Contract DAAH01-98-C-0157, Industrial Engineering Services (IES) Limited Data Rights Markings on the Low Cost Reduced Range Practice Rocket (LCRRPR)*, dated 28 August 2001, with Enclosure (1), dated 23 August 2001 [Tab 30].

technical data. Of interest, drawing 13540614, the LCRRPR Nose Cap, bears no restrictive marking, affording the government unlimited rights. In addition, specification MIS-35095/19, originally associated with the RRPR [Tab 17],⁸⁷ and subsequently applied by ECP MI-C1973FR0A0 to the LCRRPR,⁸⁸ bears a "Restricted Rights" legend [Tab 31]. The markings on these three items warrant further scrutiny.

The government may challenge a contractor's markings on technical data and drawings within three years after final payment under the contract at issue or three years after delivery of the data and/or drawings at issue, whichever later occurs.⁸⁹ In practice, when government review of a drawing or other rendering of technical data reveals a potentially inaccurate legend, the Contracting Officer formally requests an explanation from the contractor.⁹⁰ The Contracting Officer then reviews the contractor's written justification for the marking and, if valid, permits it to stand.⁹¹ If the contractor's

⁸⁷ A specification describes in narrative the performance standards associated with a particular product or end-item.

⁸⁸ ECP-MI-C1973FR0A0, submitted January 24, 2002 [Tab 31A], was developed under provisions of IES Contract No. DAAH01-C-01-0141, awarded August 16, 2001. ECP-MI-C1973FR0A0 modified and applied RRPR specifications MIS-35094/19 [Tab 31B] and MIS-35095/19 [Tab 31C] to the LCRRPR. MIS-35095/19, the specification in question, was developed pursuant to IES Contract No. DAAH01-98-C-0157 and originally set forth the specification for the software version description for the RRPR weapon special applications computer software component of the MLRS FCS electric unit central processor [Tab 17]

⁸⁹ Contract No. DAAH01-89-C-0336, Clause I-10, *Validation of Restrictive Markings on Technical Data*, DFARS 252.227-7037 (Apr 1988), paragraph (h) (stating that: "The Government may review the validity of any restriction on technical data, delivered or to be delivered under a contract, asserted by the Contractor or subcontractor. During the period within three (3) years of final payment on a contract or within three (3) years of delivery of the technical data to the Government, whichever is later, the Contracting Officer may review and make a written determination to challenge the restriction." (relating to the RRPR Nose Cap) [Tab 32]); IES Contract No. DAAH01-98-C-0157, Clause I-105, *Validation of Restrictive Markings on Technical Data*, DFARS 252.227-7037 (Nov 1995), paragraph (i), incorporated by reference (relating to MIS-35095/19 as it pertains to the RRPR) [Tab 33]. Although federal acquisition regulations mandate the inclusion of this clause in each contract, the clause was inadvertently omitted from IES Contract No. DAAH01-C-01-0141 (relating to MIS-35095/19 as it pertains to the LCRRPR). Pursuant to the so-called *Christian Doctrine*, however, the clause is deemed a part of the contract, notwithstanding this error. The *Christian Doctrine* derives from the case of *G.L. Christian & Associates v. United States*, 160 Ct. Cl. 1, 312 F.2d 418 (1963), which held that clauses required by federal acquisition regulations to be included in a contract are applicable to that contract, whether or not actually incorporated.

⁹⁰ Contract No. DAAH01-89-C-0336, Clause I-10, *Validation of Restrictive Markings on Technical Data*, DFARS 252.227-7037 (Apr 1988), paragraph (d) (stating that: "Notwithstanding any provision of this contract concerning inspection and acceptance, if the Contracting Officer determines that a challenge to the restrictive marking is warranted, the Contracting Officer shall send a written challenge notice to the Contractor or subcontractor asserting the restrictive markings." (relating to the RRPR Nose Cap) [Tab 32]); IES Contract No. DAAH01-98-C-0157, Clause I-105, DFARS 252.227-7037, *Validation of Restrictive Markings on Technical Data* (Nov 1995), paragraph (e), incorporated by reference (relating to MIS-35095/19 as it pertains to the RRPR) [Tab 33]. See *supra* note 89 as to IES Contract No. DAAH01-C-01-0141 (relating to MIS-35095/19 as it pertains to the LCRRPR).

⁹¹ Contract No. DAAH01-89-C-0336, Clause I-10, *Validation of Restrictive Markings on Technical Data*, DFARS 252.227-7037 (Apr 1988), paragraph (f)(1) (stating that: "If the Contracting Officer determines that the Contractor or subcontractor has justified the validity of the restrictive marking, the Contracting Officer shall issue a final decision to the Contractor or subcontractor sustaining the validity of the restrictive marking, and stating that the Government will continue to be bound by the restrictive marking."

justification is not persuasive as to the accuracy of the extant marking, the Contracting Officer issues a final decision as to the appropriate rights in technical data rights to be accorded the government.⁹² The contractor then may appeal any decision with which it disagrees to the Armed Services Board of Contract Appeals or to the Court of Federal Claims in accordance with The Contract Disputes Act of 1978.⁹³

The RRPR Nose Cap drawing was created in February 1992 under terms of Contract No. DAAH01-89-C-0336. Given that more than three years have passed since delivery of the drawing and that the government has issued final payment under that contract, the government is left without remedy as to the drawing's *Limited Rights* marking. Specification MIS-35095/19, as it applies to the RRPR, was developed pursuant to IES Contract No. DAAH01-98-C-0157 and subsequently applied to the LCRRPR by an ECP developed pursuant to IES Contract No. DAAH01-01-C-0141. [REDACTED] reports that final payment has not been rendered under either IES contract. Accordingly, AMCOM will request justification from Lockheed regarding the "Restricted Rights" marking on the Missile Specification as it applies to both training rockets. Should it find Lockheed's proffered justification insufficient or inappropriate, AMCOM will act in accord with DFARS 252.227-7037 to compel Lockheed to change the specifications' markings to reflect the Army's reservation of *Government Purpose License Rights*.

Notwithstanding the potentially inaccurate markings associated with the RRPR Nose Cap drawing and MIS-35095/19, as applied to both the RRPR and the LCRRPR, an AMCOM Legal Office review of payment documents revealed no evidence that the Army ever has paid Lockheed a "royalty" or similar fee for the use of RRPR or LCRRPR-related technical data.

A review of the documents cited by Mr. Daniels as evidencing the Army's alleged failures to challenge Lockheed Martin's improper assertion of proprietary rights in technical data associated with the RRPR and LCRRPR reveals the following:

- Mr. Daniels alleged that together, Modifications P00241 and P00260 to Contract No. DAAH01-89-C-0336 approved a \$393,400 "royalty" payment to

(relating to the RRPR Nose Cap) [Tab 32]; IES Contract No. DAAH01-98-C-0157, Clause I-105, *Validation of Restrictive Markings on Technical Data*, DFARS 252.227-7037 (Nov 1995), paragraph (g)(1), incorporated by reference (relating to MIS-35095/19 as it pertains to the RRPR) [Tab 33]. See *supra* note 89 as to IES Contract No. DAAH01-C-01-0141 (relating to MIS-35095/19 as it pertains to the LCRRPR).

⁹² Contract No. DAAH01-89-C-0336, Clause I-10, *Validation of Restrictive Markings on Technical Data*, DFARS 252.227-7037 (Apr 1988), paragraph (f)(2)(i) (stating that: "If the Contracting Officer determines that the validity of the restrictive marking is not justified, the Contracting Officer shall issue a final decision to the Contractor or subcontractor in accordance with the Disputes clause at FAR 52.233-1 (relating to the RRPR Nose Cap) [Tab 32]; IES Contract No. DAAH01-98-C-0157, Clause I-105, *Validation of Restrictive Markings on Technical Data*, DFARS 252.227-7037 (Nov 1995), paragraph (g)(2)(i), incorporated by reference (relating to MIS-35095/19 as it pertains to the RRPR) [Tab 33]. See *supra* note 89 as to IES Contract No. DAAH01-C-01-0141 (relating to MIS-35095/19 as it pertains to the LCRRPR).

⁹³ The Contract Disputes Act of 1978, as amended, Title 41, USC, Sections 601-613.

Lockheed.⁹⁴ As noted above, this "royalty" was an authorized lump-sum payment representing Lockheed's share of future FMS contract savings resulting from the RRPR VECP. This payment was unrelated to the government's technical data rights in the RRPR. Moreover, Modification P00241 did document both the \$5 Million "up-front royalty" and the \$5000 "per-rocket royalty" required of foreign governments (but not of the U.S. government) seeking to produce the RRPR through a contractor other than Lockheed Martin.⁹⁵ Further, as discussed above, both of these modifications imparted to AMCOM *Government Purpose License Rights* in technical data related to the RRPR, and, by derivative ECP, to the LCRRPR.

- LCRRPR ECP MI-C1973FR0A0⁹⁶ [Tab 31A], updated original RRPR software performance specifications MIS-35094/19 [Tab 31B] and MIS-35095/19 [Tab 31C]⁹⁷ to implement a new algorithm that would preclude the training rocket from aiming and firing under conditions of high winds at low altitudes, and further applied those new specifications to the LCRRPR. A review of MIS-35094/19 [Tab 31B] reveals markings referencing "Clause H-52," conveying *Government Purpose License Rights* in the specification's technical data. As previously indicated, however, original RRPR specification MIS-35095/19 (which specification, as modified by the ECP, also applies to the LCRRPR) is inscribed with the legend "Restricted Rights" [Tabs 17 and 31C]. As described above, AMCOM will employ the procedures set forth at DFARS 252.227-7037 to challenge the accuracy and propriety of the MIS-35095/19 markings as regards both the RRPR and LCRRPR. As warranted, AMCOM will take follow-on action to compel Lockheed to correct and conform the markings to vest in the Army *Government Purpose License Rights*.

- ECP No. MI-M9041 [Tab 26]⁹⁸—This ECP amended MIS-PRF-35520A (Missile Performance Specification) associated with the MLRS M270A1 FCS and established new FCS performance and test requirements for inclusion in the M270A1 contract. The OSC referral erroneously characterized this document as relating to the LCRRPR; it relates to neither the LCRRPR nor the RRPR.

Findings of the AMCOM Review: The AMCOM Legal Office determined that Lockheed Martin independently developed the RRPR concept at its own expense and properly proposed the resultant VECP to AMCOM. AMCOM properly accepted and approved

⁹⁴ See Modification P00241, *supra* note 44, paragraph A-5 [Tab 14]; see also Modification P00260, *supra* note 45, paragraph A-1 [Tab 15].

⁹⁵ See Modification P00241, *supra* note 44, paragraph A-7

⁹⁶ See ECP-MI-C1973FR0A0, *supra* note 88 [Tab 31]

⁹⁷ Specification MIS-35094/19 originally set forth the computer development specification for the RRPR and was associated with base Contract No. DAAH01-89-C-0336. Specification MIS-35095/19 was developed pursuant to Contract No. DAAH01-98-C-0157 and originally set forth the specification for the software version description for the RRPR weapon special applications computer software component of the MLRS FCS electric unit central processor [Tab 17]. Developed under IES Contract No. DAAH01-C-01-0141, ECP-MI-C1973FR0A0 subsequently changed both specifications to facilitate their application to the LCRRPR [Tabs 31B and 31C].

⁹⁸ ECP No. MI-M9041 was submitted by Lockheed Martin on September 11, 2002 and amended the MIS-PRF-35520A (Missile Performance Specification) associated with the MLRS M270A1 FCS and established new FCS performance and test requirements for inclusion in the M270A1 contract [Tab 26].

the VECP, refined and incorporated it into base Contract No. DAAH01-89-C-0336 through the standard contract modification process, reimbursed Lockheed appropriately for its costs in developing and implementing the VECP, and authorized Lockheed a share of resultant future contract savings. The actions of both AMCOM and Lockheed accorded with the FAR and with the terms of Contract No. DAAH01-89-C-0336. Lockheed's submission of its proposal for development of the RRPR was labeled and processed as a VECP; there is no evidence of any effort to mischaracterize it as an ECP.

The AMCOM Legal Office further determined that the LCRRPR was developed at government expense pursuant to TDL TR 99-001 (with Revisions A and B) issued against IES Contract No. DAAH01-98-C-0157. The TDL required Lockheed both to design and develop the new training rocket and to prepare an ECP incorporating the new rocket's design into existing RRPR specifications and drawings.⁹⁹ The Army did not reimburse Lockheed for the LCRRPR ECP because Lockheed was compensated for the development of that ECP under the IES contract. No VECP was associated with the development of the LCRRPR.

AMCOM determined that the government had secured *Government Purpose License Rights* in the technical data associated with the VECP for the RRPR and the derivative LCRRPR. A review of the legends inscribed on the technical drawings associated with both the RRPR and the LCRRPR, which markings are generally viewed as dispositive as to the grant of proprietary rights in the technical data depicted, revealed that only the RRPR Nose Cap drawing and RRPR specification MIS-35095/19, made applicable to the LCRRPR pursuant to ECP MI-C1973FR0A0, were not marked in accordance with the agreements of the parties, and conveyed to the government only *Limited Rights* (as to the Nose Cap) or "Restricted Rights," (as to the Missile Specifications pertaining to both rockets). The existence of these possibly inaccurate legends notwithstanding, there is no evidence that the Army has paid a "royalty" or similar payment to Lockheed for the use of technical data associated with any component of either practice rocket.

Conclusion: Allegation 2a is unsubstantiated. Allegation 2b is substantiated only to the extent that the RRPR Nose Cap drawing and MIS-35095/19, as applied both to the RRPR, and, as modified by ECP, to the LCRRPR, bear *Limited Rights* and "Restricted Rights" markings, respectively. With the passage of time, the government has forfeited the right to challenge the potential error as regards the RRPR Nose Cap marking. However, the period applicable to AMCOM's challenge of the Missile Specification as applied to both the RRPR and to the LCRRPR has not lapsed. Accordingly, AMCOM will request that Lockheed justify the "Restricted Rights" markings associated with both applications of MIS-35095/19, and, as appropriate, will take follow-on action to enforce the government's contractual grant of *Government Purpose License Rights*.

OSC Allegations 3 and 4: The government accepted non-conforming and unsafe M2701A MLRS launchers from Lockheed Martin without reducing the price paid to

⁹⁹ TDL TR 99-001, *supra* note 55, Task 3 [Tab 19A].

reflect the launchers' defects. The Army deployed these launchers, placing soldiers at risk. Lockheed Martin failed to provide a safety assessment report for the M270A1 launcher as it was contractually obligated to do. The Army expended additional funds to hire another contractor to prepare that report. The MLRS Project Office failed to notify the AMCOM Acquisition Center that the launchers did not comply with contract performance specifications. Subsequently, the Project Office failed to follow the Acquisition Center's advice to seek corrective action before accepting more launchers. The Army expended additional appropriated funds to render the launchers safe, a cost that Lockheed Martin should have borne.

These allegations are the subject of on-going administrative investigation by AMCOM and are not addressed in the instant report, but will be addressed in a subsequent supplementary report. Presently, it appears that the allegations will be addressed in concert because a review of the launchers' compliance with safety specifications is a prerequisite to assessing whether the government improperly accepted non-conforming launchers.

OSC Allegation 5: The Army accepted five M270A1 launchers lacking FCSs, but failed to reduce payments to Lockheed Martin to reflect the launchers' diminished value.

Mr. Daniels asserted that in preparing for Operation Iraqi Freedom, the MLRS Project Office determined that five M270A1 launchers then in Army inventory at Red River Army Depot, Texarkana, Texas, were missing their FCSs.¹⁰⁰ According to Mr. Daniels, this issue required immediate resolution to permit the launchers' deployment to Iraq. Mr. Daniels contended that on October 15, 2002, at the direction of the MLRS Project Office, [REDACTED] a MLRS contracting specialist, permitted Lockheed Martin to deliver five new M270A1 launchers from which the FCS equipment had been removed. The five FCSs that had been "stripped" from these newly delivered launchers were then installed on the five incomplete M270A1 launchers already in Red River inventory. According to Mr. Daniels, the price paid to Lockheed Martin for the delivery of the five "stripped" launchers was not adjusted downward to reflect their diminished value without their FCS equipment. The total value of each launcher was estimated at \$3 Million; the FCS equipment was separately valued at \$1.5 Million, approximately one-half of the launcher's overall cost. Mr. Daniels alleged that the Army received no benefit from these five "stripped" launchers. Nevertheless, the Army paid Lockheed Martin full price for each launcher, totaling \$7.5 Million in government funds¹⁰¹ to which Lockheed was not entitled.

References:

DD Form 250, *Material Inspection and Receiving Report*.

¹⁰⁰ Mr. Daniels suspected that the five missing FCSs had previously been removed from the M270A1 launchers and installed on five High Mobility Artillery Rocket Systems (HIMARS) launchers, which were covered by another contract with Lockheed Martin

¹⁰¹ Reflecting five sets of FCS equipment valued at \$1.5 Million each.

AR 70-6, *Management of the Research, Development, Test & Evaluation, Army Appropriation*, dated June 16, 1986 [Excerpted at Tab 34].

CID Investigative Finding: With regard to this allegation, CID ultimately found no criminal offense [Tab 5].

Evidentiary Summary:

The CID investigation and the AMCOM Legal Office administrative review validated Mr. Daniels's assertion that on or around September 2001, the Army removed the FCSs from five M270A1 launchers in inventory at Red River Army Depot and transferred them to the High Mobility Artillery Rocket System (HIMARS) program for use in testing new HIMARS launchers then in development.¹⁰² According to the AMCOM legal advisor, [REDACTED] the five HIMARS units, complete with FCSs, were ultimately deployed to Iraq for operational use.

The AMCOM Legal Office determined that the decision to use MLRS FCSs in the testing and evaluation of HIMARS launchers complied with law and regulation. AR 70-6, *Management of the Research, Development, Test & Evaluation, Army Appropriation*, authorized the use of procurement-funded assets (such as the M270A1 launchers and their associated FCSs) with testing research and development-funded assets (such as the HIMARS) in the testing and evaluation phase of development.¹⁰³ The operational deployment of the HIMARS units, with the embedded FCSs, was similarly unobjectionable.¹⁰⁴

¹⁰² The FCS for the M270A1 launcher is interchangeable with the FCS for the HIMARS launcher. The HIMARS is a newer, smaller, and more mobile version of the M270A1. Like the MLRS, Lockheed produced the HIMARS but under a different contract. According to [REDACTED] an employee of the Red River Army Depot, the Harris Company (the supplier of the FCS), had been unable to produce sufficient FCSs to meet Lockheed's concurrent demand associated with the M270A1, spares, and the HIMARS test program. Accordingly, in September 2001, the HIMARS program had "borrowed" the MLRS FCSs and installed them on the HIMARS launchers to facilitate testing of that system. [Tab 35, Excerpts from CID Agent's Activity Summary documenting the collective interview of [REDACTED] and [REDACTED] all employees of Red River Army Depot].

¹⁰³ AR 70-6, *Management of the Research, Development, Test & Evaluation, Army Appropriation*, dated June 16, 1986, paragraph 3-8a(3) [Excerpted at Tab 34]. "Major end items . . . or major components thereof, required to support the approved development and test program for a different military end item will be subject to the following . . . (a) Items that can be made available from existing inventory on a priority basis will be reassigned for use in R&D testing and evaluation programs without reimbursement for the procurement of the items. . . (d) Items that have otherwise been approved for procurement operational use and included in the forces, are in production or are on buy for a requirement other than the [Research, Development, Test and Evaluation, Army (RDTE,A)] program can be assigned for use in [research and development (R&D)] test and evaluation on a priority basis. If the items are not consumed in the R&D testing, they will be financed by [procurement appropriations (PA)] or [Operations and Maintenance, Army (OMA) appropriations] RDTE,A will bear any costs necessary to return the item to serviceable condition."

¹⁰⁴ *Id.* paragraph 3-8a(2)(b) (authorizing the operational use of RDTE,A-funded test assets upon completion of testing without reimbursement to the RDTE,A appropriation) [Excerpted at Tab 34].

On October 7, 2002, Major General David Huntoon, Director of Strategy, Plans, and Policy in the Office of the Chief of Staff, G-3, Headquarter, Department of the Army,¹⁰⁵ authorized the immediate "out of DAMPL" fielding of 19 M270A1 launchers to facilitate ongoing "critical mission[s]." [Tab 36].¹⁰⁶ By letter of October 15, 2002, and in keeping with MG Huntoon's decision, ██████████ authorized Lockheed as follows:

Lockheed Martin Missile and Fire Control – Dallas' request for Government approval to accelerate delivery of the last five (5) upgraded LRIP III M270A1 launchers utilizing slaved hardware,¹⁰⁷ which is defined as the process of using the same set of Fire Control System (FCS) hardware . . . to test and sell-off up to five (5) M270A1 launchers, *with the FCS hardware being removed following signing of the DD-250 and used on the next launcher to be tested and sold allowing [Lockheed Martin Missile and Fire Control-Dallas] to invoice in full is authorized*

...

However, the approval to deliver is contingent upon the parties agreeing to the following:

...

*FCS hardware to be removed following DD-250;
Contractor is authorized to expend and collect all costs over and above normal production, i.e., to install and remove slave hardware . . .*¹⁰⁸

(emphasis added)

[Tab 37].

██████████ told CID that she had coordinated with the AMCOM Legal Counsel, ██████████ prior to authorizing the accelerated delivery of these five M2701A launchers and the separate shipment of their five FCSs, and that ██████████ had advised her that upon the government's execution of the DD

¹⁰⁵ The Deputy Chief of Staff, G-3, Headquarters, Department of the Army, is generally responsible for Army operations and plans.

¹⁰⁶ Memorandum, Department of the Army, Office of the Deputy Chief of Staff, G-3, subject: *Out of DAMPL Fielding Request for M270A1*, dated 7 October 2002 [Tab 36]. The Department of the Army Master Priority List (DAMPL) is the standing order of precedence list approved annually to guide the distribution of personnel and equipment resources. That the fielding of the 19 M270A1 launchers was "out of DAMPL," implies that the operational need for the launchers was so significant as to warrant overriding the approved DAMPL, essentially "leapfrogging" acquisition of the launchers to the top of priority list.

¹⁰⁷ In the acquisition community, the process of "slaving" involves using the same set of hardware components for the quality testing of numerous end-items. In this case, because the FCSs associated with the last five launchers whose delivery was to be accelerated already had been sent to Red River, a single FCS "slave" was installed in each launcher for testing purposes. Upon completion of testing, the FCS slave was removed from the launcher and installed in the next launcher awaiting testing, and so on. ██████████ letter expressly authorized this process and further authorized Lockheed to claim the additional costs associated with the installation and removal of the FCS "slave" for each launcher tested.

¹⁰⁸ Memorandum, Department of the Army, United States Army Aviation and Missile Command, subject: *Contract DAAH01-00-C-0109, M2701A1 III Launcher Acceleration*, dated 15 October 2002 [Tab 37].

Form 250 documenting acceptance of the launchers.¹⁰⁹ they were considered government property. Once the launchers were accepted as government property, AMCOM could use the launchers and/or their separate components in any appropriate way. [REDACTED] stated that the acceptance of the new M2701A launchers (and their FCSs) was completed with the understanding that the HIMARS program would "pay back" the MLRS program [Tab 38, MFR documenting the interview of [REDACTED]].¹¹⁰

[REDACTED] confirmed the advice he had provided [REDACTED] once the DD Forms 250 were signed accepting delivery of the MLRS launcher weapons systems, the five MLRS launchers at issue were government property. The government then could use the launchers and/or their component parts in any appropriate way.

[REDACTED] the Defense Contract Management Agency Quality Assurance Representative at Lockheed Martin's Camden, Arkansas factory, was one of the government representatives authorized to accept the MLRS launchers. [REDACTED] verified to CID that he had received direction from the [MLRS] contracting officer to "ship short"¹¹¹ and that he had complied with that order [Tab 39, MFR documenting the interview of [REDACTED] [REDACTED] dated January 25, 2006]. [REDACTED] signature appears on four of the five DD Forms 250 documenting acceptance of the launchers at issue [Tab 40].¹¹²

The five FCSs separated from their launchers were shipped to Red River Army Depot expeditiously and installed on the five incomplete MLRS launchers there in

¹⁰⁹ Procedurally, MLRS launchers were accepted by the government representative on-site at Lockheed's Camden production plant. Once accepted, the launchers would be shipped to Red River Army Depot and stored pending deployment [Tab 35, Excerpts from CID Agent's Activity Summary documenting the collective interview of [REDACTED] and [REDACTED], all employees of Red River Army Depot], DD Form 250, *Material Inspection and Receiving Report*, documents the government's quality assurance review of items produced by a contractor, whether the items conform to the contract, the government's acceptance of those items from the contractor, and the government's receipt of those items.

¹¹⁰ See *supra* notes 103 and 104. Yet, a review of AR 70-6 reveals that reimbursement, either with funds replaced in the procurement accounts from which the FCSs had been purchased, or in-kind, was not required in either circumstance [Tab 34].

¹¹¹ A euphemism indicating that [REDACTED] was to ship the M2701A1 launchers and their FCSs separately to Red River.

¹¹² The DD Forms 250 pertaining to the five M270A1 launchers shipped to Red River without their FCSs (because their FCSs previously had been shipped to Red River and installed in the five launchers already in the government's inventory that were missing FCSs, whereupon the five complete launchers were shipped to operational units) are as follows: Launcher Serial No. 4AA00221, Shipment No. CAM0034, dated October 24, 2002; Launcher Serial No. 4AA00128, Shipment No. CAM0035, dated October 31, 2002; Launcher Serial No. 4AA00129, Shipment No. CAM0039, dated November 14, 2002; Launcher Serial No. 4AA00132, Shipment No. CAM0037, dated November 20, 2002; and Launcher Serial No. 4AA00131, Shipment No. CAM0038, dated November 25, 2002 [Tab 40]. Each DD Form 250 is marked with the annotation "Launcher shipped less five components (FCP, LIU, WIU PSU and PNU) by AMCOM approval, per letter from [REDACTED] dated October 15, 2002."

inventory (from which the FCSs had been removed and transferred to the HIMARS program in 2001). These five launchers, now complete, were deployed operationally almost immediately thereafter. It was agreed that in the ensuing weeks, as production capabilities allowed, Lockheed would ship to Red River Army Depot the five MLRS launchers devoid of FCSs. This arrangement ensured that the Army received five complete MLRS launchers, even though the five FCSs and the five launchers for which they had originally been designated had been shipped separately due to the urgency associated with the acquisition of the five FCSs.

In the context of its administrative review, the AMCOM Legal Office examined the DD Forms 250 pertaining to the five launchers at issue [Tab 40]. Each DD Form 250 indicated that AMCOM accepted a complete launcher (comprising the MLRS launcher and its FCS) at Lockheed's Camden plant. Each DD Form 250 notes expressly that pursuant to the contracting officer's direction set forth in letter of October 15, 2002, the launcher was shipped to Red River without its FCS. As we know, the FCSs had been removed earlier from the launchers and shipped separately to Red River Army Depot with the understanding that the launchers themselves (devoid of their FCSs) would follow.

In their collective CID interview in January 2006, [REDACTED] and [REDACTED] agreed that Lockheed recently had delivered six FCSs to replace those that had been loaned to the HIMARS testing program in 2001 [Tab 35, Excerpts from CID Agent's Activity Summary documenting the collective interview of [REDACTED], [REDACTED], and [REDACTED], all employees of Red River Army Depot]. [REDACTED] similarly validated that in January 2006, six¹¹³ M270A1 FCS had been delivered to Red River Army Depot to replace those transferred to the HIMARS program in 2001 [Tab 39, MFR documenting the interview of [REDACTED], dated January 25, 2006].

Findings of the AMCOM Review: The AMCOM Legal Office's administrative review substantiated that in the fall of 2002, Lockheed Martin complied with the terms of a government order and accelerated delivery of 19 MLRS M2701A launchers. Consistent with the legal advice she had received, [REDACTED] authorized five of these 19 launchers to be shipped from Lockheed's Camden, Arkansas plant without their associated FCSs. These five FCSs previously had been shipped to the Red River Army Depot where they were installed in five M270A1 launchers already in government inventory (from which the FCSs had been removed in 2001 for use in HIMARS testing).¹¹⁴ These five M270A1 launchers, newly reconstituted with FCSs at Red River, were deployed almost immediately for use in Iraq. Together, the five FCSs shipped separately to Red River and the five launchers (devoid of their FCSs) comprised five complete M270A1 launchers. The government accepted these five complete launchers

¹¹³ All records available to AMCOM appear to indicate that only five FCSs were shipped separately from their launchers. Testimony indicating that six replacement FCSs were delivered may be attributable either to simple human error or to some unknown circumstance not associated with this investigation.

¹¹⁴ The FCSs removed from the M270A1 launchers remained with the HIMARS when those launchers were deployed.

at the Lockheed Martin factory in Camden Arkansas, as documented by the DD Forms 250. It appears that the remaining 14, the production of which was accelerated, were shipped to Red River Depot and deployed without special accommodation.

This complicated chain of events notwithstanding, AMCOM ultimately received five complete MLRS launchers (in addition to 14 other complete launchers whose status is not at issue in this allegation, for a total of 19 launchers). Given the agreement between AMCOM and Lockheed, engendered by the critical operational need for launchers and AMCOM's ratification of the agreement through execution of the appropriate DD Forms 250, AMCOM could use the launchers and/or their component parts in any appropriate way, which is what occurred.

The government appropriately paid Lockheed Martin for each launcher. No evidence establishes that Lockheed Martin was unduly enriched or that it retained improperly any of the M2701A launchers or the FCSs for which the Army had paid. In January 2006, the five M2701A units procured in 2002 (and still in the inventory at Red River Army Depot, devoid of FCSs) received new FCSs, essentially "making whole" the MLRS program in recompense for its 2001 transfer of five FCSs to the HIMARS testing effort.

While one may question this transaction's "round-about" manner, nothing violates law, rule, or regulation. That others, to include Mr. Daniels, might have applied different business judgment does not invalidate the discretion exercised by officials who elected this course of action, nor render their actions inappropriate.

Conclusion: This allegation is unsubstantiated.

OSC Allegation 6: Lockheed Martin improperly used and failed to account for warranty spare launcher parts that rightfully belonged to the Army.

Mr. Daniels asserted that the warranty clause of the M270 launcher follow-on production contract¹¹⁵ required Lockheed Martin to acquire and store new spare launcher parts for repairing launchers delivered to the U.S. Government. Mr. Daniels contended that the MLRS Project Office permitted Lockheed Martin to use these so-called "rotatable warranty spares" (that the U.S. Government had purchased) to repair M270 launchers for delivery to Foreign Military Sales (FMS) customers, although those foreign customers had not purchased warranty coverage as part of their FMS agreements. Further, according to Mr. Daniels, the Army never required Lockheed Martin to reimburse the U.S. Government or to provide the government with any other form of consideration for its unauthorized use of these "rotatable warranty spares."

Mr. Daniels asserted to the OSC his belief that the contract required Lockheed to return all unused spare parts to the U.S. Government upon warranty expiration. Mr. Daniels documented that at the conclusion of the warranty period, Lockheed returned

¹¹⁵ Contract No DAAH01-94-C-A005, dated September 2, 1993, a FFP contract for the production of M270 launchers, Clause E-19 [Tab 41].

40 warranted spare parts to the Army in used condition, even though the U.S. had invoked the warranty on only two occasions throughout contract performance.¹¹⁶ The Army did not require Lockheed Martin to account for the used condition of these warranty spares, which Mr. Daniels estimated to be valued at \$3.5 Million. Ultimately, the MLRS Project Office instructed Lockheed to ship all residual warranty spares to Kuwait "as is," for use in the war effort. Accordingly, Mr. Daniels believed it to be extremely unlikely that Lockheed Martin ever will be required to account for the used condition of the "rotatable warranty spares."

References: None applicable.

CID Investigative Finding: CID ultimately found no criminal offense [Tab 5].

Evidentiary Summary:

The AMCOM Legal Office's administrative review determined that Contract No. DAAH01-94-C-A005 was originally awarded as an undefinitized FFP contract for MLRS launchers and various types of rocket pods. Contract pricing, terms, and conditions applicable to Contract No. DAAH01-94-C-A005 were subsequently definitized in Modification PZ0008, dated May 10, 1995 [Tab 43].¹¹⁷ Modification PZ0008 incorporated an updated warranty for the MLRS launchers that began on the delivery date of the launcher and extended either for 9 months or until the launcher transferred to a field unit, whichever first occurred [Tab 43A].¹¹⁸ Under the terms of paragraph 7c of the updated Warranty Clause, Lockheed Martin was required to accomplish repair or replacement of defective launcher components within an average of 90 days from the date such components were received at the designated repair point [Tab 43A].¹¹⁹ Given that Lockheed delivered all launchers from its production line to the Red River Army Depot, Texarkana, Texas, where they were stored, often for extended periods until deployment, the warranty generally expired while the launcher remained in Red River storage.

With a view to minimizing the "down-time" for launchers found to have a defective component, the Army included at Clause A-11 of Modification PZ0008 a requirement that Lockheed Martin acquire and establish a "rotatable pool" of spare launcher parts [Tab 43B]. Clause A-11 provides:

Attachment entitled "List of Rotable Spares" hereby is incorporated as Attachment "11" to the contract [Tab 43B, List of Rotatable Spares]. The

¹¹⁶ Mr. Daniels provided the OSC with a spreadsheet on which he documented the "used" condition of these warranty spares [Tab 42].

¹¹⁷ Amendment of Solicitation/Modification of Contract Modification PZ0008, dated May 10, 1995 (modifying Contract No. DAAH01-94-C-A005) [Tab 43A], with Attachment 11, List of Rotatable Spares [Tab 43B].

¹¹⁸ *Id.* Clause E-19, *Warranty*, paragraph 2, pp. 46-48 of 53 [Tab 43A] replaced the original warranty clause set forth in Contract No. DAAH01-94-C-A005, Clause E-19, *Warranty*, pp. 21-24 [Tab 41].

¹¹⁹ See *supra* note 117, Modification PZ0008, Clause E-19, paragraph 7c. p. 53 of 53 [Tab 43A].

spares shall become the property of the government at the end of the contract warranty period. Spares not consumed in the performance of the warranty requirements shall be subject to delivery to the Government "as is . . ."

(emphasis added)

[Tab 43A, Clause A-11, p. 4 of 55].

Neither Contract No. DAAH01-94-C-A005 nor Modification PZ0008 contains a separate line item for warranty administration and neither further addresses the warranty spares. Lockheed Martin was not reimbursed separately for spare part acquisition costs. According to [REDACTED], the "rotatable spares" were not included on the contract's list of Government Furnished Property. Clause A-11 and Attachment 11 of Modification PZ0008 set forth Lockheed Martin's obligation with regard to the "rotatable warranty spares" in its entirety. The base contract and the more than 60 modifications thereto lack any other provision relating to "rotatable warranty spares" administration. No contract requirement existed for Lockheed to: maintain a list of spares; document how spares were used or consumed; replace or repair either consumed spares or broken or defective components replaced by a spare; maintain a particular number of spares at a given time; or deliver to the Army a specified number of spares in a particular condition at the warranty's expiration.

Findings of the AMCOM Review: Mr. Daniels's allegations with regard to Lockheed Martin's purported misuse of "rotatable warranty spares" appear premised on the mistaken assertion that the spares were government property. The evidence indicates, however, that pursuant to Contract No. DAAH01-94-C-A005 and Modification PZ0008, Clause A-11 and Attachment 11, the spares were procured at Lockheed expense and remained its property until those spares remaining in Lockheed inventory were transferred to the Government "as is" at the expiration of the warranty period.¹²⁰

Lockheed Martin could use the "rotatable warranty spares" as it deemed appropriate, including to repair launchers sold pursuant to the FMS program, until the expiration of the warranty period—presumably the warranty period applicable to the last launcher produced and delivered under the base contract. Only upon warranty expiration was Lockheed required to transfer spare parts remaining "on hand" to the government in "as is" condition; only then did the transferred spares become government property, subject to government accountability and control.

Conclusion: This allegation is unsubstantiated.

¹²⁰ Mr. Daniels's apparent confusion as to the status of the "rotatable warranty spares" is not surprising. In the context of the CID investigation, witnesses, many with significant familiarity with this contract, cited differing "beliefs" as to the ownership of the spares, Lockheed's obligations with regard to the spares, and the uses of the spares throughout the contract period. Only upon the AMCOM Legal Office's administrative review of the contract and its more than 60 modifications did it determine, with certainty and finality, the spares' status as Lockheed property.

LISTING OF VIOLATIONS OR APPARENT VIOLATIONS OF LAW, RULE, OR REGULATIONS AND CORRECTIVE ACTIONS

As to OSC Allegation 1: This allegation is the subject of on-going administrative investigation by AMCOM and is not addressed herein, but will be addressed in a subsequent supplementary report.

As to OSC Allegation 2: Allegation 2a is unsubstantiated. Allegation 2b is substantiated only as to drawing 13031052, the RRPR Nose Cap (which vests in the government only *Limited Rights* as to the technical data portrayed) and RRPR specification MIS-35095/19, subsequently modified and applied to the LCRRPR by ECP MI-C1973FR0A0 (which vests in the government only "Restricted Rights" in the associated technical data). Such markings may contravene the terms of the contracts pursuant to which the associated technical data was developed. The three-year period in which in the government may challenge the marking on the RRPR Nose Cap drawing has passed. However, the three-year period for challenging Specification MIS-35095/19 as it applies to both the RRPR and the LCRRPR has not lapsed. AMCOM will utilize procedures set forth in the *Validation of Restrictive Markings on Technical Data Rights in Technical Data and Computer Software* clauses of the applicable contracts to challenge the accuracy and propriety of the marking and, as warranted, to compel Lockheed to correct and conform the marking to the terms of the contract.

As to OSC Allegations 3 and 4: These allegations are the subject of on-going administrative investigation by AMCOM and are not addressed herein, but will be addressed in a subsequent supplementary report.

As to OSC Allegation 5: Neither CID nor AMCOM's administrative review found evidence of a violation. Accordingly, corrective action is unwarranted.

As to OSC Allegation 6: Neither CID nor AMCOM's administrative review found evidence of a violation. Accordingly, corrective action is unwarranted.

CONCLUSION

It is fundamental, self-evident, and unquestioned that Army contracting must adhere scrupulously to applicable law, rule, and regulation. Adherence is critical to ensuring that the government receives the benefit of its substantial investment—particularly investments such as these for a weapon system that contributes directly to defense of our nation. The safety of soldiers who operate these systems on the battlefield similarly must be paramount. The Army's adherence to law, as well as how the Army responds to OSC referrals, also affects the integrity of the acquisition system—both actual and perceived—with important, overarching consequences. This OSC referral has reinforced the importance of these core tenets.

The Department of the Army takes very seriously its responsibilities to address, in a timely, thorough, accurate, and deliberative fashion the concerns drawn to its attention by the OSC. The Department has addressed, in depth, Allegations 2, 5, and 6, as referred by the OSC in this case, and has partially substantiated one element of Allegation 2.

Of equal importance, this investigation and the procedures that led to this prolonged response period have prompted a reassessment of the appropriate approach to investigating complex allegations such as these. As discussed above, AMCOM waited for CID to complete its criminal investigation before examining the allegations independently. Although AMCOM's intentions were appropriate—to avoid interfering with CID or, worse, contaminating the investigation or potential criminal prosecution—the criminal investigation took much longer than anticipated, leaving AMCOM with a cooled, if not at times cold, evidentiary trail regarding several of Mr. Daniels's allegations. This situation has prompted AMCOM to rethink its seriatim "CID First" approach, vice parallel, cooperative inquiries.

No evidence with national security implications has been disclosed in the context of this investigation. All potential criminal violations have been referred to the appropriate U.S. Attorney, who has declined prosecution.

This letter, with enclosures, is submitted in partial satisfaction of my responsibilities under Title 5, USC, Sections 1213(c) and (d) with regard to this OSC referral. Please direct any further questions you may have regarding this matter to [REDACTED]

//s//

RONALD J. JAMES
Assistant Secretary of the Army
(Manpower & Reserve Affairs)

Encls
as





DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
MANPOWER AND RESERVE AFFAIRS
111 ARMY PENTAGON
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January 5, 2009

The Honorable Scott J. Bloch
The Special Counsel
U.S. Office of Special Counsel
1730 M Street, N.W., Suite 300
Washington, D.C. 20036-4505

Re: Whistleblower Investigation—Department
of the Army Aviation and Missile Lifecycle
Management Command, Redstone Arsenal,
Huntsville, Alabama (Office of Special Counsel
Case File Number DI-00-1499)

Dear Mr. Bloch:

In accordance with Title 5, United States Code (USC), Sections 1213(c) and (d), this is the second and final report in response to the Office of Special Counsel's (OSC) referral of information requesting an investigation and report of findings in the above-referenced case. The Secretary of the Army has delegated to me his authority, as agency head, to review, sign and submit to you the report required by Title 5, USC, Sections 1213(c) and (d) [Tab 1].

This report and its enclosures contain the names and duty titles of employees of the Department of the Army, Aviation and Missile Life Cycle Management Command (AMCOM),¹ as well as of other Department of the Army soldiers and civilian employees. Release of this information could violate the Privacy Act² and breach personal privacy interests. Accordingly, releases required by Title 5, USC, Section 1213(e) excepted, the Department of the Army requests the opportunity to coordinate in advance on any proposed release of this report, or portions thereof, outside the OSC.

The OSC referral of this case to the Department of the Army comprised six allegations. For reasons addressed below, on July 21, 2008, the Department of the Army submitted to the OSC a partial report addressing Allegations 2, 5, and 6. That report advised that in the interests of obtaining and providing to the OSC accurate and

¹ Approximately three years ago, in 2005, after the OSC's referral of these allegations to the Secretary of the Army, the Department of the Army, Aviation and Missile Command, located at Redstone Arsenal, Huntsville, Alabama, was renamed the Aviation and Missile *Life Cycle Management* Command. For ease of understanding, the acronym AMCOM will be used throughout this report to refer to the Command.

² The Privacy Act of 1974, Title 5, USC, Section 552a.

complete information as to the remaining three allegations (Allegations 1, 3, and 4), the Commander, AMCOM had initiated an investigation under provisions of Army Regulation (AR) 15-6, *Procedures for Investigating Officers and Boards of Officers*, to gather evidence and to make findings and recommendations³ and that the Department of the Army would submit a supplementary report to the OSC on completion of that investigation.

The AR 15-6 investigation having been completed and approved by the Commander, AMCOM,⁴ the instant report addresses OSC-referred Allegations 1, 3, and 4. This report provides the information required by Title 5, USC, Section 1213(d). In addition, the report includes a "Background" section that addresses AMCOM's Multiple Launch Rocket System (MLRS) program, the contracts at issue, and AMCOM's organization.⁵

INFORMATION INITIATING THE INVESTIGATION

By letter dated August 20, 2003 [Tab 2], the OSC referred to the Secretary of the Army its conclusion that a substantial likelihood existed that information provided by Mr. Clarence Daniels, a contract specialist employed at AMCOM, disclosed violations of law, rule, or regulation; a gross waste of funds; and a substantial and specific danger to public safety. Mr. Daniels's allegations concerned operations at AMCOM's MLRS Project Office,⁶ Redstone Arsenal, Huntsville, Alabama. The MLRS Project Office is charged to administer and oversee the Army's MLRS M270 and M270A1 contracts with Lockheed Martin Missile and Fire Control (hereinafter Lockheed Martin or Lockheed).

THE OSC REFERRAL

Summary of the Allegations:

Mr. Daniels essentially made six allegations:

³ See *infra* p. 9. On April 28, 2008, the Commander, AMCOM, appointed an investigating officer (IO) under provisions of Army Regulation (AR) 15-6, *Procedures for Investigating Officers and Boards of Officers*, to gather evidence and to make findings and recommendations regarding Mr. Daniels's Allegations 1, 3, and 4 [Tab 8A]. AR 15-6 promulgates guidelines for Army administrative investigations. Army commands and organizations appoint IOs under provisions of AR 15-6 to investigate a wide variety of allegations and concerns.

⁴ On December 24, 2008, the Commander AMCOM approved the AR 15-6 IO's findings.

⁵ For ease of reading and comprehension, this second and final report repeats select parts of the first Department of the Army report to the OSC, dated July 21, 2008, a copy of which is attached

⁶ Approximately three years ago, in 2005, after the OSC referred the allegations at issue to the Secretary of the Army, the MLRS Project Office was reorganized as a component of AMCOM's newly established Precision Fire Rockets and Missile Systems (PFRMS) Project Office. Pursuant to this reorganization, the MLRS Project Office was redesignated as the MLRS Program Office. Presently, the MLRS Program Office is managed by the MLRS Program Manager under the supervision of the PFRMS Project Manager. For ease of understanding, the designation "MLRS Project Office" and the duty title "MLRS Project Manager" will be used throughout this report to identify the AMCOM component, and the supervisor thereof, charged to manage the technical aspects of the development and production of the family of MLRS launchers, rockets, and missiles.

Allegation 1: The MLRS Project Office used Technical Direction Letters (TDLs) to assign work against the wrong contract to enhance Lockheed Martin profits.

Allegation 2: Lockheed Martin mischaracterized costs it incurred in developing Value Engineering Change Proposals (VECPs), for which costs it was solely responsible under the Reduced Range Practice Rocket (RRPR) and Low Cost Reduced Range Practice Rocket (LCRRPR) contracts, as Engineering Change Proposals (ECP) that were reimbursable by the government. Further, the Army failed to assert proprietary rights over the RRPR and LCRRPR as required by the Federal Acquisition Regulation (FAR) and Defense Federal Acquisition Regulation Supplement (DFARS).

Allegations 3 and 4: Between 2000 and April 2003, AMCOM accepted and paid Lockheed Martin for M2701A MLRS launchers that did not conform to contract specifications and were unsafe. The Army deployed these launchers, placing soldiers at risk. Lockheed Martin also failed to submit a Safety Assessment Report (SAR) for the M270A1 launcher as it was contractually obligated to do. Accordingly, the Army was required to expend additional funds to hire another contractor to prepare the SAR. AMCOM also expended additional appropriated funds to render the launchers safe, a cost that Lockheed Martin should have borne. Further, the Army violated MIL-STD-882, "System Safety Requirements" by implementing and relying on "Fielding Operating Restrictions" rather than design features to achieve an adequate level of launcher safety. These "Fielding Operating Restrictions" were impractical and insufficient to mitigate the launchers' safety deficiencies.

Allegation 5: The Army accepted five M270A1 launchers lacking Fire Control Systems (FCSs), but failed to reduce payments to Lockheed Martin to reflect the launchers' diminished value.

Allegation 6: Lockheed Martin improperly used and failed to account for warranty spare launcher parts that belonged to the Army.

BACKGROUND INFORMATION

The MLRS:

The MLRS is a rocket artillery system that fires surface-to-surface rockets and ballistic and semi-ballistic missiles. The MLRS launcher unit is mounted on a stretched Bradley tank chassis and is loaded with 12 rockets, packaged in two six-rocket pods. Without leaving the cab, a crew of three (driver, gunner and section chief) can fire up to 12 MLRS rockets, individually or in ripples, in less than 60 seconds, striking targets at ranges exceeding 32 kilometers.

The MLRS is highly automated, self-loading and self-aiming. Its on-board fire control computer (the hardware component of the FCS) integrates vehicle and rocket-launching operations, allowing both manual and automatic firing. Typically, a command post transmits selected target data directly to the MLRS FCS, which then aims the launcher and prompts the crew to arm and fire a pre-selected number of rockets. Accuracy is maintained in all

firing modes because the computer re-aims the launcher between rounds. Multiple mission sequences can be preprogrammed and stored in the computer. The MLRS can be transported to an area of operations by aircraft or by train and operated in all weather on most terrain. The MLRS has provided combat capability in support of both Operation Enduring Freedom and Operation Iraqi Freedom.



Contracts with Lockheed Martin to Develop and Produce the MLRS:

The MLRS was developed as a result of a cooperative agreement between the United States, Great Britain, France, Germany, and Italy, signed on July 14, 1979.

AMCOM's typical contracting strategy for weapons system production long has involved the award of both a firm-fixed-price (FFP)⁷ production contract for the delivery of the system end-items and one or more concurrent cost-reimbursement⁸ Industrial Engineering Services (IES) contracts to solve emergent technical problems in production processes and make technical improvements in, or adjustments to, the end-items produced.⁹ In 1989, the U.S. Army awarded a five-year, FFP contract to Lockheed Martin¹⁰

⁷ A firm fixed-price (FFP) production contract provides a price that is not subject to adjustment based on the contractor's cost experience in performing the contract, placing the risk on the contractor to keep costs within the contractually obligated price; the contractor bears responsibility for costs and the resulting profit or loss. A FFP contract incentivizes the contractor to control costs and imposes less administrative burden on the government. See generally Defense Acquisition University, *Glossary of Defense Acquisition Acronyms and Terms*, Appendix B, 12th Edition (July 2005).

⁸ A cost-type contract provides for the government's payment to the contractor of contractually allowable costs incurred in the performance of the contract. The government bears some of the cost risk in these sorts of contracts. See generally Defense Acquisition University, *Glossary of Defense Acquisition Acronyms and Terms*, Appendix B, 12th Edition (July 2005).

⁹ Frequently over the course of developing and producing a new weapon system (particularly during the low-rate, initial production phase), issues arise that require engineering effort to resolve. Industrial Engineering Services (IES) contracts are cost-type contracts used to acquire fixed quantities of engineering service labor hours from a contractor. Generally, an IES contract adopts a broad scope of work, enumerating general categories of engineering services that the government might require of the contractor (e.g., systems and

to produce MLRS M270 rocket launchers. Companion cost-type IES contracts were in place with, or were subsequently awarded to, Lockheed.¹¹

In the early 1990s, the Army began upgrading the M270 launcher to the M270A1 launcher, awarding Lockheed two research and development contracts: one to improve the launcher's FCS and another to improve the launcher's mechanical system.¹² In 1998, the U.S. Army awarded Lockheed a low-rate initial production contract for the M270A1 launcher.¹³ In December 2000, the Army awarded Lockheed Martin a FFP production contract for 66 M270A1 launchers.¹⁴ Two companion IES contracts were awarded to address technical issues arising in the production of the M270A1.¹⁵

production engineering; configuration of hardware and software; product assurance and testing; logistics support, and other engineering services that might be required to solve technical problems in processes and to design and implement technical fixes to the weapon system being produced under companion production contracts) The contractor is not required to guarantee that its work will achieve a particular result, rather, the contractor agrees to provide only its "best efforts" toward the government's objective. Generally, IES contracts cite only an estimated cost; the government bears the cost risk and must reimburse the contractor for all reasonable, allocable, and allowable costs incurred in providing the engineering services directed. Work under IES contracts associated with the MLRS was initiated by a Technical Direction Letter (TDL). AMCOM would issue a TDL to direct Lockheed Martin to provide a specific engineering service encompassed in the IES contract's statement of work (SOW) and to allocate a specific number of labor-hours purchased under the IES contract for the provision of that specific service, all with a view to resolving a technical issue or generating a technical fix to a problem that had arisen in the context of MLRS production under the companion production contract. TDLs are commonly used in acquisitions in which the exact specifications of the end-state product or the exact processes used to arrive at that end-state are not precisely known during contract formation. Among other benefits, use of IES contracts and TDLs prevents the contractor from pricing the substantial cost risk associated with engineering services efforts in the FFP production contract, which would obligate the government to pay a higher fixed-price whether or not additional engineering services were needed or utilized.¹⁶ Contract No. DAAH01-89-C-0336. Loral Vought Systems and LTV Aerospace and Defense Company are predecessors-in-interest to Lockheed Martin and are named in many of the government contracts at issue in this investigation. The two-number grouping in the middle of the contract number identifies the year of contract award (e.g., as to DAAH01-89-1C-0336, the numbers "89" indicate that this contract was awarded in 1989).

¹¹ Contract Nos. DAAH01-92-C-0243 and DAAH01-96-C-0295.

¹² Contract Nos. DAAH01-92-C-0432 and DAAH01-95-C-0329. "Research and development" contracts are often referred to as "engineering and manufacturing" contracts. Contract Nos. DAAH01-92-C-0432 and DAAH01-95-C-0329 developed the improved FCS and mechanical systems, respectively, for the M270A1 launcher. Research and development contracts commonly provide the vehicle by which a weapon system is fully designed and tested. The objectives of such contracts are to translate a promising design into a stable system design, validate manufacturing or production processes, and demonstrate through testing whether the system will meet stated requirements.

¹³ Contract No. DAAH01-98-C-0138. A low-rate initial production contract produces the minimum quantity of a weapon system necessary to provide production-configured or representative articles for operational testing and evaluation, to establish an initial production base for the system, and to permit an orderly increase in the production rate to lead to full-rate production. Further, the low-rate production process facilitates the identification of technical problems that may surface when the system is manufactured on a production line rather than in a research and development facility. Two lots of the M270A1 launchers were produced under low-rate initial production Contract No. DAAH01-98-C-0138. A third low-rate production lot was produced under follow-on Contract No. DAAH01-00-C-0109. The three lots were identified as Low-Rate Initial Production (LRIP) I, LRIP II, and LRIP III, respectively.

¹⁴ Contract No. DAAH01-00-C-0109. The first set of launchers delivered under this contract comprised LRIP III, a low-rate production lot. See *supra* note 13.

¹⁵ Contract Nos. DAAH01-98-C-0157 and DAAH01-01-C-0141.

The following chart summarizes the MLRS-related contracts¹⁶ relevant to this report:

Contract Number	Description of Contract
DAAH01-89-C-0336	A five-year, FFP production contract for MLRS M270 launchers. The Reduced Range Practice Rocket (RRPR) was developed as a Value Engineering Change Proposal (VECP) to this contract.
DAAH-01-94-C-A005	Follow-on, FFP production contract for additional M270 launchers.
DAAH01-92-C-0243 DAAH01-96-C-0295	Cost-reimbursable contracts for industrial engineering services (IES), intended to solve technical problems in production processes or to make technical improvements to MLRS M270 launchers being produced in companion production contracts.
DAAH01-92-C-0432 DAAH01-95-C-0329	Cost-type Research and Development Contracts for the purpose of upgrading the M270 launcher to the M270A1 model. Contract No. DAAH01-92-C-0432 developed the M270A1 launcher's improved FCS. A funding "cap" was eventually established for this contract. Contract DAAH01-95-C-0329 developed the M270A1 launcher's improved mechanical system. This contract was never subject to a funding "cap."
DAAH01-98-C-0138	A FFP, low-rate initial production contract for M270A1 launchers.
DAAH01-00-C-0109	Follow-on FFP production contract for M270A1 launchers.
DAAH01-98-C-0157 DAAH01-01-C-0141	Cost-reimbursable contracts for IES intended to solve technical problems in production processes and to make technical improvements to launchers being produced in companion production contracts. The Army issued TDL TR-99-001 (with Revisions A and B), against IES Contract No. DAAH01-98-C-0157 for engineering services to develop the LCRRPR.
DAAH01-00-C-0064	A FFP contract for production of the LCRRPR.

AMCOM Organization Related to the MLRS:

AMCOM manages the Army's aviation and missile acquisition programs, one of which is the MLRS. Both during the period relevant to the OSC-referred allegations and today, two AMCOM organizational elements were and are primarily responsible for developing and producing the MLRS: the MLRS Project Office, charged to manage MLRS

¹⁶ Each of the cited contracts, together with its modifications and allied papers, comprises hundreds, if not thousands of pages. Accordingly, the full contracts are not attached as enclosures to this report. Rather, as appropriate, excerpts of relevant documents are enclosed for OSC review.

launchers, rockets, and missiles;¹⁷ and the Acquisition Center, comprised of several divisions that provide functional contracting and acquisition support to the MLRS Project Office and other AMCOM project offices, and to which AMCOM contracting officers and contract specialists are assigned.¹⁸ Both during the period relevant to the OSC-referred allegations and today, Mr. Daniels was and is employed as a contract specialist in the Acquisition Center.

The MLRS has long been one of the missile programs under the executive management of the AMCOM Program Executive Office for Missiles and Space (PEO MS). During the period relevant to the OSC-referred allegations, the MLRS Project Manager supervised the MLRS Project Office and reported to the PEO MS, which, in turn, reported to Headquarters, Department of the Army.¹⁹ The Director of the Acquisition Center reported to the Commander of AMCOM.

CONDUCT OF THE INVESTIGATION

Receipt of OSC Allegations and Referral to CID for Criminal Investigation:

On August 25, 2003, the Army Office of the General Counsel (OGC) forwarded the OSC request for investigation to the U.S. Army Materiel Command (AMC) Office of Command Counsel [Tab 3]. This referral was appropriate because AMC was, and is, AMCOM's superior command. On August 27, 2003, the AMC Command Counsel forwarded the OSC referral to the AMCOM Legal Office for action.

In September 2003, the U.S. Army Criminal Investigation Command (often called "CID") agreed to investigate Mr. Daniels's allegations. CID Special Agent (SA) [REDACTED] a procurement fraud investigator at Redstone Arsenal, Alabama, initiated an investigation. Consistent with standard practices espoused by the Department of Justice and other federal criminal investigative agencies and designed to emphasize the primacy of, and to minimize potential interference in, the criminal investigation, [REDACTED] requested that AMCOM take no independent investigative action regarding Mr. Daniels's complaints during the pendency of CID's investigation.

During the course of [REDACTED] criminal investigation, fellow agents from the Redstone Arsenal CID office deployed to Southwest Asia to support the wars in Iraq and Afghanistan. These deployments left the Redstone Arsenal CID office short-handed and significantly increased [REDACTED] caseload. Sometimes she was the acting special agent in charge of the office, which required her to perform managerial and administrative

¹⁷ See *supra* note 6. Today the MLRS Project Office is known as the MLRS *Program Office*. In this context, "management" includes the design, development, production, and maintenance of the MLRS through both in-house and contractual efforts.

¹⁸ The Director of the Acquisition Center, AMCOM, is dual-hatted as the AMCOM Principal Assistant for Contracting (PARC). The PARC issues each contracting officer a warrant authorizing that contracting officer to bind the U.S. Government up to a specified dollar amount.

¹⁹ See *supra* note 6. Today, the MLRS Project Manager is known as the MLRS *Program Manager*. The MLRS *Program Manager* reports through the PFRMS Project Office to the PEO MS, which reports to Headquarters, Department of the Army.

duties in addition to carrying a heavy investigative caseload. Also, for a considerable period, ██████████ was required to support a special Task Force investigation of a major fraud case arising in Iraq.

By law, an agency is allotted 60 days to investigate and submit to the OSC a written report of findings as to the matters referred.²⁰ In the instant case, however, frequent co-worker deployments, ██████████ work on the special Task Force, and the breadth and complexity of the allegations referred by OSC resulted in CID completing its investigation on November 30, 2007. The OGC requested, and the OSC granted, a series of 18 extensions, all but two in increments of 90 days, to bring the CID investigation to closure [Tab 4].²¹

A final summary of CID's findings with regard to each OSC-referred allegation is attached at Tab 5. The only criminal offenses that CID substantiated related to an aspect of Allegation 3: CID determined that Lockheed Martin had violated criminal statutes prohibiting false claims²² and false statements²³ when it claimed to have prepared, and accepted payment for preparing a timely, contractually acceptable, SAR for the M270A1. In fact, due to Lockheed's substantial delay in completing and submitting an acceptable SAR, AMCOM had tasked and paid an independent contractor to assist in preparing a parallel safety assessment as part of that contractor's participation on an AMCOM-sponsored Safety Risk Reduction Effort (SRRE) team.

The U.S. Attorney's Office for the Northern District of Alabama ultimately declined to prosecute any of the six OSC-referred allegations [Tab 6].²⁴ Further, the statute of

²⁰ Title 5, USC, Section 1213(c)(1)(B).

²¹ See *id.* (authorizing the Special Counsel to agree to a longer period of time for the agency to investigate and report its findings). See Extension 1, requested October 14, 2003 (granted by OSC on October 14, 2003, for 90 days); Extension 2, requested January 9, 2004 (granted by OSC on January 12, 2004, for 90 days); Extension 3, requested April 20, 2004 (granted by OSC on April 21, 2004, for 90 days); Extension 4, requested July 21, 2004 (granted by OSC on July 22, 2004, for 90 days); Extension 5, requested October 19, 2004 (granted by OSC on October 22, 2004, for 90 days); Extension 6, requested January 21, 2005 (granted by OSC on January 24, 2005, for 90 days); Extension 7, requested April 28, 2005 (granted by OSC on April 28, 2005, for 90 days); Extension 8, requested July 25, 2005 (granted by OSC on July 25, 2005, for 90 days); Extension 9, requested October 24, 2005 (granted by OSC on October 25, 2005, for 90 days); Extension 10, requested January 24, 2006 (granted by OSC on January 25, 2006, for 90 days); Extension 11, requested April 21, 2006 (granted by OSC on April 24, 2006, for 60 days); Extension 12, requested June 26, 2006 (granted by OSC on dated unknown, for 90 days); Extension 13, requested August 25, 2006 (granted by OSC on August 28, 2006, for 90 days); Extension 14, requested November 28, 2006 (granted by OSC on date unknown, for 90 days); Extension 15, requested February 28, 2007 (granted by OSC on February 28, 2007, for 90 days); Extension 16, requested May 31, 2007 (granted by OSC on May 31, 2007, for 90 days); and Extension 17, requested September 4, 2007 (granted by OSC on September 6, 2007, through November 27, 2007); Extension 18, requested November 23, 2007 (granted by OSC November 28, 2007, for 90 days) [Tab 4].

²² Title 18, USC, Section 287

²³ Title 18, USC, Section 1001.

²⁴ See U.S. Department of Justice Letter, subject: *Lockheed Martin Matters*, dated March 16, 2005 (pertaining to CID investigation 0024-03-CID13-34960, addressing OSC-referred Allegations 1, 2, 5, and 6) [Tab 6A]; U.S. Department of Justice Letter, subject: *Lockheed Martin Matters*, dated March 16, 2005 (pertaining to CID investigation 0024-03-CID13-34961, addressing OSC-referred Allegations 3 and 4) [Tab 6B]. As set forth in the final summary of CID findings at Tab 5, *supra*, on August 8, 2005, the Office of the Army General Counsel requested that CID reopen its investigation of the allegations. CID complied and developed new information. Based on this new information, CID "unfounded" all but one allegation; CID founded the criminal offenses of

limitations applicable to the sole criminal offense substantiated by CID (with regard to OSC-referred Allegation 3) had expired, barring prosecution. The U.S. Attorney recommended that AMCOM review the allegations for possible administrative action, however.

AMCOM Legal Office Administrative Review and the AR 15-6 Investigation:

Shortly after CID completed its investigation, the AMCOM Legal Office reviewed Mr. Daniels's allegations to determine whether administrative or remedial contractual action was appropriate and, more broadly, to assess AMCOM's business practices and procedures. The AMCOM Legal Office review resolved OSC-referred Allegations 2, 5, and 6; findings with regard to those three allegations were presented in the first report submitted by the Department of the Army to OSC on July 21, 2008. However, the AMCOM Legal Office determined that further administrative investigation of OSC-referred allegations 1, 3, and 4 was required. Accordingly, on April 28, 2008, the Commander, AMCOM, appointed an investigating officer (IO) under provisions of AR 15-6, *Procedures for Investigating Officers and Boards of Officers*, to gather evidence regarding OSC-referred Allegations 1, 3, and 4 [Tab 8A].²⁵ On December 24, 2008, the Commander, AMCOM approved the AR 15-6 IO's findings. The OGC requested, and the OSC granted, five additional extensions, all in increments of 60 days, to facilitate the AMCOM Legal Office review, the conduct of the AR 15-6 investigation, and the drafting, review, and submission of both the first Department of the Army report to the OSC, dated July 21, 2008, and the instant (second and final) report.²⁶

AMCOM's Legal Office, together with CID and the AR 15-6 IO, played an integral role in reviewing this matter and developing the information that forms the basis of this report. Moreover, AMCOM's Legal Office will play a role in executing the corrective actions and other recommendations resulting from this OSC referral.

**SUMMARY OF EVIDENCE OBTAINED FROM THE INVESTIGATIONS
AND AGENCY DISCUSSION**

Allegation 1: The MLRS Project Office used TDLs²⁷ to assign work against the wrong contract to enhance Lockheed Martin profits.²⁸

false claims and false statements related to OSC-referred allegation 3, as discussed in the text above. CID presented these findings to the Assistant U.S. Attorney (AUSA) for prosecution. The AUSA verbally declined to prosecute on April 27, 2007, noting a lapse in the statute of limitations applicable to prosecution of these offenses. See *infra* pp. 8, 9.

²⁵ See *supra* note 3. Note that the AR 15-6 IO afforded Mr. Daniels the opportunity to provide information to be included or considered in the context of the investigation. Mr. Daniels indicated that his disclosures to the OSC were a matter of record with the OSC and CID, but provided no additional information for consideration by the AR 15-6 IO [Tab 44, Email Exchange between Mr. Clarence Daniels and ██████████ over the period of October 14-16, 2008].

²⁶ See Extension 19, requested February 28, 2008 (granted by OSC on March 3, 2008, for 60 days); Extension 20, requested May 2, 2008 (granted by OSC on May 19, 2008, for 60 days); Extension 21, requested July 1, 2008 (granted by OSC on July 9, 2008, for 60 days); Extension 22, requested September 4, 2008 (granted by OSC on September 10, 2008 for 60 days); Extension 23, requested November 7, 2008 (granted by OSC on November 19, 2008 for 60 days, through January 5, 2009) [Tab 7].

²⁷ See *supra* note 9. The use of TDLs is a common business practice in AMCOM acquisitions. See generally Carol A. Mallow, *Acquisition of Engineering Services*, Naval Post-Graduate School, Monterey, CA, December

• **Allegation 1a.** Mr. Daniels alleged that whenever Lockheed Martin encountered unexpected difficulty or expense in meeting a condition of production under the FFP production contract for the MLRS launcher, the MLRS Project Office would improperly issue a TDL against the related cost-type IES contract, authorizing Lockheed to perform, and to be reimbursed for, work that more properly should be performed under the production contract, for which reimbursement already had been fixed. The Project Office once submitted several projected TDLs to the Acquisition Center, where Mr. Daniels worked, for approval, but Mr. Daniels found certain of them to be outside the scope of the IES contracts against which they were to be issued and rejected them. The Project Office continued to issue questionable TDLs, but stopped submitting them to the Acquisition Office for approval. Mr. Daniels claimed to have informed his supervisor of his concerns, but asserted that she failed to report the problem or to take any other remedial action.

• **Allegation 1b.** Mr. Daniels alleged that AMCOM approved TDLs against IES contracts for work that already had been funded under two M270A1 launcher cost-type research and development contracts: Contract No. DAAH01-92-C-0432 and Contract No. DAAH01-95-C-0329.²⁹ Mr. Daniels asserted that because of Lockheed Martin cost overruns and poor performance, AMCOM had modified these cost-type research and development contracts, imposing on each a funding "cap" that effectively converted them to FFP contracts. Mr. Daniels contended that the work Lockheed performed, and for which it was paid pursuant to TDL TR-99-001 (with Revisions A and B) [Tab 19],³⁰ TDL LM-98-03 [Tab 45],³¹ TDL IL-99-01 [Tab 48],³² TDL PT-P-99-020 [Tab 49],³³ and TDL LO-99-05 [Tab 50],³⁴

2001, available at Defense Technical Information Center, <http://handle.dtic.mil/100.2/ADA401404>. The AMCOM MLRS Project Office issued TDLs only in conjunction with an IES contract.

²⁸ Note that on January 2005, the United States, acting through the Department of Justice, and Lockheed Martin entered into a *Settlement Agreement* by which Lockheed agreed to pay \$1,400,000 to the United States in settlement of allegations contained in Defense Contract Audit Agency (DCAA) Report No. 3311-99L17900003, dated December 17, 1999. The DCAA Report found that Lockheed had mischarged the government on certain MLRS-related contracts. Lockheed accepted certain of the audit's conclusions, but denied any misconduct and elected to settle the matter. The AMCOM Legal Office review of both the DCAA Report and the *Settlement Agreement* determined that neither related to the OSC-referred allegations at issue.

²⁹ See *supra* note 12.

³⁰ TDL TR-99-001 was issued on May 19, 1999 and authorized Lockheed to expend 12,161 engineering services labor hours pursuant to IES Contract No. DAAH01-98-C-0157 to develop the LCRRPR [Tab 19A]. Revision A to this TDL was issued on September 15, 2000 and authorized Lockheed to expend an additional 6,102 hours of work to fabricate a number of LCRRPRs [Tab 19B]. Revision B issued on July 23, 2001 and authorized Lockheed to expend 870 hours to effect a change in the LCRRPR software. AMC Form 1095G documents the issuance of Revision B and the allocation of \$85,460.10 in appropriated funds to pay for the engineering hours to be expended in execution of the task [Tab 19C]. Note that the cover email directing the issuance of Revision B erroneously cites to TDL TM-99-001; the associated AMC Form 1095G properly cites to TDL TR-99-001.

³¹ TDL LM-98-03 [Tab 45] was issued on April 29/30, 1999, and acknowledged by Lockheed on May 13, 1999. This TDL cancelled TDL #1 [Tab 46] (which had been redesignated, without change, as TDL TM-98-01, a copy of which could not be located, despite exhaustive search) and TDL #2 [Tab 47] and redirected the 36,235 labor hours remaining on those two TDLs to "continue porting the M270A1 Software from the VADs/rational environment to the commercial VxWorks operating system and continue efforts to integrate and qualify a Digitized Cell (DC) capable of supporting the requirements for Force XXI Embedded Battlefield Command (EBC) applications."

³² TDL IL-99-01 [Tab 48] was issued on April 28/29, 1999, and acknowledged by Lockheed on May 13, 1999. This TDL authorized Lockheed to expend 12,587 labor hours to "provide product design, design support, and structural technologies support to Camden, Marconi, and Vickers" (para A1); "provide electronic systems technical support to Camden, Harris, and AlliedSignal, upgrade the MLRS SPORT Test Set (MST) and the

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duplicated work that Lockheed should have performed and for which it had been paid, under "capped" research and development Contracts No. DAAH01-92-C-0432 and/or DAAH01-95-C-0329.

References: None applicable.

CID Investigative Finding: CID ultimately found no evidence of criminal misconduct associated with Allegation 1 [Tab 6A].

Evidentiary Summary:

- **Allegation 1a.**

The AMCOM Legal Office review validated Mr. Daniels's assertion that IES contracts expressly prohibit the duplication of work covered by other government contracts.³⁵

Launcher Adapter group (LAG) to support M270A1 OT; develop a LAG Level 2 TDP and update the MST TDP" (para A2); "provide systems engineering support to Camden, Harris, AlliedSignal, Marconi, and Vickers; coordinate launcher-to-munitions interface requirements and develop/maintain the resultant interface specifications" (para A3); "provide reliability engineering, safety engineering, human factors engineering, and maintainability engineering support; develop an electronic reliability and maintainability database for the fielded M270A1" (para A4); "provide management support to all IES upgrade support efforts" (para A5); and to travel and attend meetings in support of the above efforts (para A6).

³³ TDL PT-P-99-020 [Tab 49] was issued on April 28/30, 1999 and accepted by Lockheed on May 13, 1999. This TDL authorized Lockheed to expend 2477 labor hours to conduct the improved FCS maintainability dry run and the formal improved FCS maintainability demonstration.

³⁴ TDL LO-99-05 [Tab 50A] was issued on August 16, 1999 and authorized Lockheed to expend 1300 labor hours to review legacy operations and maintenance procedures associated with the M270A1 for consistency and update the format and content as necessary; update the M270A1 validation plan and validate the correctness and completeness of all legacy operation and maintenance tasks in the Interactive Electronic Technical Manuals (IETM); validate any additional or change operation and maintenance tasks necessitated by changed processes or hardware; and perform all remaining tasks under the 1999-2000 publication schedule. Note that the *Background* section, para 2, last sentence, indicates "[c]urrent funding to support this effort [the completion of tasks set forth on the 1999-2000 publication schedule] is inadequate." This should not be interpreted to imply that AMCOM was attempting to shift requirements from either FFP production contract (Contract No. DAAH01-98-C-0138) or research and development contracts (Contract Nos. DAAH01-92-C-0432 and DAAH01-95-C-0329), to the cost-based IES contract (Contract No. DAAH01-98-C-0157) The paragraph explains that M270A1 software updates unexpectedly required concomitant updates to the operating and maintenance instructions pertaining to those software systems. The continuous nature of these required changes absorbed much of the funding originally intended for the completion of tasks set forth on the 1999-2000 production schedule. It is clear that neither the production contract nor the research and development contracts provided for the creation or update of technical manuals or other publications as required by the TDL, however. As best AMCOM can ascertain, the reference to funding inadequacies refers only to the inability to complete the tasks remaining on the 1999-2000 publication schedule established under previously issued TDLs. TDL LO-99-05 was subsequently reissued on September 9/22, 2009, without material change, as TDL LO-99-06, and accepted by Lockheed on October 25, 1999 [Tab 50B]. Note that TDL LO-99-06 was co-signed by ██████████, Contracting Officer, on September 29, 1999

³⁵ See Excerpt from IES Contract No. DAAH01-98-C-0157, Statement of Work (SOW), Industrial Engineering Services for Multiple Launch Rocket System, dated October 15, 1998 [hereinafter SOW, IES Contract No. DAAH01-98-C-0157] [Tab 22], *Introduction*, para 1.2 (advising that the general requirements of the SOW are "to obtain contractor services outlined herein without duplicating efforts that have been accomplished or are required on existing Government contracts."); Part I, *Technical Program Management*, para 3.1.5 (advising that "duplication of work covered by . . . Government contracts is prohibited.")

Because Mr. Daniels did not specify the TDLs to which Allegation 1a pertained, the AMCOM Legal Office reviewed each of the TDLs transmitted by the OSC to the Department of the Army in support of Mr. Daniels's allegations, together with each of the TDLs to which the OSC referral letter specifically cited, to determine whether any had been improperly issued against the IES contract at issue.³⁶ The AMCOM Legal Office assessed both whether the work called for by the TDL was within the scope of the work applicable to IES Contract No. DAAH01-98-C-0157 [Tab 22]³⁷ and whether the TDL duplicated work already slated for performance under production Contract No. DAAH01-98-C-0138.³⁸

- TDL TR-99-001 (with Revisions A and B) [Tab 19],³⁹ issued against IES Contract No. DAAH01-98-C-0157, related to the fabrication of the LCRRPR and changes to its enabling software. The core purpose of the effort expended under this TDL was to determine whether parts from old, surplus rockets could be used to comprise a RRPR-like practice rocket.⁴⁰

TDL TR-99-001 required Lockheed Martin to build eighteen (18) "test and qualification" LCRRPRs with a modification to ensure a smoke/flash signature and to provide support for qualification testing of the LCRRPRs;⁴¹ update the MLRS rocket firing algorithms to support the LCRRPR;⁴² and prepare both an Engineering Change Proposal (ECP) to incorporate the LCRRPR design into MIS-31710A (the RRPR specification) and a Technical Data Package (TDP).⁴³

Part II, *System and Production Engineering*, paragraph 2.8 of the IES Contract No. DAAH01-98-C-0157 SOW, directed the contractor to provide "engineering support for revision or redesign of manufacturing methods, equipment, and special tooling which result from technical changes required as a result of field problems [Tab 22, p. 6]." This service would have properly addressed the modification of the LCRRPR to ensure a smoke/flash signature as set forth in Task 1 of the TDL. Part II, *System and Production Engineering*,

³⁶ In support of its referral of Mr. Daniels's allegations to the Department of the Army, the OSC forwarded copies of TDL TR-99-001 (with Revisions A and B) [Tab 19], TDL LM-98-03 [Tab 45], TDL IL-99-01 [Tab 48], TDL PT-P-99-020 [Tab 49], TDL LO-99-05 (later reissued, without material change, as LO-99-06) [Tab 50], each of which also was specifically cited in the OSC referral letter. In addition, the OSC forwarded with its referral copies of TDL #1 [Tab 46] (which had been redesignated, without change, as TDL TM-98-01, a copy of which could not be located, despite exhaustive search), TDL #2 [Tab 47], and TDL TM-99-009 [Tab 51], none of which were further discussed in the referral letter. Although forwarded by the OSC to the Department of the Army, TDL TM-99-009 was never issued, as indicated by Mr. Daniels's typed annotation on that document. Accordingly, TDL TM-99-009 was not analyzed in the context of the AMCOM Legal Office review or the AR 15-6 investigation, and is not discussed further in this report.

³⁷ See SOW, IES Contract No. DAAH01-98-C-0157 [Tab 22]. The AMCOM Legal Office review determined that all of the TDLs at issue had been issued against IES Contract No. DAAH01-98-C-0157.

³⁸ See original SOW, dated June 29, 1998, applicable to low-rate initial production Contract No. DAAH01-98-C-0138 [Tab 52A] and the two revised SOWs [Tab 52B, First Revised SOW, dated December 1, 1998; Tab 52C; Second Revised SOW, dated April 27, 2000]. The AMCOM Legal Office review determined that Contract No. DAAH01-98-C-0138 was the only MLRS production contract in existence when the TDLs questioned by Mr. Daniels were issued.

³⁹ See *supra* note 30.

⁴⁰ At the time, the RRPR was created from new parts.

⁴¹ TDL TR-99-001, Task 1 [Tab 19A].

⁴² TDL TR-99-001, Task 2 [Tab 19A].

⁴³ TDL TR-99-001, Task 3 [Tab 19A].

paragraph 2.11 of the SOW, provided for "qualification testing of new hardware" [Tab 22, p. 6] and would appear to have authorized the building and qualification testing of the test rockets, also required by Task 1.

Part II, *System and Production Engineering*, paragraph 2.7 of the SOW, provided for contractor "support for . . . post-deployment software support . . . on the MLRS FCS [Tab 22, p. 6]." This service would have covered updating the MLRS algorithms to accommodate the LCRRPR as set forth in Task 2 of the TDL.

Part III, *Configuration Management*, paragraph 3.1.2 of the SOW, required the contractor to prepare ECPs authorized by the government, the same requirement set forth in Task 3 of the TDL [Tab 22, p. 7]. Further, Part II, *System and Production Engineering*, paragraph 2.4 of the SOW required Lockheed to perform work to ensure that proposed changes to a system were mechanically and electrically interchangeable without modification to all similar equipment [Tab 22, p. 5]. This requirement appears to have addressed the overarching objective of this TDL.

The work specified in the TDL was determined to be within the scope of the IES SOW. None of the tasks required pursuant to TDL TR 99-01 (with Revisions A and B) fell within the scope of work required under FFP low-rate initial production Contract No. DAAH01-98-C-0138 or duplicated such work.⁴⁴ The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for work authorized by this TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for the work at issue.

- **TDL LM-98-03** [Tab 45].⁴⁵ issued against IES Contract No. DAAH01-98-C-0157, required Lockheed Martin to perform engineering services to improve the M270A1 launcher's operating software. This TDL directed Lockheed's effort to introducing a new operating system and a new computer processor into the FCS. This task and others relating to adapting existing FCS software to the new operating system and processor were covered by paragraph 2.7 of Part II, *System and Production Engineering*, of the IES contract, which required the contractor to provide engineering support for the hardware and software requirements of the improved FCS [Tab 22, p. 6].

The other major tasks under this TDL related to upgrading or developing test equipment to accommodate the new operating system and processor for the improved FCS. Paragraph 3 of Part V of the IES contract SOW, *Product Assurance and Test*, directed the contractor to modify and develop special test equipment, if needed and approved by the government [Tab 22, pp. 18, 19].

The work specified in the TDL was determined to be within the scope of the IES SOW. None of the tasks required pursuant to TDL LM-98-03 fell within the scope of work required under FFP low-rate initial production Contract No. DAAH01-98-C-0138 or

⁴⁴ See Contract No. DAAH01-98-C-0138, SOWs [Tab 52]. Neither the original nor the revised SOWs contain provisions for engineering work to develop low-cost practice rockets.

⁴⁵ See *supra* note 31.

duplicated such work.⁴⁶ The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for work authorized by this TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for the work at issue.

- TDL IL-99-01 [Tab 48],⁴⁷ issued against IES Contract No. DAAH01-98-C-0157, called for a broad effort on Lockheed's part, tasking various types of engineering support for both the mechanical and electrical systems of the M270A1 launcher and various types of systems engineering and specialty engineering related to launcher production.

Task 1 of this TDL called for product design, design support, and structural technologies support to Camden (Lockheed Martin's manufacturing facility), Marconi, and Vickers (both subcontractors to Lockheed on the production contract). As explained by Mr. [REDACTED]⁴⁸ this task was most likely generated by a need to find new sources of supply for parts that had become obsolete given the length of time it had taken to for the M270A1 to reach low-rate initial production [Tab 53, Statement of [REDACTED]]. Paragraph 2.11 of Part II of the IES Contract SOW, *System and Production Engineering*, required the contractor to perform analyses to determine component availability and to perform qualification testing of new hardware [Tab 22, p. 6].

Task 2 of this TDL required the contractor to upgrade certain test equipment for the M270A1 to support operational testing and to develop technical data packages for those items. Paragraphs 2.15 and 2.12, respectively, of Part II of the IES SOW, required Lockheed to upgrade test facilities as needed to maintain compatibility with the fielded MLRS and to incorporate all approved changes to the technical data package [Tab 22, p. 6].

Task 3 of this TDL required the contractor to develop launcher to munition interfaces and the resulting interface specifications. Paragraph 3 of Part III of the IES SOW, *Configuration Management*, required the contractor to incorporate all changes to the technical data package [Tab 22, p. 7].

Task 4 of the TDL required the contractor to develop an electronic reliability and maintainability database. Paragraph 2.4 of Part II of the IES SOW required the contractor to support the government's repair parts procurement program [Tab 22, pp. 5, 6].

Task 5 of the TDL required the contractor to perform various cost reduction studies. Paragraph 2.11 of Part II of the IES Statement of Work required the contractor to perform analyses of alternate materials, components, and processes to support competitive procurement [Tab 22, p. 6].

The work specified in the TDL was determined to be within the scope of the IES SOW. None of the tasks required pursuant to TDL IL-99-01 fell within the scope of work

⁴⁶ See Contract No. DAAH01-98-C-0138, SOWs [Tab 53]. Neither the original nor the revised SOWs contain provisions for software support, development of computer upgrades or development of test equipment.

⁴⁷ See *supra* note 32.

⁴⁸ [REDACTED] is currently the Chief Engineer, PEO-MS. In 1999, he was the Chief of Program Management, MLRS Project Office.

required under FFP low-rate initial production Contract No. DAAH01-98-C-0138 or duplicated such work.⁴⁹ The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for the work authorized by this TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for the work at issue.

- **TDL PT-P-99-020** [Tab 49],⁵⁰ issued against IES Contract No. DAAH01-98-C-0157, required an "IFCS Maintainability Demonstration Dry Run and the formal IFCS Maintainability Demo" on the Improved FCS of the M270A1 launcher.⁵¹ Part II, *System and Production Engineering*, paragraph 2.7 of the IES contract SOW, required the contractor to provide hardware and software support for the M270A1 launcher's improved FCS [Tab 22, p. 6]. The work specified in the TDL was determined to be within the scope of the IES SOW. None of the tasks required pursuant to TDL PT-P-99-020 fell within the scope of work required under FFP low-rate initial production Contract No. DAAH01-98-C-0138 or duplicated such work.⁵² The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for the work authorized by this TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for the work at issue.

- **TDL LO-99-05** (later reissued, without material change, as TDL LO-99-06) [Tab 50],⁵³ issued against IES Contract No. DAAH01-98-C-0157, required the transfer of data from the M270 launcher Interactive Electronic Technical Manuals (IETMs) to the M270A1 IETMs. Part XII, *Technical Publications*, paragraph 1.1 of the IES contract SOW, required the contractor to prepare, deliver and distribute new, changed, revised, and backup publications pages for technical manuals associated with the M270A1 launcher [Tab 22, p. 26]. The work specified in the TDL was determined to be within the scope of the IES SOW. None of the tasks required pursuant to TDL LM-99-05 fell within the scope of work required under FFP low-rate initial production Contract No. DAAH01-98-C-0138 or duplicated such work.⁵⁴ The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for the work authorized by this TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for the work at issue.

⁴⁹ See Contract No. DAAH01-98-C-0138, SOWs [Tab 52]. Neither the original nor the revised SOWs contain any provisions for obsolescence work, upgrading test facilities, updating the technical data package, supporting the repair parts procurement program, or performing cost reduction efforts.

⁵⁰ See *supra* note 33.

⁵¹ The purpose of these demonstrations was the conduct of "fault isolation testing" on the improved FCS. In this context, "fault isolation testing" involved the testing of software to determine what would or might cause it to malfunction or "crash."

⁵² See Contract No. DAAH01-98-C-0138, SOWs [Tab 52]. Neither the original nor the revised SOWs contain any provisions for hardware or software testing.

⁵³ See *supra* note 34.

⁵⁴ See Contract No. DAAH01-98-C-0138, SOWs [Tab 52]. Neither the original nor the revised SOWs contain any provisions related to technical manuals.

• **TDL #1 [Tab 46]**,⁵⁵ issued against IES Contract No. DAAH01-98-C-0157, called for a study of, and report on, a low-cost improved FCS using an alternate design that relied on competitively available materials and components. Part II, *System and Production Engineering*, para 2.11 of the IES contract SOW, required the contractor to analyze potential alternate materials, processes, and supplies to support competitive procurement of materials, components, and assemblies [Tab 22, p. 6]. None of the tasks required pursuant to TDL #1 fell within the scope of work required under FFP low-rate initial production Contract No. DAAH01-98-C-0138 or duplicated such work.⁵⁶ The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for the work authorized by this TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for the work at issue.

• **TDL #2 [Tab 47]**,⁵⁷ issued against IES Contract No. DAAH01-98-C-0157, required Lockheed to conduct market research for the redesign of the M270A1 launcher fire control panel and the executive processor card component of the launcher's FCS to ensure software compatibility with Force XXI Battle Command Brigade and Below⁵⁸ applications. Part II, *System and Production Engineering*, paragraph 2.8 of the IES contract SOW, required Lockheed Martin to provide engineering support for revision or redesign of equipment that resulted from technical changes [Tab 22, p. 6]. The work specified in the TDL was determined to be within the scope of the IES SOW. None of the tasks required pursuant to TDL #2 fell within the scope of work required under FFP low-rate initial production Contract No. DAAH01-98-C-0138 or duplicated such work.⁵⁹ The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for the work authorized by this TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for the work at issue.

The evidence gathered through the AMCOM Legal Office review of the above TDLs and in the context of the AMCOM AR 15-6 investigation established that each TDL was properly issued to address a specific technical issue that arose during, or was otherwise related to, production of the MLRS launcher. Further, the TDL tasks fell within the scope of the work contemplated by IES Contract No. DAAH01-98-C-0157 pursuant to which they were issued; none of the tasks were within the scope of work of the associated MLRS production contract or duplicated such work. The available evidence indicates that

⁵⁵ See *supra* notes 31, 36. TDL #1 [Tab 46], which was included in the documents forwarded to the Department of the Army with the OSC referral letter was later redesignated, without change, as TDL TM-98-01 (a copy of which could not be located, despite exhaustive search). Subsequently, TDL LM-98-03 [Tab 45] canceled both TDL TM-98-01 and TDL #2 [Tab 47].

⁵⁶ See Contract No. DAAH01-98-C-0138, SOWs [Tab 52]. Neither the original nor the revised SOWs contain any provisions for studies.

⁵⁷ See *supra* notes 31, 36. Subsequently, TDL LM-98-03 [Tab 45] canceled TDL #2.

⁵⁸ "Force XXI Battle Command Brigade and Below" is the Army's principal digital command and control system at brigade-level and below. The system integrates EBC technology (appliqué hardware and software that depict a digitized graphical view of the battlefield and transmit this view to soldiers) in various platforms at brigade level and below, as well as with appropriate Division and Corps elements that operate in support of brigade operations.

⁵⁹ See Contract No. DAAH01-98-C-0138, SOWs [Tab 52]. Neither the original nor the revised SOWs contain any provisions for market research or studies.

Lockheed was paid only once, pursuant to the cost-type IES contract, for the work authorized by TDL; the evidence does not indicate that Lockheed was paid twice (under both the FFP low-rate initial production contract and the cost-type IES contract) for any of the work at issue.

Mr. Daniels also expressed concern to OSC regarding the process AMCOM utilized in the initiation, review, approval, and issuance of TDLs. ██████████ AMCOM Legal Counsel, advises that there exists no law or regulation governing either the substantive or procedural aspects of TDL initiation, review, approval, or issuance. Specifically, there is no legal or regulatory requirement that a contracting officer review or approve a TDL prior to issuance, nor has any such requirement ever obtained. Further, at the time on which Mr. Daniels's complaints to OSC focus, there existed no policy requirement for contracting officer review.

In fact, the SOW applicable to IES Contract No. DAAH01-08-C-0157, expressly authorizes the *Project Manager* to provide or confirm, by TDL, the discrete tasks the contractor is to perform as part of an overall engineering services effort.⁶⁰ The SOW further requires that "[a]ll TDLs will be . . . signed by the [Project Manager] or his designee."⁶¹

The AMCOM Legal Office review and AR 15-6 investigation documented that prior to signature by the MLRS Project Manager, each of the TDLs questioned by Mr. Daniels was subjected to several layers of review. Each TDL was initiated by the MLRS Project Office Division Chief responsible for the function to be tasked. The TDL then was forwarded to the Chief, MLRS Program Management, for review. In 1999, ██████████ served as the Chief of Program Management for the MLRS Project Office. In that capacity, he "concurred in" each of the TDLs at issue in the OSC referral, with three exceptions: TDL #1 (later redesignated, without change, as TDL TM-98-01), issued in August 1998⁶² and TDL #2, also issued in August 1998,⁶³ were reviewed by, and received the concurrence of ██████████ predecessor, ██████████ TDL TR-99-001 (with Revision A), issued in September 2000, was reviewed and approved by ██████████ but Program Manager review of Revision B to the TDL, issued in July 2001, is not documented.⁶⁴ When the AMCOM AR 15-6 IO presented ██████████ with copies of each TDL for review, ██████████ advised that none of the TDLs were "any that I feel should have been handled

⁶⁰ The SOW applicable to IES Contract No. DAAH01-98-C-0157, Part I, *Technical Program Management*, para 2.1 [Tab 22, p. 2], provides, "[a] Program Manager (PM) or his designee, is designated the Government Technical Manager for this engineering services contract. He is authorized to request, approve, or cancel in writing, any sub-ESM. Such written technical direction to the contractor will be provided and/or confirmed at the sub-ESM level by technical direction letters (TDLs) related to this portion of the contract. All TDLs will be serialized for control by the Contracting Officer's Technical Representative and signed by the Government Technical Manager [the PM] or his designee." A "sub-ESM," as defined in para 1.2 of Part I of the SOW, ". . . delineates discrete tasks to be performed as part of an overall [engineering services] effort" and reflects the work to be performed, objectives to be attained, estimated cost, and the timeframe of effort. See definition of "Engineering Services Memorandum," SOW, Part I, para 1.1 and definition of "Sub-Engineering Services Memorandum," SOW, Part I, para 1.2 [Tab 22, p. 2].

⁶¹ SOW, IES Contract No. DAAH01-98-C-0157, Part I, *Technical Program Management*, para 2.1. Note that the Project Manager is dual-hatted as the "Government Technical Manager." [Tab 22, p. 2].

⁶² See *supra* notes 31, 36 [Tab 46].

⁶³ *Id.* [Tab 47].

⁶⁴ See *supra* note 30 [Tab 19C].

under the EMD [Engineering and Manufacturing Development] contracts (*i.e.*, a research and development contract) for the Improved Launcher Mechanical System (ILMS) or Improved Fire Control System (IFCS)." [Tab 53, Statement of ██████████].⁶⁵

In accordance with the IES contract requirement that the MLRS Project Manager or his designee approve TDLs, each of the TDLs at issue in the OSC referral, with two exceptions, was approved by ██████████ who served as the Deputy MLRS Project Manager during most of the period relevant to Mr. Daniels's allegations; TDL #1 (later redesignated, without change, as TDL TM-98-01), issued in August 1998⁶⁶ and TDL #2, also issued in August 1998,⁶⁷ were approved by ██████████ who served as the MLRS Deputy Project Manager prior to ██████████.

In addition, ██████████ an engineer with the AMCOM Aviation and Missile Research, Development and Evaluation Center, was responsible for managing the requirements for IES contracts beginning in the mid-summer of 1998 and continuing throughout much of the period relevant to Mr. Daniels's allegations. In the context of the AMCOM AR 15-6 investigation, ██████████ testified that he had "watched the TDLs to make sure they were in the scope of the IES contract and did not duplicate effort on the other contracts." [Tab 54, Statement of ██████████].

Although the SOW applicable to IES Contract No. DAAH01-08-C-0157 included no requirement for contracting officer or AMCOM Acquisition Center review, the OSC referral indicates that at a certain point in time, Mr. Daniels, who worked in the Acquisition Center, reviewed and rejected certain TDLs as "out of scope." It appears that only two of the TDLs referred by the OSC to the Army or cited in the OSC referral letter had been reviewed by Mr. Daniels:

- As TDL TR-99-001 [Tab 19] was being formulated, Mr. Daniels objected to its issuance against IES Contract No. DAAH01-98-C-0157 on the grounds that the TDL required work outside the scope of that contract [Tab 20].⁶⁸ The matter was referred to the AMCOM legal advisor who cautioned against the use of the IES contract to engage in "new effort," but acknowledged that "solving issues and problems" with regard to "a component which is expensive, unreliable, or difficult to replace (and thereby reducing cost) is covered" by the IES contract. It appears that the legal advisor deferred to the technical experts to make the "scope" determination [Tab 21].⁶⁹ Given that TDL TR-99-001 was issued days

⁶⁵ ██████████ commented to the IO that the only "questionable item I see is a comment about design and design support in IL-99-01. If I recall correctly, that effort may have been due to experiencing some problems with obsolescence in the Low Rate Initial Production because it had taken so long to get to that point in the program." In light of ██████████ comment, ██████████ reviewed both the task assigned pursuant to TDL IL-99-01 [Tab 48] and the IES SOW. ██████████ determined that design effort related to obsolescence (redesigning the launcher to accommodate parts different from parts originally used in the design of the launcher, but now obsolete) was within the scope of the IES contract. See *supra* pp. 14, 15 and para 2.11 of Part II, *System and Production Engineering*, of the IES SOW [Tab 22, p. 6].

⁶⁶ See *supra* notes 31, 36 [Tab 46].

⁶⁷ *Id.* [Tab 47].

⁶⁸ Memorandum from Mr. Daniels to TDL Board Chairman ██████████ subject: *Acquisition Comments on Technical Direction Letter (TDL), TR-99-001 proposed for incorporation into Industrial Engineering Services (IES) DAAH01-98-C-0157*, dated May 13, 1999 [Tab 20].

⁶⁹ Handwritten memorandum signed by ██████████ former AMCOM legal advisor for the MLRS [Tab 21].

later, it appears that AMCOM officials determined that the work authorized by the TDL fell within the scope of work authorized by IES Contract No. DAAH01-98-C-0157 [Tab 22].⁷⁰

- **TDL TM-99-009** [Tab 51] includes a typewritten annotation that “[t]his TDL was withdrawn by the MLRS, PMO after it was revealed that this was an attempt to place excess [Lockheed Martin] employees under the government IES contract.” Mr. Daniels’s signature and signature block appear below the type.

As reported by the OSC, Mr. Daniels contended that after he rejected certain TDLs, the Project Office continued to authorize TDLs, but stopped seeking Acquisition Center approval of same. Mr. Daniels’s assertion does not allege improper conduct on the part of AMCOM or the MLRS Project Office, however, because, as set forth above, there is no legal or regulatory requirement for contracting officer or Acquisition Center review of a TDL. Further, at the time, there existed no policy requirement for contracting officer review.⁷¹

Mr. Daniels alleged that he reported his concerns about the Project Office’s use of TDLs to his first-level supervisor, Contracting Officer [REDACTED], but that she “failed to report the problem or to take any other remedial action regarding his concerns.” [REDACTED] transferred out of the MLRS Division of the Acquisition Center at an unknown date and retired from government service in June 2003 [Tab 55, Email from [REDACTED] to [REDACTED], dated June 5, 2008]. The AMCOM AR 15-6 IO was unable to locate [REDACTED] for an interview.⁷² Nevertheless, other evidence does appear to confirm Mr. Daniels’s assertion that for some period of time, Acquisition Center personnel were not included in the review of TDLs.⁷³ Because there was no legal or regulatory requirement for contracting officer or Acquisition Center review of a TDL (and, at the time there existed no policy requiring contracting officer review), that Acquisition Center personnel were not included in the TDL review process was neither illegal nor inappropriate. The AMCOM AR 15-6 IO could find no evidence that [REDACTED] or others in the Acquisition Center ever reported Mr. Daniels’s concerns about the use of TDLs to the Acquisition Center Policy Office or elsewhere within AMCOM for investigation or review.⁷⁴ Given that there was no

⁷⁰ There appears to be ample justification for the contracting officer’s decision. See *supra* pp. 12, 13

⁷¹ See *supra* pp. 17.

⁷² The AMCOM AR 15-6 IO advised that he could not locate [REDACTED] through government records or acquaintances.

⁷³ In her statement to CID, [REDACTED] an MLRS Contracting Officer, related that “historically, the . . . Project Office had not furnished the AC [Acquisition Center] personnel copies of the TDLs but began doing so around 1998 . . .” [REDACTED] also advised CID that she “began reviewing TDLs in 1998, but a previous supervisor, [REDACTED] omitted [REDACTED] and her co-worker, Mr. Clarence Daniels, from reviewing the documents.” [Tab 38, MFR documenting the interview of [REDACTED] dated December 8, 2005]. Based on anecdotal evidence, the AMCOM Legal Office believes that [REDACTED] excluded Mr. Daniels and [REDACTED] from the process of reviewing TDLs because their frequent expressions of concern, which [REDACTED] appears to have determined to have been without merit, unduly delayed both the issuance of the TDLs and the performance of the often critical work they authorized. Pursuant to a recent request from the AMCOM AR 15-6 IO, [REDACTED] reviewed the TDLs at issue in the OSC referral. In her response to the IO, [REDACTED] indicated that she could not remember exactly why Mr. Daniels was objecting to the TDLs [Tab 56, Email from [REDACTED] to [REDACTED] dated October 22, 2008].

⁷⁴ AMCOM’s Acquisition Policy Office is responsible for ensuring that the AMCOM Acquisition Center and other elements of AMCOM comply with all applicable laws, regulations, and policies. AMCOM’s Inspector General conducts inquiries into allegations of violations of law, regulation, or policy; mismanagement; or unethical behavior which, if true, may be of concern to the Commander, AMCOM. The AMCOM Legal Office

legal or regulatory requirement for contracting officer or Acquisition Center review of a TDL (and, at the time there existed no policy requiring contracting officer review) and that the TDLs at issue do not appear to be erroneous, irregular, or inappropriate, it does not appear that [REDACTED] apparent failure to report Mr. Daniels's concerns breached a duty to Mr. Daniels or to the government.

In 2001, [REDACTED] was assigned as the Branch Chief for that part of the AMCOM Acquisition Center responsible for servicing the M270 and M270A1 launcher program and the IES contracts associated with those launchers. [REDACTED] observed that, consistent with the absence of any legal or regulatory requirement for contracting officer review of TDLs, not all TDLs issued under then current IES Contract No. DAAH01-08-C-0157 were reviewed and approved by contracting officers in his branch. With the award of the new IES Contract No. DAA H01-01C-0141, [REDACTED] instituted a policy requiring that a contracting officer in the AMCOM Acquisition Center review, approve, and issue any TDL under an IES contract associated with the MLRS. It is important to note, however, that Mr. Snyder instituted this policy "to add another layer of review . . . based on an abundance of caution . . . not because prior practice of omitting contracting officer approval of TDLs was illegal or violated any formal policy . . ." [Tab 57, First Declaration of [REDACTED] dated August 11, 2008]. In her statement to CID, [REDACTED] affirmed that [REDACTED] review policy was implemented in 2001 and remains in place through the present day.⁷⁵

- **Allegation 1b.**

Research and development Contract No. DAAH01-92-C-0432 procured the development of the improved FCS.⁷⁶ Research and development Contract No. DAAH01-95-C-0329 developed the improved Launcher Mechanical System (LMS).⁷⁷ Together, these contracts upgraded the basic M270 MLRS launcher to the M270A1 configuration. In May 1998, a Milestone Decision Review was held to obtain approval to procure the improved LMS kits, integrate them with the improved FCS kits, and produce the M270A1 [Tab 53, Statement of [REDACTED] Tab 60, Slide Deck, *Milestone Decision Review, IFCS/ILMS Hardware Decision*, May 28, 1998].

provides complete legal services to all AMCOM command officials, elements, organizations, and other agencies serviced by AMCOM. The AMCOM Ombudsman is an independent senior government official responsible for receiving and acting upon inquiries and complaints concerning AMCOM. Each of these reporting agencies and resources for redress was in existence during the period relevant to the OSC-referred allegations and each remains so today. None of these offices report having received a referral of information or complaint regarding the MLRS Project Office's use of TDLs from [REDACTED] or from any other person during the period covered by Mr. Daniels's allegations to OSC.

⁷⁵ In an interview on December 8, 2005, [REDACTED] told CID that " . . . currently the . . . Project Office faxes the TDL to the AC [Acquisition Center] and her supervisor. [REDACTED] will sign off on the TDL." [Tab 38, MFR documenting the interview of [REDACTED].

⁷⁶ Excerpt of SOW, Contract No. DAAH01-92-C-0432 [Tab 58]. Paragraph 1.1 of the SOW provides, "[t]he Multiple Launch Rocket System (MLRS) Fire Control System (FCS) requires improvement of the existing FCS design to mitigate obsolescence, reduce operational and sustainment burden and accommodate M270 Family of Munitions (MFOM) future needs and growth."

⁷⁷ Excerpt of SOW, Contract No. DAAH01-95-C-0329 [Tab 59]. Paragraph 1.0 of the Performance Requirements for this contract provides, "[t]his requirement is an Engineering and Manufacturing Development (EMD) contract for modification of the Multiple Launch Rocket System (MLRS) with Improved Fire Control System (IFCS), designated M270A1. The modification is to add an Improved Launcher Mechanical System (ILMS)."

In October 1998, as part of the strategy that evolved from the Milestone Decision Review, Contract No. DAAH01-92-C-0432 for the development of the improved FCS was amended by Modification P000113 [Tab 61A]. The modification imposed a funding cap that required completion of all tasks identified in Attachment 005 to the modification within a specified cost ceiling.⁷⁸ Imposition of the funding cap did not formally amend the contract type from a "cost-type" to a FFP contract, but it did limit the total compensation payable to Lockheed under terms of the contract to no more than \$152,427,775.⁷⁹ Attachment 005 to the modification defined the scope of effort to be performed within the funding cap [Tab 61B]. It is important to note that Lockheed Martin did not agree to complete all tasks associated with development of the improved FCS under Contract No. DAAH01-92-C-0432 for the "capped" amount; Lockheed agreed to complete only the tasks specified in Attachment 005, together with the other tasks it already had performed. The funding cap did not apply to any task not enumerated in Attachment 005. Any task that AMCOM wished Lockheed Martin to perform with regard to the development of the improved FCS that had not already been accomplished under Contract No. DAAH01-92-C-0432 or was not enumerated in Attachment 005 would necessarily have to be performed and paid for under another contract.

Contrary to Mr. Daniels's assertion, no cost cap ever was imposed on research and development Contract No. DAAH01-95-C-0329.

The AMCOM Legal Office and AR 15-6 IO reviewed each of the TDLs to which the OSC referral letter specifically cited as having been improperly issued against IES Contract No. DAAH01-98-C-0157, but calling for work already allocated against research and development Contracts No. DAAH01-92-C-0432 (cost-capped) or DAAH01-95-C-0329 (not capped). This review revealed as follows:

- **TDL TR-99-001** (with Revisions A and B) [Tab 19]⁸⁰ related to the fabrication of the LCRRPR and changes to its enabling software. The LCRRPR has no relevance to the development of either the improved FCS for the M270A1, as procured by Contract No. DAAH01-92-C-0432 or the improved LMS, addressed by Contract No. DAAH01-95-C-0329. Accordingly, the tasks associated with this TDL were outside the scope of both research

⁷⁸ Amendment of Solicitation/Modification of Contract, Modification P000113, dated October 26, 1998 (modifying Contract No. DAAH01-92-C-0432) [Tab 61A], with Attachment 005, IFCS Contract Closeout Tasks, dated October 13, 1998 [Tab 61B].

⁷⁹ Modification P00113 stated, in pertinent part:

A-1. The purpose of this modification is to establish a funding cap in the amount of \$152,427,775. for the completion of DAAH01-92-C-0432, Multiple Launch Rocket Systems (MLRS), Improved FCS Requirements

A-2. The contractor, (Lockheed Martin Vought Systems (LMVS)), hereby agrees to complete the requirements of DAAH01-92-C-0432, as prescribed in Attachment 005, to this modification, titled "IFCS Contract Close Out Task," dated October 14, 1998.

1. The contractor agrees to accept the funded amount \$152,427,775, as total compensation for the completion of the above referenced work, the parties agree to the following definition for total compensation. Total compensation includes all allowable allocable cost, facilities capital cost of money, and fee, up to the established funding cap amount of \$152,427,775.

Tab 61A, *emphasis added*.

Note that Modification P00113 misstated the date of Attachment 0005.

⁸⁰ See *supra* note 30.

and development contracts. Further, the base TDL was issued on May 19, 1999, and Revisions A and B thereafter; the base TDL and both revisions were issued subsequent to Modification P000113 to Contract No. DAAH01-92-C-0432 and the modification's enumeration, in Attachment 005, of the limited number of specified tasks Lockheed was required to accomplish under that contract. Given that the tasks set forth in this TDL and its Revisions are not listed in Attachment 005 to Modification P000113, placing this TDL tasking against Contract No. DAAH01-92-C-0432 would have been inappropriate. The available evidence indicates that Lockheed was paid only once, pursuant to cost-type IES Contract No. DAAH01-98-C-0157, for work authorized by this TDL; the evidence does not indicate that payments to Lockheed Martin pursuant to this TDL duplicated payments under either research and development contract at issue.

- **TDL LM-98-03 [Tab 45]**⁸¹ procured engineering services required to improve the M270A1's operating software, "porting the M270A1 software from the VADS/Rational environment to the commercial VX Works operating systems and to continue efforts to integrate and qualify a Digitized Cell (DC) capable of supporting the requirements for Force XXI Embedded Battlefield Command (EBC) applications." As stated above, Contract No. DAAH01-92-C-0432 developed the launcher's improved FCS and Contract No. DAAH01-95-C-0329 developed the launcher's improved LMS. Neither contract pertained to the launcher's operating software; this TDL tasking was outside the scope of both research and development contracts. Further, this TDL was issued on April 29/30, 1999, subsequent to Modification P000113 to Contract No. DAAH01-92-C-0432 and the modification's enumeration, in Attachment 005, of the limited number of specified tasks Lockheed was required to accomplish under that contract. Given that the tasks set forth in this TDL are not listed in Attachment 005 to Modification P000113, placing this TDL tasking against Contract No. DAAH01-92-C-0432 would have been inappropriate. The available evidence indicates that Lockheed was paid only once, pursuant to cost-type IES Contract No. DAAH01-98-C-0157, for work authorized by this TDL; the evidence does not indicate that payments to Lockheed Martin pursuant to this TDL duplicated payments under either research and development contract at issue.

- **TDL IL-99-01 [Tab 48]**⁸² called for a broad effort on Lockheed's part, tasking various types of engineering support for both the mechanical and electrical systems of the M270A1 launcher and various types of systems engineering and specialty engineering related to launcher production. This TDL was issued on April 28/29, 1999, subsequent to Modification P000113 to Contract No. DAAH01-92-C-0432 and its enumeration, in Attachment 005, of the limited number of specified tasks Lockheed was required to accomplish under that contract. Given that the tasks set forth in this TDL are not listed in Attachment 005 to Modification P000113, placing this TDL tasking against Contract No. DAAH01-92-C-0432 would have been inappropriate. Further, this TDL, directed Lockheed to allocate 5000 hours of engineering services in support of "mechanical systems" to "Camden," the Lockheed Martin facility that manufactured the M270A1 launcher. Accordingly, the AMCOM AR 15-6 IO determined that the tasks assigned by this TDL related to production engineering. As such, these tasks would have exceeded the scope of research and development Contract No. DAAH01-95-C-0329, which addressed the

⁸¹ See *supra* note 31.

⁸² See *supra* note 32.

development, but not the production or manufacture, of the improved LMS. The available evidence indicates that Lockheed was paid only once, pursuant to cost-type IES Contract No. DAAH01-98-C-0157, for work authorized by this TDL; the evidence does not indicate that payments to Lockheed Martin pursuant to this TDL duplicated payments under either research and development contract at issue.

- **TDL PT-P-99-020** [Tab 49]⁸³ required an "IFCS Maintainability Demonstration Dry Run and the formal IFCS Maintainability Demo" on the M270A1 launcher's improved FCS. The TDL is dated April 28/30, 1999, subsequent to Modification P000113 to Contract No. DAAH01-92-C-0432 and its enumeration, in Attachment 005, of the limited number of specified tasks Lockheed was required to accomplish under that contract. Given that the tasks set forth in this TDL are not listed in Attachment 005 to Modification P000113, placing this TDL tasking against Contract No. DAAH01-92-C-0432 would have been inappropriate. And, the TDL bears no relevance to work on the launcher's improved LMS and thus would not have been within the scope of Contract No. DAAH01-95-C-0329. The available evidence indicates that Lockheed was paid only once, pursuant to cost-type IES Contract No. DAAH01-98-C-0157, for work authorized by this TDL; the evidence does not indicate that payments to Lockheed Martin pursuant to this TDL duplicated payments under either research and development contract at issue.

- **TDL LO-99-05** (later reissued, without material change, as TDL LO-99-06) [Tab 50]⁸⁴ required the transfer of data from the M270 launcher Interactive Electronic Technical Manuals (IETMs) to the M270A1 IETMs. This TDL is dated August 16, 1999, subsequent to Modification P000113 and its enumeration, in Attachment 005 of the modification, of the limited number of specified tasks Lockheed was required to accomplish under that contract. Given that the tasks set forth in this TDL are not listed in Attachment 005 to Modification P000113, placing this TDL tasking against Contract No. DAAH01-92-C-0432 would have been inappropriate. Moreover, the TDL bears no relevance to work on the launcher's improved FCS or improved LMS and thus would not have been within the scope of either research and development contract. The available evidence indicates that Lockheed was paid only once, pursuant to cost-type IES Contract No. DAAH01-98-C-0157, for work authorized by this TDL; the evidence does not indicate that payments to Lockheed Martin pursuant to this TDL duplicated payments under either research and development contract at issue.

The evidence gathered over the course of the AMCOM Legal Office review of the above TDLs and the AR 15-6 investigation established that the tasks allocated by the TDLs at issue did not fall within the scope of work contemplated by either research and development Contract No. DAAH01-92-C-0432 (cost-capped) or Contract No. DAAH01-95-C-0329 (not capped). In particular, although the TDLs were issued post October 26, 1998,⁸⁵ none of the TDL tasks were specified in Modification P000113, Attachment 005 for completion by Lockheed under the cost ceiling that modification imposed on Contract No.

⁸³ See *supra* note 33.

⁸⁴ See *supra* note 34.

⁸⁵ See *supra* notes 78, 79. October 26, 1998 was the date on which Modification P000113 to research and development Contract No. DAAH01-92-C-0432 was issued [Tab 61A]. Attachment 005 to that modification enumerated a limited number of specified tasks Lockheed was required to accomplish under the contract [Tab 61B].

DAAH01-92-C-0432. Accordingly, Mr. Daniels's assertions that these TDLs were issued by AMCOM with a view to facilitating Lockheed's evasion of the cost cap associated with that research and development contract or that AMCOM deliberately overlooked Lockheed's "double-billing" of tasks under both a TDL and Contract No. DAAH01-92-C-0432, are without merit. The available evidence indicates that Lockheed was paid only once, pursuant to cost-type IES Contract No. DAAH01-98-C-0157, for work authorized by the above TDLs; the evidence does not indicate that payments to Lockheed Martin pursuant to any of these TDLs duplicated payments under either research and development contract at issue.

Findings of the AR 15-6 Investigation and the AMCOM Legal Office Review:

As to OSC Allegation 1a, the AMCOM Legal Office review and AR 15-6 investigation established that each TDL in question was properly issued to address a specific technical issue that arose during, or was otherwise related to, the production of MLRS launchers. Further, the TDLs' tasks fell within the scope of work contemplated by IES Contract No. DAAH01-98-C-0157 pursuant to which they were issued; none of the tasks were within the scope of work of the associated MLRS production contract or duplicated such work. The available evidence indicates that Lockheed was paid only once, pursuant to the cost-type IES contract, for work authorized by these TDLs; the evidence does not indicate that Lockheed was paid twice (under both the FFP production contract and the cost-type IES contract) for any of the work at issue.

As to the process AMCOM utilized with regard to TDLs, there exists no law or regulation governing either the substantive or procedural aspects of TDL initiation, review, approval, or issuance. Specifically, at all times relevant to the OSC-referred allegations, there was no legal, regulatory, or policy requirement for contracting officer review or approval of a TDL prior to issuance. However, throughout the period at issue, TDLs were subjected to several layers of review within the MLRS Project Office and were approved by the MLRS Project Manager, as required by IES Contract No. DAAH01-98-C-0157. There is some evidence that Mr. Daniels objected to the issuance of two TDLs: one such TDL was referred for review by legal counsel, and subsequently issued without legal objection; the other was withdrawn. Evidence also tends to show that at some point, the Acquisition Center, to include Mr. Daniels, was omitted from the TDL review process. Given that there was no legal or regulatory requirement for contracting officer or Acquisition Center review of TDLs (and, at the time, there existed no requirement for contracting officer review), such exclusion did not, constitute improper conduct. The assertion that Mr. Daniels informed [REDACTED] his supervisor, of his concerns about improper TDLs, but that she failed to report the problem or to take other remedial action can be neither substantiated nor disproven due, in major part, to [REDACTED] unavailability. The AR 15-6 IO was unable to confirm any report of purported TDL irregularities, by [REDACTED] or any other person, to the AMCOM chain of command or to any of the other organizations or offices specifically authorized to receive and act on such concerns. Given that there was no legal or regulatory requirement for contracting officer or Acquisition Center review of TDLs and that and that the TDLs at issue do not appear to be erroneous, irregular, or inappropriate, it does not appear that [REDACTED] apparent failure to report Mr. Daniels's concerns breached a duty to Mr. Daniels or to the government.

Although not required by law or regulation to do so, in 2001, in an abundance of caution, AMCOM implemented a policy requiring contracting officer review of TDLs for MLRS engineering services. In accordance with this policy, all TDLs issued against IES Contract No. DAAH01-C-01-0141⁸⁶ and thereafter have been reviewed by the Acquisition Center [Tab 57, First Declaration of ██████████ dated August 11, 2008].

As to Allegation 1b, the evidence gathered from the AMCOM Legal Office review of the above TDLs and the AR 15-6 investigation established that none of the tasks allocated by the TDLs were within the scope of work contemplated by either research and development Contract No. DAAH01-92-C-0432 (cost-capped) or Contract No. DAAH01-95-C-0329 (not capped). In particular, although the TDLs were issued post October 26, 1998,⁸⁷ none of the TDL tasks were specified in Modification P000113, Attachment 005, for completion by Lockheed under the cost ceiling imposed on Contract No. DAAH01-92-C-0432. Accordingly, Mr. Daniels's assertions that these TDLs were issued by AMCOM with a view to facilitating Lockheed's evasion of the cost cap associated with that research and development contract or that AMCOM deliberately overlooked Lockheed's "double-billing" of tasks under both a TDL and Contract No. DAAH01-92-C-0432, are without merit. The available evidence indicates that Lockheed was paid only once, pursuant to cost-type IES Contract No. DAAH01-98-C-0157, for work authorized by the above TDLs; the evidence does not indicate that payments to Lockheed Martin pursuant to any TDL duplicated payments under either research and development contract at issue.

Conclusion: This allegation is unsubstantiated.

Allegation 2: Lockheed Martin mischaracterized costs it incurred in developing VECPs, for which costs it was solely responsible under the RRPR and LCRRPR contracts, as ECP that were reimbursable by the government. Further, the Army failed to assert proprietary rights over RRPR and LCRRPR technical data as required by the FAR and DFARS.

This allegation was addressed in the prior report submitted by the Department of the Army to the OSC on July 21, 2008. The allegation that Lockheed mischaracterized costs it incurred in developing VECPs was unsubstantiated by that report. The report substantiated, in part, the allegation that AMCOM failed to assert proprietary rights over RRPR and LCRRPR technical data and described the corrective action that AMCOM will undertake in this regard.

Allegations 3 and 4: These allegations are addressed in concert because an appraisal of the launchers' compliance with safety-related performance specifications set forth in the MLRS production contract is inherently related to an assessment as to whether AMCOM improperly accepted unsafe launchers.

- **Allegations 3a and 4a.** Mr. Daniels asserted that beginning in 2000, when Lockheed began delivery of the M270A1 launchers, until April 2003, at which time AMCOM

⁸⁶ IES Contract No. DAAH01-C-01-0141 was the first IES contract to be issued post-2001.

⁸⁷ See *supra* notes 78, 79, 85.

temporarily halted the delivery and acceptance of the launchers, the MLRS Project Office accepted, paid for, and deployed to Iraq and Kuwait, over fifty M270A1 launchers that failed to meet critical safety-related performance specifications set forth in the applicable contracts. Mr. Daniels contended that these launchers posed a substantial danger to the safety of soldiers who would be firing, or standing in close proximity to, them. Mr. Daniels further alleged that notwithstanding the launchers' noncompliance with safety-related performance specifications, AMCOM failed to reduce its payments to Lockheed to reflect the launchers' defects.

According to Mr. Daniels, in year 2000, Lockheed Martin failed to provide a SAR for the M270A1 launcher as it was contractually obligated to do. Mr. Daniels claimed that as a result, the Army was required to expend additional funds to hire an independent contractor to prepare the SAR. Mr. Daniels contended that the independently-prepared SAR ultimately determined that the launchers did not meet the contract's safety-related performance specifications and that both the MLRS Project and Safety Offices, having reviewed the independent contractor's SAR, were aware of these deficiencies. Subsequently, in November 2000, Lockheed briefed the MLRS Project Office about safety deficiencies associated with the launchers, to include "uncommanded cage movement,"⁸⁸ and proposed to halt launcher delivery. Mr. Daniels alleged that despite the findings of the independently-prepared SAR and Lockheed's expression of concern, the Project Office authorized resumption of launcher delivery.

Mr. Daniels alleged that although the MLRS Project Office learned in 2000 of the significant safety concerns associated with the launchers, it delayed notifying the AMCOM Acquisition Center until 2002. According to Mr. Daniels, [REDACTED] the Contracting Officer, who was both responsible for ensuring that the terms of the contract were satisfied and had the authority to stop accepting the deficient launchers, was not informed of these concerns until she attended a meeting in April 2002 at which the independently-prepared SAR was discussed. Mr. Daniels claimed that the Project Office then ignored [REDACTED] [REDACTED] advice to seek corrective action from Lockheed before accepting any more launchers, and continued to accept delivery of the defective launchers.⁸⁹ Mr. Daniels averred that meanwhile, AMCOM established a government team to engage in a Safety Risk Reduction Effort (SRRE), the purpose of which was to identify the specific safety concerns associated with the launcher and to determine how those concerns could be mitigated. Based on the findings of the SRRE, a launcher "get well plan" was developed with the objective of correcting the identified safety hazards over an extended period of time without affecting the launcher delivery schedule. According to Mr. Daniels, the AMCOM Safety Office concurred in this approach and granted a "Conditional Safety Release" allowing the government to accept the launchers, contingent on Lockheed's adherence to the "get well plan" and correction of the launchers' deficiencies within a two-year period.

⁸⁸ "Uncommanded cage movement" refers to a presumed defect in the MLRS software whereby the cage, in which the MLRS rocket pods and rockets are contained, moves at rapid tactical speed, without having been commanded to do so.

⁸⁹ Mr. Daniels asserted that the AMCOM's acceptance of launchers known to be defective violated FAR 46.407 [Tab 62], which requires the government to "reject supplies or services not conforming in all aspects to the contract requirements."

Subsequently, in October 2002, Lockheed finally presented AMCOM with its own SAR, reporting safety deficiencies that Mr. Daniels alleged were much more serious⁹⁰ than those previously identified. In light of this new information, the Safety Center concluded that the launchers did not comply with the contract's safety-related performance specifications and in April 2003, ██████████ halted acceptance and delivery of the launchers.

- **Allegation 3b.** Mr. Daniels asserted that because Lockheed refused to provide AMCOM with a SAR for the M270A1 launcher, as the contract required, AMCOM hired and separately paid an independent contractor to perform this task.

- **Allegation 3c.** Mr. Daniels asserted that the Army was required to expend additional appropriated funds to render safe the MLRS launchers. According to Mr. Daniels, the costs associated with bringing the launchers into compliance with safety standards should have been borne by Lockheed Martin.

- **Allegation 4b.** Mr. Daniels alleged that AMCOM attempted to minimize the safety risks associated with the deployed launchers by promulgating M270A1 "Fielding Operating Restrictions" that soldiers were required to follow when operating the launchers. According to Mr. Daniels, this effort was both impractical and insufficient to mitigate against the potentially "catastrophic" dangers posed by the launchers. Further, Mr. Daniels contended that the Army's reliance on "Fielding Operating Restrictions" violated MIL-STD-882, "System Safety Requirements," which provides that the Army must rely on design features, rather than operating procedures, to achieve an adequate level of safety.

References:

FAR 46.407, *Nonconforming Supplies or Services* [Tab 62], provides that contracting officers will reject nonconforming supplies or services and establishes the specific circumstances under which they may accept nonconforming supplies or services.⁹¹

⁹⁰ Mr. Daniels alleged that Lockheed itself deemed these deficiencies, which included "uncommanded cage movement," to be "catastrophic" in nature.

⁹¹ **FAR 46.407 Nonconforming supplies or services.**

(a) The contracting officer should reject supplies or services not conforming in all respects to contract requirements (see 46 102). In those instances where deviation from this policy is found to be in the Government's interest, such supplies or services may be accepted only as authorized in this section.

(b) The contracting officer ordinarily must give the contractor an opportunity to correct or replace nonconforming supplies or services when this can be accomplished within the required delivery schedule. Unless the contract specifies otherwise (as may be the case in some cost-reimbursement contracts), correction or replacement must without additional cost to the Government. Paragraph (e)(2) of the clause at 52 246-2, *Inspection of Supplies—Fixed-Price*, reserves to the Government the right to charge the contractor the cost of Government reinspection and retests because of prior rejection

(c)(1) In situations not covered by paragraph (b) of this section, the contracting officer ordinarily must reject supplies or services when the nonconformance is critical or major or the supplies or services are otherwise incomplete. However, there may be circumstances (e.g., reasons of economy or urgency) when the contracting officer determines acceptance or conditional acceptance of supplies or services is in the best interest of the Government. The contracting officer must make this determination based upon—

(i) Advice of the technical activity that the item is safe to use and will perform its intended purpose;

(ii) Information regarding the nature and extent of the nonconformance or otherwise incomplete supplies or services.

(iii) A request from the contractor for acceptance of the nonconforming or otherwise incomplete

FAR 46.502, *Responsibility for Acceptance* [Tab 63], provides that only contracting officers and their delegates⁹² have the responsibility and authority to accept supplies or services provided under a government contract.

Military Standard 882 (MIL-STD-882), *Department of Defense, Standard Practice for System Safety*, dated 10 February 2000 [Tab 64], sets forth the Department of Defense's (DoD) standard approach to managing environmental, safety, and health risks encountered in the development, test, production, use, and disposal of DoD systems, subsystems, equipment, and facilities.

AR 700-142, *Type Classification, Materiel Release, Fielding, and Transfer*, dated 16 October 2008 [Tab 65],⁹³ assigns responsibilities and prescribes policies for the Army's type classification, materiel release, materiel fielding, and materiel transfer processes. The type

supplies or services (if feasible).

- (iv) A recommendation for acceptance, conditional acceptance, or rejection, with supporting rationale; and
- (v) The contract adjustment considered appropriate, including any adjustment offered by the contractor.

(2) The cognizant contract administration office, or other Government activity directly involved, must furnish this data to the contracting officer in writing, except that in urgent cases it may be furnished orally and later confirmed in writing. Before making a decision to accept, the contracting officer must obtain the concurrence of the activity responsible for the technical requirements of the contract and, where health factors are involved, of the responsible health official of the agency concerned.

(d) If the nonconformance is minor, the cognizant contract administration office may make the determination to accept or reject, except where this authority is withheld by the contracting office of the contracting activity. To assist in making this determination, the contract administration office may establish a joint contractor-contract administrative office review group. Acceptance of supplies and services with critical or major nonconformances is outside the scope of the review group.

(e) The contracting officer must discourage the repeated tender of nonconforming supplies or services, including those with only minor nonconformances, by appropriate action, such as rejection and documenting the contractor's performance record.

(f) When supplies or services are accepted with critical or major nonconformances as authorized in paragraph (c) of this section, the contracting officer must modify the contract to provide for an equitable price reduction or other consideration. In the case of conditional acceptance, amounts withheld from payments generally should be at least sufficient to cover the estimated cost and related profit to correct deficiencies and complete unfinished work. The contracting officer must document in the contract file the basis for the amounts withheld. For services, the contracting officer can consider identifying the value of the individual work requirements or tasks (subdivisions) that may be subject to price or fee reduction. This value may be used to determine an equitable adjustment for nonconforming services. However, when supplies or services involving minor nonconformances are accepted, the contract need not be modified unless it appears that the savings to the contractor in fabricating the nonconforming supplies or performing the nonconforming services will exceed the cost to the Government of processing the modification.

(g) Notices of rejection must include the reasons for rejection and be furnished promptly to the contractor. Promptness in giving this notice is essential because, if timely nature of rejection is not furnished, acceptance may in certain cases be implied as a matter of law. The notice must be in writing if—

- (1) The supplies or services have been rejected at a place other than the contractor's plant;
- (2) The contractor persists in offering nonconforming supplies or services for acceptance; or
- (3) Delivery or performance was late without excusable cause.

⁹² For example, MLRS contracting officers have delegated to Defense Contract Management Agency quality assurance representatives, many of whom work on-site at Lockheed's production plant in Camden, Arkansas, the authority to accept MLRS hardware on behalf of the government.

⁹³ Although this regulation was recently revised, the same processes, procedures, and requirements it promulgates applied during the period relevant to the OSC-referred allegations.

classification process ensures that materiel is acceptable for Army use prior to spending procurement funds for full-rate production. The materiel release process ensures that Army materiel developed and/or procured is safe, suitable, and supportable. The materiel fielding and transfer processes ensure the orderly and effective deployment and transfer of Army equipment, including all necessary logistics support requirements.

CID Investigative Finding: The only criminal offense that CID ultimately substantiated related to a component of Allegation 3: CID determined that Lockheed Martin had violated criminal statutes prohibiting false claims⁹⁴ and false statements⁹⁵ when it claimed to have prepared, and accepted payment for preparing, a SAR for the M270A1 [Tab 5, pp. 4, 5]. In fact, due to Lockheed's substantial delay in completing and submitting an acceptable SAR, AMCOM had tasked and paid an independent contractor to assist in preparing a parallel safety assessment as part of that contractor's participation on an AMCOM-sponsored SRRE team. CID ultimately found no other evidence of criminal misconduct associated with Allegations 3 and 4.

Evidentiary Summary:

- **Allegations 3a and 4a.**

AMCOM contracted with Lockheed for the low-rate initial production of three "lots" of M270A1 launchers.⁹⁶ A low-rate initial production contract produces the minimum quantity of a new weapon system necessary to provide production-configured or representative articles for operational testing and evaluation, establishes an initial production base for the system, and facilitates an orderly increase in the production rate to lead to full-rate production. Further, the low-rate production process facilitates the identification of technical problems that may surface when the system is manufactured on a production line rather than in a research and development facility.⁹⁷ A weapon system produced under a low-rate initial production contract is not authorized to be fielded or deployed immediately for operational use by personnel. Prior to fielding and deployment for operational use by soldiers, a system produced under a low-rate initial production contract is subject to rigorous testing, a comprehensive safety assessment, and subsequent corrective action to remediate identified safety deficiencies. Only after determining the system to be safe for use by soldiers will a government safety officer issue a final "Safety Release." A properly issued "Safety Release" is one prerequisite to the issuance of a "Full Materiel Release" and a decision to proceed to full-rate production; ultimately, these "milestone" decisions are entrusted to the Commander of the Life Cycle Management Command with purview over

⁹⁴ Title 18, USC, Section 287

⁹⁵ Title 18, USC, Section 1001

⁹⁶ See *supra* notes 13, 14

⁹⁷ In the context of DoD acquisitions, full-rate production involves contracting for economic quantities of an item following stabilization of the system design and validation of the production process. See generally Defense Acquisition University, *Glossary of Defense Acquisition Acronyms and Terms*, Appendix B. 12th Edition (July 2005).

the system.⁹⁸ Only subsequent to a favorable "Full Material Release" decision is the new weapon system authorized to be fielded and deployed for operational use by soldiers.⁹⁹

The MLRS M270A1 launcher cage is the enclosure in which the rockets and the pods that contain them are emplaced for firing. When commanded by the launcher operator, the cage is moved to face the rear of the launcher to facilitate the process of loading (or unloading) the rockets. On September 21, 2000, during low-rate initial production-related testing of the M270A1 launcher at Lockheed Martin's Camden, Arkansas manufacturing facility, a launcher cage moved, despite not having been commanded to do so by the launcher operator. Similar "uncommanded cage movement" had been observed during testing on at least four prior instances, but Lockheed's efforts to duplicate the problem under controlled conditions or to identify the cause of the anomaly had proven unsuccessful [Tab 66].¹⁰⁰

The MLRS M270A1 launcher cage weighs approximately five thousand pounds and moves at much faster speeds than did its precursor, the M270. From a safety perspective, soldiers who might have been able to dodge the slower-moving M270 could be crushed by the faster M270A1 were the launcher cage to move unexpectedly. Accordingly, the possibility of an "uncommanded cage movement" during rocket loading and unloading posed a significant safety risk to soldier-operators standing or working in and around the launcher. "Uncommanded cage movement" did not pose a direct personnel safety risk to soldier-operators sitting in the launcher cab during rocket firing, but could adversely affect the accuracy of the launch and targeting by distorting the direction in, or angle at which, the MLRS rockets were fired.

In response to the September 2000 Camden testing incident, Lockheed Martin issued a *Safety Bulletin* intended for use by Lockheed and AMCOM employees whose duties required them to work in and around the launcher [Tab 67].¹⁰¹ Because the M270A1 launcher was in the low-rate initial production phase and had not yet been fielded, there was no need to issue this *Safety Bulletin* to soldier-operators in the field. It was this Lockheed *Safety Bulletin* that first promulgated the "3-meter rule," requiring Lockheed and AMCOM employees to maintain a distance of approximately 10 feet (or 3 meters) from the launcher whenever the launcher engine was running.¹⁰²

By letter dated November 20, 2000, from [REDACTED], a Lockheed Martin Financial Manager, to [REDACTED] then-Chief of the MLRS Division of the Acquisition Center (and Mr. Daniels's supervisor) [Tab 68], Lockheed acknowledged that given its

⁹⁸ See AR 700-142, para 4-3 and Table 4-1 [Tab 65]. In the case of the M270A1, the authority to issue a "Full Material Release" was reserved to the Commander, AMCOM, a two-star general officer of the Army.

⁹⁹ *Id.*, paras 4-1—4-4 [Tab 65].

¹⁰⁰ See Email from [REDACTED] dated September 21, 2000, forwarded by [REDACTED] [Tab 66].

¹⁰¹ See M270A1 *Safety Bulletin, M270A1 Operational Recommendations for Personnel Safety* [Tab 67].

¹⁰² *Id.*, para 1 (providing that all personnel must remain outside the "zero-elevation slewing radius" of the [launcher] when the launcher engine is running . . .). The "zero-elevation slewing radius" is a distance of approximately 3 meters or 10 feet. *Id.*, paras 3, 4. The *Safety Bulletin* also advised personnel to take care properly to emplace jury struts (the equivalent of a car jack) under the launcher cage to provide additional support to the cage during maintenance. The use of jury struts was intended to prevent the cage, which weighed approximately 5000 pounds, from falling on and crushing maintenance personnel.

ongoing investigation of the "uncommanded cage movement" and another technical issue,¹⁰³ it had voluntarily chosen not to present for the government's acceptance the three M270A1 launchers that had been scheduled for delivery in October 2000. The letter further referenced an October 26, 2000 briefing at which Lockheed informed AMCOM of the status of its investigation into the potential causes of "uncommanded cage movement."

██████████ letter advised that despite hours of intensive testing, Lockheed had been unable to recreate the conditions that had caused the launcher cage to move without being commanded to do so or to identify the cause of the problem. The letter went on to describe several hardware and software improvements that Lockheed believed would either prevent the "uncommanded cage movement" from recurring or stop it more quickly if it did recur. ██████████ requested AMCOM's approval to resume delivery to the government of six launchers in November 2000 and three launchers for December, all of which would be retrofitted with Lockheed's recommended hardware and software improvements. The letter promised that Lockheed would continue its investigation into the root cause of the "uncommanded cage movement."

AMCOM's letter of response, dated November 29, 2000, from ██████████ Contracting Officer for the MLRS Division of the AMCOM Acquisition Center, to ██████████ ██████████ Lockheed Martin's MLRS Production Contracts Manager, agreed that the causes of "uncommanded cage movement" remained unknown, but accepted Lockheed's proposal to resume delivery of the launchers, subject to the following conditions:¹⁰⁴

Research is continued to determine the exact cause of the uncommanded cage movement and excessive piston shoe wear at no additional cost to the Government.

Repairs and solutions are developed for all 45 identified potential causes [of the uncommanded cage movement] and any others that arise during the course of the research. Developed repairs and solutions for the uncommanded cage movement and excessive piston shoe wear are to be applied to all M270A1 launchers previously delivered and those yet to be delivered, *at no additional cost to the Government.*

Tab 69, *emphasis added.*

¹⁰³ ██████████ letter also set forth the actions Lockheed was implementing to address the problem of excessive piston shoe wear, which presented a maintenance concern, but did not impact launcher safety.

¹⁰⁴ ██████████ decision to continue to accept the launchers was in accord with FAR 46.407(c)(1) [Tab 62], because Lockheed Martin had made improvements that it believed remedied the problem and rendered the launchers safe to use for their intended purpose. Note that there is no evidence that Lockheed ever affirmatively agreed to or accepted the conditions posited in ██████████ letter. Essentially, ██████████ letter established what is commonly known as a "conditional acceptance." Were Lockheed to refuse or fail to comply with the conditions set forth in ██████████ letter, the government's only remedy would be to rescind its acceptance of the launchers and return them to Lockheed Martin. This sort of arrangement is not uncommon in a major weapon system acquisition in which the government and a contractor must work together in the long term to achieve their mutual objectives

Lockheed continued its investigative efforts and in December 2000 resumed delivery of the launchers, retrofitted with the improvements promised.¹⁰⁵ Meanwhile, Lockheed Martin advised AMCOM that it would be unable to prepare and timely submit a SAR, as required by Contract No. DAAH01-00-C-0109.¹⁰⁶ As contemplated by the contract, the preparation of the SAR would require Lockheed to undertake a wide-ranging effort to identify all of the potential safety hazards associated with the M270A1 launcher and to propose actions to correct those hazards and render the launcher safe for use by soldiers. Lockheed asserted that in negotiating the contract, it had failed to allocate and cost sufficient manhours to prepare the comprehensive SAR the government required.

As set forth above,¹⁰⁷ a "Safety Release," issued by a qualified government safety officer, is a necessary prerequisite to a "Full Materiel Release" decision authorizing the fielding and deployment of a new weapon system for operational use by soldiers. Generally, a contractor's only input into the "Safety Release" decision is through the preparation and submission of a SAR.

In view of the absolute mandate for a comprehensive hazard analysis on which a "Safety Release," and ultimately "Full Materiel Release" and full-rate production decisions could be based, coupled with Lockheed Martin's delays in submitting a compliant SAR, and AMCOM's continuing lack of satisfaction with Lockheed's efforts to isolate the cause of the "uncommanded cage movement," then-MLRS Project Manager ██████████¹⁰⁸ and then-Deputy Project Manager ██████████ decided to establish a Safety Risk Reduction Effort (SRRE) team comprised of government experts and support contractors.¹⁰⁹ The mission of the SRRE team, convened in May 2001, was to conduct a detailed evaluation of the M270A1 launcher's potential safety risks and to propose appropriate corrective action. The AMCOM Safety Office concurred fully in the establishment of the SRRE.

¹⁰⁵ According to AMCOM Legal Advisor, ██████████ Lockheed absorbed all expenses associated with these hardware and software improvements.

¹⁰⁶ Generally, DD Form 1423, *Contract Data Requirements List*, is attached to the contract to which it pertains and describes the data items to be delivered under that contract. *Contract Data Requirements List*, dated June 23, 2000, applicable to Contract No. DAAH01-00-C-0109, data item A001, required Lockheed Martin to deliver a SAR in regard to the MLRS 270A1 launcher within 270 days after contract award, no later than March 28, 2001 [Tab 70].

¹⁰⁷ See *supra* p. 29. See also Email from ██████████ to ██████████ dated May 24, 2001 [Tab 71].

¹⁰⁸ When interviewed by the AMCOM AR 15-6 IO, "retired ██████████" . . . did remember that Lockheed Martin was required to do a SAR under their contract, but the report was delayed and lacking. As a result, he directed an independent assessment be performed. ██████████ recalled that the SRRE report determined that problems with launcher safety would be rare occurrences and would require a combination of mistakes. Accordingly, the SRRE decided the safety risk was minimal, as compared to the need to get the system fielded." See MFR documenting the interview of ██████████ [Tab 72A] and AMCOM Project Office Memorandum for MLRS Contracting Office, subject: *M270A1 Delivery Issues*, dated March 18, 2003, signed by then ██████████ in his role as Project Manager [Tab 72B].

¹⁰⁹ Independent contractors (not employed by or affiliated with Lockheed Martin) were seconded in support of the SRRE team via a task order issued against an existing contract. In an email to the AR 15-6 IO, ██████████ clarified that the independent contractor who participated on the AMCOM SRRE team and assisted in generating the parallel safety assessment did so under an existing support contract task order rather than pursuant to a wholly new contract [Tab 73, Email from ██████████ to ██████████ ██████████ dated June 30, 2008]. This understanding was further confirmed by the AMCOM AR 15-6 IO in a meeting with members of the MLRS Project Office [Tab 74, MFR documenting ██████████ meeting with PFRMS Project Office regarding AR 15-6 investigation, dated 11 July 2008, para 1].

On January 31, 2002, after significant research, investigation, and testing, the multi-disciplinary SRRE team issued its final report [Tab 75].¹¹⁰ The SRRE report identified launcher design deficiencies that "affect[ed] the personnel safety environment of the M2701A launcher system." Certain of the deficiencies identified were related to the launcher cage motion; others related to munitions firing.¹¹¹

Of greatest importance, the SRRE team identified a "single-point failure"¹¹² in the launcher's design; this "single-point failure" was believed to be the most likely cause of the "uncommanded cage movement." The team concluded that "when either the inner or outer loop¹¹³ [of the launcher's control system] is interrupted, the launcher cage becomes uncontrollable . . . and is stopped only by the emergency shutdown."¹¹⁴ Essentially, if one of the launcher's sensors was disconnected for any reason, the launcher control software malfunctioned, causing "uncommanded cage movement." The SRRE team further recommended that AMCOM "place restrictions upon the use of the launcher to provide an acceptable personnel environment for the user of the weapon system." and that the "design deficiencies should be corrected as soon as possible, thereby removing the launcher restrictions."¹¹⁵

Concurrently, the AMCOM Safety Office issued its *M270A1 Safety Assessment/Safety and Health Data Sheet (S&HDS) in Support of a Milestone III Decision*, dated January 31, 2002 [Tab 77].¹¹⁶ Distilling the findings and recommendations of the Final SRRE Report, the S&HDS documented the Safety Office's conclusion that the M270A1 launcher was safe, subject to the implementation of two changes in the FCS software and six hardware and software changes to the launcher control system, as follows.¹¹⁷

¹¹⁰ See *Excerpts, MLRS M270A1 Safety Risk Reduction Effort, Final Report*, dated January 31, 2002 [hereinafter Final SRRE Report] [Tab 75].

¹¹¹ *Id.*, pp. 1-2; p. 28, para 7.0.

¹¹² *Id.*, p. 29, para 9.0. In this context, a "single-point failure" is defined as a single part of a system, the failure of which would result in a safety hazard of catastrophic magnitude. It is important to note that Contract No. DAAH01-00-C-0109 incorporated safety-related performance specification MIL-PRF-35500, Revision A, para 3.2.10.2. of which provided, "Critical hazard. Single-point failures which may result in catastrophic or critical safety hazards or mishaps, shall be precluded from the system . . ." [Tab 76]. Whether or not the M270A1 launchers delivered by Lockheed and accepted by AMCOM conformed to MIL-PRF-35500 is addressed in more detail later in this report.

¹¹³ The "inner and outer loops" are hardware circuits that connect the launcher drive and feedback sensors (inner loop) and the launcher cage position sensors (outer loop) to the M270A1 launcher control system. These "loops" are designed to provide the launcher control system software with constant awareness of the launcher cage's speed and position. See *supra* note 110, Final SRRE Report, p. 28, para 7.1.

¹¹⁴ *Id.*

¹¹⁵ *Id.*, p. 29, para 8.0.

¹¹⁶ See AMCOM Safety Office Memorandum, *M270A1 Safety Assessment/Safety and Health Data Sheet (S&HDS) in Support of a Milestone III Decision*, dated January 31, 2002 [Tab 77] [hereinafter Safety Office S&HDS]. Note that the Safety Office S&HDS, p. 1, para 3, mistakenly refers to Lockheed Martin's completion and submission of a "top-level Safety Assessment." Lockheed had finally submitted a SAR on December 20, 2001. Although that SAR was originally perceived as satisfactory, a more thorough review found it to be insufficient. Ultimately, Lockheed's December 2001 SAR was rejected by MLRS Project Office Letter from [REDACTED] Product Manager, Improved Launcher, to [REDACTED] Lockheed Martin, dated January 24, 2002 [Tab 78]. The AMCOM Safety Office was not informed of the Project Office's rejection of the SAR until after the S&HDS was issued.

¹¹⁷ See *supra* note 116, Safety Office S&HDS, pp. 2-3, para 4.

FCS Software Changes—

- *Requiring a Double Tap:* This modification would require two deliberate actions by the user (instead of only one) to activate movement of the launcher cage at tactical speed. This modification would not cure the likely cause of the “uncommanded cage movement.” Rather, it was an AMCOM-prescribed, safety-related “improvement” in the launchers’ design that would maximize the user-operator’s control of launcher cage movement.
- *Defaulting to Maintenance Speed:* This modification would ensure that when the launcher was started, the cage would initially move at a much slower maintenance speed until intentionally increased, by deliberate action on the part of the user, to the faster tactical speed. This modification would not cure the likely cause of the “uncommanded cage movement.” Rather, it was an AMCOM-prescribed, safety-related “improvement” in the launchers’ design that would maximize the user-operator’s control over the speed at which the launcher cage moved.

Launcher Control System Changes (in order of priority)—

- *Launcher Movement/Control:* This change created a redundant means of checking the cage’s speed and position by adding a second circuit of “loops” between the speed and position sensors and the launcher control unit. Essentially, even if one of the circuits became disconnected from the sensors, the additional loop would serve to maintain control of the launcher cage. It was believed that this modification in the launchers’ design would remediate the “single-point failure” identified by the SRRE team as the most likely cause of “uncommanded cage movement.”¹¹⁸
- *Adding Boom Control Kill Switch Capabilities:* This change required the placement of a remote device for operating the cage while rocket pods were being loaded or unloaded. Under the original launcher design, the boom control kill switch¹¹⁹ would only work if the kill switch inside the cab was deactivated. The proposed improvement would allow the boom control kill switch to work at all times, whether or not the inside kill switch had been deactivated. A related change connected the boom control kill switch directly to the cage brakes, an improvement over the “old” design that merely instigated a “short” in the electrical system, while leaving the power connected to the motor. The new design would disconnect entirely the power supply to the motor, while at the same time applying the cage brakes with a view to bringing the cage to a complete halt. This modification would not cure the likely cause of the “uncommanded cage movement.” Rather, this AMCOM-prescribed, safety-related “improvement” in the launchers’ design would enable a user-operator to respond more quickly and effectively to curtail or

¹¹⁸ *Id.*, p. 4, para 5c.

¹¹⁹ The purpose of the boom control kill switch is to stop the cage from moving while the rocket pods and rockets are being loaded or unloaded.

terminate an "uncommanded cage movement" should it occur. Further, this design "improvement" would facilitate bringing the launcher cage under control from a distance, eliminating the need for a user-operator to place himself in close proximity to the launcher cage while it was in motion.

- *Eliminating Stale Message and Hanging/Latent Commands:* Recognizing the possibility of delay in the transmission of message traffic, to include messages directing the launcher to fire, this change ensured the expiration of computer commands that remained unexecuted after a certain period of time elapsed. This modification would not cure the likely cause of the "uncommanded cage movement." Rather, it was an AMCOM-prescribed, safety-related "improvement" in the launchers' design that would maximize the user-operator's control of the launchers' firing sequence.

- *Implementing a "Timeout" of the Last Command in Buffer:* This change cleared the memory (*i.e.*, buffer) of the launcher's computer so that if the launcher were stopped and restarted, no previous command to the computer could be executed unless loaded anew by the operator.¹²⁰ This modification would not cure the likely cause of the "uncommanded cage movement." Rather, it was an AMCOM-prescribed, safety-related "improvement" in the launchers' design that would maximize the user-operator's control of the launchers' firing sequence.

- *Eliminating Launcher Cage Oscillation:* When the cage transitioned from "moving" to "stop," sometimes it would shake or oscillate. This condition was described by the SRRE team as "easy condition to stop . . . once noticed, [but] a control issue that should not exist for the long term." No specific design change was proposed to correct this condition. Correcting launcher cage oscillation would not cure the likely cause of the "uncommanded cage movement."¹²¹ Rather, upgrading the launchers' design to prevent cage oscillation was viewed by AMCOM as a necessary preventative safety-related "improvement."

- *Adding Additional Kill Switches:* This proposed change would have added two more kill switches to the base of the launcher. Adding additional kill switches would not cure the likely cause of the "uncommanded cage movement." Rather, it was initially perceived that this safety-related "improvement" in the launchers' design would enable a user-operator to

¹²⁰ Although related, the "fixes" associated with *Eliminating Stale Message and Hanging/Latent Commands* and *Implementing a "Timeout" of the Last Command in Buffer* are slightly different. The *Hanging Commands* fix would automatically eliminate any pending, but unexecuted, "hanging command" from the computer after a specified period of time. The *Timeout of the Last Command in Buffer* fix ensured that any command that had not "timed out" as a result of the *Hanging Commands* fix would be cleared from the buffer when the launcher was turned off and then restarted.

¹²¹ Although at first blush "launcher cage oscillation" may appear be similar to "uncommanded cage movement," there is no indication that the two conditions were related in any way. Simply put, the problem of launcher cage oscillation was identified by the SRRE team in the context of its hazard assessment of the M270A1 launcher as a separate concern that should be rectified in the long term.

respond more quickly and effectively to curtail or terminate an "uncommanded cage movement" should it occur.¹²²

Tab 77, pp. 2, 3, para 4.

Note that of the eight "changes" proposed by the Final SRRE Report and the AMCOM Safety Office S&HDS, AMCOM determined that only one: that change related to *Launcher Movement/Control*, was causally related to correcting the problem of "uncommanded cage movement" and remediated a "single-point failure" of the sort that rendered the launchers nonconforming with safety-related performance standard MIL-PRF-35500 incorporated in the base production contract. The other changes were deemed to be precautionary additive "improvements" in the launchers' design. That a launcher lacked one of the additive "improvements" did not render that launcher nonconforming to the contract terms or "unsafe" *per se*, although the inclusion of the "improvements" certainly rendered the launchers "safer." This distinction is important because the terms of the FFP contract required Lockheed to take corrective action to remediate any "single-point failure" and conform the launchers to the contract's performance specifications at no additional expense to the government. Lockheed properly could expect additional payment from the government for the costs of developing and incorporating precautionary design "improvements" and upgrades not contemplated by the original contract.

In effect, the Safety Office S&HDS constituted a "Conditional Safety Release" and AMCOM's first effort at establishing a "get well plan" for the launcher.¹²³ Essentially, a "Conditional Safety Release" provides the safety determination required to authorize the fielding of a new weapon system for the *limited purposes of field testing and training*. Inherent in any "Conditional Safety Release" is an understanding that the materiel at issue will be safe for full fielding and deployment for operational use by troops only once the improvements set forth in the associated "get well plan" are implemented.¹²⁴

In February 2002, based upon the AMCOM Safety Office "Conditional Safety Release" (as set forth in the Safety Office S&HDS), Mr. James Flinn, III, Deputy to the AMCOM Commander, issued a determination¹²⁵ approving the "Conditional Materiel Release"¹²⁶ of thirty-eight M270A1 launchers and the "Training Materiel Release"¹²⁷ of six

¹²² Because this change would have tended to decrease launcher reliability—if the additional switches malfunctioned the launcher would stop working—it was ultimately rejected by the MLRS Project Office. See *infra* note 133 and pp. 37, 39, 40.

¹²³ See *supra* note 116, Safety Office S&HDS, p. 5, para 7 [Tab 77].

¹²⁴ See AR 700-142, para 4-4b. Conceptually, the regulation clearly contemplates the fielding of equipment and systems with known safety deficiencies through the "Conditional Materiel Release" process. The regulation also contemplates that it may take several years to correct the problems identified. See e.g., AR 700-142, para 4-7d [Tab 65].

¹²⁵ See Commanding General's Determination, Conditional Materiel Release and Training Materiel Release of the M270A1 Launcher, executed by Mr. James L. Flinn, III, February 2002 [Tab 79]. See also AR 700-142, para 4-3c (providing that usually "Materiel Release" authority will not be delegated below the level of the Commander of the Life Cycle Management Command with purview over the system at issue. The regulation goes on to state that a deputy commander not lower than the grade of brigadier general or the civilian equivalent may approve a "Materiel Release" action in the absence of the Commander.) [Tab 65]. Mr. Flinn met these criteria.

¹²⁶ See AR 700-142, para 4-4b (advising that "Conditional Materiel Release" results when all criteria for "Full Materiel Release" are not met and may occur when . . . a program fields LRIP materiel prior to full rate production. In these cases [a plan will be developed] to achieve a "Full Materiel Release" at the full rate

additional launchers [Tab 79]. Note that neither the "Conditional Safety Release" nor the "Conditional Materiel Release" constituted authorization to field and deploy the M270A1 for operational use by soldiers; these conditional releases authorized the fielding of the launcher only for the *limited purposes of field testing and training* and required strict adherence to fielding operating restrictions designed to mitigate further any risk to the soldier-user.¹²⁸ Launchers were fielded pursuant to the "Conditional Materiel Release" beginning in February 2002.

As mandated by the "get well plan" documented in the Safety Office S&HDS¹²⁹ operating procedures to mitigate further the impact of extant safety-related concerns were identified and promulgated to the field in or around February of 2002 [Tab 80].¹³⁰

As required by governing Army policy,¹³¹ and set forth in the Safety Office S&HDS,¹³² the two FCS software changes, together with five of the six proposed changes to the launcher's control system,¹³³ formed the core tenets of the launcher "get well plan."¹³⁴ The

production decision and address all LRIP materiel previously fielded.). Generally, the full-rate production decision is taken at the conclusion of the low-rate initial production phase. Under full-rate production, production rates are "ramped up" and the equipment or system produced is authorized to be deployed to the field for operational use by soldiers. Mr. Flinn's decision noted that the launchers subject to the "Conditional Materiel Release" were issued to the U.S. Army Forces Command (FORSCOM) and to the National Guard Bureau (NGB). FORSCOM exercises jurisdiction over most Active Army combat units, to include field artillery units, the primary intended users of the MLRS; the NGB exercises jurisdiction over those State National Guard units with combat field artillery missions. The M270A1 launchers authorized for "Conditional Materiel Release" to FORSCOM and the NGB were subsequently released to combat units for *field testing and training only*. At the "Conditional Materiel Release" stage, the equipment or system is not authorized for deployment for operational use by troops [Tab 65].

¹²⁷ See AR 700-142, para 4-4d (defining a "Training Materiel Release" as a limited certification that provides authorization to field or issue the materiel to U.S. Army Training and Doctrine Command (TRADOC) schools and training sites for the express purpose of curriculum development and training of soldiers.) [Tab 65]. It appears that the M270A1 launchers covered by the "Training Materiel Release" were sent to Fort Sill, Oklahoma, the home of the U.S. Army Field Artillery School, an installation under the jurisdiction of TRADOC. See *infra* note 159 and pp. 46, 47.

¹²⁸ See *supra* note 116, Safety Office S&HDS, p. 4, para 6b; p. 5, para 7 [Tab 77].

¹²⁹ *Id.*, p. 4, para 6b [Tab 77].

¹³⁰ See MLRS Maintenance Information Bulletin (MIB) #02001, subject, *Safety Bulletin for M270A1* [hereinafter *Safety Bulletin for M270A1*] [Tab 80]. The AMCOM Legal Office confirms that the *Safety Bulletin* was promulgated in accordance with the terms of the launcher "get well plan" and in anticipation of the release of a limited number of launchers to the field for testing and training. The most important aspect of the operating procedures and restrictions imposed by the *Safety Bulletin* was the "3-meter rule" which prohibited the presence of personnel within a 3-meter safety zone around the launcher while it was moving or while the launcher drive system (LDS) was engaged (except during reload operations).

¹³¹ See AR 700-142, para 4-4b(2) [Tab 65].

¹³² See *supra* note 116, Safety Office S&HDS, p. 5, para 6b(2) [Tab 77].

¹³³ Ultimately, the MLRS Project Office and user-representatives—representatives of the field units that would use the launchers—rejected the sixth recommended change—the additional kill switches—as tactically unsound; if the additional switches malfunctioned, the launcher would stop working. Further, requiring soldiers to approach the launcher to reach and activate the additional kill switches could prove hazardous.

¹³⁴ A "get well plan," is a government plan to remediate deficiencies identified in equipment or systems. Both the MLRS Project Office and the AMCOM Safety Office were required to concur in any "get well plan" covering the M270A1 launcher, both did so. The contractor, in this case Lockheed Martin, is not a party to the "get well plan." Contrary to Mr. Daniels's assertions, a "get well plan" is not an unusual remedy in the context of developmental acquisition programs such as this. In fact, AR 700-142, para 4-4b(2), requires the creation of a "get well plan" whenever a "Conditional Materiel Release" is issued. The regulation requires that the "get well

Safety Office S&HDS required implementation of the "get well plan" and correction of the launchers' identified safety deficiencies within 24 months of the "Conditional Material Release" and "Training Materiel Release" decisions.¹³⁵

Although documentation to this effect is lacking, AMCOM believes that from the moment it convened in May 2001, through the issuance of the Final SRRE Report in January 2002, the SRRE team kept Lockheed apprised of its evolving activities, findings, and recommendations. There is no impropriety in this; the government and Lockheed shared a mutual interest in the safety of the M270A1 launcher, and in particular, in resolving the "uncommanded cage movement" anomaly. That given, it appears that the AMCOM Project Office worked with Lockheed to begin developing improved launcher hardware and software to implement the SRRE team findings and recommendations even before the Final SRRE Report was issued.

With the publication of the Final SRRE Report and Safety Office S&HDS in January 2002, followed a month later by AMCOM's "Conditional Material Release" and "Training Materiel Release" decisions, the MLRS Project Office and the AMCOM Safety Office immediately began to work with Lockheed Martin to implement the "get well plan." By this time, however, Lockheed had already taken action to implement certain of the safety-related "improvements" in the launchers and was well along in the development and implementation of others. For example, the "improvements" associated with *Requiring a Double Tap and Defaulting to Maintenance Speed* were included in all launchers produced and delivered prior to February 2002, prior to the fielding of the launchers pursuant to the "Conditional Material Release" and "Training Materiel Release" decisions. Lockheed initiated "improvements" associated with *Implementing a "Timeout" of the Last Command in Buffer* as early as November 2001 and completed most upgrades before February 2002; by May of 2002 all launchers had been retrofitted with this "improvement."

Most importantly, Lockheed undertook action to correct the "single-point failure" believed to be the most likely cause of "uncommanded cage movement" in May 2002. AMCOM completed the retrofit of all launchers, to include those already fielded for testing and training, in September of that same year. This correction remediated any nonconformance of the launchers with contract safety-related performance specification MIL-PRF-35500.

The following chart documents the corrective action and each safety-related "improvement" recommended by the SRRE and endorsed by the Safety Office S&HDS as part of the "get well plan," the date on which Lockheed delivered to the AMCOM the

plan" address each of the conditions of release and set forth a plan for achieving "Full Materiel Release." [Tab 65]. The "get well plan" in this case was designed primarily to resolve the problem of "uncommanded cage movement" and other safety concerns that had manifested during low-rate production under Contract Nos. DAAH01-98-C-0138 and DAAH01-00-C-0109. The "get well plan" for the M270A1 launcher was first set forth in the Safety Office S&HDS, *supra* note 116, issued in January 2002 [Tab 77]. The implementation and execution of the "get well plan" was documented in *M270A1 Launcher System Safety Risk Assessment, Uncommanded Movement of the M270A1 Launcher Loader Module (LLM) Cage*, with collateral documents, issued in May/June 2003 [hereinafter *System Safety Risk Assessment*] [Tab 81].

¹³⁵ See *supra* note 116, Safety Office S&HDS, p. 4, para 6b(2) [Tab 77].

hardware/software addressing each "fix" or "improvement," and the date by which AMCOM retrofitted all launchers with the improved products.¹³⁶

"GET WELL PLAN IMPLEMENTATION"

"Fixes" and "Safety-Related Improvements" Recommended by SRRE Team	Date on Which Lockheed Delivered Corrected/Improved Hardware/Software to the MLRS Project Office	Date on Which AMCOM Completed Retrofit of all Fielded Launchers¹³⁷
<i>Requiring a Double Tap</i>	Prior to February 2002	Completed prior to conditional materiel release and limited fielding of launchers
<i>Defaulting to Maintenance Speed</i>	Prior to February 2002	Completed prior to conditional materiel release and limited fielding of launchers
<i>Launcher Movement/Control (correcting the "single-point failure" and "uncommanded cage movement")</i>	May 2002	September 2002
<i>Adding Boom Control Switch Kill Capabilities</i>	Field modification implemented by AMCOM in increments between 2004 and 2007	
<i>Eliminating Stale Message and Hanging/Latent Commands</i>	May 2002	September 2002 ¹³⁸
<i>Implementing a "Timeout" of the Last Command in Buffer</i>	First Wave Started—Nov 2001 Second Wave Started—Mar 2002	First Wave Complete—Feb 2002 All Complete—May 2002
<i>Eliminating Launcher Cage Oscillation</i>	March 2003	December 2003

¹³⁶ The "Get Well Plan Implementation" chart was developed by [REDACTED] with the input and assistance of [REDACTED] the head of quality assurance for the MLRS Project Office, AMCOM. Note that any corrective/improved hardware/software was included automatically in any launcher subsequently produced, delivered, and accepted by the government.

¹³⁷ With regard to software updates, for example, Lockheed would deliver to AMCOM a compact disc containing the corrected/improved software. The corrected/improved software was included on all launchers that Lockheed subsequently produced and delivered and was uploaded on all launchers stored in Army depots awaiting fielding. AMCOM then sent a team of experts to each of the locations to which launchers already had been fielded pursuant to the "Conditional Materiel Release" and/or the "Training Conditional Release." The experts uploaded the corrected/improved software to each fielded launcher, "rebooted" the launcher, and tested it to be sure it was functioning properly.

¹³⁸ Note that AMCOM Safety Office Memorandum, subject: *M270A1 Safety Assessment/Safety and Health Data Sheet (S&HDS)*, dated August 27, 2003 [hereinafter Final Safety Office S&HDS] [Tab 82], mistakenly indicates that the *Eliminating Stale Message and Hanging/Latent Commands* "improvement" was not completed until August 2003. [REDACTED] the head of quality assurance for the MLRS Project Office indicates that, in fact, this "improvement" was initiated in May 2002 and completed in September 2002. The *Eliminating Stale Message and Hanging/Latent Commands* "improvement" was incorporated in all launchers at exactly the same time the *Launcher Movement/Control* "single-point failure" was corrected.

The remaining "fix" identified by the SRRE team, *Adding Additional Kill Switches*, was not implemented. Because this change would have tended to decrease launcher reliability—if the additional switches malfunctioned the launcher would stop working—it was ultimately rejected by the MLRS Project Office.¹³⁹

In his allegations to OSC, Mr. Daniels correctly asserted that the MLRS Project Office failed to advise the AMCOM Acquisition Center of the initiation of the SRRE team effort or the AMCOM' Safety Office's issuance of the S&HDS and associated "get well plan." AMCOM is unable to ascertain specifically when or how the Acquisition Center became aware of these efforts, but accepts as reasonable Mr. Daniels's assertion that [REDACTED] [REDACTED] was first informed in April 2002 when she attended a meeting at which the SRRE and the "get well plan" were discussed. Accordingly, from January 31, 2002 (when the Final SRRE Report documenting launcher safety concerns was issued) through April 2002 (when [REDACTED] became aware of the SRRE findings and the "get well plan"), MLRS contracting officers continued to accept launchers presented by Lockheed for acceptance, unaware of the "single-point failure" documented by the SRRE.¹⁴⁰ In a recent discussion with [REDACTED], [REDACTED] indicated that although she became aware in April 2002 that the SRRE had recommended safety "improvements," it was not until October 2002 that she became aware of the possibility that the launchers did not conform to safety-related performance specification, MIL-PRF-35500, incorporated in the base contract. As indicated in the above chart, however, by September 2002, Lockheed and AMCOM, working together, had remediated the "single-point failure" in all of the launchers.

Further, AMCOM concedes that it paid Lockheed additional monies, above and beyond the sum to which Lockheed was entitled under terms of the FFP low-rate initial production contract, to correct the *Launcher Movement/Control* "single-point failure" presumed to be the most likely cause of "uncommanded cage movement" and to develop and incorporate in the launchers the remaining safety-related "improvements" recommended by the SRRE and the Safety Center S&HDS. As explained above, Lockheed was already obligated, and had been paid, under terms of base production Contract No. DAAH01-00-C-0109 to provide the government with M270A1 launchers conforming to MIL-PRF-35500 and devoid of "single-point failures." Accordingly, AMCOM erred in

¹³⁹ See *supra* note 122.

¹⁴⁰ Similarly, throughout this period, the Acquisition Center was unaware of the SRRE's finding that one of these deficiencies—the lack of redundancy in the "inner and outer loops" of the launcher control system was a "single-point failure," thus rendering the launchers nonconforming to safety-related contract performance specification MIL-PRF-35500, which prohibited the existence in the M270A1 launcher of "single-point failures" that potentially could result in "catastrophic or critical safety hazards or mishaps." See *supra* note 112 and p. 33. The AMCOM Legal Office review has determined that continued acceptance of the launchers during this period did not constitute a *per se* violation of FAR 46.407—it is evident that the FAR speaks to "knowing" acceptance of nonconforming items, otherwise the provision would make no sense. For example, a contracting officer cannot give a contractor the opportunity to cure a nonconformity if the contracting officer does not know of its existence. Further, even had the Acquisition Center been aware of the launchers' nonconformance with MIL-PRF-35500, it was certainly aware of the problem of "uncommanded cage movement and properly could have invoked FAR 46.407(c) to continue accepting the launchers while the problem was being addressed. This is illustrated by the action taken by [REDACTED] in November 2000 whereby AMCOM continued to accept launchers based on the actions Lockheed had taken to address the problem of "uncommanded cage movement" and its pledge to continue its corrective efforts. See *supra* note 104 and pp. 30, 31.

subsequently paying Lockheed an additional sum, estimated by Mr. Tony Vollers to be \$600,000, to remediate the *Launcher Movement/Control* deficiency.

It appears that this erroneous \$600,000 "double payment" had its genesis also in the poor communications and unacceptable lack of information exchange between the MLRS Project Office and the AMCOM Acquisition Center. Unaware of the SRRE effort until April of 2002, the Acquisition Center remained "in the dark," until October of that year to the fact that the SRRE team had identified a "single-point failure" (that rendered the launchers nonconforming to the contract performance specification and that Lockheed was obligated to correct this deficiency at no additional cost to the government).¹⁴¹ Because the remaining safety-related "improvements" were additive to the original launcher design and had not been contemplated by the base contract, ██████████ verified that AMCOM properly paid Lockheed additional compensation to develop and incorporate these "improvements" into the launchers.

Meanwhile, Lockheed still had not submitted a satisfactory SAR, as required by the contract. In his allegations to OSC, Mr. Daniels's asserted that Lockheed submitted its SAR in October 2002 and that the SAR revealed safety deficiencies far more serious than previously reported. Neither the AR 15-6 investigation nor the AMCOM Legal Office review found any evidence that Lockheed had submitted a SAR in October 2002. The AR 15-6 IO found that in October 2002, Lockheed did respond to "Action Item 573"¹⁴² by which the AMCOM Safety Office had requested that Lockheed determine if contract performance specification MIS-PRF-35500 requirements¹⁴³ were to be met by procedural steps or design mitigations. Lockheed's response to "Action Item 573"—comprising a matrix of hazards and their assessed risk, together with a denotation as to whether each hazard risk was to be reduced to an acceptable level by hardware, software, and/or procedural controls—evidenced that after mitigation, *all* potential hazards identified, to include items H21, *Uncommanded Cage Movement and/or Overspeed Condition at Tactical Speed*, and H32, *Uncommanded Cage Motion*, were reduced to "remote" or "improbable," meaning a very low or rare probability of occurrence [Tab 83].¹⁴⁴

¹⁴¹ *Id.*

¹⁴² The use of a numbered "Action Item" system is an informal way of keeping track of administrative "taskers" assigned to either Lockheed Martin or the government. Government-originated Action Item 573 essentially "tasked" Lockheed to demonstrate that the M270A1 launcher met the requirements of contract performance specification MIL-PRF-35500.

¹⁴³ See *supra* note 112 (providing that "single-point failures" which may result in catastrophic or critical safety hazards or mishaps, shall be precluded from the [M270A1] system . . .)

¹⁴⁴ See M270A1-MLRS Program Action Item 573 and associated M270A1 LRIP II Hazard Controls Matrix, Table 1-1, *Risk Acceptance Criteria*, and Table 1-2, *Hazard Risks and Control Types* [hereinafter Action Item 573] [Tab 83]. As to item H21, *Uncommanded Cage Movement and/or Overspeed Condition at Tactical Speed*, Table 1-2 indicates that after mitigation associated with software controls, the probability of occurrence was coded IIE (improbable), and colored "blue," (meaning that even after the application of mitigation, AMCOM review of the hazard and acceptance of the risk it posed (although improbable), was required). As to item H32, *Uncommanded Cage Motion*, Table 1-2 indicates that after mitigation associated with hard and software controls and the implementation of procedural controls, the probability of occurrence was coded ID (remote), and colored "yellow," (meaning that even after the application of mitigation, AMCOM review of the hazard and acceptance of the risk it posed (although remote), was required). Note that in May 2003, subsequent to the completion of all critical components of launcher remediation associated with the "get well plan" and in conjunction with its decision to clear the M270A1 launcher for "Full Materiel Release," AMCOM conducted the required reviews and rendered the decision to accept any residual risk associated with these

By email of October 4, 2002, the AMCOM Safety Office provided [REDACTED] with the Lockheed response to "Action Item 573." It appears that [REDACTED] review of Lockheed's response triggered her to seek input from the MLRS Project Office on the issue of whether the launchers conformed with safety-related performance specification MIL-PRF-35500, prohibiting "single-point failures." On November 22, 2002, [REDACTED] the MLRS Project Office liaison to the Acquisition Center, sent an email to [REDACTED] advising her of the Project Office's position that although the launchers satisfied contract performance specifications,¹⁴⁵ Lockheed Martin still had not submitted a contractually acceptable SAR and thus did not meet the requirements of the contract's safety program. Specifically, [REDACTED] email advised:

It is the position of the [MLRS Project Office] that the M270A1 launcher *does meet* the performance specification (MIL-PRF-35500) set forth in the contract but does not met [sic] the terms of the contract [safety program] and that consideration from [Lockheed Martin] is warranted.

Tab 84, Email from [REDACTED] to [REDACTED] dated November 22, 2002, *emphasis added*.

[REDACTED] correctly believed that Lockheed's failure to submit an acceptable SAR [an important element of the contract safety program], did not, in itself, render the launcher unacceptable or unsafe. Thus, [REDACTED] advice that it would not be inappropriate for AMCOM to accept delivery of the launchers while continuing to pursue remedial action against Lockheed for the insufficient and late SAR appears logical.¹⁴⁶ [REDACTED] advice that the launchers conformed to MIL-PRF-35500 also appears to be correct given that as of September 2002, Lockheed had completed implementation of the *Launcher Movement/Control* software "fix."¹⁴⁷

Still not satisfied that the launchers conformed to the production contract's specifications, [REDACTED] sought input from the AMCOM Safety Office. While awaiting the Safety Office's formal response, [REDACTED] engaged in informal discussions with Safety Office employees. Based on these informal discussions, [REDACTED] advised Lockheed Martin by letter of February 12, 2003, that because no acceptable SAR had, as yet, been submitted and given that government "Action Item 573" pertaining to the

enumerated hazards. See *supra* note 134, *M270A1 Launcher System Safety Risk Assessment, Un-Commanded Movement of the Launcher Lode Module (LLM) Cage* [Tab 81A], with endorsements of the MLRS Project Office and the AMCOM Safety Office on May 19, 2003, the Commanding General of AMCOM on June 20, 2003, and the PEO on June 26, 2003 [Tab 81B]. Note that the orange block in Table 1-2, in the column opposite Item H07, *Fire Control Panel (FCP) Elevated Temperature*, served only as "flag" to reinforce the narrative statement in the *Response* section of the Action Item coversheet indicating Lockheed Martin's understanding that upon further review, the MLRS Project Office did not consider *FCP Elevated Temperature* to be a significant hazard and that Lockheed was thus closing the item and would not pursue further mitigation.¹⁴⁵ It appears that [REDACTED] was well aware that as of September 2002, Lockheed had completed the software remediation that corrected the "single-point failure" deemed to be the likely cause of the "uncommanded cage movement."

¹⁴⁶ Note that the contracting officer could not in good faith refuse to accept the launchers merely because the SAR was unacceptable or late. However, the contracting officer could properly reject the launchers if they did not meet the standard set forth in contract performance specification MIL-PRF-35500.

¹⁴⁷ See "Get Well Plan Implementation" Chart, *supra* p. 39 and text p. 38.

launchers' conformance with MIL-PRF-35500 had not been satisfactorily resolved, AMCOM would no longer accept delivery of M270A1 launchers effective March 19, 2003—

. . . the SAR required by the contract has not been approved . . . and that sufficient data has not been provided to allow closure of action item 573¹⁴⁸ to the satisfaction of the Government. . . . [Lockheed] needs to provide sufficient safety data to allow the Government to determine the best path forward. Until sufficient data is provided to adequately ensure that the launcher meets critical safety performance requirements, the action item is disapproved.

. . . it is my determination that Lockheed Martin corporation is in non-compliance with the terms of the contract. You are further notified that effective 19 March 2003, M270A1 Launchers will no longer be accepted until this issue is resolved.

Tab 85, AMCOM Acquisition Center, MLRS Contracting Office Letter to ██████████ Lockheed Martin, dated February 12, 2003.

On March 13, 2003, the AMCOM Safety Office provided somewhat contradictory and advice to ██████████ as follows—

The Safety Office concurred . . . with the conditional release of the M270A1 launcher. This office has *no safety objections* to the continued acceptance of M270A1 launchers. . . . It is the position of the Safety Office that the M270A1 launcher *does not* comply with the requirements of Paragraph 3.2.10.2 of MIL-PRF-35500, and that this issue needs to be corrected through proper contractual avenues.¹⁴⁹

Tab 86, AMCOM Safety Office Memorandum, subject: *M270A1 Delivery Issues*, dated March 13, 2003, *emphasis added*.

In a subsequent March 18, 2003 memorandum to ██████████ MLRS Contracting Officer,¹⁵⁰ then-MLRS Project Manager, ██████████ may have contributed further to the confusion. ██████████ noted—

¹⁴⁸ See *supra* note 144, Action Item 573 and pp. 41.

¹⁴⁹ See "Get Well Plan Implementation" Chart, *supra* p. 39 and text p. 38. By the date of the Safety Office memorandum to the Acquisition Center, Lockheed Martin had completed all work to correct the "single-point failure" associated with the *Launcher Movement/Control* deficiency identified by the SRRE, and implemented most of the other safety-related "improvements" recommended by the SRRE and incorporated in the "get well plan." The AMCOM Legal Office review revealed that all of the launchers that had been delivered and accepted by the government to that point in time had been retrofitted with the corrected *Launcher Movement/Control* software by September 2002. Further, the new software had been incorporated in each of the new launchers produced beginning in May 2002. Nonetheless, it appears that the Acquisition Center used the Safety Center's assertion that the launcher "*does not comply* with . . . MIL-PRF-35500" to support a course of action—termination of launcher delivery and acceptance—that would motivate Lockheed Martin and the MLRS Project Office to act immediately to resolve the Acquisition Center's remaining concerns regarding the safety of the launchers.

¹⁵⁰ Although ██████████ had assumed lead Contracting Officer responsibility for MLRS Contract Nos DAAH01-98-C-0138 and DAAH01-00-C-0109, ██████████ continued to assist ██████████ on both of these contracts. No bright line divided ██████████ responsibilities from those of ██████████ rather, they functioned as a team with overlapping duties.

Reference the safety letter to your office, 13 Mar 03, the M270A1 Safety POC states that his office *has no safety objections* to the continued acceptance of the M270A1 launchers. I recognize the Safety Office as the subject matter expert in this area, and consequently feel satisfied their opinion is well researched and sound. My office intends to place a priority on sorting out the other issue brought up by AMCOM Safety, that being non-compliance of the launcher to MIL-PRF-35500.

Tab 72B, *emphasis added*.

Recognizing that March 23, 2003—the deadline the Acquisition Center had imposed on Lockheed to resolve the outstanding safety issues, or risk AMCOM's refusal to accept launchers pending delivery—was fast approaching, ██████████ requested that ██████████ extend to April 23, 2003, the deadline "to come to an acceptable solution to this issue." [Tab 72B]. It appears that ██████████ acceded to ██████████ extension request.

In an attempt to resolve the matter, ██████████ requested, by letter of March 20, 2003, that Lockheed validate and certify that the company had met the terms and conditions of contract DAAH01-00-C-0109 for M270A1 LRIP III. ██████████ letter addressed, among other things, the need to resolve the matter of the unsatisfactory and untimely SAR and the requirement that Lockheed verify launcher conformance to MIL-PRF-35500 [Tab 87, AMCOM Acquisition Center, MLRS Contracting Office letter to ██████████, Lockheed Martin, dated March 20, 2003].

By letter dated April 4, 2003, Lockheed responded to AMCOM's concerns, stating that it had done "everything practical to eliminate hazards through design," and had "no reason for concern or problems [set forth in AMCOM's request]." Lockheed requested "that this matter now be considered closed and that the planned shutdown of launcher production on 23 April 2003 be rescinded." [Tab 88, Lockheed Martin letter from ██████████ Financial Manager, Fire Support Programs to ██████████ MLRS Contracting Officer, subject: *Contract DAAH01-00-C-0109, M270A1 LRIP III; Compliance with Contract Terms and Conditions*, dated April 4, 2003]. Apparently dissatisfied with Lockheed's response, AMCOM suspended launcher acceptance from April through June of 2003. As expected, the suspension spurred Lockheed and AMCOM to work together to address and resolve the Acquisition Center's remaining concerns about the safety of the launchers.

By memorandum of June 26, 2003, the AMCOM Acquisition Center acknowledged that all issues associated with the safety of the launchers had been resolved [Tab 89, AMCOM Acquisition Center Memorandum to ██████████ Administrative Contracting Officer, Defense Contract Management Agency, subject: *Contract DAAH01-00-C-0109, M270A1—Resumption of Delivery of M270A1 Launchers*, dated June 26, 2003]. This letter further substantiated that Lockheed ultimately had submitted an acceptable SAR.¹⁵¹ Attached to the Acquisition Center letter was the *M270A1 Launcher System Safety*

¹⁵¹ The contracting officer had delegated to the MLRS Project Office the authority to accept data items Lockheed produced under Contract No. DAAH01-00-C-0109. The production of the SAR fell into the category of "data item." The Acquisition Center letter confirms that Lockheed finally submitted a facially acceptable SAR, which was informally accepted by the government on June 13, 2003. It appears that Lockheed worked with AMCOM over time to perfect the SAR, which at this stage was of diminished significance. The MLRS Project Office formally notified Lockheed on March 2, 2004 that the SAR had been accepted [Tab 90, AMCOM

Risk Assessment, Un-Commanded Movement of the M270A1 Launcher Loader Module (LLM) Cage [Tab 81A].¹⁵² This *System Safety Risk Assessment* documented that all corrective actions and safety-related "improvements" recommended by the SRRE team and made part of the "get well plan" had been completed, with one exception: implementation of the recommendation to incorporate a boom control kill switch, which remained in progress.¹⁵³ The *System Safety Risk Assessment* recommended continued efforts to implement this "improvement" no later than June 30, 2005. The *System Safety Risk Assessment* further recommended that AMCOM temporarily accept the risk involved with the fielding and deployment of the launcher prior to the implementation of the boom control switch "improvement" and permanently accept any risk associated with the earlier decision not to implement the Adding Additional Kill Switches "improvement." These recommendations had been endorsed, in full, by the MLRS Project Office and the AMCOM Safety Office on May 19, 2003, and by the Commanding General of AMCOM on June 20, 2003. On June 26, 2003, the same date of the Acquisition Center letter authorizing the resumption of launcher delivery [Tab 89], the PEO concurred in and approved the recommendations of the *System Safety Risk Assessment* [Tab 81B].¹⁵⁴

By memorandum of August 27, 2003, the AMCOM Safety Office issued its Final S&HDS [Tab 82],¹⁵⁵ concluding that "[a]ll identified hazards associated with the operation of the M270A1 have been resolved through design, training, procedures and the Safety Risk Management Process. Based upon this information, the M270A1 is considered acceptable for material release."¹⁵⁶ Thereafter, AMCOM approved the M270A1 launcher for "Full Material Release," authorizing its deployment to soldiers in the field for operational use and accelerating launcher production to full-rate.

We now turn our attention to the most important question posed by OSC: was the M270A1 safe for use by soldiers? ██████████ a safety engineer assigned to the AMCOM Safety Office during the period relevant to this OSC-referred allegation, was responsible for MLRS safety determinations and participated in the SRRE. When questioned by the AMCOM AR 15-6 IO regarding the safety of the launcher, Mr. Indihar verified that Lockheed Martin had fixed all of the launchers before the launchers were fielded:

. . . the problems discovered (particularly the uncommanded cage movement) were fixed by Lockheed Martin before the launchers were sent to the field. The allegation that unsafe launchers were actually sent to the field is an

MLRS Project Office Letter from ██████████ Product Manager, Field Artillery Launchers, to ██████████ Lockheed Martin, dated March 2, 2004].

¹⁵² See *supra* note 134, *System Safety Risk Assessment*, with collateral documents [Tab 81].

¹⁵³ Note that the *System Safety Risk Assessment*, *supra* note 134, mistakenly indicated that the *Eliminating Stale Message and Hanging/Latent Commands* "improvement" was not complete until August 2003. Mr. Handley, the head of quality assurance for the MLRS Project Office indicates that, in fact, this "improvement" was initiated in May 2002 and completed in September 2002. The *Eliminating Stale Message and Hanging/Latent Commands* "improvement" was incorporated in all launchers at exactly the same time the *Launcher Movement/Control* "single-point failure" was corrected. See *supra* note 138.

¹⁵⁴ See *supra* note 134, *System Safety Risk Assessment*, with collateral documents [Tab 81].

¹⁵⁵ See *supra* note 138, Final Safety Office S&HDS [Tab 82].

¹⁵⁶ *Id.*, p. 6, para 5.0.

exaggeration of facts There have been no instances noted of the failure [uncommanded cage movement] in the field.

Tab 93, Statement of [REDACTED] dated July 8, 2008.

[REDACTED] the AMCOM Safety Office lead for the MLRS Project Office, wrote:¹⁵⁷

To my knowledge there have been no reported cases of uncommanded cage movement since the original issue was resolved.

. . . .
No recurrence of the anomaly has ever occurred after the software upgrade during the original development process.¹⁵⁸

Tab 92, Email from [REDACTED] to [REDACTED], dated July 14, 2008, forwarding email of July 1, 2008.

In a meeting with the AR 15-6 IO on June 17, 2008, [REDACTED] the Deputy MLRS Project Manager, stated that he was unaware of any safety incidents in the field associated with "uncommanded cage movement" [Tab 74, MFR documenting [REDACTED] meeting with PFRMS Project Office regarding AR 15-6 investigation, dated July 11, 2008, *emphasis added*].

On June 2006, as part of its criminal investigation of Mr. Daniels's allegations to OSC, CID agents interviewed soldiers and Army civilian employees at Fort Sill, Oklahoma¹⁵⁹ to assess their experience as to the safety of the M270A1 launchers. CID documented statements from witnesses who had trained on, used, and maintained the MLRS. All described the MLRS as "safe".¹⁶⁰

- Staff Sergeant (SSG) [REDACTED] an MLRS instructor at the U.S. Army Field Artillery School, who had worked on three separate MLRS platforms (the M270, the M270A1, and the HIMARS) for at least 13 years, stated that some items tended to fail due to the systems' complicated electronics, but that he had never thought of the MLRS as unsafe. [REDACTED] related his belief that the system was safe for soldiers' use [Tab 93, Summaries of CID Interviews at Fort Sill, Oklahoma on June 27, 2006, p. 1].

- Sergeant (SGT) [REDACTED] recalls first training on the M270A1 in 2001.¹⁶¹ SGT [REDACTED] stated that he had witnessed an involuntary cage movement at Fort Hood,

¹⁵⁷ Presumably, [REDACTED] was referring to Lockheed's correction of the *Launcher/Movement Control* "single-point failure" in May 2002. See "Get Well Plan Implementation" Chart, *supra* p. 39 and text p. 38.

¹⁵⁸ As a technical matter, low-rate initial production is considered to be a part of the "development" process.

¹⁵⁹ Fort Sill, Oklahoma is the location of the U. S. Army Field Artillery School. The mission of the Field Artillery School is to train field artillery soldiers to destroy, neutralize, or suppress the enemy by cannon, rocket and missile fire and to help integrate all fire support assets into combined arms operations. The MLRS is one of the field artillery systems trained at the School. The summarized testimony of witnesses interviewed by CID is documented at Tab 93.

¹⁶⁰ None of the witnesses interviewed commented adversely on the overall safety of the MLRS.

¹⁶¹ Note, however, that SGT [REDACTED] recollection as to the year may be in error; the M270A1 was not fielded for the limited purpose of testing and training until February 2002.

Texas, but that the problem had stemmed from burned-out internal limiting switches. SGT ██████ stated that the MLRS had a great degree of safety built-in that soldiers could not bypass. SGT ██████ stated that the biggest problem that he perceived was that the MLRS went "too high-tech, too fast" for users to understand the electronics thoroughly. He also noted that items tended to fail due to complexity. SGT ██████ concluded that the MLRS was safe [Tab 93, Summaries of CID Interviews at Fort Sill, Oklahoma on June 27, 2006, p. 1].

- ██████ had worked on the MLRS for 21 years at the time CID took his statement. ██████ stated that he had never observed any uncommanded cage movements nor had he identified any safety problems when performing maintenance on the launchers [Tab 93, Summaries of CID Interviews at Fort Sill, Oklahoma on June 27, 2006, p. 1].
- Sergeant First Class (SFC) ██████ formerly a chief instructor at the U.S. Army Field Artillery School, had accrued almost 16 years of MLRS experience at the time he was interviewed by CID. SFC ██████ informed CID that there existed 191 MLRS systems, 18 of which were deployed, and that there had been no cage command problems except as to one launcher. SFC ██████ stated his belief that the MLRS system was safe [Tab 93, Summaries of CID Interviews at Fort Sill, Oklahoma on June 27, 2006, pp. 1, 2].

Further, the M270A1 launcher has proven to be a system vital to the success of the U.S. Army in the field in Operations Enduring Freedom and Iraqi Freedom. As evidenced in a briefing presented by the current AMCOM Commanding General at "Industry Days 2008,"¹⁶² more than 1500 MLRS and guided MLRS¹⁶³ rockets have been fired in support of the war effort [Tab 94A, Slide, *Support to the Warfighter OIF/OEF, MLRS Rockets*], all without apparent safety incident. M270A1 field reliability, tracked beginning in April 2002 (subsequent to the "Conditional Materiel Release" of the launchers to the field for testing and training), through the present, indicates that the M270A1 launcher has logged more than 375,000 hours of operational time, all without a single incident of "uncommanded cage movement." [Tab 94B, Slide, *M270A1 Field Reliability*].

All available evidence supports a finding that all significant safety issues regarding the M270A1 launcher were identified and analyzed as part of the SRRE and corrected through the implementation of the launcher "get well plan," well in advance of the launchers' fielding and deployment for operational use by soldiers in late 2003. In fact, by September 2002, a few short months after the launchers had been fielded pursuant to a "Conditional Materiel Release" and a "Training Conditional Release" for the *limited purposes of testing and training*, all launchers conformed to safety-related contract performance specification

¹⁶² See Slide, *Support to the Warfighter OIF/OEF, MLRS Rockets* [Tab 94A]. Industry Days 2008 is an annual conference, sponsored by AMCOM, to which government defense contractors are invited. The conference is designed to provide AMCOM with insights into products currently under development in the commercial sector and to promote communication between the government and the private sector.

¹⁶³ Regular MLRS rockets are aimed at the target by the launcher's fire control system. Guided MLRS rockets have an internal guidance system linked to a Global Positioning System (GPS) that guides the rocket to its target.

MIL-PRF-35500 (that prohibited "single-point failures" that could result in a catastrophic safety hazard) and were safe for use by soldiers.

• **Allegation 3b.**

FFP production Contract No. DAAH01-00-C-0109 required Lockheed Martin to deliver a SAR in regard to the MLRS 270A1. Data Item A001 on the DD Form 1423, *Contract Data Requirements List*, attached to the contract, required Lockheed's preparation and delivery of a SAR for the M270A1 no later than March 28, 2001, within 270 days after contract award [Tab 70A].¹⁶⁴ Partially in consideration for Lockheed's production of a SAR, the government paid Lockheed the FFP for which the parties had contracted. Mr. Daniels asserted that Lockheed never submitted the SAR as required by the contract, and that AMCOM was then required to expend additional appropriated funds to pay an independent contractor to prepare the report.

The preparation of a SAR would have required Lockheed to engage in safety program, safety assessment, and hazard analysis efforts. Paragraph 7.1 of the SOW applicable to Contract No. DAAH01-00-C-0109, specified how the SAR was to be generated—

A comprehensive Safety Assessment Report [SAR] shall be prepared for the M270 in accordance with DI-SAFT 80102 that incorporates the safety assessment efforts conducted under the ILMS and IFCS programs. The M270A1 Safety Assessment Report shall summarize the combined safety programs, tasks and activities, and describe all design safety requirements features, functions and characteristics of the hardware and applicable launcher software. All safety hazards and risks associated with the M270A1 configuration that were identified during development and testing shall also be documented along with any procedural hazards, controls and precautions required for tactical and training launcher operation/maintenance. System, Subsystem, Software and Operating and Support Hazard Analysis shall be performed and/or updated on the changes from the Basic M270 to M270A1 Launcher configuration, with emphasis on safety critical components and functions, and the results incorporated into the contract.

Tab 70B, Excerpt, SOW, Contract No. DAAH01-00-C-0109, para 7.1.

As the contractual due date for the SAR approached, Lockheed advised AMCOM that in originally negotiating the contract with the government, it had not proposed or costed sufficient manhours to prepare the comprehensive SAR required. Lockheed made clear that it would not submit the SAR by the March 2001 suspense.¹⁶⁵

¹⁶⁴ FAR 27.401 defines "data" as recorded information, regardless of form or the media on which may be recorded.

¹⁶⁵ Nonetheless, Lockheed proposed a schedule for submitting a SAR that complied with contract specifications by October 30, 2001 [Tab 975 Email from ██████████ Financial Manager, Fire Support, responding to ██████████ Chief of the PEO Tactical Missile PEO Support Directorate, Acquisition Center, dated May 30, 2001]. Lockheed did not submit its SAR until December 20, 2001, however. Lieutenant Colonel ██████████ then a M270A1 launcher Product Manager, determined Lockheed's submission to be unsatisfactory and disapproved the SAR by letter to Lockheed of January 24, 2002 [Tab 78].

AMCOM needed a comprehensive and timely SAR to assess potential risks and safety issues associated with the M270A1 launcher.¹⁶⁶ Accordingly, then-MLRS Project Manager [REDACTED] and then-Deputy Project Manager [REDACTED] decided to establish an AMCOM-sponsored SRRE team comprised of government experts and support contractors.¹⁶⁷ The mission of the SRRE team, convened in May 2001, was to evaluate fully the M270A1 launcher's potential safety risks and to propose appropriate corrective action. The AMCOM Safety Office concurred fully in the establishment of the SRRE. AMCOM paid approximately \$1,000,000 for the services of an independent contractor (other than Lockheed) to participate in the SRRE effort. The MLRS Project Office intended the SRRE safety assessment, the preparation of which was supported by the independent contractor, to be of sufficiently high quality to substitute for, and fulfill the purposes of, the SAR Lockheed had failed to produce to date.

Several sources clarified that independent contractor, who assisted in generating the parallel safety assessment pursuant to its participation on the AMCOM SRRE team, did so pursuant to an existing support contract task order rather than pursuant to a wholly new contract [Tabs 73, 74].¹⁶⁸

After multiple revisions and resubmissions, Lockheed finally submitted a facially acceptable SAR, which was informally accepted by the government on June 13, 2003.¹⁶⁹ It appears that Lockheed worked with AMCOM over time to perfect the SAR, which by then was of diminished significance. The MLRS Project Office formally notified Lockheed on March 2, 2004 that the SAR had been accepted [Tab 90, AMCOM MLRS Project Office Letter from [REDACTED] Product Manager, Field Artillery Launchers, to [REDACTED] Lockheed Martin, dated March 2, 2004].¹⁷⁰

In August 2003, [REDACTED] had drafted, but had not signed, a demand letter seeking \$1,600,000 in reimbursement from Lockheed Martin. \$1,000,000 of this amount represented the government's additional expenditure of appropriated funds required to pay the independent contractor supporting the AMCOM-sponsored SRRE team's parallel safety assessment.¹⁷¹ Just as [REDACTED] planned to sign and send the letter, AMCOM received the instant OSC referral and a CID investigation ensued. CID [REDACTED] requested that [REDACTED] refrain from sending the demand letter while CID's investigation was ongoing, presumably to preclude a civil action from undermining a potential criminal case [Tab 96, Second Declaration of [REDACTED] dated August 11, 2008]. On January 28,

¹⁶⁶ See *supra* pp. 29, 32.

¹⁶⁷ See *supra* p. 32.

¹⁶⁸ See *supra* note 109.

¹⁶⁹ This submission was documented in AMCOM Acquisition Center Memorandum to [REDACTED] Administrative Contracting Officer, Defense Contract Management Agency, subject: *Contract DAAH01-00-C-0109, M270A1—Resumption of Delivery of M270A1 Launchers*, dated June 26, 2003 [Tab 89].

¹⁷⁰ See *supra* note 151. The contracting officer had delegated to the MLRS Project Office the authority to accept data items Lockheed produced under Contract No. DAAH01-00-C-0109.

¹⁷¹ See *infra* pp. 50, 51. The remaining \$600,000 was attributable to AMCOM's mistaken "double-payment" to Lockheed to remediate the *Launcher Movement/Control* deficiency identified by the SRRE team as the most likely cause of the "uncommanded cage movement." Correction of this "single-point failure" was required to conform the launcher to safety-related performance specification MIL-PRF-35500 set forth in the base production contract by which Lockheed was bound and for which Lockheed already had been paid.

2008, subsequent to the completion of the CID investigation, ██████████ forwarded a demand letter to Lockheed [Tab 97, AMCOM Acquisition Center Letter from ██████████ ██████████ Chief, MLRS Services Division, to ██████████ Lockheed Martin, dated January 28, 2008].¹⁷²

- **Allegation 3c.**

MIL-PRF-35500, incorporated in FFP Contract No. DAAH01-00-C-0109, provided that, “[s]ingle-point failures which may result in catastrophic or critical safety hazards or mishaps, shall be precluded from the system . . .” [Tab 76].¹⁷³ Lockheed bore all responsibility for producing and delivering to the government M270A1 launchers that conformed to this specification. Partially in consideration for Lockheed’s production of launchers that conformed to contract specifications, the government paid Lockheed the FFP to which the parties had agreed.

Subsequently, an AMCOM-sponsored SRRE team identified a *Launcher Movement/Control* deficiency as the most likely cause of an “uncommanded cage movement” anomaly.¹⁷⁴ Correction of this “single-point failure” was required to conform the launcher to safety-related performance specification MIL-PRF-35500.¹⁷⁵

Unaware that *Launcher Movement/Control* deficiency identified by the SRRE constituted a “single-point failure” that rendered the launchers nonconforming with MIL-PRF-35500, the AMCOM Acquisition Center subsequently paid Lockheed an additional sum, estimated by ██████████ to be \$600,000, to remediate this deficiency.¹⁷⁶ As explained above, Lockheed was already obligated, and had been paid, under terms of base production Contract No. DAAH01-00-C-0109 to provide the government with M270A1 launchers conforming to MIL-PRF-35500 and devoid of “single-point failures.” Accordingly, AMCOM’s \$600,000 “double payment” to Lockheed was in error.

It appears that this erroneous \$600,000 “double payment” had its genesis in the persistently poor communications between the MLRS Project Office and the AMCOM Acquisition Center. Unaware of the SRRE effort until April of 2002, the Acquisition Center remained “in the dark,” until October of that year, to the fact that the SRRE team had identified a “single-point failure” that rendered the launchers nonconforming to contract performance specifications and that Lockheed thus was obligated to correct this deficiency

¹⁷² ██████████ recently contacted his counterpart at Lockheed Martin to request an update on the status of Lockheed’s response to the demand letter. The Lockheed contact reported that he had been recently undergone heart surgery, necessitating his absence from the office for a period of 4-5 months. The Lockheed contact reported that he had provided a draft response to the Lockheed’s legal department prior to his surgery and committed to checking on the status of the response with a view to providing a final response to AMCOM as soon as practicable.

¹⁷³ See *supra* note 112.

¹⁷⁴ See *supra* note pp. 33, 34.

¹⁷⁵ *Id.*

¹⁷⁶ It is likely that AMCOM rendered this payment to Lockheed between May 2002, when Lockheed first undertook to correct the *Launcher Movement/Control* “single-point failure,” and September 2002, by which time Lockheed and AMCOM, working together, had completed remediation of the deficiency and retrofitted all of the launchers.

at no additional cost to the government.¹⁷⁷ By the time the Acquisition Center became fully aware of all pertinent facts and circumstances, it appears that Lockheed already had received "double payment" for its correction of the *Launcher Movement/Control* deficiency.

In August 2003, ██████████ had drafted, but had not signed, a demand letter seeking \$1,600,000 in reimbursement from Lockheed Martin. According to AMCOM Legal Office estimates, \$600,000 of this amount represented recoupment of AMCOM's mistaken "double-payment" of appropriated funds to Lockheed to correct the "single-point failure" associated with the *Launcher Movement/Control* deficiency and to bring the launchers into conformance with MIL-PRF-35500.¹⁷⁸ Just as ██████████ planned to sign and send the letter, AMCOM received the instant OSC referral and a CID investigation ensued. CID ██████████ requested that ██████████ refrain from sending the demand letter while CID's investigation was ongoing, presumably to preclude a civil action from undermining a potential criminal case [Tab 96, Second Declaration of ██████████ dated August 11, 2008]. On January 28, 2008, subsequent to the completion of the CID investigation, ██████████ forwarded the demand letter to Lockheed [Tab 97, AMCOM Acquisition Center Letter from ██████████ Chief, MLRS Services Division, to ██████████ Lockheed Martin, dated January 28, 2008].¹⁷⁹

- Allegation 4b.

The M270A1 launcher was approved for "Conditional Materiel Release" and "Training Materiel Release" in February 2002 and shortly thereafter fielded to troops on a *limited basis for testing and training*. Both the SRRE report, and the AMCOM Safety Office S&HDS, which served preliminarily to document the launcher "get well plan," recommended that AMCOM expeditiously implement launcher design changes *and* issue operating procedures to buttress the safety of personnel who might test or train on the launcher. Accordingly, in February 2002, AMCOM distributed to the field a *Safety Bulletin* setting forth the operating procedures and restrictions to which users were required to adhere.¹⁸⁰ The most important safety measure imposed by the *Safety Bulletin* was the "3-meter rule," which prohibited the presence of personnel within a 3-meter safety zone around the launcher while it was moving or while the LDS was engaged. ██████████ advises that the *Safety Bulletin* and the "3 meter rule" remain in effect today [Tab 80].

Mr. Daniels alleged that AMCOM's reliance on what he called "Fielding Operating Restrictions" was both insufficient to ensure the safety of soldier-users and violated MIL-STD-882 [Tab 64]. Mr. Daniels asserted that the M270A1 should not have been fielded unless all extant safety concerns were susceptible of correction solely through improvements and corrections in the launchers' design.

¹⁷⁷ See *supra* pp. 33, 34.

¹⁷⁸ See *supra* pp. 47-49. The remaining \$1,000,000 was attributable to the government's additional expenditures of appropriated funds required to pay the independent contractor supporting the AMCOM-sponsored SRRE. Ultimately, the SRRE report was used in lieu of the SAR that Lockheed failed to prepare and submit timely to the government, as required by the base contract, and for which Lockheed already had been paid.

¹⁷⁹ See *supra* note 172.

¹⁸⁰ See *supra* note 130 [Tab 80].

This allegation appears to have been premised on a misinterpretation of the requirements of MIL-STD-882. Although MIL-STD-882 states a preference for the use of design features to mitigate safety risks, it clearly delineates other measures as part of a comprehensive approach to system safety. For example, MIL-STD-882 expressly provides that "[w]here it is impractical to eliminate hazards through design selection or to reduce the associated risk to acceptable level with safety and warning devices, *incorporate special procedures and training*. . ." as part of a comprehensive approach to personnel safety [Tab 64, para 4-4a—d]. Such special procedures and training indisputably include the operating procedures and restrictions set forth in the AMCOM M270A1 *Safety Bulletin*. Further, taken in combination, Lockheed's redesign of the launcher software to eliminate the *Launcher Movement/Control* "single-point failure," coupled with the incorporation of "improved" safety and warning devices, as recommended by the SRRE and the Safety Office, and AMCOM's publication of the *Safety Bulletin* and soldier adherence to the "3-meter rule" it promulgated, appear to have contributed to the outstanding personnel safety record associated with the M270A1 launcher.¹⁸¹

Findings of the AMCOM Legal Office Review and AR 15-6 Investigation:

As to Allegations 3a and 4a, the allegation that the government accepted and deployed launchers that were unsafe and failed to conform with safety-related performance specification MIL-PRF-35500 is unsubstantiated. The evidence reveals that Lockheed initiated an investigation immediately after a September 2000 incident of "uncommanded cage movement" that occurred in the context of production testing at its Camden, Arkansas facility. Given its ongoing investigation, Lockheed voluntarily suspended its planned October 2000 delivery of the launchers to the government. By letter of November 2000, Lockheed requested approval to resume launcher delivery, however. Although unable to determine the root cause of the "uncommanded cage movement," Lockheed Martin had incorporated in the launcher, at its own expense, certain safety improvements that it believed would either prevent "uncommanded cage movement" or stop it more quickly if it started. The evidence indicates that based on these improvements and Lockheed's commitment to research the problem further, AMCOM Contracting Officer, [REDACTED] in whom the authority to accept or reject the launchers vested, conditionally agreed to Lockheed's proposal to resume delivery and in December 2000, launcher delivery and acceptance resumed. It is undisputed that this decision was rendered by the contracting officer, not by the MLRS Project Office, as Mr. Daniels asserted to OSC. [REDACTED] decision to continue to accept the launchers was in accord with FAR 46.407(c)(1) [Tab 62], because Lockheed Martin had made improvements that it believed remedied the problem and rendered the launchers safe to use for their intended purpose. [REDACTED] involvement at this stage of the process also contravenes Mr. Daniels's assertion that the AMCOM Acquisition Center was wholly unaware of safety concerns regarding the launchers until much later, in 2002.

Meanwhile, Lockheed advised AMCOM that it would be unable to submit a comprehensive SAR by the due date of March 23, 2001, as required by the terms of Contract No. DAAH01-00-C-0109, and for which Lockheed had been paid. Given the imperative for a comprehensive hazard analysis of the launcher, in May 2001, AMCOM established a SRRE

¹⁸¹ See *supra* pp. 45-47.

team to conduct a parallel safety assessment. The SRRE team was comprised of government experts and supported by an independent contractor (not Lockheed), at a cost of \$1,000,000. The final report of the SRRE team, issued at the end of January 2002, identified a *Launcher Movement/Control* deficiency as a "single-point failure" and the presumptive cause of the "uncommanded cage movement." The team concluded that when one of the launcher's drive, feedback, or cage position sensors disconnected for any reason from the hardware circuits that connected them to the launcher control system, the launcher control software malfunctioned, causing "uncommanded cage movement." The SRRE report proposed the addition of a redundant "loop" to launcher control software to maintain control of the cage if such a disconnection recurred. In addition, the SRRE recommended seven other safety-related "improvements." The "single-point failure" rendered the launchers nonconforming with safety-related performance specification MIL-PRF-35500, which, as incorporated in the base contract, required Lockheed to provide the government with launchers free of such "single-point failures."

It is likely that from the moment the SRRE convened in May 2001, through the issuance of its Final Report in January 2002, the SRRE properly kept Lockheed apprised of its activities. That given, it appears that the AMCOM Project Office worked with Lockheed to begin developing improved launcher hardware and software to implement the findings and recommendations of the SRRE as they evolved.

On January 31, 2002, based on the findings of the SRRE team, the AMCOM Safety Office issued a "Conditional Safety Release," documenting its determination that the M270A1 launcher would be safe for fielding and deployment for operational use by troops subject to correction of the "single-point failure" and implementation of the other "improvements" identified by the SRRE effort and set forth in a preliminary "get well plan." Subsequently, in February 2002, AMCOM approved both a "Conditional Materiel Release" and a "Training Materiel Release," authorizing fielding of the launchers for the limited purposes of testing and training. Concurrently, AMCOM published a M270A1 *Safety Bulletin* promulgating the "3 meter rule" and other operational procedures and restrictions to which personnel using the launcher were required to adhere. The *Safety Bulletin* remains in effect today.

By the time the launchers were fielded for testing and training in February 2002, several of the "improvements" recommended by the SRRE and the Safety Office already had been implemented. Several short months later, in May 2002, Lockheed and AMCOM began to remediate the "single-point failure" associated with the *Launcher Movement/Control* deficiency, retrofitting all launchers by September of that same year. Completion of this task rendered the launchers safe and in conformance with contract performance specifications.

It does appear that the SRRE team and the AMCOM Safety Office identified launcher safety concerns and applicable remedies and communicated them to the MLRS Project Office, leaving Acquisition Center personnel "out of the loop," as asserted by Mr. Daniels in his communications with OSC. This ineffective communication between the MLRS Project Office and the Acquisition Center likely contributed to the Acquisition Center's unknowing acceptance of nonconforming launchers between February 2002 (following publication of the Final SRRE report identifying the "single-point failure") and April 2002, when Ms.

Rodriguez attended a meeting at which the SRRE and the "get well plan" were discussed. The AMCOM Legal Office has held that continued acceptance of the launchers during this period did not constitute a *per se* violation of FAR 46.407—it is evident that the FAR speaks to "knowing" acceptance of nonconforming items. Further, even had the Acquisition Center been aware of the launchers' nonconformance with MIL-PRF-35500, it was aware of the problem of "uncommanded cage movement" and properly could have invoked FAR 46.407(c) to continue accepting the launchers while the problem was being addressed. Although cognizant of the fact that the SRRE team had recommended certain safety "improvements" to the launchers, it was not until October of 2002 that the Acquisition Center became aware that the SRRE had identified a *Launcher Movement/Control* deficiency as a "single-point failure" and the likely cause of the "uncommanded cage movement." Thus it was that some time between May and September 2002, the Acquisition Center mistakenly compensated Lockheed, in an amount estimated at \$600,000, to remediate the *Launcher Movement/Control* deficiency, unaware that Lockheed already bore responsibility and had been paid for this same work (*i.e.*, the provision of launchers devoid of "single-point failures") under the base production contract. The \$600,000 payment thus constituted a "double payment" to which Lockheed was not entitled. The remaining safety "improvements" identified by the SRRE were additive and precautionary in nature—none had been required by the terms of the base contract. That a launcher lacked one of the additive "improvements" did not render that launcher nonconforming to the contract terms or "unsafe" *per se*, although the inclusion of the "improvements" certainly rendered the launchers "safer." Accordingly, Lockheed properly could properly expect, and did receive, additional compensation from AMCOM for the costs of developing and incorporating precautionary design "improvements" and upgrades not contemplated by the original contract.

In the months that followed, Lockheed continued to retrofit the launchers with the additive safety "improvements" recommended by the SRRE; these same "improvements" were installed on all new launchers as they "rolled off" the Lockheed production line.

Neither the AR 15-6 investigation nor the AMCOM Legal Office review found evidence to support Mr. Daniels's claim that in October 2002, Lockheed had submitted a SAR that had revealed launcher safety deficiencies far more serious than previously reported. Rather, the AR 15-6 IO determined that in October 2002, Lockheed had submitted to AMCOM a matrix setting forth potential M270A1 hazards and their assessed risks, together with a denotation as to whether each hazard risk was to be reduced to an acceptable level by hardware, software, and/or procedural controls. The IO's review of the matrix revealed that after mitigation, all potential hazards—to include "uncommanded cage movement"—were reduced to "remote" or "improbable," meaning a very low or rare probability of occurrence.

It appears that in the course of reviewing the October 2002 Lockheed Martin hazard assessment matrix, [REDACTED] first became aware of the "single-point failure" that potentially rendered the launchers nonconforming to MIL-PRF-35500. After a perplexing series of communications between the MLRS Project Office, the AMCOM Safety Office, and the Acquisition Center, in which [REDACTED] attempted to get to the "ground truth" of the launchers' safety, she suspended delivery and acceptance of the launchers in April 2003.

Mr. Daniels's assertion that the Project Office ignored Acquisition Center advice to seek corrective action prior to accepting more launchers appears to be without merit. It may be that this allegation is grounded in a misconception of contractual acceptance authorities and procedures. Neither the MLRS Project Office nor any individual therein had (nor has) the authority to accept or reject items presented for delivery under a government contract. This authority is vested solely in the contracting officer and his/her duly appointed representatives. The documentary evidence makes clear that beginning in the Fall of 2002, the MLRS Project Office, the AMCOM Safety Office, and the Acquisition Center worked together, albeit in confused fashion, in an effort to resolve concerns about Lockheed's compliance with safety-related performance specification MIL-PRF-35500 and to decide whether AMCOM should continue to accept delivery of the launchers.

As expected, AMCOM's April 2003 suspension of launcher delivery and acceptance spurred Lockheed to work with AMCOM to address the Acquisition Center's remaining concerns about the safety of the launchers.

By letter of June 26, 2003, the AMCOM Acquisition Center acknowledged that all safety issues associated with the launcher had been resolved and that Lockheed ultimately had submitted an acceptable SAR. Attached to the Acquisition Center letter was the *M270A1 Launcher System Safety Risk Assessment, Un-Commanded Movement of the M270A1 Launcher Loader Module (LLM) Cage*, documenting that the most important corrective action and safety-related "improvements" recommended by the SRRE team and made part of the "get well plan" had been completed. The *System Safety Risk Assessment* ultimately was reviewed and approved at appropriate levels and by memorandum of August 27, 2003, the AMCOM Safety Office issued its Final S&HDS,¹⁸² concluding that "[a]ll identified hazards associated with the operation of the M270A1 have been resolved through design, training, procedures and the Safety Risk Management Process. Based upon this information, the M270A1 is considered acceptable for material release."¹⁸³ Thereafter, AMCOM approved the M270A1 launcher for "Full Material Release," authorizing its deployment to soldiers in the field for operational use and accelerating launcher production to full-rate.

Of greatest importance, the investigative undertakings of both the AR 15-6 IO and the AMCOM Legal Office contravened wholly Mr. Daniels's assertions that AMCOM deployed unsafe and nonconforming M270A1 launchers to the field, placing soldiers at great risk. All available evidence supports a finding that all safety issues associated with the M270A1 launcher were identified, analyzed, and corrected prior to the grant of a "Full Materiel Release" and the launchers' fielding for operational use in August 2003. The earlier correction of the *Launcher Movement/Control* deficiency between May and September 2002 had the concomitant effect of eliminating the "single-point failure" and conforming the launchers to safety-related contract performance specification MIL-PRF-35500.

Subsequent to the implementation of the launcher "get well plan" no further incidents of "uncommanded cage movement" are known to have occurred. As reported by numerous individuals familiar with the operation and maintenance of the MLRS, and as documented

¹⁸² See *supra* note 138, Final Safety Office S&HDS [Tab 82].

¹⁸³ *Id.*, p. 6, para 5.0.

through the performance of the MLRS in Operations Enduring Freedom and Iraqi Freedom, the M270A1 launcher has proven to be remarkably safe and effective; more than 1500 MLRS rockets have been fired in support of the war effort, all without apparent incident. Since its "Conditional Materiel Release" in early 2002, the launcher has logged more than 375,000 operational hours, all without a single incident of "uncommanded cage movement" or other significant safety anomaly.

With regard to Allegation 3b, the AR 15-6 IO and AMCOM Legal Office validated that Lockheed was obligated under Contract No. DAAH01-00-C-0109 to prepare a comprehensive and timely SAR, and had been paid by the government to do so. The evidence substantiates that Lockheed failed to prepare and timely submit a SAR that complied with contract requirements; Lockheed's failure prompted AMCOM to convene the SRRE team, with independent contractor support, to conduct a parallel safety assessment at a cost of approximately \$1,000,000. The report rendered by the SRRE ultimately was substituted for the still incomplete Lockheed SAR as the foundation for a "Conditional Materiel Release" and the launcher "get well plan."

With regard to Allegation 3c, safety-related contract performance specification MIL-PRF-35500, incorporated in Contract No. DAAH01-00-C-0109, required Lockheed to provide the government with M270A1 launchers devoid of "single-point failures." The evidence substantiates that because of poor communications between the MLRS Project Office, the Safety Office, and the AMCOM Acquisition Center, the MLRS contracting officer was unaware that the SRRE had identified a *Launcher Movement/Control* deficiency as a "single-point failure" and the likely cause of "uncommanded cage movement." Accordingly, at some time between May and September 2002, the contracting officer mistakenly compensated Lockheed, in an amount estimated at \$600,000, to correct the Launcher Movement/Control problem, believing the corrective action to be a simple "improvement" in launcher design not addressed by the base contract. It is clear, however, that Lockheed was bound by its preexisting obligation under the base FFP contract, for which it had been paid, to ensure launcher conformance with MIL-PRF-35500. AMCOM erred by paying Lockheed twice: once under the base contract and again in 2002, for what was essentially the same work.

The evidence indicates that as early as August 2003, the MLRS contracting officer sought proactively to issue a demand letter to Lockheed, seeking recompense for amounts the government had expended to complete the above tasks. Just as ██████████ planned to sign and send the letter, AMCOM received the instant OSC referral and a CID investigation ensued. At the request of CID, and so as not to interfere with the criminal investigation of the OSC-referred allegations, the contracting officer held the demand letter in abeyance. On January 28, 2008, subsequent to completion of the CID investigation, ██████████ demanded \$1,600,000 from Lockheed in reimbursement of costs that AMCOM had incurred: in convening the SRRE team, with independent contractor support, to generate a parallel safety assessment report that could be substituted for Lockheed's inadequate and untimely SAR (\$1,000,000); in paying Lockheed "twice" to eliminate the "single-point failure" identified by the SRRE team as the presumptive cause of the "uncommanded cage movement" and conform the launchers to MIL-PRF-35500, rendering them safe for fielding (estimated to be \$600,000).

As to Allegation 4b, both the AR 15-6 investigation and the AMCOM Legal Office review validated Mr. Daniels's contention that in conjunction with its correction of the *Launcher Movement/Control* "single-point failure" and implementation of other safety-related "improvements," AMCOM developed and issued an *M270A1 Safety Bulletin* promulgating operational procedures and restrictions, to include the "3-meter rule," to which soldier-users of the launcher were required to adhere strictly. The *M270A1 Safety Bulletin* was first issued in February 2002 and remains in effect today. However, contrary to Mr. Daniels's assertion that the launcher should not have been fielded unless all safety concerns had addressed through design improvements and that accordingly, these so-called "Fielding Operating Restrictions" were inadequate and AMCOM's reliance on them inappropriate, the investigation determined that MIL-STD-882 expressly authorizes a combination of design features, safety and warning devices, and *special procedures and training*, as part of a comprehensive approach to system safety. It appears that AMCOM's employment of each of these elements: design corrections and improvements, safety and warning devices, and *special procedures and training* (such as the "3-meter rule" promulgated in the AMCOM *Safety Bulletin*), has contributed to the M270A1 launcher's outstanding safety record.

Conclusion:

- **Allegations 3a and 4a:** The allegation that fielded and deployed M270A1 launchers were or are unsafe because of "uncommanded cage movement" is unsubstantiated. The allegation that fielded and deployed M270A1 launchers failed to conform to safety-related contract performance specification MIL-PRF 35500 is unsubstantiated. Between February 2002 and April 2002 (while the launcher remained in the low-rate initial production phase and was not yet approved for fielding and deployment to soldiers for operational use), poor communications between the MLRS Project Officer, the AMCOM Safety Office, and the AMCOM Acquisition Center resulted in the contracting officer's unknowing acceptance of nonconforming M270A1 MLRS launchers from Lockheed Martin. All available evidence indicates that shortly thereafter, in the period between May and September 2002, the "single-point failure" presumed to be the cause of the "uncommanded cage movement" was corrected, conforming the launchers to MIL-PRF-35500 and rendering them safe. Numerous additional safety "improvements" identified by the SRRE and made part of the "get well plan" were incorporated in the launchers before their "Full Material Release" and deployment to the field for operational use by soldiers in August 2003. From April 2002, subsequent to the "Conditional Materiel Release" decision, through the present day, the M270A1 launcher has logged more than 375,000 wartime operational hours, all without a single incident of "uncommanded cage movement" or other significant safety anomaly.

- **Allegation 3b:** The allegation that Lockheed Martin did not timely deliver an acceptable SAR as required by the FFP Contract No. DAAH01-00-C-0109, and for which Lockheed had been paid is substantiated. Given the imperative need for a comprehensive safety assessment of the M270A1 launcher, coupled with Lockheed's failure to prepare and submit the required SAR by the March 2001 deadline, AMCOM established a SRRE team in May 2001. AMCOM tasked and paid an independent contractor approximately \$1,000,000 to assist in preparing a parallel safety assessment as part of that contractor's participation on the SRRE. The Final SRRE report was ultimately substituted for the delinquent Lockheed SAR.

• **Allegation 3c:** The allegation that AMCOM expended additional appropriated funds to conform the M270A1 launcher to the requirements of safety-related performance specification MIL-PRF-35500 is substantiated. Lockheed was obligated and paid under FFP Contract No. DAAH01-00-C-0109 to provide the government with M270A1 launchers devoid of “single-point failures” as required by the specification. Because of poor communications between the MLRS Project Office and the AMCOM Acquisition Center, the Acquisition Center was unaware that the *Launcher Movement/Control* deficiency identified by the SRRE team constituted a “single-point failure,” and erroneously “double paid” Lockheed in an amount estimated to be \$600,000, to correct the problem.

• **Allegation 4b:** The allegation that the Army violated MIL-STD-882, *System Safety Requirements*, by relying on so-called “Fielding Operating Restrictions” to buttress the safety of the M270A1 launcher and its user-operators is unsubstantiated. MIL-STD-882 expresses a clear preference for the use of design features to mitigate safety risks, but acknowledges that a comprehensive approach to personnel safety also may include safety and warning devices and *special procedures and training*. It is undisputed that these *special procedures and training* may include operating procedures and restrictions such as the “3-meter rule” AMCOM promulgated in its February 2002 *M270A1 Safety Bulletin*, which remains in effect today. A combination of improved launcher design features, safety and warning devices, and strict soldier-operator adherence to the provisions of the *Safety Bulletin* appears to have contributed to the outstanding record of personnel safety associated with the M270A1 launcher.

Allegation 5: The Army accepted five M270A1 launchers lacking Fire Control Systems (FCSs), but failed to reduce payments to Lockheed Martin to reflect the launchers’ diminished value.

This allegation was addressed in, and unsubstantiated by, the prior report submitted by the Department of the Army to the OSC on July 21, 2008,

Allegation 6: Lockheed Martin improperly used and failed to account for warranty spare launcher parts that belonged to the Army.

This allegation was addressed in, and unsubstantiated by, the prior report submitted by the Department of the Army to the OSC on July 21, 2008,

LISTING OF VIOLATIONS OR APPARENT VIOLATIONS OF LAW, RULE, OR REGULATIONS AND CORRECTIVE ACTIONS

As to Allegation 1: Although not required by law or regulation to do so, in 2001,¹⁸⁴ in an abundance of caution, AMCOM implemented a policy requiring contracting officer review of

¹⁸⁴ We note also that this corrective action was implemented prior to OSC’s referral to the Army of Mr. Daniels’s complaints.

TDLs for MLRS industrial engineering services. All TDLs issued against IES Contract No. DAAH01-C-01-0141¹⁸⁵ and thereafter have been reviewed by the Acquisition Center [Tab 57].

As to Allegation 2: Allegation 2a was unsubstantiated by prior report submitted by the Department of the Army to the OSC on July 21, 2008. That same report substantiated Allegation 2b only as to drawing 13031052, the RRPR Nose Cap (which vests in the government only *Limited Rights* as to the technical data portrayed) and RRPR specification MIS-35095/19, subsequently modified and applied to the LCRRPR by ECP MI-C1973FR0A0 (which vests in the government only "Restricted Rights" in the associated technical data). Such markings may contravene the terms of the contracts pursuant to which the associated technical data was developed. The three-year period in which in the government may challenge the marking on the RRPR Nose Cap drawing has passed. However, the three-year period for challenging Specification MIS-35095/19 as it applies to both the RRPR and the LCRRPR has not lapsed. AMCOM will utilize procedures set forth in the *Validation of Restrictive Markings on Technical Data Rights in Technical Data and Computer Software* clauses of the applicable contracts to challenge the accuracy and propriety of the marking and, as warranted, to compel Lockheed to correct and conform the markings to the terms of the contract.

As to Allegations 3 and 4:

Allegations 3a, 4a, and 4b are unsubstantiated.

Allegation 3b is substantiated. Lockheed Martin failed to deliver timely an acceptable SAR as required by FFP Contract No. DAAH01-00-C-0109 and for which Lockheed had been paid. AMCOM tasked and paid an independent contractor approximately \$1,000,000 to assist in preparing a parallel safety assessment as part of that contractor's participation on a government SRRE team. The Final SRRE Report was ultimately substituted for the delinquent Lockheed SAR.

Allegation 3c is substantiated. Between May and September of 2002, AMCOM erroneously "double paid" Lockheed approximately \$600,000 to correct the *Launcher Movement/Control* deficiency and conform the M270A1 launcher to the requirements of safety-related performance specification MIL-PRF-35500 incorporated in FFP Contract No. DAAH01-00-C-0109. Lockheed was obligated and already had been paid once under the base production contract to provide the government with M270A1 launchers devoid of "single-point failures."

As early as August 2003, the AMCOM MLRS contracting officer had sought proactively to issue a demand letter to Lockheed Martin seeking recompense for amounts the government had expended to ensure the preparation of a suitable safety assessment (\$1,000,000) and had "double paid" to conform the launchers to MIL-PRF-35500 (estimated to be \$600,000). Just as ██████████ planned to sign and send the letter, AMCOM received the instant OSC referral and a CID investigation ensued. At the request of CID, and so as not to interfere with the criminal

¹⁸⁵ IES Contract No. DAAH01-C-01-0141 was the first IES contract to be issued post-2001.

investigation of the OSC-referred allegations, the contracting officer held the demand letter in abeyance. On January 28, 2008, subsequent to completion of the CID investigation, ██████ issued a demand letter seeking reimbursement from Lockheed in the amount of \$1,600,000. AMCOM recently contacted Lockheed seeking information about the status of Lockheed's response to the demand letter. Although resolution of these types of issues require significant time and effort, particularly in the context of an acquisition as complex as that of the MLRS, AMCOM has pledged to take immediate action to bring to closure, as expeditiously as possible, the matters raised by its demand letter to Lockheed.

Additionally, AMCOM, with AMC oversight, will review its internal communication mechanisms and procedures, both formal and informal, with a view to improving MLRS Project Office and Acquisition Center collaboration, particularly in circumstances involving potentially nonconforming supplies or services and on all matters of safety.

As to Allegation 5: As set forth in the prior report submitted by the Department of the Army to the OSC on July 21, 2008, neither CID nor AMCOM's administrative review found evidence of a violation. Accordingly, corrective action is unwarranted.

As to Allegation 6: As set forth in the prior report submitted by the Department of the Army to the OSC on July 21, 2008, neither CID nor AMCOM's administrative review found evidence of a violation. Accordingly, corrective action is unwarranted.

COLLATERAL ISSUE

In the context of interviewing witnesses believed to possess information of potential relevance to the investigation of the OSC-referred allegations, the AR 15-6 IO identified a collateral issue. In their initial testimonies to the IO, ██████, formerly of the MLRS Project Office,¹⁸⁶ and ██████, formerly of the AMCOM Safety Office,¹⁸⁷ both

¹⁸⁶ In his statement of July 7, 2008, to the AR 15-6 IO, ██████ indicated that "[b]oth Gary [Indihar] and I felt pressured by the Project office and by Lockheed Martin because of the issues we raised. At one point, Lockheed sent (faxed) a list or letter to ██████ Deputy PM, . . . wanting members of the government team, including myself and ██████ removed from the MLRS program. The government wouldn't take that action, but both ██████ and I eventually moved to other offices and projects because of the situation. The MLRS . . . leadership did not act on LM's request for my removal, but . . . did nothing to reprimand LM for such an inappropriate request." [Tab 54].

¹⁸⁷ In his statement of July 9, 2008, to the AR 15-6 IO, ██████ stated "[i]t is my experience and opinion that most managers on both the Government and Lockheed side refused to acknowledge the [safety] problem [with regard to the M270A1 launcher], and pushed everyone to be 'team players.' As a result of the pressure I felt, including from my own manager who chastised me for not supporting MLRS adequately after a visit from two MLRS managers, I left the Safety Office in 2003." [Tab 91]. In an email dated October 7, 2008, responding to the IO's request for a more detailed explanation of his concerns, ██████ explained that at the conclusion of the SRRE effort, in which he had participated, the "Tech Management Chief . . . visited my Chief, ██████ and discussed his dissatisfaction with my support. . . . My Chief, ██████ who has since retired, told [the Tech Management Chief] that I was a problem anyway and he would take care of it. ██████ reprimanded me verbally for the insufficient support to MLRS. . . ." ██████ reported that immediately after the reprimand from ██████ he returned to his desk to find a voice mail message from a former supervisor recruiting him ██████ to work at the Space and Missile Defense Command (SMDC) Safety Office. ██████

indicated that they had perceived "pressure" from their respective supervisory chains and from Lockheed Martin in response to having raised issues associated with the safety of the M270A1 launcher. The Commanding General, AMCOM, directed the AR 15-6 IO to expand his investigation to review these concerns [Tab 8B]. The IO concluded:

. . . it is clear that the MLRS Project Office, and many of the individuals involved, faced numerous pressures including trying to produce and field an improved launcher . . . to support the war efforts, while trying to contain costs to meet program and funding restraints and trying to deal with safety and reliability issues. There is little doubt that both [redacted] and [redacted] felt pressure from their management, presumably from their involvement in the SRRE project.

In [redacted] case, he felt pressured to leave the Project Office by [then Deputy Project Manager, MLRS] [redacted]. [redacted] did not feel he was pressuring [redacted].¹⁸⁸ Unspecified personal issues tend to blur this situation somewhat.

In [redacted] case, he felt pressured to leave the AMCOM Safety Office by [his supervisor], [redacted]. Whether there is any valid reason cannot be determined.¹⁸⁹ It appears that it was an attempt by [redacted] to appease the MLRS Project Office.

[redacted] recalled that the pressure he felt from [redacted] appeared to be an attempt to minimize the impacts of the MLRS safety problems on Lockheed. Without more, [redacted] attributed [redacted] conduct to an effort to gain Lockheed's favorable recommendation for the Deputy PEO position [redacted] purportedly was seeking. In addition, [redacted] perceived that [redacted] had pressured the MLRS Chief Engineer to force [redacted] out of the MLRS program and to reconsider [redacted] promotion. [redacted] reported that despite the pressure he perceived, he had refused to leave the MLRS program and was promoted in mid-2002. However, when presented with the opportunity to work for the Non Line of Sight Task Force, [redacted] accepted and left the MLRS Project Office in September 2002 [Tab 99, Email exchange between [redacted] and [redacted], documenting their conversation of October 19, 2008].

[redacted] testified that subsequent to his negative interaction with his supervisor, [redacted] who [redacted] perceived had reprimanded him unfairly for failing to provide appropriate support to the SRRE team, [redacted] accepted a position with a Safety Office in another command and subsequently was twice promoted. However, [redacted] complained to the IO that several years later, after [redacted] retirement, [redacted] had

Indihar accepted the SMDC position "within a couple of days" and reported that he did so because his "Chief led me to believe I needed to leave the safety office [at AMCOM] or situations could have gotten much worse."¹⁸⁸ In his interview with the AR 15-6 IO, on November 14, 2008, [redacted] stated that he didn't believe that he had pressured [redacted] and "certainly didn't pressure him not to find problems or do anything other than a correct report." The Memorandum for Record documenting the IO's discussions with [redacted] indicates that [redacted] said [redacted] got angry with him [redacted] during the SRRE project for reasons he [redacted] would not discuss with me. [redacted] said that after the SRRE project was completed, he recommended that [redacted] go back to the Aviation and Missile Research and Development Center [AMRDEC], from which [redacted] was currently on a "detail-like" arrangement to the MLRS Project Office. [redacted] reported that [redacted] had, in fact, moved first to the Non Line of Sight Project Office, and then later went back to AMRDEC [Tab 98, MFR documenting the interview of [redacted] dated November 14, 2008].

¹⁸⁹ In part because of [redacted] retirement and unavailability for interview.

provided negative information about him to the selecting official for the now vacant position of Chief, AMCOM Safety Office, for which [REDACTED] had applied, but was not selected [Tab 100, Email exchange between [REDACTED] and [REDACTED], dated October 3/7, 2008]. When interviewed by the AR 15-6 IO, the selecting official indicated that he could not recall what, if anything, [REDACTED] had told him about [REDACTED]. Nevertheless, the selecting official was clear that whatever comments [REDACTED] may have provided had not impacted [REDACTED] non-selection for the position.¹⁹⁰

After considering the available testimony, the AR 15-6 IO determined that both as regards [REDACTED] and [REDACTED] the situation was colored by "hard feelings." The IO noted, however, that the "pressures" as reported by [REDACTED] and [REDACTED] did not appear to have adversely affected either employee's career progression, as both had subsequently been promoted. The IO further observed that in the context of his investigation, both [REDACTED] and [REDACTED] had been commended by numerous other AMCOM personnel, both as having been very knowledgeable and having played an important role in the identification and resolution of the safety issues associated with the M270A1 launcher. Finally, the IO noted that neither [REDACTED] nor [REDACTED] appeared to have been pressured "to do anything wrong regarding the SRRE project, and the MLRS launcher had proven to be a safe and effective weapon system." In addition, it does not appear that further investigation would clarify the facts associated with this issue. Accordingly, the IO recommended no further investigation of, or action on, this matter; the Commander, AMCOM and the AMCOM Legal Office concurred in the IO's recommendation.

CONCLUSION

It is fundamental, self-evident, and unquestioned that Army acquisition programs and procedures must adhere scrupulously to applicable law, rule, and regulation. Adherence is critical to ensuring that the government receives the benefit of its substantial investment—particularly as regards a weapon system that contributes directly to defense of our nation. The safety of soldiers who operate these systems on the battlefield similarly must be paramount. The Army's adherence to law, as well as how the Army responds to OSC referrals, also affects the integrity of the acquisition system—both actual and perceived—with important, overarching consequences. This OSC referral has reinforced the importance of these core tenets.

¹⁹⁰ [REDACTED] has retired from government service, but was the AMCOM Chief of Staff and served as selecting official for the position of Chief, AMCOM Safety Office after it was vacated at the retirement of [REDACTED]. [REDACTED] applied for the position, but was not selected. [REDACTED] advised the AR 15-6 IO of his belief that he had not been selected because [REDACTED] had provided negative information about him to [REDACTED]. In an interview with the AR 15-6 IO, [REDACTED] recalled that he had asked [REDACTED] for an assessment of each of the four candidates who had previously worked for him. [REDACTED] did not recall receiving negative feedback on [REDACTED] but noted that whatever the feedback had been, it did not impact his [REDACTED] selection of the new Safety Office Chief. [REDACTED] stated that the candidate he selected was more experienced than the others, to include [REDACTED] had performed better in the job interview; and was "far and away the best candidate for the position." [Tab 101, MFR documenting the interview of [REDACTED] dated November 3, 2008].

The Department of the Army takes very seriously its responsibilities to address, in a timely, thorough, accurate, and deliberative fashion the concerns the OSC draws to its attention. The Department has addressed, in depth, the allegations referred by the OSC in this case, has partially substantiated elements of the certain allegations, and has committed to appropriate corrective action.

Of equal importance, this investigation and the procedures that led to this prolonged response period have prompted a reassessment of the appropriate approach to investigating complex, multiple allegations such as these. As discussed above, AMCOM waited for CID to complete its criminal investigation before undertaking an independent examination of the allegations. Although AMCOM's intentions were appropriate—to avoid interfering with CID or, worse, contaminating the investigation or potential criminal prosecution—the criminal investigation took much longer than anticipated, leaving AMCOM with a cooled, if not at times cold, evidentiary trail regarding several of Mr. Daniels's allegations. This situation has prompted AMCOM to rethink its *seriatim* "CID First" approach, vice parallel, cooperative inquiries, especially where, as here, receipt of the OSC's referral of allegations had the unintended consequence of delaying the contracting officer's issuance to Lockheed Martin of a demand letter.

This OSC referral also has prompted AMC and AMCOM to consider how best to improve communications between MLRS Project Office and Acquisition Center personnel. With close oversight by AMC, AMCOM will endeavor through training and practical application of lessons learned to achieve and maintain the type of close coordination that is imperative on matters bearing potentially on personnel safety and best serves the Army's interests in all acquisitions.

No evidence with national security implications has been disclosed in the context of this investigation. All potential criminal violations have been referred to the appropriate U.S. Attorney, who has declined prosecution.

This letter, with enclosures, is submitted in full satisfaction of my responsibilities under Title 5, USC, Sections 1213(c) and (d) with regard to this OSC referral. Please direct any further questions you may have regarding this matter to [REDACTED] at [REDACTED]


RONALD J. JAMES
Assistant Secretary of the Army
(Manpower & Reserve Affairs)

Enclosures
as stated