

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. W9113M-04-D-0001	2. DELIVERY ORDER/ CALL NO. 0002	3. DATE OF ORDER/ CALL (YYYYMMDD) 2005 Jan 20	4. REQ./ PURCH. REQUEST NO. TASK ORDER 0002	5. PRIORITY
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6. ISSUED BY US ARMY SPACE & MISSILE DEFENSE COMMAND [REDACTED] PO BOX 1500 HUNTSVILLE AL 35807-3801	CODE W31RPD	7. ADMINISTERED BY (if other than 6) DCM LOCKHEED MARTIN MISSILES & SPACE P.O. BOX 3504 SUNNYVALE CA 94088-3504	CODE S0543A	8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)
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9. CONTRACTOR LOCKHEED MARTIN SPACE SYSTEMS COMPANY NAME MISSILES AND SPACE OPERATIONS AND 1111 LOCKHEED MARTIN WAY ADDRESS SUNNYVALE CA 94088-3504	CODE 06887	FACILITY	10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE	11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED
			12. DISCOUNT TERMS	
13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15				

14. SHIP TO SEE SCHEDULE	CODE	15. PAYMENT WILL BE MADE BY DFAS-COLUMBUS CENTER DFAS-CO/WEST ENTITLEMENT OPERATION P.O. BOX 182381 COLUMBUS OH 43218-2381	CODE HQ0339	MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.
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16. TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
	PURCHASE		Reference your quote dated Furnish the following on terms specified herein. REF:

ACCEPTANCE, THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)
<input checked="" type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies: 1			

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
CONFIRMING ORDER - DO NOT DUPLICATE SEE SCHEDULE					

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.	24. UNITED STATES OF AMERICA	25. TOTAL	\$30,601,643.00
		26. DIFFERENCES	

27a. QUANTITY IN COLUMN 20 HAS BEEN
 INSPECTED RECEIVED ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c. DATE (YYYYMMDD)	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
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e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS
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f. TELEPHONE NUMBER	g. E-MAIL ADDRESS	<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY	33. AMOUNT VERIFIED CORRECT FOR
36. I certify this account is correct and proper for payment.			34. CHECK NUMBER	
a. DATE (YYYYMMDD)	b. SIGNATURE AND TITLE OF CERTIFYING OFFICER			35. BILL OF LADING NO.
			<input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.
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Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	MKV TASK ORDER 0002 CPAF Scope of Work entitled "Multiple Kill Vehicles (MKV) System Development, Hover Kill Vehicle Development, Task Order Number 0002." PURCHASE REQUEST NUMBER: TASK ORDER 0002				
				ESTIMATED COST	
				BASE FEE	
				SUBTOTAL EST COST + BASE	
				MAX AWARD FEE	
				TOTAL EST COST + FEE	\$ 30,601,643.00 *
	ACRN AA Funded Amount				\$ 10,000,000.00 **

* This is the undefinitized NTE amount for performance of this Task Order.

** The currently allotted/obligated funding includes an NTE amount of [REDACTED] ([REDACTED] cost, [REDACTED] fee) for Kill Vehicle (KV) Divert and Attitude Control System (DACS) effort for the period of performance through 30 April 2005 until further government direction is provided.

Section C - Descriptions and Specifications

STATEMENT OF WORK

MULTIPLE KILL VEHICLES SYSTEM DEVELOPMENT HOVER KILL VEHICLE DEVELOPMENT TASK ORDER NUMBER 0002

1.0 TASK DESCRIPTION

This Task Order (TO) defines requirements activities in support of the Multiple Kill Vehicles (MKV) System Development Program. The contractor shall perform Kill Vehicle (KV) development activities, Demonstration Carrier Vehicle (DCV) development activities, DCV interface requirements definition and system integration and test activities necessary to support the overall MKV Program objectives. Milestones for this task order include a seeker software Critical Design Review (CDR), verification testing of multiple subsystems, and delivery of a pathfinder seeker. The focus of activities under this task order will continue to be on KV development with DCV development proceeding but at a substantially lower level of effort.

Use of readily available, low risk components will be emphasized. For higher risk key components, risk mitigation strategies must be maintained and kept available for contingency execution (after consultations with the Government) if necessary to meet program objectives.

2.0 TASK

2.1 Background

Prior to execution of this task, the contractor will have completed a system concept development effort that included System Design Review (SDR) I and the KV Preliminary Design Review. Additionally, the contractor will have completed the System Requirements Review, SDR II, and risk reduction tests for key KV components. Task order one will culminate in a Hover Test KV CDR shortly after initiation of this task order.

Kill vehicle development and demonstration is the focus of the MKV program through completion of hover testing. However, since a major goal of the program is system level flight testing in the Pacific Test Bed, DCV development and system integration and test planning to support this testing will be conducted in parallel, but at substantially lower levels.

Overall MKV Program Objectives

2.2.1 KV Objectives

KV1. Demonstrate navigation and flight to an assigned acquisition basket.

KV2. Demonstrate target acquisition, aimpoint selection, and terminal homing.

2.2.2 DCV Objectives

DCV1. Demonstrate weapon-to-target assignment and effective management of KVs.

2.2.3 System-level Objectives

S1. Demonstrate interception of multiple midcourse targets from a single launcher.

S2. Demonstrate successful integration into the existing ballistic missile defense system

2.3 Task 0002 Objective

The primary objective of this task is to continue the KV detailed design and development activities leading to a KV hover test under Task Order 0003. A secondary objective is to continue KV flight test configuration development, DCV development, systems engineering, and integration and flight test activities to maintain software design integrity and to ensure all hardware /software interfaces and functional designs are sufficiently mature to support post Task Order 0002 milestones.

2.3.1 KV Subtask

The contractor shall continue development of the MKV kill vehicle. The contractor shall deliver a pathfinder seeker for integration into a hardware-in-the-loop (HWIL) facility, complete seeker stabilization engineering tests, conduct a seeker software CDR, and deliver kill vehicle software build 1 (SIL) and 2 (HWIL). The contractor shall complete a verification test of the solid divert and attitude control system including external/imbedded valves, actuators, and controller circuitry, perform verification testing of the mission processor, perform integration testing and demonstration of an integrated seeker and inertial measurement unit, and conduct a HWIL Readiness Review. The contractor shall perform modeling and simulation of critical hardware and software KV functions to verify designs based on appropriate duty cycles and requirements associated with tactical scenarios. Prior to all testing, the contractor shall conduct test readiness reviews encompassing the entrance and exit criteria of the test in addition to demonstrating all entrance criteria have been met by adequate analysis, inspection and validation via simulation. Test results, which demonstrate the level of success in meeting the exit criteria, will be presented for assessment by the government following each test event. Government approval will be required for any changes in the hover KV configuration proposed for any follow-on task orders. Periodic reviews of KV activities will be conducted under this task order to assess the contractor's progress toward meeting overall program objectives.

2.3.2 DCV Subtask

The contractor shall continue design and development activities to define a DCV that provides sufficient functional capability to support the system level flight test demonstrations. Existing and readily available hardware and software subsystems and technology shall be used as much as possible. In addition, periodic reviews of DCV activities will be conducted under this Task Order to assess the contractor's progress toward meeting overall program objectives, including a DCV PDR to be conducted under Task Order 0003. Propulsion, avionics, and sensor component, and dispense system specifications will be delivered.

2.3.3 System Subtask

The effort during this period will consist of KV and DCV requirements balancing and system design updates as the KV and DCV designs mature. Both hardware and software interfaces for the MKV system will be matured to support a flight KV CDR, DCV PDR and a SDR Update under follow-on task orders.

The contractor shall ensure that the DCV and KV designs are compatible from a software perspective or, if not, that potential conflicts are identified, reconciled and controlled. System integration issues will be addressed at in-process reviews and other technical interchange meetings in conjunction with DCV and KV design activities.

The contractor shall assess design changes and implementation strategies including long lead activities to support the development of an MKV system that is able to survive/operate through the Level 1 nuclear environments specified in the MDA Ballistic Missile Defense System (BMDS) High Altitude Exoatmospheric Nuclear Survivability (HAENS) Standard dated 17 March 2004 not later than the first System Integrated Flight Test. The contractor shall also maintain a plan/roadmap that identifies the cost/schedule/performance impacts of adapting the MKV system to survive/operate through the Level 2 nuclear environment as specified in the HAENS Standard.

3.0 Deliverables

	CDRL	Submittal
Briefing Packages	A001	As Required
Software Development Plan	A002	Update
Simulation Development Plan	A002	Initial
Monthly Report	A003	Monthly

Final Report	A004		31 January 2007
Contract Work Breakdown Structure	A006		Update
Cost Performance Report	A007		Monthly
Contract Funds Status Report	A008		Monthly
Conference Minutes	A00A		As Required
Software Requirement Specification (KV & DCV)	A00B		As Required
Integrated Master Schedule	A00C		Monthly
Hover Test Documentation	A00D		As Required
Documents Required by National Ranges	A00D		As Required
Program Management Plan	A00E		Update
System/Subsystem Specification	A00F		As Required
Master Test Plan	A00G		Update
Test Plan (Hover)		A00H	As Required
Configuration Management Plan	A00J		Update
Data Accession List	A00K		Quarterly
Product Drawing and Associated Lists	A00L		As Required
Test/Inspection Reports	A00M		As Required
System Safety Program Plan	A00N		Update
Explosive Hazard Classification Data	A00Q		As Required
Software Test Plan (KV-DCV Update)	A00R		As Required
Software Design Description (KV & DCV)	A00T		As Required
Interface Design Description (KV-DCV Interface Only)	A00U		As Required
Cost Analysis Requirements Document	A00V		Update

4.0 Program Management. The contractor shall implement a system to ensure integrated cost, schedule, and technical performance management and shall conduct periodic reviews to assess the degree of completion of technical and programmatic efforts. The contractor shall manage and track data and related correspondence and support interface/integration activities.

4.1 Subcontract Management. The contractor shall implement a system to ensure integrated cost, schedule, and technical performance management of all subcontractor efforts. They shall conduct reviews to assess the degree of completion of technical and programmatic efforts and implement corrective actions and controls when necessary. The contractor shall identify and implement specific actions to ensure appropriate subcontractor oversight in areas such as parts, materials, and procedures characterization, end-to-end test planning and overall mission assurance.

4.2 Integrated Cost, Schedule and Technical Performance Management. The contractor shall implement, document, and use an earned value based management system compliant with the contractor's earned value management system (EVMS) for integrated cost, schedule, and technical performance management. The contractor shall report EVMS information to the government using the cost performance report (CPR) "no criteria" approach. The contractor shall flow down earned value management and reporting requirements to major subcontracts which are not firm fixed price and that, based on risk, schedule criticality, and dollar value, have the potential to impede the successful completion of the program. The contractor shall have a conservative plan of action based on historical analysis to ensure success despite risk. The contractor shall relate technical accomplishments with cost and schedule in contract performance reports and at reviews. The program Technical Performance Measures (TPM) and program metrics to include software shall continue to be in effect but maybe tailored as required for this task order. The contractor shall maintain the contract work breakdown structure (CWBS) and the CWBS dictionary.

4.3 Reviews. The contractor shall identify, conduct, and document reviews both formal and informal, to assess the degree of completion of technical and programmatic efforts related to major schedule milestones including, but not limited to design reviews, in-process reviews (IPRs), integrated baseline reviews (IBRs), and technical interchange meetings (TIMs). It is anticipated that formal technical reviews will be conducted quarterly. Major reviews such as IBRs, KV CDR, TRR, and DCV PDR may be conducted independently or in conjunction with an IPR. One copy of design review agenda and outline shall be submitted to the government for comments 30 days prior to the design review. The government will respond within 10 days of receipt of agenda and outline. The contractor shall conduct a program review process to ensure complete insight into the program by the government. This review process shall include monthly informal cost, schedule, performance, and affordability status reviews and via e-mail weekly program status reports. The contractor shall identify milestones necessary for coordination of key elements and interfaces to accomplish an orderly, event-driven program. Action items identified at reviews shall be documented, distributed, and tracked through an electronic database accessible by the government. It is also anticipated that informal TIMs will be held nominally monthly. Government and contractor participants in TIMs will jointly prepare agenda and/or define discussion topics prior to each TIM. The method of distribution of presentation material and resolution of action items for each TIM will be jointly determined by TIM participants.

4.4 Data Management. The contractor shall manage the preparation, submittal, maintenance, and tracking of data and related correspondence to include the maintenance and submittal of a Data Accession List (DAL). The contractor shall develop and maintain the DAL in contractor format to provide a single objective repository of contractor and subcontractor analytic and technical information. It shall document evolution of KV and DCV component and subsystem designs, traceability of performance requirements and their allocation to hardware and software configuration items, design margin assessments, component and subsystem test results, and integrated MKV system test results. The DAL shall reflect the current state of the MKV system design and be revised as the design matures. To facilitate data management, the contractor shall maintain requirements, engineering, logistics, and program data including a program management plan (PMP) and an integrated master schedule (IMS) in an electronic database accessible by the government.

4.5 Interface/Integration Activities. The contractor shall provide technical support to the government in executing the MKV program. The contractor shall participate in technical interchange meetings and program management meetings as necessary. The contractor shall on an as needed basis address actions to support understanding of the MKV System, component technologies and BMDS interfaces. The contractor shall conduct limited analyses/assessments upon request to address specific issues/actions regarding MKV plans, design, performance or integration relative to but not limited to topic areas such as other BMDS systems/threats/engagement environments/test facilities. The contractor shall also present via briefings or white papers the results of their analyses/assessments upon request.

4.6 Quality Assurance (QA). The contractor shall implement a quality assurance plan, IAW ISO 9001 and ISO 9000-3. The QA Plans specified by these requirements shall be included in the DAL. The contractor's quality program shall ensure that all inspections/tests required by the contract requirements are contained in the contractor's production planning and manufacturing methods and are being performed. These same requirements must be flowed down to subcontractors and suppliers to ensure overall compliance to the contract.

4.7 Product Assurance (PA). The contractor shall plan and conduct a PA program that integrates PA requirements into the design, manufacture, and test of all MKV system hardware and software. The contractor's PA program shall be based on best practices to establish the necessary PA processes, controls, and approval authority to ensure that product quality, reliability, safety, and other system attributes are not comprised. Audits and analyses shall be conducted on both hardware and software to ensure the major subcontractors and vendors are compliant with the PA program.

5.0 System Engineering. The contractor shall perform system engineering and specialty engineering to (1) define and allocate MKV system functions and requirements and incorporate them into a design comprising balanced HW/SW components, (2) ensure that the design is verified and validated by appropriate development plans, tests,

and data/data analysis; inspections and performance demonstrations that yield the necessary and appropriately documented results needed to satisfy the SOW. The contractor shall develop simulations and HWIL plans that support the establishment, balancing, verification and validation of the MKV system requirements and design. The contractor shall implement and maintain a PMP.

5.1 Requirements. The contractor shall allocate requirements to the MKV design. This allocation shall be documented and maintained in the MKV System Specifications and other lower level specifications. As part of the requirements allocation process, the contractor shall conduct trade studies to assess affordability, producibility, and supportability by evaluating MKV performance requirements against projected or potential design, testing, manufacturing, maintenance, operations and support, and overall life cycle costs. The contractor shall define the MKV design margin assessment process and the reporting process for margin against the allocated performance requirements in the PMP. The contractor shall include requirements verification and validation plans for the integrated MKV system and major components, subsystems, ground support equipment, and interfaces to other test system elements in the PMP. The contractor shall provide the plans and processes for coupling requirements validation with design/critical issue resolution by integrating analysis, simulation, ground test, and flight test data. The PMP shall document the management approach and provide for risk assessment and risk mitigation. The IMS shall establish the traceability from the PMP to the design, development, fabrication, integration, and test and evaluation planning to meet performance requirements.

5.2 Mission Planning and Test Requirements. The contractor shall plan a comprehensive and cost effective test program for the ground and flight tests. The contractor's test program shall consist of a logical sequence of ground and flight tests to validate and document performance of KV and DCV components and the integrated MKV system as documented in the MKV System Specification and lower level specifications. The contractor shall ensure balance in the planning, development, and conduct of the test effort to meet system performance and safety requirements. The contractor shall define and document the ground and flight test objectives in the PMP. The contractor shall maintain the master test plan.

5.3 Ground and Flight Test Planning. Ground and flight test planning shall include development master test planning per the PMP and IMS, and detailed test specifications/plans and procedures. The contractor shall maintain or develop as required as part of the test plan(s), a set of criteria by which the performance of components, subsystems, and integrated systems will be measured. Collected data from ground and flight test activities shall be traceable to verification of a requirement. Schedule risk mitigation techniques shall be employed. The contractor shall plan for test data acquisition, handling, and analysis. A complete test and analysis plan shall be developed for the Hover Test and submitted for government approval. The contractor shall investigate targets of opportunity for component flight testing, and investigate KV flight testing that would piggy back on other tests or utilize alternative booster vehicles for KV testing such as sounding rockets.

5.4 Configuration Management. The contractor shall maintain a configuration management program to ensure control of the documentation, hardware and software that will be used in the program. A Configuration Management Plan (CMP) shall be updated as required. The contractor's CMP shall describe the processes, methods, and procedures to be used to manage the functional and physical characteristics of the assigned configuration items (CI) under the program. The contractor shall implement a configuration control function that ensures regulation of the flow of proposed changes, documentation of the complete impact of the proposed changes, and release only of approved configuration changes into CI's and their related configuration documentation. The contractor shall also implement a configuration identification process to incrementally establish and maintain a definitive basis for control and status accounting for each CI throughout the program cycle. The KV and DCV designs shall be controlled IAW the approved CMP not later than immediately following their respective CDRs.

6.0 Specialty Engineering. The contractor shall conduct specialty engineering efforts to execute the MKV program. Processes, methods, and procedures utilized to implement these specialty engineering activities shall be identified and defined in the PMP and IMS. Status of these efforts shall be discussed during program reviews.

6.1 Environmental, Safety, and Health (ESH). The contractor shall implement practices and initiatives throughout the life of the program to ensure that all program activities are environmentally compliant, that both system safety and health requirements are met, hazardous materials are minimized and controlled and that pollution prevention measures are observed. The ESH considerations to be addressed during design, fabrication, integration, testing and fielding shall address the following:

6.1.1 Environmental Protection. The contractor shall assist the Government's assessments required by the National Environmental Policy Act (NEPA) (42 USC 4321-4370d) implementing regulation 40 CFR 1500-1508 and 32 CFR Part 651. If necessary, the contractor shall provide a description of proposed contractor actions along with qualitative and quantitative data describing the constituent materials, emissions, effluents, wastes, and hazardous materials used in and produced from these activities.

6.1.2 Hazardous Material Management. The contractor shall not use, or require the use of substances listed in Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 "toxic chemicals" and EPCRA Section 302, "extremely hazardous substances" (available at: [REDACTED]) nor the use of substances identified in the EPA 17 list (available at: [REDACTED]) in the design, fabrication, integration, or test activities associated with the MKV program unless written approval is provided by the government via the engineering change process. The contractor shall not use any Class I Ozone Depleting Chemicals/Ozone Depleting Substances (ODC/ODS), listed at [REDACTED] in the manufacture of items required by this task order, unless a waiver is obtained from the government. The contractor shall minimize the use of other hazardous materials and Class II ODSs. The contractor shall provide immediate notification of any proposed hazardous material mitigation/elimination efforts that may adversely impact schedules, cost and/or performance. The contractor may use NAS411 as a guide for implementing a Hazardous Materials Management Program (HMMP). The HMMP will be prepared IAW DI-MISC-81398 and results of the HMMP shall be made available to the government IAW DI-MISC-81397.

The contractor shall prevent pollution to minimize program environmental and cost impacts and ensure that all pollutants whose generation cannot be prevented will be recycled or disposed of in an environmentally safe manner.

6.1.3 System Safety/Health. The contractor shall plan, develop and implement a System Safety/Health Program for the MKV IAW DI-SAFT-81626. The System Safety/Health Program shall be integrated with the concurrent engineering processes used to develop, mature and support the MKV System. The contractor shall use MIL-STD 882D, as tailored by AR 386-16 and AR 385-10, in determining whether System Safety/Health engineering objectives are met.

6.1.3.1. System Safety/Health Program Plan. The contractor shall develop a System Safety/Health Plan that defines safety/health activities and relationships to other contractor organizations and the overall MKV Program.

6.1.3.2 Safety Hazard Analyses. The contractor shall develop and/or update System, Subsystem, Operating and Support and Software Safety (top level and detailed level) hazard analyses to address MKV system design or peculiar modifications IAW DI-SAFT-80101. Analyses shall identify design and procedural hazards of safety critical components and operations of the MKV system throughout its life cycle. The analysis efforts shall include a fault tree analysis of all catastrophic and critical events impacted by the MKV system design. A single hard copy of each final hazard analysis, complete with contractor's signed signature page shall be delivered to the Government for approval, IAW DI-SAFT-80101. Existing hazard analyses may be used to the fullest extent as applicable. The contractor shall institute a system for tracking hazards. This management control process should include the method to be used for determination of hazard resolution and safety compliance. Hazard resolution and safety compliance shall be demonstrated by evidence of implementing corrective actions to adequately control hazards. Data shall be made electronically available to the Government for residual risk acceptance.

6.1.3.3. Eliminate or Reduce Hazards to Acceptable Levels. Hazards will be eliminated or reduced to an acceptable level through appropriate design and or materiel selection. Contractor shall use the following order of precedence to eliminate or control potential safety/health hazards.

a. Design for Minimum Risk – Unacceptable hazards and environmental conditions shall be eliminated or their associated risks mitigated by design when feasible.

b. Incorporate Safety Devices – Hazards or unacceptable environmental conditions that cannot be eliminated or controlled through design selection shall be controlled to an acceptable level of risk through the use of fixed, automatic or other protective safety design features or devices. Provision shall be made for periodic functional checks of safety devices.

c. Provide Warning Devices - Devices will be installed to detect hazardous or unacceptable environmental conditions that cannot be otherwise eliminated or controlled. Adequate warnings shall be provided to alert personnel of the hazard or unacceptable condition and afford sufficient time for personnel response.

d. Develop Procedure and Training – When all other reasonable possibilities of hazard resolution or environmental protection have been exhausted, procedural controls and specialized training may be used to counter hazardous or unacceptable environmental conditions and actions. Warning and inspection provisions and procedures will be used to detect and correct failures, malfunctions, and errors before the hazard or environmental damage manifests itself. In no case will a single warning or caution or other form of written advisory be the only form of risk reduction.

6.1.3.4 Insensitive Munition (IM). The MKV system shall be designed to a Type V reaction in bullet and fragment impact, Fast Cook-Off and Slow Cook-Off tests and no Type I (detonation) reaction of acceptor in Sympathetic Detonation Test for final Government IM testing. The contractor shall make provisions within development plans to provide test assets in future task orders in the configuration specified in the government furnished IM test plan.

6.1.3.5 Explosives Hazard Classification. The contractor shall design the packaged MKV system to a hazard class 1.3 and so that the MKV system passes the 40-foot drop test without the energetic components functioning and so that the MKV system is safe for disposal by normal means. The contractor shall provide data for Interim Hazard Classification (IHC) IAW DI-SAFT-81299.

6.1.3.6 Radioactive Material. No radioactive, carcinogenic, or highly toxic materials, as defined by 29 CFR (OSHA), current revision, shall be incorporated into the system without prior Government approval.

6.1.3.7 Contractor Facilities. All explosives and related dangerous material facilities and operations shall comply with DOD 4145.26-M for Privately Owned, Privately Operated (POPO) contractor facilities. If Government Owned, Contractor Operated (GOCO) facilities are used, the contractor shall comply with the providing service explosive standards.

6.1.3.8 Safety Tests. The contractor shall plan safety tests on all new or modified explosive items of the MKV system. The plans shall include drop tests (in packaged configuration) to verify (1) no functioning of any energetic portion of the KV and DCV, (2) no rupture of the test item(s) which dislodges or disrupts explosives material, (3) the item is safe to handle and dispose of by normal EOD procedures and, (4) all safety devices remain in the safe condition. The contractor shall ensure safety test plans and strategies are compatible with GBI/EKV testbed and tactical system development safety requirements. An IM test program will be managed by the Government as described in paragraph 6.1.3.4. The contractor developmental plan shall include an asset (in packaged configuration) for the Government conducted test.

6.2 Operations Security. The contractor shall prepare an Operations Security (OPSEC) Plan or an annex to a previously approved plan for the MKV program. The OPSEC Plan or annex shall identify the perceived collection threat to the contractor's portion of the MKV program, essential elements of friendly information and protective counter measures that the contractor will employ to protect relevant sensitive unclassified information.

6.3 Threat Intelligence Information. The contractor shall use government furnished threat definitions in all planning, analysis, and testing documents where intelligence and threat information is required. The contractor shall coordinate any additional requests for intelligence and threat materials through the contracting officer's representative (COR) or Task Order Monitor to ensure that the most current Defense Intelligence Agency validated sources are used in planning, analysis, and testing documents. Threat positions or assessments developed by the contractor shall be submitted to the COR or Task Order Monitor for approval and/or validation.

7.0 Facilities. The contractor shall perform analyses/studies required to define/modify existing facilities for ground testing. The contractor shall provide input for site surveys, environmental impact documentation, facilities planning, and preliminary facility design efforts if required.

8.0 Period of Performance: 20 January 2005 – 30 November 2005

9.0 Task Order Monitor

The Task Order Monitor for this effort is [REDACTED] Alternate Task Order Monitor for this effort is [REDACTED].

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

ACRN AA: 97 5 0400 2501 36 2216 30603175C00 255Y W31RPD5009ES1H 5HHA05 S01021

AMOUNT: \$10,000,000.00

CLAUSES INCORPORATED BY FULL TEXT

IMPLEMENTATION OF AND EXPLANATION OF THE RELATIONSHIP OF THE LIMITATION OF FUNDS (LOF) CLAUSE TO FEE OBLIGATIONS: The amount of funds estimated to be required for full performance, including fee(s); the amount of funds allotted pursuant to the Contract Clause hereof entitled, Limitations of Funds; the amount of funds currently obligated for fee; and the estimated period of performance covered by the funds allotted are set forth below. Amounts obligated for fee are separate from and are not to be commingled with the amounts allotted for costs and are not available to the contractor to cover costs in excess of those allotted to the contract for cost.

a. CLIN 0001:

(1) Amount Required for Full Funding, Including Fee(s):	██████████
(2) Amount Allotted Under the LOF Clause for Payment of Costs:	██████████
(3) Amount Separately Obligated for Payment of Fee:	██████████
(4) Total Amount Allotted and Obligated:	\$10,000,000**
(5) Unfunded Balance:	██████████
(6) Estimated Period of Performance the Allotted Amount Will Cover:	30 Apr 05

* This is the undefinitized NTE amount for performance of this Task Order.

** The currently allotted/obligated funding includes an NTE amount of ██████████ (██████████ cost, ██████████ fee) for Kill Vehicle (KV) Divert and Attitude Control System (DACS) effort for the period of performance through 30 April 2005 until further government direction is provided.

Section H - Special Contract Requirements

AWARD FEE DETERMINATION PLAN

C. Award Fee Determination Process

1. Performance Rating and Determination of Award Fee. The AFB will assess the contractor's performance in meeting the period-specific objectives for each of the evaluation categories. This assessment will be used to calculate the award fee that the AFB Chair will include in his/her recommendation to the FDO.

2. Award Fee Determination Procedures. The contractor shall furnish to the AFB such information as may be reasonably required to assist the board in evaluation of the contractor's work as follows:

a. Five working days prior to the award fee evaluation meeting, the contractor shall electronically provide to the Contracting Officer and AFB recorder a written self-assessment of its performance under the Contract Performance Element during the award fee period. This information shall include a complete evaluation of the contractor's efforts, accomplishments, products due and delivered for the period, problems, recommendations, costs incurred and any other data the contractor considers appropriate. Definitive and quantifiable data shall be provided. In addition, the Government may request an oral presentation of the contractor's self-assessment. The content of the oral presentation shall not be substantially different than the written self-assessment previously provided.

b. The Government Award Fee evaluation meeting will be held within forty-five calendar days after the end of TO2. The recorder shall furnish the Government's end-of-period evaluation report, available DCMA and DCAA reports, and such other documents or reports as the Recorder or Board may deem appropriate and useful in making an award fee determination. The AFB Chair will present the AFB's summary of the meeting and its recommendation to the FDO as soon as possible after the AFB meeting. After the Award Fee evaluation meeting, the AFB Chair will prepare a performance evaluation letter and present it to the Fee Determining Official for review and signature. The evaluation letter should include evaluation scoring and a written summary for each evaluation category.

c. The Contracting Officer will issue a unilateral modification to the contractor to provide the earned award fee.

D. Final Decision

Determinations of the Fee Determination Official, with respect to the amount of the award fee to be paid to the contractor and the methodology for determining the award fee, are unilateral decisions made solely at the discretion of the Government.

E. Payment of Award Fee

The contractor shall be paid award fee, if any is awarded, upon submittal of a proper invoice or voucher to DCAA (to be forwarded to the cognizant Payment Office), together with a copy of the unilateral modification to the contract authorizing payment of award fee for the applicable award fee period. The contractor's invoice must cite the appropriate accounting data in order for payment to be effected.

F. Award Fee Rollover

Rollover is not automatic and will be permitted only at the discretion of the Fee Determining Official.

G. Award Fee Base and Maximum Fee

The base fee for TO2 is zero (0). The maximum award fee for this effort shall not exceed the maximum award fee dollars available.

H. Termination for Convenience

In the event the contract is terminated in whole, or in part, for convenience of the Government, the contractor may retain all award fee previously determined to be earned by the FDO prior to the effective date of such termination. Invoices in process for award fee earned, but not paid as of the effective date of termination will be paid by the Government as if the termination for convenience had not occurred. If the Government elects to terminate for convenience after the start of an award fee period, the award fee deemed earned and to be paid for this period will be determined by the FDO. The remaining award fee dollars for all periods subsequent to this termination, including mission success payments, shall not be considered available or earned, and therefore, shall not be paid.

I. Contract Performance Elements: The contractor's performance under Task Order 0002 will be measured in four (4) Functional Performance Areas (FPA) covering management, cost, schedule, and technical performance. A perfect score is 100 points. The contractor's performance will be evaluated as set forth below:

Criteria Applicable to Task Order 0002

(i) Schedule (40 points)

The contractor's performance will be evaluated in terms of overall effectiveness in meeting task order milestones in a timely manner. [REDACTED] emphasizes a proactive approach to schedule centered on planning and notification. Aspects of schedule that may be considered include:

- a. Accuracy, completeness, traceability of schedule data;
- b. Comprehensiveness of the Integrated Master Schedule and timeliness of its submission;
- c. Completeness of integration of subcontractor data into the overall program schedule;
- d. Realism of plans to reduce or eliminate schedule variances;
- e. Accuracy of projections of milestone completion;
- f. Success in achieving Task Order schedule baseline;
- g. Integration of Earned Value Management into overall program management and effectiveness of schedule variance analysis; and
- h. Effective use of risk management techniques to gain early insight into potential schedule-related problems.

(ii) Technical Performance (30 points)

The contractor will be evaluated in terms of overall technical effectiveness in performing the task order with emphasis on achieving a Critical Design Review (CDR) for KV software, verification testing of multiple subsystems, delivery of a pathfinder seeker, and completion of KV software build 2 (HWIL). [REDACTED] emphasizes a proactive approach to technical performance centered on components and their integration for use in MKV systems. Those aspects of technical performance that may be considered include:

- a. Performance of components, subassemblies, subsystems, and systems delivered under TO0002 in terms of their ability to support a hover test in TO0003 as well as follow-on program objectives.
- b. Completeness and timeliness of technical documentation, particularly trade study and analysis reports including responses to government taskings;
- c. Effectiveness of KV/CV requirements balancing;

- d. Effectiveness of risk management and risk mitigation plans;
- e. Effectiveness of efforts to provide the Government program planning data and procedures that facilitate fulfilling Government oversight responsibilities;
- f. Consistency of technical solutions with DoD, MDA, and other applicable standards;
- g. Consistency of products with plans and requirements identified in overall system engineering products and deliverables; and

(iii) Cost (20 points)

The contractor's performance will be evaluated in terms of overall effectiveness in managing the total cost of TO2. [REDACTED] emphasizes a proactive approach to cost control centered on planning and notification. Those aspects of cost that will be considered include:

- a. Overall effectiveness of cost reporting and cost control programs;
- b. Accuracy, completeness, timeliness, and consistency of cost data;
- c. Completeness of cost controls and their ability to identify and highlight potential cost problems early;
- d. Effectiveness of cost control concepts or initiatives which produce demonstrable reductions in cost without adding risk;
- e. Realism, currency, and adequacy of cost estimates/proposals;
- f. Efforts and success at performing within initial task order cost estimates

(iv) Management (10 points)

The contractor's performance will be evaluated in terms of overall effectiveness in managing the task order. [REDACTED] emphasizes a proactive and disciplined management approach. Those aspects of management performance that may be considered include:

- a. Execution of the Task Order baseline including accomplishing major milestones in a timely manner;
- b. Effectiveness of management intervention to identify, communicate, and resolve problems quickly;
- c. Adequacy of Interim Progress Reviews in facilitating government oversight responsibilities;
- d. Responsiveness to Government changes in direction and requests for information;
- e. Effectiveness in executing common processes; and
- f. Effective management of subcontractor activities.

Rating Plan

The following adjectival and numerical ratings will be used in evaluating the performance under Task Order 0002.

ADJECTIVE RATING	NUMERICAL RATING	CRITERIA (with respect to the standards set forth in Section 2, Paragraph I)
EXCELLENT	90-100	The contractor's performance significantly exceeds standards although there may be a few examples of performance only meeting the standards and/or needing improvements, all of which are minor, and they are more than offset by cited examples of performance significantly exceeding standards.
GOOD	80-89	The contractor's performance generally exceeds standards and more than offsets the cited examples of performance only meeting standards and/or needing improvement.
		The contractor's performance meets standards. Any cited examples of

ACCEPTABLE	66-79	performance exceeding standards are approximately offset by cited examples of performance needing improvement.
UNACCEPTABLE	65 or below	The contractor's performance does not meet the standards and although there may be a few examples of performance exceeding and/or meeting standards they are more than offset by cited examples of not meeting standards.

The relationship of the numerical performance rating to the award fee earned is described below. A performance rating of 65 or below is deemed unacceptable and the contractor is not awarded any award fee for that period.

$$[.5 + (.5(\text{AWARD FEE SCORE} - 65)/35)] \times \text{AWARD FEE POOL} = \text{AWARD FEE EARNED}$$

Exception: A numerical rating of 65 or below (UNACCEPTABLE) equates to zero (0) award fee earned.

Section I - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.216-23 EXECUTION AND COMMENCEMENT OF WORK (APR 1984)

The Contractor shall indicate acceptance of this undefinitized task order by signing the task order and returning to the Contracting Officer not later than 20 January 2005. Upon acceptance by both parties, the Contractor shall proceed with performance of the work, including purchase of necessary materials.

52.216-24 LIMITATION OF GOVERNMENT LIABILITY (APR 1984)

(a) In performing this task order, the Contractor is not authorized to make expenditures or incur obligations exceeding [REDACTED]

(b) The maximum amount for which the Government shall be liable if this task order is terminated is [REDACTED].

52.216-25 CONTRACT DEFINITIZATION (OCT 1987) - ALTERNATE I (APR 1984)

(a) A cost plus award fee definitive task order is contemplated.

(b) The schedule for definitizing this contract is 60 days after the issue date of the undefinitized task order.

(c) If agreement on a definitive task order to supersede this undefinitized task order is not reached by the target date in paragraph (b) above, or within any extension of it granted by the Contracting Officer, the Contracting Officer may, with the approval of the head of the contracting activity, determine a reasonable price or fee in accordance with Subpart 15.8 and Part 31 of the FAR, subject to Contractor appeal as provided in the Disputes clause. In any event, the Contractor shall proceed with completion of the task order, subject only to the Limitation of Government Liability clause.

52.216-26 PAYMENTS OF ALLOWABLE COSTS BEFORE DEFINITIZATION (DEC 2002)

(a) Reimbursement rate. Pending the placing of the definitive contract referred to in this letter contract, the Government will promptly reimburse the Contractor for all allowable costs under this contract at the following rates:

(1) [REDACTED] of approved costs representing financing payments to subcontractors under fixed-price subcontracts, provided that the Government's payments to the Contractor will not exceed [REDACTED] of the allowable costs of those subcontractors.

(2) [REDACTED] of approved costs representing cost-reimbursement subcontracts; provided, that the Government's payments to the Contractor shall not exceed [REDACTED] of the allowable costs of those subcontractors.

(3) [REDACTED] of all other approved costs.

(b) Limitation of reimbursement. To determine the amounts payable to the Contractor under this letter contract, the Contracting Officer shall determine allowable costs in accordance with the applicable cost principles in Part 31 of the Federal Acquisition Regulation (FAR). The total reimbursement made under this paragraph shall not exceed [REDACTED] of the maximum amount of the Government's liability, as stated in this contract.

(c) Invoicing. Payments shall be made promptly to the Contractor when requested as work progresses, but (except for small business concerns) not more often than every 2 weeks, in amounts approved by the Contracting Officer. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost incurred by the Contractor in the performance of this contract.

(d) Allowable costs. For the purpose of determining allowable costs, the term "costs" includes--

(1) Those recorded costs that result, at the time of the request for reimbursement, from payment by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(2) When the Contractor is not delinquent in payment of costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for--

(i) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments determined due will be made--

(A) In accordance with the terms and conditions of a subcontract or invoice; and

(B) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government;

(ii) Materials issued from the Contractor's stores inventory and placed in the production process for use on the contract;

(iii) Direct labor;

(iv) Direct travel;

(v) Other direct in-house costs; and

(vi) Properly allocable and allowable indirect costs as shown on the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(3) The amount of financing payments that the Contractor has paid by cash, check, or other forms of payment to subcontractors.

(e) Small business concerns. A small business concern may receive more frequent payments than every 2 weeks.

(f) Audit. At any time before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of costs audited. Any payment may be (1) reduced by any amounts found by the Contracting Officer not to constitute allowable costs or (2) adjusted for overpayments or underpayments made on preceding invoices or vouchers.

(End of clause)