Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

☒ **Annual Report Under Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the fiscal year ended April 30, 2011

o **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from to

Commission file number 001-33261

AEROVIRONMENT, INC.

(Exact name of registrant as specified in its charter)

Delaware	**95-2705790**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
181 W. Huntington Drive, Suite 202 **Monrovia, CA**	**91016**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's telephone number, including area code: **(626) 357-9983**

Securities registered pursuant to Section 12(b) of the Act:

Title of Class	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	**The NASDAQ Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes o No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer o	Accelerated filer ☒	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No ☒

The aggregate market value of the voting stock held by non-affiliates of the registrant, based on the closing price on the NASDAQ Global Select Market on October 30, 2010 was approximately $413.3 million.

As of June 10, 2011, the issuer had 22,057,784 shares of common stock, par value $0.0001 per share, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the conclusion of the registrant's fiscal year ended April 30, 2011, are incorporated by reference into Part III of this Form 10-K.

AEROVIRONMENT, INC.
INDEX TO FORM 10-K

PART I

Forward-Looking Statements

This Annual Report on Form 10-K, or Annual Report, contains forward-looking statements, which reflect our current views about future events and financial results. We have made these statements in reliance on the safe harbor created by the Private Securities Litigation Reform Act of 1995 (set forth in Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act). Forward-looking statements include our views on future financial results, financing sources, product development, capital requirements, market growth and the like, and are generally identified by terms such as "may," "will," "should," "could," "targets," "projects," "predicts," "contemplates," "anticipates," "believes," "estimates," "expects," "intends," "plans" and similar words. Forward-looking statements are merely predictions and therefore inherently subject to uncertainties and other factors which could cause the actual results to differ materially from the forward-looking statement. These uncertainties and other factors include, among other things:

- unexpected technical and marketing difficulties inherent in major research and product development efforts;
- availability of U.S. government funding for defense procurement and research and development programs;
- the extensive regulatory requirements governing our contracts with the U.S. government and the results of any audit or investigation of our compliance therewith;
- the potential need for changes in our long-term strategy in response to future developments;
- unexpected changes in significant operating expenses, including components and raw materials;
- changes in the supply, demand and/or prices for our products;
- increased competition, including from firms that have substantially greater resources than we have;
- changes in the regulatory environment; and
- general economic and business conditions in the U.S. and elsewhere in the world.

Set forth below in Item 1A, "Risk Factors" are additional significant uncertainties and other factors affecting forward-looking statements. The reader should understand that the uncertainties and other factors identified in this Annual Report are not a comprehensive list of all the uncertainties and other factors that may affect forward-looking statements. We do not undertake any obligation to update or revise any forward-looking statements or the list of uncertainties and other factors that could affect those statements.

Item 1. Business.

Overview

We design, develop, produce and support a technologically-advanced portfolio of products and services. We supply unmanned aircraft systems, or UAS, and related services primarily to organizations within the U.S. Department of Defense, or DoD. We also supply charging systems and services for electric vehicles, or EVs and power cycling and test systems to commercial, consumer and government customers. We derive the majority of our revenue from these business areas and we believe that the markets for these solutions have significant growth potential. Additionally, we believe that some of the innovative potential products in our research and development pipeline will emerge as new growth platforms in the future, creating additional market opportunities.

The success we have achieved with our current products stems from our investment in research and development and our ability to invent and deliver advanced solutions, utilizing our proprietary technologies, to help our government, commercial and consumer customers operate more effectively and efficiently. Our core technological capabilities, developed through 40 years of innovation, include lightweight aerostructures, power electronics, electric propulsion systems, efficient electric power generation and storage systems, high-density energy packaging, miniaturization, controls integration and systems engineering optimization.

Our UAS business segment focuses primarily on the design, development, production and support of innovative UAS that provide situational awareness and other mission effects to increase the security and effectiveness of our customers' operations. Our Efficient Energy Systems, or EES, business segment focuses primarily on the design, development, production and support of innovative efficient electric energy systems that address the growing demand for electric transportation solutions.

Our Strategy

As a technology solutions provider, our strategy is to develop innovative new solutions that enable us to create new markets or market segments, gain market share and grow as market adoption increases. We believe that by introducing new solutions that provide customers with compelling value we are able to create new markets or market segments and then grow our positions within those markets or market segments profitably, instead of competing in existing markets against large, incumbent competitors.

We intend to grow our business by maintaining market leadership for UAS, electric vehicle charging systems and power cycling and test systems, and by creating new solutions that enable us to enter and lead new markets. Key components of this strategy include the following:

Expand our current solutions to existing and new customers. Our small UAS, electric vehicle charging systems and power cycling and test systems are leading solutions in their respective markets. We intend to increase the penetration of our small UAS products and services within the U.S. military, the military forces of allied nations and non-military customers. We believe that the continued adoption of our small UAS by the U.S. military will continue to spur demand by allied countries, and that our efforts to pursue new applications will help to create opportunities beyond the military market we currently serve. We similarly intend to increase the penetration of our electric vehicle charging systems and services, and our power cycling and test systems, into existing and new customer segments in North America and globally.

Deliver innovative new solutions. Innovation is the primary driver of our growth. We plan to continue research and development efforts to develop better, more capable products, services and business models, both in response to and in anticipation of emerging customer needs. In some cases these innovations result in upgrades to existing offerings, expanding their value among existing customers and markets. In other cases these innovations become entirely new solutions that position us to address new markets, customers and business opportunities. We believe that by continuing to invest in research and development we will continue to deliver innovative new products and services that address market needs within and outside of our current target markets, enabling us to create new opportunities for growth.

Foster our entrepreneurial culture and continue to attract, develop and retain highly-skilled personnel. We have created a company culture that encourages innovation and an entrepreneurial spirit, which helps to attract and retain highly-skilled professionals. We intend to maintain this culture to encourage the development of the innovative, highly technical system solutions and business models that give us our competitive advantage. A core component of our culture is the demonstration of trust

and integrity in all of our interactions, contributing to a positive work environment and engendering loyalty among our employees and customers.

Preserve our agility and flexibility. We are able to respond rapidly to evolving markets, solve complicated customer problems, and deliver new products and system capabilities quickly, efficiently and affordably. We believe this ability helps us to strengthen our relationships with customers and partners. We intend to maintain our agility and flexibility, which we believe to be important sources of differentiation when we compete against organizations with more extensive resources.

Effectively manage our growth portfolio. Our production and development programs and services provide us with numerous investment opportunities that we believe will support our long-term growth. Each opportunity is evaluated independently and within the context of all other investment opportunities to determine its relative priority. This process ensures that we allocate resources based on relative risks and returns to maximize long-term return on investment, which is a key element of our growth strategy.

Market Opportunity, Requirements and Solutions Summary

We develop innovative solutions that target potentially large, emerging market opportunities related to two growing, global trends: the increasing economic and security value of network-centric, intelligence, surveillance, reconnaissance and communications solutions; and the increasing economic, environmental and energy security value of electric transportation solutions. We believe that our focus on these trends constitutes important work that will benefit our company, stockholders, employees and community. The following table provides a summary of the market opportunities we pursue, the market requirements we satisfy and solutions we develop:

Market Opportunity	Primary Market Requirements	Our Solutions
—UAS Products—		
Man-portable airborne intelligence, surveillance and reconnaissance, or ISR, tools for the rapid acquisition of tactical situational awareness within 20 kilometers	• Minimum size, weight and volume for rucksack or vehicle carriage • High reliability and robust performance in various operating environments • Day and night video sensors • Quiet operation • Operation via hand-held controller	Puma, Raven® and Wasp small UAS systems: • Battery-powered with an electric motor, each aircraft produces minimal audio signature and is designed for ruggedness • Onboard sensors stream live color or infrared video wirelessly to a monitor integrated into a hand-held ground control unit • Operated from a common and interoperable ground control system • Supported by spare parts, repair and training services • Offered as hardware or through turnkey flight services

Market Opportunity	Primary Market Requirements	Our Solutions
Rapidly deployable mesh network for tactical video, voice, data and text communications	• Signal encryption • Multiple available communications channels • Lightweight, small, low power consumption	Digital Data Link, or DDL: • Small, lightweight, low power, wireless video link • Bi-directional, digital; enables enhanced command and control of small UAS • Internet protocol-based for maximum flexibility and interoperability between small airborne and ground systems • Efficient use of bandwidth maximizes the number of systems that can reliably operate within an area
—EES Products—		
Charging infrastructure for plug-in electric vehicles entering the global automotive market	• Designed for safety and reliability • Standards-based solutions for home and public charging • Data and communications networking to integrate with smart grid and various business models	Passenger and Fleet Electric Vehicle Charging Systems: • 240-volt "Level 2" charging systems and a variety of three-phase, 480-volt "Level 3," DC, or fast charging systems for fleet and public charging that range from 10 kilowatts to 250 kilowatts • Geographically broad, qualified network of licensed electrical contractors for installation and support services • Infrastructure tools for web-based integration with partners and service providers
Charging infrastructure for plug-in electric industrial materials handling vehicles	• Designed for safety and reliability • Support multiple vehicle and battery types • Economically scalable based on vehicle usage	PosiCharge Industrial Electric Vehicle Charging Systems: • Broad range of solutions for different vehicle duty cycles • Standard connector interface to support multiple vehicles and battery types • Data and communications network for reporting and trouble-shooting

Market Opportunity	Primary Market Requirements	Our Solutions
		• Fast, opportunity and conventional charging rates for multiple user types and operational requirements
Test systems for electric vehicle developers, battery manufacturers, and electric energy research and development activities	• Programmable, robust • Multiple DC power levels for multiple test regimes • Designed for safety and reliability	Power Cycling and Test Systems: • Programmable simulation of duty cycles for lifecycle testing electric vehicles, battery packs and components • Source and sink for electrical loads • Returns electricity delivered by test items to the grid
	—UAS Development Programs—	
Organic, high-precision non-line-of-sight strike capability for dismounted forces	• Man-portable, rapidly deployable • Precise, lower probability for collateral damage	Switchblade™: • Backpack-able, tube-launched, loitering munition • Unfolds tandem wings upon ejection from launch tube and transmits streaming video from an onboard sensor • Operator identifies and designates target using ground control unit monitor • Aircraft autonomously guides itself to the target, with high precision and lower probability for collateral damage • Can be launched from a variety of air and ground platforms
Affordable, high altitude long endurance platforms for wide area ISR and communications	• Seamless remote sensing and communications platform • Less costly than satellites and existing manned and unmanned aircraft systems • No latitude restrictions • Rapid turnaround • Deployable from outside combat areas	Global Observer™: • Hydrogen-powered, hybrid-electric propulsion system provides more energy per unit of weight than conventional fuels to maximize endurance • Composite airframe reduces weight while maintaining structural strength

Market Opportunity	Primary Market Requirements	Our Solutions
	• Capacity sufficient for existing payloads	• Up to one week flight duration at up to 65,000 feet in altitude • A system, consisting of at least two aircraft trading positions over a designated geographic area, to provide continuous coverage—an unblinking eye—at a significantly lower cost than available alternatives

Customers

We sell the majority of our UAS products and services to organizations within the DoD, including the U.S. Army, Marine Corps, Special Operations Command and Air Force. Our EES business segment generates revenue from commercial, consumer and, to a lesser extent, government customers.

During our fiscal year ended April 30, 2011, approximately 48% of our sales were made to the U.S. Army pursuant to orders made under contract by the U.S. Army on behalf of itself as well as several other organizations within the DoD. Other U.S. government agencies and government subcontractors accounted for 35% of our sales revenue, while purchases by foreign, commercial customers and consumers accounted for the remaining 17% of sales revenue during our fiscal year ended April 30, 2011.

Technology, Research and Development

Technological Competence and Intellectual Property

The innovations developed by our company and our founder include, among others: the world's first effective human-powered and manned solar-powered airplanes; the first modern passenger electric car, the EV1 prototype for General Motors; the world's highest flying airplane in level flight, Helios, a solar-powered UAS that reached over 96,000 feet in 2001; and, more recently, Global Observer, the world's first liquid hydrogen-fuelled UAS. The Smithsonian Institution has selected seven vehicles developed by us or our founder for its permanent collection. Our history of innovation excellence is the result of our creative and skilled employees whom we encourage to invent and develop new technologies.

Our company was founded by the late Dr. Paul B. MacCready, the former Chairman of our board of directors and an internationally renowned innovator who was instrumental in establishing our entrepreneurial and creative culture. This culture has enabled us to consistently attract and retain highly-motivated, talented employees and has established our reputation as an innovative leader in the industries in which we compete.

A critical component of our ongoing innovation is a screening process that helps our business managers identify early market needs, which assists us in making timely investment into critical technologies necessary to develop solutions to address these needs. Similarly, we manage new product and business concepts through a commercialization process that balances spending, resources, time and intellectual property considerations against market requirements and potential returns on investment. Strongly linking our technology and business development activities to customer needs in attractive growth markets is an important element of this process. Throughout the process we revalidate our

customer requirement assumptions to help ensure that the products and services we ultimately deliver are of high value.

As a result of our commitment to research and development, we possess an extensive portfolio of intellectual property in the form of patents, trade secrets, copyrights and trademarks across a broad range of UAS and advanced energy technologies. As of April 30, 2011, we had 65 U.S. patents issued; 74 U.S. patent applications pending; 31 active Patent Cooperation Treaty applications; and numerous foreign patents and applications. In many cases, when appropriate and to preserve confidentiality, we opt to protect our intellectual property through trade secrets as opposed to filing for patent protection.

The U.S. government has licenses to some of our intellectual property that is specifically developed in performance of government contracts, and may use or authorize others to use this intellectual property. In some cases we internally fund the development of certain intellectual property to maximize its value and limit potential competitors from utilizing it. While we consider the development and protection of our intellectual property to be integral to the future success of our business, at this time we do not believe that a loss or limitation of rights to any particular piece of our intellectual property would have a material adverse effect on our overall business.

Research, Development and Commercialization Projects

A core component of our business strategy is the development and commercialization of innovative solutions that we believe can become new products and enable us to enter large new markets or accelerate the growth of our current products. We invest in an active pipeline of these commercialization projects that range in maturity from technology validation to early market adoption. We cannot predict when, if ever, these projects will be successfully commercialized, or the exact level of capital expenditures they could require, which could be substantial. In our fiscal year 2011, we began to transition elements of our passenger and fleet electric vehicle charging systems offering from the development stage to the production stage as passenger electric vehicles became available to consumers.

For the fiscal years ended April 30, 2011, 2010 and 2009, our internal research and development spending amounted to 12%, 10% and 9%, respectively, of our revenue, and customer-funded research and development spending amounted to an additional 12%, 32% and 27%, respectively, of our revenue.

Sales and Marketing

Our marketing strategy is to increase awareness of our brand among key target market segments and to be associated with innovation, flexibility, agility and the ability to deliver reliable new technology solutions that improve customer operational effectiveness and efficiency within these segments. Our reputation for innovation is a key component of our brand and has been acknowledged through a variety of awards and recognized in numerous articles in domestic and international publications. We have registered the trademarks for AeroVironment, PosiCharge, Global Observer and Raven and have submitted several other applications for trademark registration, including those for the AeroVironment logo, EV Solutions™, GO™ and Switchblade™.

International Sales

We are increasing our sales efforts abroad and have contracted with international sales representatives for our business segments in a number of foreign markets. Our international sales accounted for approximately 7% of our revenue for the fiscal years ended April 30, 2011, 2010 and 2009.

Competition

We believe that the principal competitive factors in the markets for our products and services include product performance, features, acquisition cost, lifetime operating cost, including maintenance and support, ease of use, integration with existing equipment, quality, reliability, customer support, brand and reputation.

Manufacturing and Operations

We pursue a lean and efficient manufacturing system strategy across our business segments, focusing on rapid prototyping, supply chain management, final assembly, integration, quality and final acceptance testing. Using concurrent engineering techniques within an integrated product team structure, we rapidly prototype design concepts and products while optimizing our designs for manufacturing requirements, mission capabilities and customer specifications. Within this framework we develop our products with feedback and input from manufacturing, quality, supply chain management, key suppliers, logistics personnel and customers. We rapidly incorporate this input into product designs to ensure maximum efficiency and quality in our products. As a result, we believe that we can significantly reduce the time required to move a product from its design phase to full-rate production deliveries with high reliability, quality and yields.

We outsource certain production activities, such as the fabrication of structures, the manufacture of subassemblies and payloads and the production of certain of our EV charging products, to qualified suppliers, many of whom we have long-term relationships with. This outsourcing enables us to focus on final assembly system integration, and test processes for our products, ensuring high levels of quality and reliability. We believe that our efficient supply chain is a significant strength of our manufacturing strategy. We have forged strong relationships with key suppliers based on their ability to grow with our manufacturing needs and support our growth plans. We continue to expand upon our suppliers' expertise to improve our existing products and develop new solutions. We rely on both single and multiple suppliers for certain components and subassemblies. See "Risk Factors—If critical components of our products that we currently purchase from a small number of suppliers or raw materials used to manufacture our products become scarce or unavailable, then we may incur delays in manufacturing and delivery of our products, which could damage our business" for more information. All of our production system operations incorporate internal and external quality programs and processes to increase acceptance rates, reduce lead times and lower cost.

Contract Engineering Services

We actively pursue internally and externally funded projects that help us to strengthen our technological capabilities. Our UAS business segment submits bids to large research customers such as the Defense Advanced Research Projects Agency, the U.S. Air Force, the U.S. Army and the U.S. Special Operations Command for projects that we believe have future commercial application. Contract engineering services conducted through our EES business segment represent a strategic source of innovation for us, and a portion of our business involves providing advanced battery module and pack testing services to automotive manufacturers in support of their electric and hybrid electric vehicle development programs. Providing these services contributes to the development and enhancement of our technical competencies. In an effort to manage the ability of our key technical personnel to support multiple, high-value research and development initiatives, we attempt to limit the volume of contract engineering projects that we accept. This process enables us to focus these personnel on projects we believe offer the greatest current and future value to our business.

Contract Mix

The table below shows our revenue for the periods indicated by contract type, including both government and commercial sales:

	Fiscal Year Ended April 30,		
	2011	2010	2009
Fixed-price contracts	69 %	59 %	59 %
Cost reimbursable contracts	30 %	40 %	40 %
Time-and-materials contracts	1 %	1 %	1 %

Employees

As of April 30, 2011, we had 768 full-time employees, of whom 281 were in research and development and engineering, 71 were in sales and marketing, 278 were in operations and 138 were general and administrative personnel. We believe that we have a good relationship with our employees.

Backlog

We define funded backlog as unfilled firm orders for products and services for which funding currently is appropriated to us under the contract by the customer. As of April 30, 2011 and April 30, 2010, our funded backlog was approximately $82.9 million and $72.3 million, respectively. We expect that 94% of our funded backlog will be filled during our fiscal year ending April 30, 2012.

In addition to our funded backlog, we had unfunded backlog of $230.8 million and $269.4 million as of April 30, 2011 and April 30, 2010, respectively. We define unfunded backlog as the total remaining potential order amounts under cost reimbursable and fixed price contracts with multiple one-year options, and indefinite delivery, indefinite quantity, or IDIQ contracts. Unfunded backlog does not obligate the U.S. government to purchase goods or services. There can be no assurance that unfunded backlog will result in any orders in any particular period, if at all. Management believes that unfunded backlog does not provide a reliable measure of future estimated revenue under our contracts.

Because of possible future changes in delivery schedules and/or cancellations of orders, backlog at any particular date is not necessarily representative of actual sales to be expected for any succeeding period, and actual sales for the year may not meet or exceed the backlog represented. Our backlog is typically subject to large variations from quarter to quarter as existing contracts expire, or are renewed, or new contracts are awarded. A majority of our contracts, specifically our IDIQ contracts, do not currently obligate the U.S. government to purchase any goods or services. Additionally, all U.S. government contracts included in backlog, whether or not they are funded, may be terminated at the convenience of the U.S. government.

Other Information

AeroVironment, Inc. was originally incorporated in the State of California in July 1971 and reincorporated in Delaware in 2006. In January 2007, we completed an initial public offering which resulted in the issuance of 5,252,285 shares of our common stock at a price of $17.00 per share, resulting in net proceeds to us of approximately $80.5 million, after deducting payment of underwriters' discounts and commissions and offering expenses.

Our principal executive offices are located at 181 W. Huntington Dr., Suite 202, Monrovia, California 91016. Our telephone number is (626) 357-9983. Our website home page on the Internet is *http://www.avinc.com*. We make our website content available for information purposes only. It should not be relied upon for investment purposes, nor is it incorporated by reference into this Form 10-K.

We make our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and proxy statement for our annual stockholders' meeting, as well as any amendments to those reports, available free of charge through our website as soon as reasonably practical after we electronically file that material with, or furnish it to, the Securities and Exchange Commission, or SEC. You can learn more about us by reviewing our SEC filings. Our SEC reports can be accessed through the investor relations page of our web site at *http://investor.avinc.com*. These reports may also be obtained at the SEC's public reference room at 100 F. Street, N.E., Washington, DC 20549. The SEC also maintains a web site at www.sec.gov that contains reports, proxy statements and other information regarding the Company.

Unmanned Aircraft Systems

Our UAS business segment addresses the increasing economic and security value of network-centric intelligence, surveillance, reconnaissance, or ISR, and communications with innovative UAS solutions.

Industry Background

Small UAS

The market for small UAS has grown significantly over the last several years, initially due to the U.S. military's post-Cold War transformation, and now more directly by the demands associated with the current global threat environment. Following the end of the Cold War, the U.S. military began its transformation into a smaller, more agile force that operates via a network of observation, communication and precision targeting technologies. This transformation accelerated following the terrorist attacks of September 11, 2001, as the U.S. military required improved, distributed observation and targeting of enemy combatants who operate in small groups, often embedded in dense population centers or dispersed in remote locations. We believe that UAS, which range from large systems, such as Northrop Grumman's *Global Hawk* and General Atomics' *Predator*, *Sky Warrior*, *Reaper* and *Grey Eagle*, to small systems, such as our Raven, Wasp and Puma, serve as integral components of this transforming military force. These systems provide critical observation and communications capabilities serving the increasing demand for actionable intelligence, while reducing risk to individual "warfighters." Small UAS can provide real-time observation and communication capabilities to the small units who control them. As we explore opportunities to develop new markets for our small UAS, such as border surveillance, law enforcement, first response and infrastructure monitoring, we expect further growth through the introduction of UAS technology to non-military applications once rules are established for their safe and effective operation in each country's national airspace.

Stratospheric Persistent UAS

We believe a market opportunity exists for UAS that can fly for multiple days to perform continuous remote sensing and communications relay missions in an affordable manner. The emergence of distributed military threats in geographic areas with limited communications infrastructure has prompted U.S. military forces to deploy solutions to manage the increasing volume of data generated by their operations in those areas. Existing solutions such as communications satellites and manned and unmanned aircraft address some of this emerging demand for bandwidth, but do so at relatively high financial and resource costs. Given the nature of asymmetrical warfare, with embedded military adversaries operating in population centers, rural areas and remote locations, the ability to observe areas of interest on a continuous basis with high resolution sensors remains a critical and largely unmet need. Geosynchronous satellites provide fixed, continuous communications relay capabilities to much of the globe, but they operate nearly 25,000 miles from the surface of the earth, therefore limiting the bandwidth they can provide and requiring relatively larger, higher power ground stations. Remote sensing satellites typically operate at lower altitudes, but are unable to maintain geosynchronous

positions, meaning they are moving with respect to the surface of the earth, resulting in a limited presence over specific areas of interest, and significant periods of time during which they are not present over those areas. UAS that are capable of operating for extended periods of time over an area of interest without gaps in availability while carrying a communications relay or observation payload in an affordable manner could help to satisfy this need.

Loitering Airborne Munitions Systems

The pursuit of weapons capable of rapid deployment and of striking their targets with high precision while minimizing the risk to surrounding civilians, property and the user accelerated in recent years due to advances in enabling technologies. Weapons such as laser-guided missiles, "smart" bombs and GPS-guided artillery shells have dramatically improved the accuracy of strikes against hostile targets. Most of these weapons systems typically are operated by elements of the armed forces that are geographically removed from the target area, requiring advanced planning and coordination to enable their use. When ground forces find themselves engaged in a firefight or near a target, their ability to deploy and use a precision weapon system quickly and easily can mean the difference between mission success and failure. Embedding a lethal payload into a man-portable unmanned aircraft system could provide warfighters with a valuable alternative to existing airborne and land-based munitions systems.

Our UAS Solutions

Small UAS Products

Our small UAS, including Raven, Wasp and Puma, are designed to provide valuable ISR, including real-time tactical reconnaissance, tracking, combat assessment and geographic data, directly to the small tactical unit or individual warfighter, thereby increasing flexibility in mission planning and execution. Our small UAS wirelessly transmit critical live video and other information generated by their payload of electro-optical or infrared sensors directly to a hand-held ground control unit, enabling the operator to view and capture images, during the day or at night, on the control unit. Our ground control systems allow the operator to control the aircraft by programming it for GPS-based autonomous navigation using operator-designated way-points and also provide for manual flight operation. The ground control systems are designed for durability and ease of use in harsh environments and incorporate a user-friendly, intuitive, graphical user interface. All of our small UAS currently in production operate from our common ground control system.

All of our small UAS are designed to be man-portable, assembled without tools in less than five minutes and launched and operated by one person, with limited training required. The efficient and reliable electric motors used in all of our small UAS are powered by replaceable modular battery packs that can be swapped out in seconds, enabling rapid return to flight. All of our small UAS, other than Switchblade, which we consider a loitering munition, are designed to be reusable and can be recovered through an autonomous landing feature that enables a controlled descent to a designated location.

In military applications, our small systems enable tactical commanders to observe around the next corner, to the next intersection or past the ridgeline in real-time. This information facilitates faster, safer movement through urban, rural and mountainous environments and can enable troops to be proactive based on field intelligence rather than reactive. Moreover, by providing this information, our systems reduce the risk to warfighters and to the surrounding population by providing the ability to tailor the military response to the threat. U.S. military personnel regularly use our small UAS, such as Raven, for missions such as force protection, combat observation and damage assessment. These reusable systems are easy to transport, assemble and operate and are relatively quiet when flying at typical operational altitudes of 200 to 300 feet above ground level, the result of our efficient electric propulsion systems. Furthermore, their small size makes them difficult to see from the ground. In addition, the low cost of our small UAS systems relative to larger systems and alternatives makes it practical for customers to deploy these assets directly to warfighters.

Our small UAS also include spare equipment, alternative payload modules, batteries, chargers, repair services and customer support. We provide training by our highly-skilled instructors, who typically have extensive military experience, and continuous refurbishment and repair services for our products. By maintaining close contact with our customers and users in the field, we gather critical feedback on our products and incorporate that information into ongoing product development and research and development efforts. This approach enables us to improve our solutions in response to, and in anticipation of, evolving customer needs.

Each system in our small UAS portfolio typically includes multiple aircraft, our common and interoperable hand-held ground control system and an array of spare parts and accessories. Our current small UAS portfolio consists of the following aircraft:

Small UAS Product	Wingspan (ft.)	Weight (lbs.)	Recovery	Standard Sensors	Range (mi.)(1)	Flight Time (min.)(1)
Puma	9.2	13.0	Vertical autonomous landing capable (ground or water)	Mechanical pan, tilt, zoom and digital zoom electro-optical and infrared	9.0	120
Raven	4.5	4.2	Vertical autonomous landing capable	Digital zoom electro-optical or infrared	6.0	90
Wasp	2.4	1.0	Horizontal autonomous landing capable	Digital zoom electro-optical and infrared	3.0	45

(1) Represents minimum customer-mandated specifications for all operating conditions. In optimal conditions, the performance of our products may significantly exceed these specifications.

The ground control system is the primary interface between the operator and the aircraft, and allows the operator to control the direction, speed and altitude of the aircraft as well as view the visual information generated by the aircraft through real-time, streaming video. Our ground control system interfaces with each of our air vehicles, providing a common user interface with each of our air vehicles. In addition to the thousands of air vehicles delivered to our customers, thousands of ground control systems are also in our customers' hands.

During fiscal 2011 we began production of new digital Puma systems incorporating our DDL. This transition followed the successful initiation of our digital Raven system and retrofit kit production in fiscal 2010. The result of a successful development program, DDL enhances the capabilities, and ultimately, the utility of our small UAS by enabling more efficient radio spectrum utilization and communications security. Small UAS incorporating our DDL offer many more channels as compared to our analog link, increasing the number of air vehicles that can be operated in a given area. Additionally, our DDL enables each air vehicle to operate as an Internet-Protocol addressable hub capable of routing and relaying video, voice and data to and from multiple other nodes on this *ad hoc* network. This capability will enable beyond line-of-sight operation of our small UAS, further enhancing their value proposition to our customers.

UAS Services

In support of our small UAS we offer a suite of services that help to ensure the successful operation of our products by our customers. These services generate incremental revenue for the company and provide us with continuous feedback to understand the utility of our systems, anticipate our customers' needs and develop additional customer insights. We believe that this ongoing feedback loop enables us to continue to provide our customers with innovative solutions that help them succeed.

We provide spare parts as well as repair, refurbishment and replacement services through our services operation. We designed our services operation to minimize supply chain delays and provide our customers with spare parts, replacement aircraft and support whenever and wherever they need them. We developed an Internet-accessible logistics system to provide our customers with the status of their returned products and their inventory that we help manage. This secure system also provides recent parts and repairs history and tracks usage data to enable inventory optimization forecasting. One of our facilities also serves as the primary depot for repairs and spare parts.

We provide complete training services to support all of our small UAS. Our highly-skilled instructors typically have extensive military experience. We deploy training teams throughout the continental United States and abroad to support our customers' wide variety of training needs on both production and development-stage systems.

Customers who require the information generated by our small UAS but who may not wish to purchase and operate the equipment themselves can contract with us for turnkey flight operation services. We can deploy our own operators to locations around the world to provide small UAS-generated reconnaissance video and information to support numerous types of missions.

We provide contract engineering services in support of customer-funded research and development projects, delivering new value-added technology solutions to our customers. These types of projects typically involve developing new system solutions and technology or new capabilities to existing solutions that we introduce as retrofits or upgrades. We recognize customer-funded research and development projects as revenue.

We supply our UAS products and services to multiple customers in the United States and beyond. During fiscal 2011, the U.S. Army, our largest customer, increased its projected total demand for our Raven small UAS by 8%, from 2,182 to 2,358 new systems. We had delivered approximately 70% against the new acquisition objective as of April 30, 2011. During fiscal 2011, strong initial adoption of our digital Puma system complemented continued demand for digital Raven systems and UAS services, increasing the diversity of our UAS portfolio. For the fiscal years ended April 30, 2011, 2010, and 2009, our UAS segment products and services accounted for 85%, 90% and 85%, respectively, of our revenue.

UAS Technology, Research and Development

Our primary areas of technological competence represent the sum of numerous technical skills and capabilities that help to differentiate our approach and product offerings. The following list highlights a number of our key UAS technological capabilities:

- Lightweight, low speed aerostructures and propeller design;
- Miniaturized avionics and micro/nano unmanned aircraft systems;
- Image stabilization and target tracking;
- Unmanned autonomous control systems;

- Payload integration;
- Electric and hydrogen propulsion systems and high-pressure-ratio turbochargers;
- Stratospheric flight operations;
- Fluid dynamics;
- Miniature, low power wireless digital communications; and
- System integration and optimization.

Three of our UAS development programs are described below:

Global Observer. Global Observer is our high-altitude, long-endurance UAS under development to address the critical need for affordable, 24-hour, 365-days-a-year persistent communications and ISR. Each Global Observer aircraft is designed to operate at up to 65,000 feet for up to a week before landing. A complete system would include at least two aircraft, one flying over a designated area and the other in preparation or in transit to or from the designated area, which would alternate positions approximately every week to maintain an uninterrupted presence. Global Observer is the continuation of years of research with both our own and U.S. government development funding. The system has been developed and tested under a three-and-one-half-year joint capabilities technology demonstration program, or JCTD, sponsored by several agencies of the U.S. government. We expect the efficiency and endurance, three to four times the longest flight time of existing payload-capable fixed-wing aerial options, of this UAS to provide for dramatically lower operating and total life cycle costs for missions where long distance persistent communications or surveillance is critical. The Global Observer platform is intended to be the low-cost equivalent of a 12-mile-high, redeployable satellite, providing a potential footprint of coverage of up to 600 miles in diameter and capable of providing a broad array of services, including high-speed broadband data, video and voice relay and ISR. We expect these capabilities to provide the foundation for multiple high-value applications including communications relay and ISR missions for defense and homeland security, storm tracking, telecommunications infrastructure, wildfire detection/tracking and disaster recovery services.

The first Global Observer aircraft developed in the JCTD successfully completed extensive ground testing and then eight test flights at Edwards Air Force Base in California between August 2010 and March 2011, the last three flights using its liquid hydrogen-fuelled propulsion system. More than 18 hours into its ninth flight, after reaching 30,000 feet altitude, the aircraft experienced a mishap that resulted in it impacting the ground on an uninhabited portion of the base and being damaged beyond repair. Our initial internal analysis indicated that the cause of the mishap is addressable. The results of the formal investigation commissioned to determine the cause of the mishap will be detailed in a report to be issued by the investigation board.

Switchblade. We have developed and are continuing to demonstrate a man-portable, single-use, tube-launched loitering munition with the ability to destroy a stationary or moving target with high precision and reduced collateral damage through the detonation of an onboard explosive. This system can be launched by a single individual from the ground or from land or sea vehicles, and operated through the ground control system used with our other small UAS. Switchblade allows an operator to launch the loitering munition system rapidly, positively identify a threat and track the target using visual information transmitted from the aircraft's onboard sensor to the ground control unit, lock-on to the target and then neutralize the target via the aircraft's integrated warhead. We believe that recent U.S. military

experience supports the notion that such a capability would be of great value and could significantly improve the ability to neutralize threats with reduced collateral damage and with minimal risk to the operators due to the standoff distance from which they can launch the Switchblade. Development of this system under customer funding has achieved desired milestones, including demonstrating dynamic target tracking, real-time aircraft course correction and high precision, as well as launching from multiple platforms.

Development of New Small UAS Solutions and Enhancements to Existing Solutions. Based on feedback from our customers and our own assessment of market needs, we continuously pursue the development of new small UAS and enhancements to our existing small UAS. Both we and customers fund this development work. An example of a customer-funded new small UAS is the Stealthy Perch and Persistent Stare, or SP2S. The goal of the SP2S program is to develop the technology to enable an entirely new generation of perch-and-stare micro air vehicles capable of flying to difficult-to-access locations, landing on and securing to a "perch" position, conducting sustained surveillance missions and then re-launching from their perch and returning to their home base.

UAS Sales and Marketing

We organize our U.S. small UAS business development team members by customer and product and have team members located where they are in close proximity to the customers they support. Our program managers are organized by product and focus on designing optimal solutions and contract fulfillment, as well as internalizing feedback from customers and users. By maintaining assigned points of contact with our customers, we believe that we are able to enhance our relationships, service existing contracts effectively and gain vital feedback to improve our responsiveness and product offerings.

UAS Manufacturing and Operations

We have successfully developed the manufacturing infrastructure to produce small UAS products at high rates, support initial low rate production for new small UAS development programs and execute initial low-rate production of our stratospheric persistent UAS, Global Observer. Continued investment in infrastructure has established our manufacturing capability to meet demand with scalable capacity. By drawing upon experienced personnel across various manufacturing industries, aerospace, automotive, volume commodity, we have progressed in establishing our lean production system and leveraging our International Organization for Standardization, or ISO, certification, integrated supply chain strategy, document control systems, and process control methodologies for a high volume, efficient production system. Presently, our small UAS manufacturing is performed at our 85,000 square foot manufacturing facility established in 2005. This ISO 9001:2000 certified manufacturing facility is designed to accommodate demand of up to 1,000 aircraft per month. ISO 9001:2000 refers to a set of voluntary standards for quality management systems. These standards are established by the ISO to govern quality management systems used worldwide. Companies that receive ISO certification have passed audits performed by a Registrar Accreditation Board-certified auditing company. These audits evaluate the effectiveness of companies' quality management systems and their compliance with ISO standards. Some companies and government agencies view ISO certification as a positive factor in supplier assessments. Our 105,000 square foot facility housing the Global Observer program is equipped with specialized testing and production capabilities to enable low rate production of this unique system.

UAS Competition

The market for small UAS is evolving rapidly and subject to changing technologies, shifting customer needs and expectations and the potential introduction of new products. We believe that a number of established domestic and international defense contractors have developed or are developing

small UAS that will continue to compete directly with our products. Some of these contractors have significantly more financial and other resources than we possess. Our current principal small UAS competitors include Elbit Systems Ltd., L-3 Communications Holdings, Inc. and Lockheed Martin Corporation. We do not view large UAS such as Northrop Grumman Corporation's *Global Hawk*, General Atomics, Inc.'s *Predator* and its derivatives, The Boeing Company's *ScanEagle* and Textron Inc.'s *Shadow* as direct competitors to our small UAS because they perform different missions, do not typically deliver their information directly to front-line ground forces and are not hand launched and controlled, although we cannot be certain that these platforms will not become direct competitors in the future.

The market for high altitude long endurance UAS is in its early stages of development. As a result, this category is not well defined and is characterized by multiple potential solutions. Existing contractors that claim to provide long endurance UAS include Northrop Grumman Corporation with its Global Hawk. Several aerospace and defense contractors are pursuing this market opportunity with proposed very long duration UAS, including The Boeing Company, Qinetiq Group PLC, Aurora Flight Sciences Corporation, Lockheed Martin Corporation and Northrop Grumman Corporation. Companies pursuing airships as a solution for this market include Lockheed Martin Corporation and Northrop Grumman Corporation. Companies pursuing satellites as a solution for this market include The Boeing Company, Lockheed Martin Corporation, General Dynamics Corporation, EADS N.V., Ball Corporation and Orbital Sciences Corporation.

An established market for man-portable, high-precision loitering miniature airborne munitions systems does not currently exist. The successful introduction of our Switchblade system could establish this market, and if so, would likely attract potential competitors that could range from large aerospace and defense prime contractors to smaller, more innovative technology developers. Early potential competitors in this market include Textron Inc. and Raytheon Company.

We believe that the principal competitive factors in the markets for our products and services include product performance, features, acquisition cost, lifetime operating cost, including maintenance and support, ease of use, integration with existing equipment, quality, reliability, customer support, brand and reputation.

UAS Regulation

Due to the fact that we contract with the DoD and other agencies of the U.S. government, we are subject to extensive federal regulations, including the Federal Acquisition Regulations, Defense Federal Acquisitions Regulations, Truth in Negotiations Act, Foreign Corrupt Practices Act, False Claims Act and the regulations promulgated under the DoD Industrial Security Manual, which establishes the security guidelines for classified programs and facilities as well as individual security clearances. The federal government audits and reviews our performance on contracts, pricing practices, cost structure, and compliance with applicable laws, regulations and standards. Like most government contractors, our contracts are audited and reviewed on a continual basis by federal agencies, including the Defense Contract Management Agency, or DCMA and the Defense Contract Audit Agency, or DCAA.

Certain of these regulations carry substantial penalty provisions, including suspension or debarment from government contracting or subcontracting for a period of time if we are found to be in violation. We carefully monitor all of our contracts and contractual efforts to minimize the possibility of any violation of these regulations.

In addition, we are subject to industry-specific regulations due to the nature of the products and services we provide.

For example, we are subject to further U.S. government regulation, including by the Federal Aviation Administration, or FAA, which regulates airspace for all air vehicles, by the National

Telecommunications and Information Administration and Federal Communications Commission, which regulate the wireless communications upon which our UAS depend, and under the International Traffic in Arms Regulations, which regulate the export of controlled technical data, defense articles and defense services. In 2006, the FAA issued a clarification of its existing policies stating that, in order to engage in public use of small UAS in the U.S. National Airspace System, a public (government) operator must obtain a Certificate of Authorization, or COA, from the FAA or fly in restricted airspace. The FAA's COA approval process requires that the public operator certify the airworthiness of the aircraft for its intended purpose, that a collision with another aircraft or other airspace user is extremely improbable, that the small UAS complies with appropriate cloud and terrain clearances and that the operator or spotter of the small UAS is generally within one half-mile laterally and 400 feet vertically of the small UAS while in operation. Furthermore, the FAA's clarification of existing policy states that the rules for radio-controlled hobby aircraft do not apply to public or commercial use of small UAS. The FAA is in the process of drafting updated regulations specifically for small UAS operations. We have engaged in discussions with the FAA to help ensure that these new regulations allow for the maximum safe utilization of our small UAS.

Furthermore, our non-U.S. operations are subject to the laws and regulations of foreign jurisdictions, which may include regulations that are more stringent than those imposed by the U.S. government on our U.S. operations.

UAS Government Contracting Process

We sell the significant majority of our small UAS products and services as the prime contractor under contracts with the U.S. government. Certain important aspects of our government contracts are described below.

UAS Bidding Process

We are awarded government contracts either on a sole-source basis or through a competitive bidding process. Most of our current government contracts were awarded through a competitive bidding process. The U.S. government awards competitive-bid contracts based on proposal evaluation criteria established by the procuring agency. Competitive-bid contracts are awarded after a formal bid and proposal competition among providers. Interested contractors prepare a bid and proposal in response to the agency's request for proposal or request for information. A bid and proposal is usually prepared in a short time period in response to a deadline and requires the extensive involvement of numerous technical and administrative personnel. Following award, competitive-bid contracts may be challenged by unsuccessful bidders.

UAS Funding

The funding of U.S. government programs is subject to congressional appropriations. Although multi-year contracts may be authorized in connection with major procurements, Congress generally appropriates funds on a fiscal year basis, even though a program may continue for many years. Consequently, programs are often only partially funded initially, and additional funds are committed only as Congress makes further appropriations.

The contracts for our full-rate production UAS are funded either through operational needs statements or as programs of record. Operational needs statements represent allocations of discretionary spending or reallocations of funding from other government programs. Funding for our production of initial Raven deliveries was provided through operational needs statements. We define a program of record as a program which, after undergoing extensive DoD review and product testing, is included in the five-year government budget cycle, meaning that funding will be allocated for purchases under these contracts during the five-year cycle, absent affirmative action by the customer or Congress

to change the budgeted amount. Funding for these programs is subject to annual approval. We are currently the sole provider and prime contractor under all of the programs of record established by the DoD for small UAS.

UAS Material Government Contract Provisions

All contracts with the U.S. government contain provisions, and are subject to laws and regulations, that give the government rights and remedies not typically found in commercial contracts, including rights that allow the government to:

- terminate existing contracts for convenience, which affords the U.S. government the right to terminate the contract in whole or in part anytime it wants for any reason or no reason, as well as for default;
- reduce or modify contracts or subcontracts, if its requirements or budgetary constraints change;
- cancel multi-year contracts and related orders, if funds for contract performance for any subsequent year become unavailable;
- claim rights in products and systems produced by its contractors if the contract is cost reimbursable and the contractor produces the products or systems during the performance of the contract;
- adjust contract costs and fees on the basis of audits completed by its agencies;
- suspend or debar a contractor from doing business with the U.S. government; and
- control or prohibit the export of products.

Generally, government contracts are subject to oversight audits by government representatives. Provisions in these contracts permit termination, in whole or in part, without prior notice, at the government's convenience or upon contractor default under the contract. Compensation in the event of a termination, if any, is limited to work completed at the time of termination. In the event of termination for convenience, the contractor may receive a certain allowance for profit on the work performed.

UAS Government Contract Categories

We have three types of government contracts, each of which involves a different payment methodology and level of risk related to the cost of performance. These basic types of contracts are typically referred to as fixed-price contracts, cost reimbursable contracts, including cost-plus-fixed fee, cost-plus-award fee, and cost-plus-incentive fee, and time-and-materials contracts.

In some cases, depending on the urgency of the project and the complexity of the contract negotiation, we will enter into a Letter Contract prior to finalizing the terms of a definitive fixed-price, cost reimbursable or time-and-materials definitive contract. A Letter Contract is a written preliminary contractual instrument that provides limited initial funding and authorizes us to begin immediately manufacturing supplies or performing services while negotiating the definitive terms of the procurement.

Fixed-Price. These contracts are not subject to adjustment by reason of costs incurred in the performance of the contract. With this type of contract, we assume the risk that we will not be able to perform at a cost below the fixed- price, except for costs incurred because of contract changes ordered by the customer. Upon the U.S. government's termination of a fixed-price contract, generally we would be entitled to payment for items delivered to and accepted by the U.S. government and, if the termination is at the U.S. government's

convenience, for payment of fair compensation for work performed plus the costs of settling and paying claims by any terminated subcontractors, other settlement expenses and a reasonable allowance for profit on the costs incurred.

Cost Reimbursable. Cost reimbursable contracts include cost-plus-fixed fee contracts, cost-plus-award fee contracts and cost-plus-incentive fee contracts. Under each type of contract, we assume the risk that we may not be able to recover costs if they are not allowable under the contract terms or applicable regulations, or if the costs exceed the contract funding.

- Cost-plus-fixed fee contracts are cost reimbursable contracts that provide for payment of a negotiated fee that is fixed at the inception of the contract. This fixed fee does not vary with actual cost of the contract, but may be adjusted as a result of changes in the work to be performed under the contract. This contract type poses less risk of loss than a fixed-price contract, but our ability to win future contracts from the procuring agency may be adversely affected if we fail to perform within the maximum cost set forth in the contract.

- A cost-plus-award fee contract is a cost reimbursable contract that provides for a fee consisting of a base amount, which may be zero, fixed at inception of the contract and an award amount, based upon the government's satisfaction with the performance under the contract. With this type of contract, we assume the risk that we may not receive the award fee, or only a portion of it, if we do not perform satisfactorily.

- A cost-plus-incentive fee contract is a cost reimbursable contract that provides for an initially negotiated fee to be adjusted later by a formula based on the relationship of total allowable costs to total target costs.

We typically experience lower profit margins and lower risk under cost reimbursable contracts than under fixed-price contracts. Upon the termination of a cost reimbursable contract, generally we would be entitled to reimbursement of our allowable costs and, if the termination is at the U.S. government's convenience, a total fee proportionate to the percentage of work completed under the contract.

Time-and-Materials. Under a time-and-materials contract, our compensation is based on a fixed hourly rate established for specified labor or skill categories. We are paid at the established hourly rates for the hours we expend performing the work specified in the contract. Labor costs, overhead, general and administrative costs and profit are included in the fixed hourly rate. Materials, subcontractors, travel and other direct costs are reimbursed at actual costs plus an amount for material handling. We make critical pricing assumptions and decisions when developing and proposing time-and-materials labor rates. We risk reduced profitability if our actual costs exceed the costs incorporated into the fixed hourly labor rate. One variation of a standard time-and-materials contract is a time-and-materials, award fee contract. Under this type of contract, a positive or negative incentive can be earned based on achievement against specific performance metrics.

UAS Indefinite Delivery Indefinite Quantity Contract Form

The U.S. government frequently uses IDIQ contracts and IDIQ-type contract forms, such as cost reimbursable and fixed price contracts with multiple one-year options, to obtain fixed-price, cost reimbursable and time-and-materials contractual commitments to provide products or services over a period of time pursuant to established general terms and conditions. At the time of the award of an IDIQ contract or IDIQ-type contract, the U.S. Government generally commits to purchase only a minimal amount of products or services from the contractor to whom such contract is awarded.

After award of an IDIQ contract the U.S. Government may issue task orders for specific services or products it needs. The competitive process to obtain task orders under an award contract is limited to the pre-selected contractors. If such contract has a single prime contractor, then the award of task orders is limited to that contractor. If the contract has multiple prime contractors, then the award of the task order is competitively determined among only those prime contractors.

IDIQ and IDIQ-type contracts typically have multi-year terms and unfunded ceiling amounts which enable, but do not commit, the U.S. government to purchase substantial amounts of products and services from one or more contractors.

Efficient Energy Systems

Our EES business segment addresses the increasing economic, environmental and energy security value of electric transportation solutions.

Industry Background

Electric Vehicle Charging Systems

Electric and advanced hybrid electric vehicles require on-board battery packs to provide the electricity that powers their operation. These battery packs range in size, weight and energy storage capacity. As drivers operate electric vehicles, their battery packs discharge electricity similar to the way an internal combustion vehicle's engine consumes gasoline as it is driven. Upon fully discharging the battery pack, the driver of an electric vehicle must either replace it with a fully charged pack or recharge the pack while it remains in the vehicle. Because of the differences in battery size and composition, as well as the design of each vehicle, a variety of charging systems exist to support these vehicles. These charging systems range from relatively slow charging devices that require many hours to completely recharge a battery pack to extremely fast chargers that can do so in a very short amount of time.

Passenger and Fleet Electric Vehicle Charging Systems

Numerous factors contribute to a growing interest among consumers, governments and automakers for vehicles that do not rely on fossil fuels. These factors include:

- concerns regarding the environmental impact of resource extraction and carbon emissions associated with fossil fuel-based transportation;
- growing awareness of the geopolitical and economic costs associated with the current dependence on petroleum imports;
- anticipation of future energy price volatility;
- the increasing demand for automobiles in large, rapidly growing markets such as China and India and the resulting anticipated growth in demand for fossil fuels; and
- increasing government and private investments in "clean" technologies.

In response to these factors numerous automotive manufacturers around the world are developing and introducing modern EVs for everyday consumer and fleet transportation. Vehicles in this class will incorporate battery electric drive systems either in a dedicated format in which an onboard battery pack supplies electricity to an electric motor, or in an advanced hybrid design, in which an onboard battery pack provides electricity to an electric motor, and a small onboard internal combustion engine recharges the battery as needed. An EV, requires that its battery pack be recharged from an external power source or be replaced with a fully charged battery pack. An advanced hybrid EV does not require recharging from an external power source because it has an onboard gasoline powered internal

combustion engine to recharge the battery pack, but doing so can minimize gasoline consumption and vehicle carbon emissions.

Most EVs will likely be recharged using external systems installed at home, work and at public places such as shopping centers, supermarkets and locations similar to gasoline stations. With the first new consumer electric vehicle models now entering the market and additional models scheduled to follow there exists a need for the implementation of charging infrastructure to enable their safe, reliable and practical recharging.

The rate at which a passenger electric vehicle battery pack can be recharged depends on its size, the capacity of the vehicle's onboard controller to invert electricity, its ability to receive high current charging and the amount of power available. Electric vehicle charging systems are segmented into three general categories.

Level	Infrastructure Requirement	Recharge Time
Level 1	Power cord that plugs into a dedicated 120-volt AC outlet	Capable of slow recharge that could require up to 24 hours or more for certain batteries
Level 2, known as Electric Vehicle Supply Equipment	Requires professional installation of a dedicated 240-volt AC circuit	Capable of fully recharging most battery packs in six to eight hours
Level 3, DC or fast charge	Typically requires installation into a three-phase, 480-volt AC circuit	Capable of fully recharging battery packs designed to accept such a charge in minutes

We believe that broad adoption of passenger electric vehicles will require a mix of these types of charging systems, distributed so as to make them accessible to drivers when and where they need them. The adoption of passenger electric vehicles will also necessitate supporting services, such as: experienced electrical assessment and installation capability, the integration into smart grids, and the ability to monitor and manage the use of electricity and provide for various payment methods and plans such as subscription and credit card point-of-sale.

Industrial Electric Vehicle Charging Systems

While the broad availability of passenger electric vehicles is fairly recent, industrial electric vehicles have been in use for decades. In industrial environments such as factories, distribution centers and airports, fast charge technology, which charges a battery with a high electrical current while the battery remains in the vehicle, eliminates the need for frequent battery changing and a dedicated battery room. This approach increases productivity, reduces operating costs and improves facility safety. The earliest adopters of fast charge technology include the automotive and air transportation industries. Large food and retail industry customers are now also utilizing fast charge technology.

Electric industrial vehicles are powered by large onboard batteries that can consume up to 17 cubic feet and weigh up to 3,500 pounds. In multi-shift fleet operations traditional slow charging systems require users to exchange vehicle batteries throughout the day because these batteries discharge their energy through vehicle usage and there is insufficient vehicle downtime to recharge them during a shift. As a result, drivers must leave their work area when the battery reaches a low state of charge and drive to a dedicated battery changing room, which often occupies valuable floor space and is frequently located far from a driver's work area. The driver, or in some cases a dedicated battery attendant, must then remove the battery from the vehicle, place it on a storage rack, connect it to a conventional battery charger, identify a fully-charged battery, move it into the vehicle's battery compartment and reconnect the battery to the motor before the driver may return to the work area. These battery changes take place every day in facilities around the world, resulting in reduced material movement and

increased operating costs. Furthermore, depending on the type of battery, conventional battery chargers can require up to eight hours to recharge the battery, which then must cool for up to an additional eight hours before it is ready to be used again. Consequently, depending on vehicle usage and the number of shifts in an operation, a fleet may require more than one battery per vehicle, which necessitates additional storage space, chargers and maintenance time. Moreover, the high levels of heat generated by conventional battery chargers during their normal use can cause excessive evaporation of the water contained in the battery and damage to the battery's components. Over time, this evaporation of fluid and damage to components result in battery degradation and adversely affect the battery's life.

Power Cycling and Test Systems

Developers and manufacturers of electric and hybrid electric vehicles typically conduct a variety of tests on the electric propulsion and energy storage systems that form the core of their vehicles. These tests include simulating the consumption, conversion and storage of electricity through a range of operating scenarios, and include long-term testing to simulate the rigors of real-world driving. Developers of battery packs, electric motors and fuel cells also test their devices to validate design hypotheses and identify potential operating issues. Global interest in electric transportation solutions, including electric and hybrid electric vehicles, has increased and has served as a driver of increased demand for electric vehicle and component test systems. This demand spans commercial, government, military and university research and development labs as well as commercial manufacturing facilities as more funding and attention are focused on clean transportation.

Our EES Solutions

EES Products

Our EES business segment produces electric transportation and industrial productivity solutions for commercial, consumer and government customers, develops new potential electric transportation solutions and performs contract engineering services. These solutions consist of: electric vehicle charging systems for passenger and fleet vehicles, PosiCharge® industrial electric vehicle charging systems for electric material handling vehicles and airport ground support equipment, and power cycling and test systems for developers and manufacturers of EVs as well as battery packs, electric motors and fuel cells. For the fiscal years ended April 30, 2011, 2010 and 2009, EES sales accounted for 15%, 10% and 15%, respectively, of our revenue. We believe that the markets for our electric vehicle charging systems and power cycling and test systems continue to develop and that continued diversification of our customer base will support increased penetration into target markets.

Passenger and Fleet Electric Vehicle Charging Systems

In response to automakers' plans to introduce EVs and broader trends favoring electric transportation, we have developed solutions to support the adoption and use of EVs from nearly every major automaker and many startups worldwide. Our initial EV charging technology emerged from our development of the GM Impact, the first modern EV. Over two decades we improved the technology, deployed it to industrial markets, and adapted it for the next generation of EVs. We believe that most EV drivers will charge their vehicles overnight at their homes. For those without a charging location at home or who make trips beyond the range of their vehicle's battery pack, public charging infrastructure will be required. Our strategy is to offer a full solution of charging infrastructure, including overnight home chargers, public chargers, public fast chargers, installation services, data collection systems and communications through multiple wired and wireless data communications options. We offer an integrated solution designed to enable the broad adoption and the practical use of electric and hybrid electric vehicles. From home charging to "pay at the pump" fast charging in as little as ten minutes,

our goal is to enable drivers to use these electric vehicles as practical alternatives to gasoline-powered automobiles.

Part of our strategy is to develop relationships across multiple channels that leverage our strengths and provide complementary pathways to market. We have announced several such agreements to date with leading auto manufacturers, energy companies, state and municipal governments and an electric component distributor.

We believe these early successes represent a valuable position from which to expand our charging infrastructure footprint in the United States and globally. We continue to work in the United States and internationally with automakers, utilities and government agencies at multiple levels as well as with private industry to explore business models and to promote our solutions.

We have also begun the commercial rollout of our EV fast charging system, which we view as a powerful tool that can help enable the broader adoption of these vehicles in two main categories:

- **Passenger Electric Vehicles.** A network of fast charging systems would ensure that EV drivers have access to a complete battery recharge in minutes, and that advanced hybrid EV drivers could drive more miles in electric mode, thereby reducing emissions and consuming less gasoline or diesel, which is typically significantly more expensive than electricity.

- **Fleet Electric Vehicles.** Fleet EVs could come in multiple vehicle types and duty cycles, from inner-city taxis and buses to medium range delivery vans and utility repair vehicles. A few fast charging systems installed in a maintenance yard or a network of systems in the city could help fleet operators maintain throughput while reducing emissions and fuel expenses.

PosiCharge Industrial Electric Vehicle Charging Systems

Developed from our work on electric and hybrid electric vehicles and advanced battery systems in the 1990s, PosiCharge industrial electric vehicle charging systems quickly and safely recharge industrial vehicle batteries while the batteries remain in the vehicle during regularly scheduled breaks and other times when the vehicle is not in use, thereby maintaining a sufficient level of energy throughout the workday. By eliminating battery changing, PosiCharge systems improve supply chain productivity by returning time to the vehicle operator to complete more work. Furthermore, because of their advanced efficient energy capabilities, PosiCharge systems can reduce the amount of electricity required to support electric industrial vehicles by several hundred dollars per year per vehicle, as compared to less efficient conventional battery chargers. Many customers who implement our charging systems in their facilities are able to re-purpose the battery changing room floor space for more productive activities and create a safer working environment, as drivers or battery attendants no longer need to exchange large lead-acid batteries continually.

The proprietary battery charging algorithms built into PosiCharge systems, which are tailored to battery type, brand and size, maximize the rate at which energy is delivered into the battery while minimizing heat generation and its damaging effects on the battery's internal components. We developed these algorithms over years of advanced battery testing and usage. We believe our work to develop these algorithms contributed to the major battery manufacturers offering warranties for the use of their batteries with our charging systems, which provided a critical assurance to customers that our rapid charging systems would not harm their batteries. In combination with a weekly equalization charge that balances all the cells within the battery pack, our "intelligent" charging process enhances the performance of batteries. We believe that competing rapid and conventional charging systems, which lack our current and voltage regulating tailored charge algorithms and monitoring capabilities,

may actually contribute to lower battery performance and lifespan, ultimately resulting in higher battery costs and degraded vehicle performance.

We project that PosiCharge system customers typically begin to realize cost savings when compared to battery changing within the first 12 months of operation. Operators of large fleets of electric industrial vehicles who use PosiCharge systems in multiple settings, including factories, distribution centers, cold storage facilities and airport tarmacs, include Ford Motor Company, Continental Airlines, Inc., Total Logistics Control and IKEA.

Our PosiCharge systems and support products range from lower-power devices for smaller, less heavily-used vehicles to high-power devices for large, heavy-duty vehicles, and are capable of charging from one to 16 vehicles concurrently, depending on the needs of the operation. Included in our product line are systems for indoor and outdoor use, such as for airport ground support equipment. We also supply accessories to help our customers integrate PosiCharge systems into their operations. These accessories include automated battery watering systems, charge status indicator lights, battery-mounted fans and cable management options.

Our PosiCharge systems and support products, such as the 2500 Series of opportunity chargers, the BatteryRx comprehensive battery health management solution and the Port Splitter, are all designed to deliver increased performance and efficiency for a broad array of material handling environments, as well as more cost-effective solutions to our value-conscious customers.

The PosiCharge 2500 Series offers a high degree of flexibility. The 2500 Series charger automatically identifies the battery profile of a vehicle and customizes the charge for safe and efficient in-vehicle charging that protects the battery. The 2500 Series charger has an efficiency rating of up to 90% and we believe it offers more standard features than any other charger in its class. The addition of the Battery Rx advanced battery monitoring module enables customers to maximize the effectiveness and life of the batteries in their system. The Battery Rx provides critical battery management information, such as real-time battery health, maintenance scheduling, preventive care and warranty compliance tracking. The Port Splitter is another recent innovation. This device doubles the capacity of a charging station, lowering the cost of implementation in distributed in-vehicle charging and allowing for staggered break schedules or spare trucks in a fleet.

Our PosiCharge offering is focused on providing new smart, efficient products to enhance the charging process and help customers maximize the life of their industrial fleets by managing and extending the life of their batteries, and by increasing the productivity of their drivers.

Power Cycling and Test Systems

We supply a line of power cycling and test systems to research and development organizations that focus on electric propulsion systems, electric generation systems and electricity storage systems. Customers employ these electric load and sink systems to test batteries, electric motors and fuel cell systems.

Our line of DC test systems has the flexibility to perform a variety of electric load tests. With a full power range (+/-5kW to +/-800kW) of bi-directional DC equipment, our power cycling and test systems can handle virtually any DC supply or load requirement—from lead acid to the latest lithium-ion batteries to fuel cells with integrated power electronics. In addition, these systems can emulate any drive train component, enabling the testing of individual components or partial drive trains accurately and realistically, allowing hardware-in-the-loop testing. We also offer flexible software control options via the C language Remote Operation System and Windows-based languages such as LabVIEW or CAN.

EES Services

We have created and are expanding a network of licensed electrical contracting firms to provide installation and repair services for our growing footprint of passenger and fleet electric vehicle charging systems. We identify, qualify, select, train and monitor the performance of these contractors and equip them with proprietary tools and web-based information systems to facilitate the successful installation and support of our charging systems as this market opportunity grows. We intend to expand this network nationwide to support customers across the United States. Our 24-hour customer service center provides around-the-clock support to answer customer inquiries and promote a high level of customer satisfaction.

Our products and services can readily be customized to support our partners' marketing programs. This capability is designed to enable automakers, utilities, government agencies and other businesses to deliver a branded solution to their customers that will enhance their customer relationships.

EES Technology, Research and Development

The following list highlights a number of our key EES technological capabilities:

- Battery management and testing;
- Power electronics and controls;
- Efficient drive systems and controls;
- Fuel cell system integration and testing;
- High-density energy packaging;
- Efficient electric power generation, storage and management;
- Charging algorithms and thermal management;
- On/off grid controls and controls integration;
- System integration and optimization; and
- Web-based real-time data collection and reporting.

EES Sales and Marketing

Passenger and Fleet Electric Vehicle Charging Systems

As the market for EVs emerges, we are pursuing numerous potential sales channels for our products and services. We continue to seek to partner with auto manufacturers, utilities, government agencies and private enterprises, both domestically and abroad, to position ourselves for the potential demand for charging solutions associated with electric and hybrid electric vehicle adoption. We also have the capability to sell directly to consumers. We have begun the development of a nationwide network of licensed electrical contractors who we train and certify to install and service home charging systems. To enable this installation and service network we have developed an e-commerce platform to integrate customers' orders, inventory management, dispatching and provisioning, billing and traceability. This platform, along with our nationwide network is designed to support our growth as we pursue numerous electric vehicle charging opportunities.

Industrial Electric Vehicle Charging Systems

We primarily sell our PosiCharge industrial electric vehicle charging systems through a dedicated, direct sales force whose members are located in close proximity to the customers they support. The sales team targets large entities with the potential for domestic and international enterprise adoption of our solutions. The sales team also coordinates distribution of PosiCharge systems through battery and lift-truck dealers. These dealers' relationships with, and proximity to, our customers' facilities enable them to sell our solutions and provide post-sale service to our customers. We believe that these dealers are well suited to address the large number of smaller and geographically dispersed customers with industrial vehicle fleets. When evaluating a facility for its ability to benefit from PosiCharge systems, we typically perform a detailed analysis of the customer's operations. This analysis allows us to quantify the benefit projected for a PosiCharge system implementation, helping customers to determine for themselves if the business case is sufficiently compelling.

Power Cycling and Test Systems

We sell our power cycling and test systems through a dedicated, direct sales force and through a network of international distributors and representatives who have access to the research and development and manufacturing organizations that procure and use these types of systems. Given the distances involved, we enable and often rely on our international distributors to provide service in support of our customers.

EES Manufacturing and Operations

We perform assembly and testing of our power cycling and test systems at a 20,000 square foot, ISO 9001:2008 certified facility. We designed this facility for flexibility, using a work cell model for final assembly, and have included fixtures optimized for final testing. We utilize contract manufacturing for the production of the majority of our PosiCharge industrial electric vehicle charging systems. We have also implemented a contract manufacturing strategy to support our passenger and fleet electric and hybrid electric vehicle charging systems business opportunity.

EES Competition

Competitors in the emerging market for passenger and fleet electric and hybrid electric vehicle charging systems include focused charging system suppliers such as Coulomb Technologies Inc., ECOtality Inc. and ClipperCreek Inc. and large industrial electrical device suppliers such as Eaton Corporation, General Electric Company, Leviton Manufacturing Co., Inc., and Siemens AG.

The primary direct competitors to PosiCharge systems are other fast charge suppliers, including Aker Wade Power Technologies LLC, PowerDesigners, LLC and ECOtality Inc. Some of the major industrial motive battery suppliers have aligned themselves with fast charge suppliers. In addition, our PosiCharge systems compete against the traditional method of battery changing. Competitors in this area include suppliers of battery changing equipment and infrastructure, designers of battery changing rooms, battery manufacturers and dealers who may experience reduced sales volume because PosiCharge systems reduce or eliminate the need for extra batteries.

Direct competitors for our power cycling and test systems include Bitrode Corporation and Digatron Firing Circuits.

We believe that the principal competitive factors in the markets for our products and services include product performance, features, acquisition cost, lifetime operating cost, including maintenance and support, ease of use, integration with existing equipment, quality, reliability, customer support, brand and reputation.

For additional financial information with respect to our UAS and EES segments, please see Note 13 to our consolidated financial statements, which are included in Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Item 1A. Risk Factors.

We rely heavily on sales to the U.S. government, particularly to agencies of the Department of Defense.

Historically, a significant portion of our total sales and substantially all of our small UAS sales have been to the U.S. government and its agencies. Sales to the U.S. government, either as a prime contractor or subcontractor, represented approximately 83% of our revenue for the fiscal year ended April 30, 2011. The DoD, our principal U.S. government customer, accounted for approximately 76% of our revenue for the fiscal year ended April 30, 2011. We believe that the success and growth of our business for the foreseeable future will continue to depend on our ability to win government contracts, in particular from the DoD. Many of our government customers are subject to budgetary constraints

and our continued performance under these contracts, or award of additional contracts from these agencies, could be jeopardized by spending reductions or budget cutbacks at these agencies. The funding of U.S. government programs is uncertain and dependent on continued congressional appropriations and administrative allotment of funds based on an annual budgeting process. We cannot assure you that current levels of congressional funding for our products and services will continue. Furthermore, all of our contracts with the U.S. government are terminable by the U.S. government at will. A significant decline in government expenditures generally, or with respect to programs for which we provide products, could adversely affect our business and prospects. Our operating results may also be negatively impacted by other developments that affect these government programs generally, including the following:

- changes in government programs that are related to our products and services;
- adoption of new laws or regulations relating to government contracting or changes to existing laws or regulations;
- changes in political or public support for security and defense programs;
- delays or changes in the government appropriations and budget process;
- uncertainties associated with the current global threat environment and other geo-political matters; and
- delays in the payment of our invoices by government payment offices.

These developments and other factors could cause governmental agencies to reduce their purchases under existing contracts, to exercise their rights to terminate contracts at-will or to abstain from renewing contracts, any of which would cause our revenue to decline and could otherwise harm our business, financial condition and results of operations.

Military transformation and changes in operational levels in Afghanistan and Iraq may affect future procurement priorities and existing programs, which could limit demand for our UAS.

Following the end of the Cold War, the U.S. military began a transformation of its operational concepts, organizational structure and technologies in an effort to improve warfighting capabilities. The resulting shift in procurement priorities toward achieving these capabilities, together with the operational activity in Afghanistan and Iraq, led to an increase in demand for our small UAS. We cannot predict whether current or future changes in priorities due to defense transformation or continuation of the current nature and magnitude of operations in Afghanistan and Iraq will afford new opportunities for our small UAS business in terms of existing, additional or replacement programs. Furthermore, we cannot predict whether or to what extent this defense transformation or current operational levels in Afghanistan or Iraq will continue. If defense transformation or operations in Afghanistan and Iraq cease or slow down, then our business, financial condition and results of operations could be impacted.

We operate in evolving markets, which makes it difficult to evaluate our business and future prospects.

Our UAS, electric vehicle charging systems and other energy technologies are sold in new and rapidly evolving markets. Accordingly, our business and future prospects are difficult to evaluate. We cannot accurately predict the extent to which demand for our products will increase, if at all. The challenges, risks and uncertainties frequently encountered by companies in rapidly evolving markets could impact our ability to do the following:

- generate sufficient revenue to maintain profitability;
- acquire and maintain market share;

- manage growth in our operations;
- develop and renew contracts;
- attract and retain additional engineers and other highly-qualified personnel;
- successfully develop and commercially market new products;
- adapt to new or changing policies and spending priorities of governments and government agencies; and
- access additional capital when required and on reasonable terms.

If we fail to address these and other challenges, risks and uncertainties successfully, our business, results of operations and financial condition would be materially harmed.

We face competition from other firms, many of which have substantially greater resources.

The defense industry is highly competitive and generally characterized by intense competition to win contracts. Our current principal small UAS competitors include Elbit Systems Ltd., L-3 Communications Holdings Inc. and Lockheed Martin Corporation. We do not view large UAS such as Northrop Grumman Corporation's *Global Hawk*, General Atomics, Inc.'s *Predator*, The Boeing Company's *ScanEagle* and Textron Inc.'s *Shadow* as direct competitors because they perform different missions, do not typically deliver their information directly to front-line ground forces, and are not hand launched and controlled, although we cannot be certain that these platforms will not become direct competitors in the future. Some of these firms have substantially greater financial, management, research and marketing resources than we have. Our UAS services business also faces competition from smaller businesses that can provide training and logistics services for multiple UAS platforms, including our small UAS.

The primary direct competitors to our PosiCharge industrial electric vehicle charging system business are other fast charge suppliers, including Aker Wade Power Technologies LLC, PowerDesigners, LLC and ECOtality Inc., as well as industrial battery manufacturers who distribute fast charging systems from these suppliers. The primary direct competitors to our power cycling and test system business are other test system suppliers, including Bitrode Corporation and Digatron Firing Circuits. Our primary competitors in the emerging market for passenger and fleet electric vehicle charging systems include charging system suppliers such as Coulomb Technologies Inc., ECOtality Inc. and ClipperCreek Inc. As the passenger and fleet electric and hybrid electric vehicle charging systems market grows we expect that certain charging products may begin to be viewed as commodities, and we therefore anticipate increasing competition from various charging system suppliers and large industrial electrical device suppliers such as Eaton Corporation, General Electric Company, Panasonic Corporation, Leviton Manufacturing Co., Inc., and Siemens AG. Our electric vehicle charging system installation and support services business faces competition from local licensed electricians as well as larger electrical service providers.

Our competitors may be able to provide customers with different or greater capabilities or benefits than we can provide in areas such as technical qualifications, past contract performance, geographic presence, price and the availability of key professional personnel, including those with security clearances. Furthermore, many of our competitors may be able to utilize their substantially greater resources and economies of scale to develop competing products and technologies, manufacture in high volumes more efficiently, divert sales away from us by winning broader contracts or hire away our employees by offering more lucrative compensation packages. Small business competitors in our services businesses may be able to offer more cost competitive services, due to their lower overhead costs, and take advantage of small business incentive and set-aside programs for which we are ineligible. In the event that the market for small UAS or electric vehicle charging systems and services

expands, we expect that competition will intensify as additional competitors enter the market and current competitors expand their product lines. In order to secure contracts successfully when competing with larger, well-financed companies, we may be forced to agree to contractual terms that provide for lower aggregate payments to us over the life of the contract, which could adversely affect our margins. In addition, larger diversified competitors serving as prime contractors may be able to supply underlying products and services from affiliated entities, which would prevent us from competing for subcontracting opportunities on these contracts. Our failure to compete effectively with respect to any of these or other factors could have a material adverse effect on our business, prospects, financial condition or operating results.

If the UAS, electric vehicle charging and power cycling and test systems markets do not experience significant growth, if we cannot expand our customer base or if our products do not achieve broad acceptance, then we may not be able to achieve our anticipated level of growth.

For the fiscal year ended April 30, 2011, our UAS and EES businesses accounted for 85% and 15% of our total revenue, respectively. We cannot accurately predict the future growth rates or sizes of these markets. Demand for our products may not increase, or may decrease, either generally or in specific markets, for particular types of products or during particular time periods. We believe the market for electric vehicle charging is nascent. Moreover, there are only a limited number of major programs under which the U.S. military, our primary customer, is currently funding the development or purchase of our UAS. Although we are seeking to expand our customer base to include foreign governments, domestic non-military agencies and commercial customers, we cannot assure you that our efforts will be successful. The expansion of the UAS, electric vehicle charging and power cycling and test systems markets in general, and the market for our products in particular, depends on a number of factors, including the following:

- customer satisfaction with these types of systems as solutions;
- the cost, performance and reliability of our products and products offered by our competitors;
- customer perceptions regarding the effectiveness and value of these types of systems;
- the availability and adoption of electric and hybrid electric vehicles;
- limitations on our ability to market our UAS products and services outside the United States due to U.S. government regulations;
- obtaining timely regulatory approvals, including, with respect to our small UAS business, access to airspace and wireless spectrum; and, with respect to our electric vehicle charging business, proper certifications and licenses to offer and perform electrical installation work; and
- marketing efforts and publicity regarding these types of systems.

Even if UAS and electrical vehicle charging and power cycling and test systems gain wide market acceptance, our products may not adequately address market requirements and may not continue to gain market acceptance. If these types of systems generally, or our products specifically, do not gain wide market acceptance, then we may not be able to achieve our anticipated level of growth and our revenue and results of operations would suffer.

If critical components of our products that we currently purchase from a small number of suppliers or raw materials used to manufacture our products become scarce or unavailable, then we may incur delays in manufacturing and delivery of our products, which could damage our business.

We obtain hardware components and various subsystems from a limited group of suppliers. We do not have long-term agreements with any of these suppliers that obligate them to continue to sell components or products to us. Our reliance on these suppliers involves significant risks and

uncertainties, including whether our suppliers will provide an adequate supply of required components of sufficient quality, will increase prices for the components and will perform their obligations on a timely basis.

In addition, certain raw materials and components used in the manufacture of our products are periodically subject to supply shortages, and our business is subject to the risk of price increases and periodic delays in delivery. Similarly, the market for electronic components is subject to cyclical reductions in supply. If we are unable to obtain components from third- party suppliers in the quantities and of the quality that we require, on a timely basis and at acceptable prices, then we may not be able to deliver our products on a timely or cost-effective basis to our customers, which could cause customers to terminate their contracts with us, increase our costs and seriously harm our business, results of operations and financial condition. Moreover, if any of our suppliers become financially unstable, then we may have to find new suppliers. It may take several months to locate alternative suppliers, if required, or to redesign our products to accommodate components from different suppliers. We may experience significant delays in manufacturing and shipping our products to customers and incur additional development, manufacturing and other costs to establish alternative sources of supply if we lose any of these sources or are required to redesign our products. We cannot predict if we will be able to obtain replacement components within the time frames that we require at an affordable cost, if at all.

Any efforts to expand our offerings beyond our current markets may not succeed, which could negatively impact our operating results.

We have focused on selling our small UAS to the U.S. military, our industrial electric vehicle fast charging and test systems to large industrial electric vehicle fleet operators primarily in North America, our power cycling and test systems primarily to research and development facilities in North America, and our electric vehicle charging systems to domestic commercial customers, distributors and consumers. We plan, however, to seek to expand our UAS sales into other government and commercial markets, and our industrial electric vehicle charging and power cycling and test systems and electric vehicle charging systems sales into international markets. Efforts to expand our product offerings beyond the markets that we currently serve may divert management resources from existing operations and require us to commit significant financial resources to unproven businesses that may not generate additional sales, either of which could significantly impair our operating results.

Our failure to obtain necessary regulatory approvals from the FAA or other appropriate governmental agency may prevent us from expanding the sales of our small UAS to non-military customers in the United States and require us to incur additional costs in the testing of our products.

In 2006, the FAA issued a clarification of its existing policies stating that, in order to engage in public use of small UAS in the U.S. National Airspace System, a public (government) operator must obtain a COA, from the FAA or fly in restricted airspace. The FAA's COA approval process requires that the public operator certify the airworthiness of the aircraft for its intended purpose, that a collision with another aircraft or other airspace user is extremely improbable, that the small UAS complies with appropriate cloud and terrain clearances and that the operator or spotter of the small UAS is generally within one half-mile laterally and 400 feet vertically of the small UAS while in operation. Furthermore, the FAA's clarification of existing policy states that the rules for radio-controlled hobby aircraft do not apply to public or commercial use of small UAS. The FAA is in the process of drafting updated regulations specifically for small UAS operations, but we cannot assure you that these regulations will allow the use of our small UAS by potential non-military government and commercial customers. If the FAA does not modify its regulations, we may not be able to expand our sales of UAS beyond our military customers, which could harm our business prospects. In addition, if our DoD customers are unable to obtain COAs, we may not be able to perform our flight tests without incurring the additional

costs of transporting our small UAS products to military installations, when restricted airspace is available for testing, which could impair our operating results.

The markets in which we compete are characterized by rapid technological change, which requires us to develop new products and product enhancements, and could render our existing products obsolete.

Continuing technological changes in the market for our products could make our products less competitive or obsolete, either generally or for particular applications. Our future success will depend upon our ability to develop and introduce a variety of new capabilities and enhancements to our existing product offerings, as well as introduce a variety of new product offerings, to address the changing needs of the markets in which we offer our products. Delays in introducing new products and enhancements, the failure to choose correctly among technical alternatives or the failure to offer innovative products or enhancements at competitive prices may cause existing and potential customers to purchase our competitors' products.

If we are unable to devote adequate resources to develop new products or cannot otherwise successfully develop new products or enhancements that meet customer requirements on a timely basis, our products could lose market share, our revenue and profits could decline, and we could experience operating losses.

The electric vehicle charging industry is especially dynamic. For example, a single fast charge connector communication protocol standard for the U.S. market has not yet been established, although other standards are emerging throughout the world. If we are unable to accurately anticipate fast charge standards that are adopted in our potential markets or develop products that meet such standards quickly enough to meet customer requirements, our electric vehicle charging systems could lose market share, our revenue and profits could decline, and we could experience operating losses.

We expect to incur substantial research and development costs and devote significant resources to identifying and commercializing new products, which could significantly reduce our profitability and may never result in revenue to us.

Our future growth depends on penetrating new markets, adapting existing products to new applications, and introducing new products that achieve market acceptance. We plan to incur substantial research and development costs as part of our efforts to design, develop and commercialize new products and enhance existing products. We spent $35.8 million, or 12% of our revenue, in our fiscal year ended April 30, 2011 on research and development activities and expect to continue to spend significant funds on research and development in the future. Because we account for research and development as an operating expense, these expenditures will adversely affect our earnings in the future. Further, our research and development programs may not produce successful results, and our new products may not achieve market acceptance, create additional revenue or become profitable, which could materially harm our business, prospects, financial results and liquidity.

If we are unable to manage our growth, our business could be adversely affected.

Our headcount and operations have grown rapidly over the last several years. This rapid growth has placed, and will continue to place, a significant strain on our management and our administrative, operational and financial infrastructure. We anticipate further growth of headcount and facilities will be required to address increases in our product offerings and the geographic scope of our customer base. Our success will depend in part upon the ability of our senior management to manage this growth effectively. To do so, we must continue to hire, train, manage and integrate a significant number of qualified managers and engineers. If our new employees perform poorly, or if we are unsuccessful in hiring, training, managing and integrating these new employees, or retaining these or our existing employees, then our business may suffer.

For us to continue our growth, we must continue to improve our operational, financial and management information systems. If we are unable to manage our growth while maintaining our quality of service, or if new systems that we implement to assist in managing our growth do not produce the expected benefits, then our business, prospects, financial condition or operating results could be adversely affected.

Our earnings and profit margins may decrease based on the mix of our contracts and programs and other factors related to our contracts.

In general, we perform our production work under fixed-price contracts and our repair and customer-funded research and development work under cost-plus-fee contracts. Under fixed-price contracts, we perform services under a contract at a stipulated price. Under cost-plus-fee contracts, which are subject to a contract ceiling amount, we are reimbursed for allowable costs and paid a fee, which may be fixed or performance based. We typically experience lower profit margins under cost-plus-fee contracts than under fixed-price contracts, though fixed-price contracts have higher risks. In general, if the volume of services we perform under cost-plus-fee contracts increases relative to the volume of services we perform under fixed- price contracts, we expect that our operating margin will suffer. In addition, our earnings and margins may decrease depending on the costs we incur in contract performance, our achievement of other contract performance objectives and the stage of our performance at which our right to receive fees, particularly under incentive and award fee contracts, is finally determined.

Our senior management and key employees are important to our customer relationships and overall business.

We believe that our success depends in part on the continued contributions of our senior management and key employees. We rely on our executive officers, senior management and key employees to generate business and execute programs successfully. In addition, the relationships and reputation that members of our management team and key employees have established and maintain with government defense personnel contribute to our ability to maintain good customer relations and to identify new business opportunities. We do not have employment agreements with any of our executive officers or key employees, and these individuals could terminate their employment with us at any time. The loss of any of our executive officers, members of our senior management team or key employees could significantly delay or prevent the achievement of our business objectives and could materially harm our business and customer relationships and impair our ability to identify and secure new contracts and otherwise manage our business.

We must recruit and retain highly-skilled employees to succeed in our competitive business.

We depend on our ability to recruit and retain employees who have advanced engineering and technical services skills and who work well with our customers. These employees are in great demand and are likely to remain a limited resource in the foreseeable future. If we are unable to recruit and retain a sufficient number of these employees, then our ability to maintain our competitiveness and grow our business could be negatively affected. In addition, because of the highly technical nature of our products, the loss of any significant number of our existing engineering personnel could have a material adverse effect on our business and operating results. Moreover, some of our U.S. government contracts contain provisions requiring us to staff a program with certain personnel the customer considers key to our successful performance under the contract. In the event we are unable to provide these key personnel or acceptable substitutes, the customer may terminate the contract.

Our business may be dependent upon our employees obtaining and maintaining required security clearances.

Certain of our U.S. government contracts require our employees to maintain various levels of security clearances, and we are required to maintain certain facility security clearances complying with

DoD requirements. The DoD has strict security clearance requirements for personnel who work on classified programs. Obtaining and maintaining security clearances for employees involves a lengthy process, and it is difficult to identify, recruit and retain employees who already hold security clearances. If our employees are unable to obtain security clearances in a timely manner, or at all, or if our employees who hold security clearances are unable to maintain the clearances or terminate employment with us, then a customer requiring classified work could terminate the contract or decide not to renew it upon its expiration. In addition, we expect that many of the contracts on which we will bid will require us to demonstrate our ability to obtain facility security clearances and employ personnel with specified types of security clearances. To the extent we are not able to obtain facility security clearances or engage employees with the required security clearances for a particular contract, we may not be able to bid on or win new contracts, or effectively rebid on expiring contracts.

Cost overruns on our contracts could subject us to losses, decrease our operating margins and adversely affect our future business.

Fixed-price contracts (including both government and commercial contracts) represented approximately 69% of our revenue for the fiscal year ended April 30, 2011. If we fail to anticipate technical problems, estimate costs accurately or control costs during our performance of fixed-price contracts, then we may incur losses on these contracts because we absorb any costs in excess of the fixed price. Under cost-plus-fee contracts, if costs exceed the contract ceiling or are not allowable under the provisions of the contract or applicable regulations, then we may not be able to obtain reimbursement for all such costs. Under time and materials contracts, we are paid for labor at negotiated hourly billing rates and for certain expenses. Under each type of contract, if we are unable to control the costs we incur in performing under the contract, then our financial condition and results of operations could be materially adversely affected. Cost overruns also may adversely affect our ability to sustain existing programs and obtain future contract awards.

Our products are complex and could have unknown defects or errors, which may give rise to claims against us, diminish our brand or divert our resources from other purposes.

Our UAS rely on complex avionics, sensors, user-friendly interfaces and tightly-integrated, electromechanical designs to accomplish their missions, and our electric vehicle charging and power cycling and test systems often rely upon the application of intellectual property for which there may have been little or no prior commercial application. Despite testing, our products have contained defects and errors and may in the future contain defects, errors or performance problems when first introduced, when new versions or enhancements are released, or even after these products have been used by our customers for a period of time. These problems could result in expensive and time-consuming design modifications or warranty charges, delays in the introduction of new products or enhancements, significant increases in our service and maintenance costs, exposure to liability for damages, damaged customer relationships and harm to our reputation, any of which could materially harm our results of operations and ability to achieve market acceptance. In addition, increased development and warranty costs could be substantial and could reduce our operating margins.

The existence of any defects, errors, or failures in our products or the misuse of our products could also lead to product liability claims or lawsuits against us. A defect, error or failure in one of our UAS could result in injury, death or property damage and significantly damage our reputation and support for our UAS in general. While our PosiCharge industrial electric vehicle charging systems include certain safety mechanisms, these systems can deliver up to 600 amps of current in their application, and the failure, malfunction or misuse of these systems could result in injury or death. Our passenger and fleet electric and hybrid electric vehicle charging systems also have the potential to cause injury, death or property damage in the event that they are misused, malfunction or fail to operate properly due to unknown defects or errors. Although we maintain insurance policies, we cannot assure

you that this insurance will be adequate to protect us from all material judgments and expenses related to potential future claims or that these levels of insurance will be available in the future at economical prices or at all. A successful product liability claim could result in substantial cost to us. Even if we are fully insured as it relates to a claim, the claim could nevertheless diminish our brand and divert management's attention and resources, which could have a negative impact on our business, financial condition and results of operations.

Our future profitability is dependent upon achieving cost reductions and projected economies of scale from increasing manufacturing quantities of our electric vehicle charging systems. Failing to achieve such reductions in manufacturing costs and projected economies of scale could materially adversely affect our business.

We have limited experience manufacturing our electric vehicle charging systems in high volume. We do not know whether or when we will be able to develop efficient, low-cost manufacturing capabilities and processes that will enable us to manufacture these products in commercial quantities while meeting the volume, speed, quality, price, engineering, design and production standards required to successfully market our products. Our failure to develop such manufacturing processes and capabilities in locations that can efficiently service our markets would have a material adverse effect on our business, financial condition, results of operations and prospects. We are beginning volume production of electric vehicle charging systems in Taiwan, Italy and the United States. Historically, we have produced PosiCharge industrial electric vehicle charging systems and power cycling and test systems only in limited production quantities. Our future profitability is, in part, dependent upon achieving increased savings from volume purchases of raw materials and component parts, achieving acceptable manufacturing yield and capitalizing on machinery efficiencies. We expect the suppliers within our supply chain will experience a sharp increase in demand for their products. As a result, we may not have reliable access to supplies that we require or be able to purchase such materials or components at cost effective prices. There is no assurance that we will ever be in a position to realize any material, labor and machinery cost reductions associated with higher purchasing power and higher production levels. Failure to achieve these cost reductions could adversely impact our business and financial results.

We face significant risks in overseeing our outsourcing of manufacturing processes as well as in the management of our inventory, and failure to properly oversee our manufacturing processes or to effectively manage our inventory levels may result in product recalls or supply imbalances that could harm our business.

We have contracted for the manufacture of certain electric vehicle charging systems with contract manufacturers. We sell these units directly and through distributors, as well as through our own online sales channels. We face significant risks if our contract manufacturers do not perform as expected. If we fail to effectively oversee the manufacturing process, including the work performed by our contract manufacturers, we could suffer from product recalls, poorly performing products and higher than anticipated warranty costs.

In connection with our manufacturing operations, we maintain a finished goods inventory of electric vehicle charging units in various locations, including with third party logistics providers. Due to the long-lead time of our manufacturing cycles, we need to make forecasts of demand and commit significant resources towards manufacturing our electric vehicle charging units. As such, we are subject to significant risks in managing the inventory needs of our business during the year, including estimates of the appropriate demand across our models. Should actual market conditions differ from our estimates, our future results of operations could be materially adversely affected. In the future, we may be required to record write-downs of finished products and materials on-hand and/or additional charges for excess purchase commitments as a result of future changes in our sales forecasts.

Due to the volatile and flammable nature of certain components of our products and equipment, fires or explosions may disrupt our business or cause significant injuries, which could adversely affect our financial results

The development and manufacture of certain of our products involves the handling of a variety of explosive and flammable materials as well as high power equipment. From time to time, these activities may result in incidents that could cause us to temporarily shut down or otherwise disrupt some manufacturing processes, causing production delays and resulting in liability for workplace injuries and/or fatalities. We have safety and loss prevention programs that require detailed reviews of process changes and new operations, along with routine safety audits of operations involving explosive materials, to mitigate such incidents, as well as a variety of insurance policies. However, we cannot ensure that we will not experience such incidents in the future or that any such incidents will not result in production delays or otherwise have a material adverse effect on our business and financial condition.

The operation of UAS in urban environments may be subject to risks, such as accidental collisions and transmission interference, which may limit demand for our UAS in such environments and harm our business and operating results.

Urban environments may present certain challenges to the operators of UAS. UAS may accidentally collide with other aircraft, persons or property, which could result in injury, death or property damage and significantly damage the reputation of and support for UAS in general. While we are aware of only one instance of an accidental collision involving one of our UAS to date, as the usage of UAS has increased, particularly by military customers in urban areas of Afghanistan and Iraq, the danger of such collisions has increased. Furthermore, the incorporation of our DDL technology into our UAS has increased the number of vehicles which can operate simultaneously in a given area and with this increase has come an increase in the risk of accidental collision. In addition, obstructions to effective transmissions in urban environments, such as large buildings, may limit the ability of the operator to utilize the aircraft for its intended purpose. The risks or limitations of operating UAS in urban environments may limit their value in such environments, which may limit demand for our UAS and consequently materially harm our business and operating results.

As a manufacturer of electrical vehicle charging products and provider of electrical installation services to consumers, we are subject to various government regulations and may be subject to additional regulations in the future, violation of which could subject us to sanctions or otherwise harm our business. In addition, we could be the subject of future product liability suits or product recalls, which could harm our business.

As a manufacturer of consumer products, we are subject to significant government regulations, including, in the United States, under The Consumer Products Safety Act, as well as under product safety and consumer protection statutes in our international markets. In addition, certain of our electrical contracting services are subject to regulation by various government authorities. While we take all the steps we believe are necessary to comply with these regulations, there can be no assurance that we will be in compliance in the future. Failure to comply could result in sanctions that could have a negative impact on our business, financial condition and results of operations. We may also be subject to involuntary product recalls or may voluntarily conduct a product recall. The costs associated with any future product recalls, individually and in the aggregate in any given fiscal year, could be significant. In addition, any product recall, regardless of direct costs of the recall, may harm consumer perceptions of our products and have a negative impact on our future revenues and results of operations.

Governments and regulatory agencies in the markets where we manufacture and sell products may enact additional regulations relating to product safety and consumer protection in the future, and may also increase the penalties for failure to comply with product safety and consumer protection regulations. In addition, one or more of our customers might require changes in our products, such as the non-use of certain materials, in the future. Complying with any such additional regulations or requirements could impose increased costs on our business. Similarly, increased penalties for non-compliance could subject us to greater expense in the event any of our products were found to not comply with such regulations. Such increased costs or penalties could harm our business.

In addition to government regulation, products that have been or may be developed by us may expose us to potential liability from personal injury or property damage claims by the users of such products. There can be no assurance that a claim will not be brought against us in the future. Any successful claim could significantly harm our business, financial condition and results of operations.

Our quarterly operating results may vary widely.

Our quarterly revenue, cash flow and operating results have and may continue to fluctuate significantly in the future due to a number of factors, including the following:

- fluctuations in revenue derived from government contracts, including cost-plus-fee contracts and contracts with a performance-based fee structure;
- the size and timing of orders from military and other governmental agencies, including increased purchase requests from government customers for equipment and materials in connection with the U.S. government's fiscal year end, which may affect our quarterly operating results;
- the mix of products that we sell in the period;
- seasonal fluctuations in customer demand for some of our products or services;
- unanticipated costs incurred in the introduction of new products;
- fluctuations in the adoption of our products in new markets;
- changes in the level of tax credits available for research and development spending;
- cancellations, delays or contract amendments by our governmental agency customers; and
- changes in policy or budgetary measures that adversely affect our governmental agency customers.

Changes in the volume of products and services provided under existing contracts and the number of contracts commenced, completed or terminated during any quarter may cause significant variations in our cash flow from operations because a relatively large amount of our expenses are fixed. We incur significant operating expenses during the start-up and early stages of large contracts and typically do not receive corresponding payments in that same quarter. We may also incur significant or unanticipated expenses when contracts expire or are terminated or are not renewed. In addition, payments due to us from government agencies may be delayed due to billing cycles or as a result of failures of governmental budgets to gain congressional and presidential administration approval in a timely manner.

Shortfalls in available external research and development funding could adversely affect us.

We depend on our research and development activities to develop the core technologies used in our UAS and EES products and for the development of our future products. A portion of our research and development activities depends on funding by commercial companies and the U.S. government. U.S. government and commercial spending levels can be impacted by a number of variables, including

general economic conditions, specific companies' financial performance and competition for U.S. government funding with other U.S. government-sponsored programs in the budget formulation and appropriation processes. Moreover, the U.S., state and local governments provide energy rebates and incentives to commercial companies, which directly impact the amount of research and development that companies appropriate for energy systems. To the extent that these energy rebates and incentives are reduced or eliminated, company funding for research and development could be reduced. Any reductions in available research and development funding could harm our business, financial condition and operating results.

Volatility and cyclicality in the market for electric industrial vehicles could adversely affect us.

Our PosiCharge industrial electric vehicle charging system products are purchased primarily by operators of fleets of electric industrial vehicles, such as forklift trucks and airport ground support equipment. Consequently, our ability to remain profitable depends in part on the varying conditions in the market for electric industrial vehicles. This market is subject to volatility as it moves in response to cycles in the overall business environment and it is also particularly sensitive to the industrial, food and beverage, retail and air travel sectors, which generate a significant portion of the demand for such vehicles. Sales of electric industrial vehicles have historically been cyclical, with demand affected by such economic factors as industrial production, construction levels, demand for consumer and durable goods, interest rates and fuel costs. A significant decline in demand for electric industrial vehicles could adversely affect our revenue and prospects, which would harm our business, financial condition and operating results.

Our success in the emerging market for passenger and fleet electric and hybrid electric vehicle charging systems will depend on numerous factors which are out of our control.

The passenger and fleet electric and hybrid electric vehicle charging systems market is expected to grow rapidly, along with innovations in fast charging technologies. As a result, we expect to face increasing competition from various charging system suppliers and large industrial electrical device suppliers such as Eaton Corporation, General Electric Company, Panasonic and Siemens AG. While we believe that we currently have superior charging technology and service infrastructure, we cannot assure you that competitors will not develop and bring to market substantially equivalent or superior technology. In addition, because the passenger electric and fleet charging systems market is relatively new, there is no guarantee that there will be strong consumer demand for charging systems. Demand for such systems could also be directly impacted by fuel costs; if fuel costs were to significantly decrease, the demand for electric vehicles and charging systems could decline. If there is little consumer demand for our passenger electric and fleet charging systems, our revenue and prospects could be adversely affected, which would harm our business, financial and operating results.

Our industrial electric vehicle charging systems business is dependent upon our relationships with third parties with whom we do not have exclusive arrangements.

To remain competitive in the market for industrial electric vehicle charging systems, we must maintain our access to potential customers and ensure that the service needs of our customers are met adequately. In many cases, we rely on battery and industrial vehicle dealers for access to potential industrial electric vehicle charging system customers. Currently, several of our industrial electric vehicle charging system competitors are working with battery manufacturers to sell fast charging systems and batteries together. Cooperative agreements between our competitors and battery manufacturers could restrict our access to battery dealers and potential industrial electric vehicle charging systems customers, adversely affecting our revenue and prospects. Additionally, we rely on outside service providers to perform post-sale services for our PosiCharge industrial electric vehicle charging system customers. If these service providers fail to perform these services as required or discontinue their

business with us, then we could lose customers to competitors, which would harm our business, financial condition and operating results.

Our electric and hybrid electric vehicle charging system business is dependent upon our development of relationships with automakers, utilities and other participants in the electric and hybrid electric vehicle and electricity delivery markets.

In January 2010, we were selected by a major automaker to support the rollout of a new model electric vehicle across the U.S. Accordingly, we depend upon that relationship and the success of the home charging rollout to those new model electric vehicle owners to expand our charging system footprint in the United States and worldwide. If our partnership with that major automaker terminates prematurely, and we cannot establish similar relationships with other entities with direct access to electric vehicle owners and drivers, we may not be able to develop a sustainable market for our home charging system, which may delay the commercialization of our charging systems or jeopardize the long-term success of this product line. We believe that the success and growth of our passenger and fleet electric vehicle charging system business for the foreseeable future will also depend on our ability to develop similar working relationships with other automakers in the U.S. and internationally. While we have been working with other automakers and utilities to explore business models and to promote our solutions, there is no guarantee that we will be successful in doing so.

Our work for the U.S. Department of Defense and international governments may expose us to security risks.

We work in international locations where there are high security risks, which could result in harm to our employees and contractors or substantial costs. Some of our services are performed in or adjacent to high-risk locations, such as Iraq and Kuwait, where the country or location is suffering from political, social or economic issues, or war or civil unrest. In those locations where we have employees or operations, we may incur substantial costs to maintain the safety of our personnel. Despite these precautions, the safety of our personnel in these locations may continue to be at risk, and we may in the future suffer the loss of employees and contractors, which could harm our business and operating results. In addition, our position as a supplier of UAS to military forces may increase our security risk.

We may not be able to obtain capital when desired on favorable terms, if at all, or without dilution to our stockholders.

We operate in emerging and rapidly evolving markets, which makes our prospects difficult to evaluate. It is possible that we may not generate sufficient cash flow from operations or otherwise have the capital resources to meet our future capital needs. If this occurs, then we may need additional financing to pursue our business strategies, including to:

- hire additional engineers and other personnel;
- develop new or enhance existing products;
- enhance our operating infrastructure;
- fund working capital requirements;
- acquire complementary businesses or technologies; or
- otherwise respond to competitive pressures.

If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly-issued securities may have rights, preferences or privileges senior to those of existing stockholders. We cannot assure you that additional financing will be available on terms favorable to us, or at all. Our former line of credit contained, and future debt financing may contain, covenants or other provisions that limit

our operational or financial flexibility. In addition, certain of our customers require that we obtain letters of credit to support our obligations under some of our contracts.

Our investment portfolio includes investments in auction rate securities. Failures in the auctions for these securities affect our liquidity, while deterioration in credit ratings of issuers of such securities and/or third parties insuring such investments may require us to adjust the carrying value of our investment through an impairment of earnings.

As of April 30, 2011, our $6.3 million of long-term investments, recorded at fair value, consisted entirely of auction rate municipal bonds with maturities that range from approximately 8 to 23 years. These investments have characteristics similar to short-term investments, because at pre-determined intervals, generally ranging from 30 to 35 days, there is a new auction process at which the interest rates for these securities are reset to current interest rates. At the end of such period, we choose to roll-over our holdings or redeem the investments for cash. A market maker facilitates the redemption of the securities and the underlying issuers are not required to redeem the investment within 365 days.

In 2009, 2010 and 2011, we experienced failed auctions of our auction rate securities and there is no assurance that auctions on the remaining auction rate securities in our investment portfolio will succeed in the future. As a result, our ability to liquidate our investments in the near term may be limited, and our ability to recover the carrying value of our investments may be limited. An auction failure means that the parties wishing to sell securities were not able to do so. As of June 10, 2011, including the securities involved in failed auctions, we held approximately $6.3 million of these auction rate securities, all of which carry investment grade ratings. These investments are subject to general credit, liquidity, market and interest rate risks, which may be exacerbated by continued problems in the global credit markets, including but not limited to, U.S. subprime mortgage defaults, writedowns by major financial institutions due to deteriorating values of their assets portfolios, including leveraged loans, collateralized debt obligations, credit default swaps, and other credit-linked products. These and other related factors have affected various sectors of the financial markets and caused credit and liquidity issues. If the issuers of these securities are unable to successfully close future auctions or their credit ratings deteriorate, we may in the future be required to record an impairment charge on these investments. We currently believe these securities are not permanently impaired, primarily due to the government backing of the underlying securities. However, it could take until the final maturity of the underlying notes (up to 23 years) to realize our investments' purchase price of $7.6 million. Based on our ability to access our cash and cash equivalents, expected operating cash flows, and our other sources of cash, we do not anticipate that the current lack of liquidity on these investments will affect our ability to continue to operate our business in the ordinary course, however we can provide no assurance as to when these investments will again become liquid or as to whether we may ultimately have to recognize an impairment charge with respect to these investments.

We face risks related to the current challenging economic environment.

Our business, financial condition and results of operation could be negatively affected by economic conditions generally, both in the United States and elsewhere around the world. Continuing concerns over inflation, energy costs, geopolitical issues, the availability and cost of credit, the U.S. mortgage market and a difficult residential real estate market in the United States have contributed to increased volatility and diminished expectations for the economy and the markets going forward. These factors, combined with volatile oil prices, declining business and consumer confidence and continued unemployment concerns, have resulted in heightened volatility and turmoil in domestic and international equity markets. These events and the continuing market upheavals could adversely affect our business in a number of ways, including:

Potential Deferment of Purchases and Orders by Customers: Uncertainty about current and future global economic conditions may cause governments, including the U.S. government, which is our largest

customer, consumers and businesses to modify, defer or cancel purchases in response to tighter credit, decreased cash availability and declining consumer confidence. Accordingly, future demand for our products could differ materially from our current expectations. Additionally, if customers are not successful in generating sufficient revenue or are precluded from securing financing, they may not be able to pay, or may delay payment of, accounts receivable that are owed to us. Any inability of current and/or potential customers to pay us for our products may adversely affect our earnings and cash flow.

Negative Impact from Increased Financial Pressures on Key Suppliers: Our ability to meet customers' demands depends, in part, on our ability to obtain timely and adequate delivery of quality materials, parts and components from our suppliers. Certain of our hardware components and various subsystems are available only from a limited group of suppliers. If certain key suppliers were to become capacity constrained or insolvent as a result of a continuing market downturn, then we may have to find new suppliers. We may experience significant delays in manufacturing and shipping our products to customers and incur additional development, manufacturing and other costs to establish alternative sources of supply if we lose any of these sources or are required to redesign our products. We cannot predict if we will be able to obtain replacement components within the time frames that we require at an affordable cost, if at all. In addition, credit constraints of key suppliers could result in accelerated payment of accounts payable by us, impacting our cash flow.

Customers' Inability to Obtain Financing to Make Purchases from Us and/or Maintain Their Business: Some of our customers may require substantial financing in order to fund their operations and make purchases from us. The inability of these customers to obtain sufficient credit to finance purchases of our products, or otherwise meet their payment obligations to us could adversely impact our financial condition and results of operations. In addition, if a continuing market downturn results in insolvencies for our customers, it could adversely impact our financial condition and results of operations.

Our international business poses potentially greater risks than our domestic business.

We derived approximately 7% of our revenue from international sales during the fiscal year ended April 30, 2011. We expect to derive an increasing portion of our revenue from international sales. Our international revenue and operations are subject to a number of material risks, including the following:

- the unavailability of, or difficulties in obtaining any, necessary governmental authorizations for the export of our UAS products to certain foreign jurisdictions;
- regulatory requirements that may adversely affect our ability to sell certain products or repatriate profits to the U.S.;
- the complexity and necessity of using foreign representatives and consultants;
- difficulties in enforcing agreements and collecting receivables through foreign legal systems and other relevant legal issues, including fewer legal protections for intellectual property;
- potential fluctuations in foreign economies and in the value of foreign currencies and interest rates;
- potential preferences by prospective customers to purchase from local (non-U.S.) sources;
- general economic and political conditions in the markets in which we operate;
- laws or regulations relating to non-U.S. military contracts that favor purchases from non-U.S. manufacturers over U.S. manufacturers;
- the imposition of tariffs, embargoes, export controls and other trade restrictions; and

- different and changing legal and regulatory requirements, including those pertaining to data protection and privacy, in the jurisdictions in which we currently operate or may operate in the future.

Negative developments in any of these areas in one or more countries could result in a reduction in demand for our products, the cancellation or delay of orders already placed, threats to our intellectual property, difficulty in collecting receivables and a higher cost of doing business, any of which could negatively impact our business, financial condition or results of operations. Moreover, our sales, including sales to customers outside the United States, are denominated in dollars, and downward fluctuations in the value of foreign currencies relative to the U.S. dollar may make our products more expensive than other products, which could harm our business.

Potential future acquisitions could be difficult to integrate, divert the attention of key personnel, disrupt our business, dilute stockholder value and impair our financial results.

We intend to consider strategic acquisitions that would add to our customer base, technological capabilities or system offerings. Acquisitions involve numerous risks, any of which could harm our business, including the following:

- difficulties in integrating the operations, technologies, products, existing contracts, accounting and personnel of the target company and realizing the anticipated synergies of the combined businesses;
- difficulties in supporting and transitioning customers, if any, of the target company;
- diversion of financial and management resources from existing operations;
- the price we pay or other resources that we devote may exceed the value we realize, or the value we could have realized if we had allocated the purchase price or other resources to another opportunity;
- risks of entering new markets in which we have limited or no experience;
- potential loss of key employees, customers and strategic alliances from either our current business or the target company's business;
- assumption of unanticipated problems or latent liabilities, such as problems with the quality of the target company's products; and
- inability to generate sufficient revenue to offset acquisition costs.

Acquisitions also frequently result in the recording of goodwill and other intangible assets which are subject to potential impairments in the future that could harm our financial results. In addition, if we finance acquisitions by issuing equity, or securities convertible into equity, then our existing stockholders may be diluted, which could lower the market price of our common stock. If we finance acquisitions through debt, then such future debt financing may contain covenants or other provisions that limit our operational or financial flexibility. As a result, if we fail to properly evaluate acquisitions or investments, then we may not achieve the anticipated benefits of any such acquisitions, and we may incur costs in excess of what we anticipate. The failure to successfully evaluate and execute acquisitions or investments or otherwise adequately address these risks could materially harm our business and financial results.

Environmental laws and regulations and unforeseen costs could impact our future earnings.

The manufacture and sale of our products in certain states and countries may subject us to environmental and other regulations. For example, we obtain a significant number of our electronics components from companies located in East Asia, where environmental rules may be less stringent than

in the United States. Over time, the countries where these companies are located may adopt more stringent environmental regulations, resulting in an increase in our manufacturing costs. Furthermore, certain environmental laws, including the U.S. Comprehensive, Environmental Response, Compensation and Liability Act of 1980, impose strict, joint and several liability on current and previous owners or operators of real property for the cost of removal or remediation of hazardous substances and impose liability for damages to natural resources. These laws often impose liability even if the owner or operator did not know of, or was not responsible for, the release of such hazardous substances. These environmental laws also assess liability on persons who arrange for hazardous substances to be sent to disposal or treatment facilities when such facilities are found to be contaminated. Such persons can be responsible for cleanup costs even if they never owned or operated the contaminated facility. Although we have not yet been named a responsible party at a contaminated site, we could be named a potentially responsible party in the future. We cannot assure you that such existing laws or future laws will not have a material adverse effect on our future earnings or results of operations.

Our passenger and fleet electric vehicle charging system business is subject to federal, state and international laws regarding data protection and privacy, and a privacy breach could damage our reputation, expose us to litigation risk and adversely affect our business.

In connection with our emerging passenger and fleet electric vehicle charging system business, we collect, process and retain certain sensitive and confidential customer information. As a result, we are subject to increasingly rigorous federal, state and international laws regarding privacy and data protection. Compliance with these constantly evolving laws may cause us to incur significant costs or require changes to our business practices, which could reduce our revenue. If we fail to comply with these laws, proceedings may be brought against us by governmental entities or others or penalties may be imposed on us, either of which could have a material adverse effect on our business, results of operations and financial condition. While we rely, in part, on security services and software provided by outside vendors to protect sensitive and confidential customer information, there is no guarantee that the protections that we or our outside vendors have implemented will prevent security breaches. Any actual, threatened or perceived security breach that could result in misappropriation, loss or other unauthorized disclosure of sensitive or confidential customer information could harm our reputation and relationship with customers, expose us to litigation risk and liability and adversely affect our business.

Our business and operations are subject to the risks of earthquakes and other natural catastrophic events.

Our corporate headquarters, research and development and manufacturing operations are located in Southern California, a region known for seismic activity and wild fires. A significant natural disaster, such as an earthquake, fire or other catastrophic event, could severely affect our ability to conduct normal business operations, and as a result, our future operating results could be materially and adversely affected.

Risks Related to Our U.S. Government Contracts

We are subject to extensive government regulation, and our failure to comply with applicable regulations could subject us to penalties that may restrict our ability to conduct our business.

As a contractor to the U.S. government, we are subject to and must comply with various government regulations that impact our revenue, operating costs, profit margins and the internal

organization and operation of our business. The most significant regulations and regulatory authorities affecting our business include the following:

- the Federal Acquisition Regulations and supplemental agency regulations, which comprehensively regulate the formation and administration of, and performance under, U.S. government contracts;
- the Truth in Negotiations Act, which requires certification and disclosure of all factual cost and pricing data in connection with contract negotiations;
- the False Claims Act and the False Statements Act, which impose penalties for payments made on the basis of false facts provided to the government and on the basis of false statements made to the government, respectively;
- the Foreign Corrupt Practices Act, which prohibits U.S. companies from providing anything of value to a foreign official to help obtain, retain or direct business, or obtain any unfair advantage;
- the National Telecommunications and Information Administration and the Federal Communications Commission, which regulate the wireless spectrum allocations upon which UAS depend for operation and data transmission in the U.S.;
- the Federal Aviation Administration, which is in the process of drafting regulations specifically for small UAS operation in the U.S.;
- the International Traffic in Arms Regulations, which regulate the export of controlled technical data, defense articles and defense services and restrict from which countries we may purchase materials and services used in the production of certain of our products; and
- laws, regulations and executive orders restricting the use and dissemination of information classified for national security purposes and the exportation of certain products and technical data.

Also, we need special security clearances and regulatory approvals to continue working on certain of our projects with the U.S. government. Classified programs generally will require that we comply with various executive orders, federal laws and regulations and customer security requirements that may include restrictions on how we develop, store, protect and share information, and may require our employees to obtain government security clearances. Our failure to comply with applicable regulations, rules and approvals or misconduct by any of our employees could result in the imposition of fines and penalties, the loss of security clearances, the loss of our government contracts or our suspension or debarment from contracting with the U.S. government generally, any of which would harm our business, financial condition and results of operations. We are also subject to certain regulations of comparable government agencies in other countries, and our failure to comply with these non-U.S. regulations could also harm our business, financial condition or results of operations.

Our business could be adversely affected by a negative audit or investigation by the U.S. government.

U.S. government agencies, primarily the DCAA and the DCMA, routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. These agencies also may review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems.

Like most government contractors, our contracts are audited and reviewed on a continual basis by the DCMA and the DCAA. Audits for costs incurred on work performed after fiscal year 2005 have

not yet been completed. In addition, non-audit reviews or investigations by the government may still be conducted on all of our government contracts. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit or investigation of our business were to uncover improper or illegal activities, then we could be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U.S. government. We could suffer serious harm to our reputation if allegations of impropriety or illegal acts were made against us, even if the allegations were inaccurate. In addition, responding to governmental audits or investigations may involve significant expense and divert management attention. If any of the foregoing were to occur, our financial condition and operating results could be materially adversely affected.

Moreover, if any of our administrative processes and systems are found not to comply with the applicable requirements, we may be subjected to increased government scrutiny or required to obtain additional governmental approvals that could delay or otherwise adversely affect our ability to compete for or perform contracts. An unfavorable outcome to such an audit or investigation by the DCAA, DOJ or other government agency, could materially adversely affect our competitive position, affect our ability to obtain the maximum price for our products and services, and result in a substantial reduction of our revenues.

If we were suspended or debarred from contracting with the federal government generally, or any specific agency, if our reputation or relationship with government agencies were impaired, or if the government otherwise ceased doing business with us or significantly decreased the amount of business it does with us, our revenue and operating results would be materially harmed.

In February 2010, we were notified by the U.S. Department of Justice, or DOJ, that it had initiated a civil investigation into our billing practices with respect to our government contracts. The investigation is focused on three matters:

- the appropriateness of certain expenses included in our fiscal year 2006 Incurred Indirect Cost Claim (reconciliation of projected rates to actual rates);
- billing labor rates associated with time and materials government contracts; and
- billing rates for small UAS maintenance and repair contracts.

We are currently cooperating with this investigation, which we believe may be the result of prior DCAA audit activity. Based on our current understanding of the matters identified, we believe that the outcome of the investigation will not have a material impact on our business. We are voluntarily cooperating with a request for information received in connection with this investigation. No claim has been filed against us to date.

Some of our contracts with the U.S. government allow it to use inventions developed under the contracts and to disclose technical data to third parties, which could harm our ability to compete.

Some of our contracts allow the U.S. government to use, royalty-free, or have others use, inventions developed under those contracts on behalf of the government. Some of the contracts allow the federal government to disclose technical data without constraining the recipient on how those data are used. The ability of third parties to use patents and technical data for government purposes creates the possibility that the government could attempt to establish alternative suppliers or to negotiate with us to reduce our prices. The potential that the government may release some of the technical data without constraint creates the possibility that third parties may be able to use this data to compete with us, which could have a material adverse effect on our business, results of operations or financial condition.

U.S. government contracts are generally not fully funded at inception and contain certain provisions that may be unfavorable to us, which could prevent us from realizing our contract backlog and materially harm our business and results of operations.

U.S. Government contracts typically involve long lead times for design and development, and are subject to significant changes in contract scheduling. Congress generally appropriates funds on a fiscal year basis even though a program may continue for several years. Consequently, programs are often only partially funded initially, and additional funds are committed only as Congress makes further appropriations. The termination or reduction of funding for a government program would result in a loss of anticipated future revenue attributable to that program.

The actual receipt of revenue on awards included in backlog may never occur or may change because a program schedule could change or the program could be canceled, or a contract could be reduced, modified or terminated early.

In addition, U.S. government contracts generally contain provisions permitting termination, in whole or in part, at the government's convenience or for contractor default. Since a substantial majority of our revenue is dependent on the procurement, performance and payment under our U.S. government contracts, the termination of one or more critical government contracts could have a negative impact on our results of operations and financial condition. Termination arising out of our default could expose us to liability and have a material adverse effect on our ability to re-compete for future contracts and orders. Moreover, several of our contracts with the U.S. government do not contain a limitation of liability provision, creating a risk of responsibility for indirect, incidental damages and consequential damages. These provisions could cause substantial liability for us, especially given the use to which our products may be put.

U.S. government contracts are subject to a competitive bidding process that can consume significant resources without generating any revenue.

U.S. government contracts are frequently awarded only after formal, protracted competitive bidding processes and, in many cases, unsuccessful bidders for U.S. government contracts are provided the opportunity to protest contract awards through various agency, administrative and judicial channels. We derive significant revenue from U.S. government contracts that were awarded through a competitive bidding process. Much of the UAS business that we expect to seek in the foreseeable future likely will be awarded through competitive bidding. Competitive bidding presents a number of risks, including the following:

- the need to bid on programs in advance of the completion of their design, which may result in unforeseen technological difficulties and cost overruns;
- the substantial cost and managerial time and effort that must be spent to prepare bids and proposals for contracts that may not be awarded to us;
- the need to estimate accurately the resources and cost structure that will be required to service any contract we are awarded; and
- the expense and delay that may arise if our competitors protest or challenge contract awards made to us pursuant to competitive bidding, and the risk that any such protest or challenge could result in the delay of our contract performance, the distraction of management, the resubmission of bids on modified specifications, or in termination, reduction or modification of the awarded contract.

We may not be provided the opportunity to bid on contracts that are held by other companies and are scheduled to expire if the government extends the existing contract. If we are unable to win particular contracts that are awarded through a competitive bidding process, then we may not be able

to operate in the market for goods and services that are provided under those contracts for a number of years. If we are unable to win new contract awards over any extended period consistently, then our business and prospects will be adversely affected.

Risks Related to Our Intellectual Property

If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, our business, financial condition, and results of operations could be materially harmed.

Our success depends, in large part, on our ability to protect our intellectual property and other proprietary rights. We rely primarily on patents, trademarks, copyrights, trade secrets and unfair competition laws, as well as license agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. However, a significant portion of our technology is not patented, and we may be unable or may not seek to obtain patent protection for this technology. Moreover, existing U.S. legal standards relating to the validity, enforceability and scope of protection of intellectual property rights offer only limited protection, may not provide us with any competitive advantages, and may be challenged by third parties. The laws of countries other than the United States may be even less protective of intellectual property rights. Accordingly, despite our efforts, we may be unable to prevent third parties from infringing upon or misappropriating our intellectual property or otherwise gaining access to our technology. Unauthorized third parties may try to copy or reverse engineer our products or portions of our products or otherwise obtain and use our intellectual property. Moreover, many of our employees have access to our trade secrets and other intellectual property. If one or more of these employees leave us to work for one of our competitors, then they may disseminate this proprietary information, which may as a result damage our competitive position. If we fail to protect our intellectual property and other proprietary rights, then our business, results of operations or financial condition could be materially harmed.

In addition, affirmatively defending our intellectual property rights and investigating whether we are pursuing a product or service development that may violate the rights of others may entail significant expense. Any of our intellectual property rights may be challenged by others or invalidated through administrative processes or litigation. If we resort to legal proceedings to enforce our intellectual property rights or to determine the validity and scope of the intellectual property or other proprietary rights of others, then the proceedings could result in significant expense to us and divert the attention and efforts of our management and technical employees, even if we prevail.

We may be sued by third parties for alleged infringement of their proprietary rights, which could be costly, time-consuming and limit our ability to use certain technologies in the future.

We may become subject to claims that our technologies infringe upon the intellectual property or other proprietary rights of third parties. Any claims, with or without merit, could be time-consuming and expensive, and could divert our management's attention away from the execution of our business plan. Moreover, any settlement or adverse judgment resulting from these claims could require us to pay substantial amounts or obtain a license to continue to use the disputed technology, or otherwise restrict or prohibit our use of the technology. We cannot assure you that we would be able to obtain a license from the third party asserting the claim on commercially reasonable terms, if at all, that we would be able to develop alternative technology on a timely basis, if at all, or that we would be able to obtain a license to use a suitable alternative technology to permit us to continue offering, and our customers to continue using, our affected product. An adverse determination also could prevent us from offering our products to others. Infringement claims asserted against us may have a material adverse effect on our business, results of operations or financial condition.

Risks Relating to Securities Markets and Investment in Our Stock

The price of our common stock may fluctuate significantly.

The market prices for securities of emerging technology companies have historically been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. The market price of our common stock may fluctuate significantly in response to a number of factors, most of which we cannot control, including the following:

- U.S. government spending levels, both generally and by our particular customers;
- The volume of operational activity by the U.S. military;
- delays in the payment of our invoices by government payment offices, resulting in potentially reduced earnings during a particular fiscal quarter;
- announcements of new products or technologies, commercial relationships or other events relating to us or our industry or our competitors;
- failure of any of our key products to gain market acceptance;
- variations in our quarterly operating results;
- perceptions of the prospects for the markets in which we compete;
- changes in general economic conditions;
- changes in securities analysts' estimates of our financial performance;
- regulatory developments in the U.S. and foreign countries;
- fluctuations in stock market prices and trading volumes of similar companies;
- news about the markets in which we compete or regarding our competitors;
- terrorist acts or military action related to international conflicts, wars or otherwise;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders; and
- additions or departures of key personnel.

In addition, the equity markets in general, and NASDAQ in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, the market prices of securities of emerging technology companies have been particularly volatile. These broad market and industry factors may affect the market price of our common stock adversely, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation often has been instituted against that company. This type of litigation, if instituted against us, could result in substantial costs and a diversion of management's attention and resources.

Our management, whose interests may not be aligned with yours, is able to exert significant influence over all matters requiring stockholder approval.

As of June 10, 2011, our directors, executive officers and their affiliates collectively beneficially owned 4,862,459 shares, or approximately 22%, of our total outstanding shares of common stock. Accordingly, our directors and executive officers as a group may be able to exert significant influence over matters requiring stockholder approval, including the election of directors. The interests of our directors and executive officers may not be fully aligned with yours. Although there is no agreement

among our directors and executive officers with respect to the voting of their shares, this concentration of ownership may delay, defer or even prevent a change in control of our company, and make transactions more difficult or impossible without the support of all or some of our directors and executive officers. These transactions might include proxy contests, tender offers, mergers or other purchases of common stock that could give you the opportunity to realize a premium over the then-prevailing market price for shares of our common stock.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

All of our facilities are leased. Our corporate headquarters are located in Monrovia, California where we lease approximately 13,000 square feet under an agreement expiring in September 2015. We have several other leased facilities in California and Alabama that are used for administration, research and development, logistics and manufacturing and have a total of approximately 345,000 square feet. Such leases expire between the end of 2012 and 2016.

Item 3. Legal Proceedings.

We are not currently a party to any material legal proceedings. We are, however, subject to lawsuits from time to time in the ordinary course of business.

Item 4. (Removed and Reserved)

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Common Stock

The following table sets forth, for the periods indicated, the high and low sales prices for our common stock from May 1, 2009 through April 30, 2011. The following quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not represent actual transactions.

	Fiscal Year Ended April 30,			
	2011		2010	
	High	Low	High	Low
First Quarter	$ 28.17	$ 20.70	$ 32.90	$ 23.15
Second Quarter	$ 24.47	$ 21.25	$ 31.25	$ 26.28
Third Quarter	$ 29.91	$ 22.25	$ 35.38	$ 25.64
Fourth Quarter	$ 35.96	$ 27.20	$ 34.11	$ 21.64

On June 10, 2011, the closing sales price of our common stock as reported on the NASDAQ Global Select Market was $28.97 per share. As of June 10, 2011, there were 77 holders of record of our common stock.

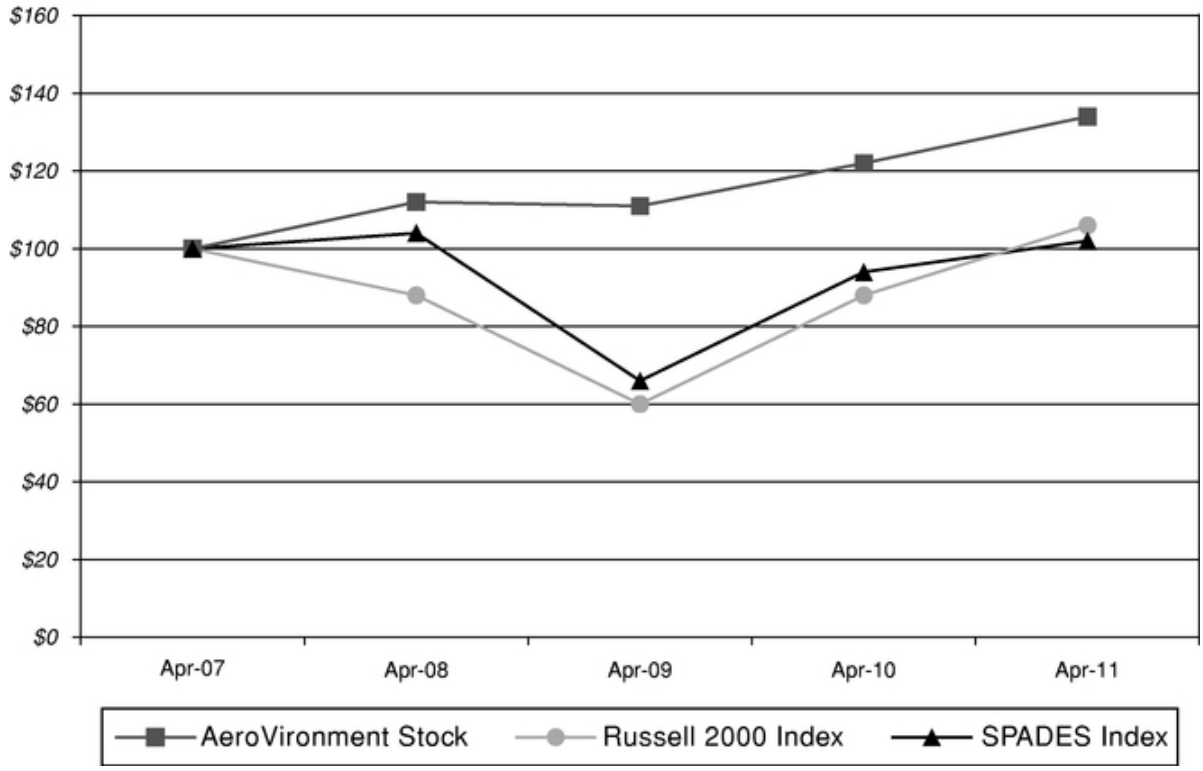
Dividends

We currently intend to retain all future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions and such other factors as our board of directors deems relevant.

Stock Price Performance Graph

The following graph shows a comparison of cumulative returns on our common stock, based on the market price of the common stock, with the cumulative total returns of companies in the Russell 2000 Index and the SPADES Index.

Cumulative Total Return



The following table shows the value of $100 invested on April 30, 2007 in AeroVironment, Inc., the Russell 2000 Index and the SPADES Index.

	Performance Graph Table ($)				
	April 30, 2007	April 30, 2008	April 30, 2009	April 30, 2010	April 30, 2011
AeroVironment Stock	100	112	111	122	134
Russell 2000 Index	100	88	60	88	106
SPADES Index	100	104	66	94	102

The stock price performance shown on the graph above is not necessarily indicative of future price performance. Factual material was obtained from sources believed to be reliable, but we are not responsible for any errors or omissions contained therein. No portions of this graph shall be deemed incorporated by reference into any filing under the Securities Act, or the Exchange Act through any general statement incorporating by reference in its entirety the report in which this graph appears, except to the extent that we specifically incorporate this graph or a portion of it by reference. In addition, this graph shall not be deemed filed under either the Securities Act or the Exchange Act.

Item 6. Selected Consolidated Financial Data.

The following selected financial data should be read in conjunction with our consolidated financial statements. The information set forth below is not necessarily indicative of results of future operations, and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes thereto included in Item 8, "Financial Statements and Supplementary Data" of this Form 10-K in order to understand fully factors that may affect the comparability of the financial data presented below.

	Year Ended April 30,				
	2011	2010	2009	2008	2007
	(In thousands, except per share data)				
Consolidated Income Statement Data:					
Revenue	$ 292,503	$ 249,518	$ 247,662	$ 215,746	$ 173,721
Net income	$ 25,909	$ 20,716	$ 24,245	$ 21,386	$ 20,718
Earnings per common share:					
Basic	$ 1.20	$ 0.97	$ 1.15	$ 1.08	$ 1.39
Diluted	$ 1.17	$ 0.94	$ 1.11	$ 1.00	$ 1.22
Weighted average common shares outstanding (basic):	21,591	21,392	21,024	19,767	14,947
Weighted average common shares outstanding (diluted):	22,081	21,977	21,776	21,372	16,992
Balance Sheet Data					
Total assets	$ 331,747	$ 281,971	$ 253,181	$ 205,211	$ 168,177
Long-term obligations	$ 6,175	$ 4,438	$ 7,117	$ 5,460	$ 541

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Introduction

The following discussion of our financial condition and results of operations should be read in conjunction with our "Selected Consolidated Financial Data" and our consolidated financial statements and notes thereto included herein as Item 8. This discussion contains forward-looking statements. Refer to "Forward-Looking Statements" on page 2 and "Risk Factors" beginning on page 27, for a discussion of the uncertainties, risks and assumptions associated with these statements.

Overview

We design, develop, produce and support a technologically-advanced portfolio of products. We supply unmanned aircraft systems, or UAS, and services primarily to organizations within the U.S. Department of Defense, or DoD. We also supply charging systems and services for electric vehicles and power cycling and test systems to commercial, consumer and government customers. We derive the majority of our revenue from these business areas and we believe that the markets for these solutions have significant growth potential. Additionally, we believe that some of the innovative potential products in our research and development pipeline will emerge as new growth platforms in the future, creating additional market opportunities.

The success we have achieved with our current products stems from our investment in research and development and our ability to invent and deliver advanced solutions, utilizing our proprietary technologies, to help our government, commercial and consumer customers operate more effectively and efficiently. Our core technological capabilities, developed through 40 years of innovation, include lightweight aerostructures, power electronics, electric propulsion systems, efficient electric energy generation and storage systems, high-density energy packaging, miniaturization, controls integration and systems engineering optimization.

Our UAS business segment focuses primarily on the design, development, production and support of innovative UAS that provide situational awareness and other mission effects to increase the security and effectiveness of our customers' operations. Our Efficient Energy Systems, or EES, business segment focuses primarily on the design, development, production and support of innovative efficient electric energy systems that address the growing demand for electric transportation solutions.

Revenue

We generate our revenue primarily from the sale and support of our small UAS, electric vehicle charging systems and power cycling and test systems solutions. Support for our small UAS customers includes training, spare parts, product repair, product replacement, and the customer-contracted operation of our small UAS by our personnel. We refer to these support activities collectively as our services operation. We derive most of our small UAS revenue from fixed-price and cost-plus-fee contracts with the U.S. government, and most of our electric vehicle charging systems and power cycling and test systems revenue from sales and service to commercial customers.

Cost of Sales

Cost of sales consists of direct costs and allocated indirect costs. Direct costs include labor, materials, travel, subcontracts and other costs directly related to the execution of a specific contract. Indirect costs include overhead expenses, fringe benefits and other costs that are not directly charged to a specific contract.

Gross Margin

Gross margin is equal to revenue minus cost of sales. We use gross margin as a financial metric to help us understand trends in our direct costs and allocated indirect costs when compared to the revenue we generate.

Research and Development Expense

Research and development, or R&D, is an integral part of our business model. We conduct significant internally funded research and development and anticipate that research and development expense will continue to increase in absolute dollars for the foreseeable future. Our research and development activities focus specifically on creating capabilities that support our existing product portfolio as well as new solutions. These activities are funded both externally by customers and internally.

Selling, General and Administrative

Our selling, general and administrative expenses, or SG&A, include salaries and other expenses related to selling, marketing and proposal activities, and other administrative costs. SG&A is an important financial metric that we analyze to help us evaluate the contribution of our selling, marketing and proposal activities to revenue generation.

Other Income and Expenses

Other income and expenses includes interest income and interest expense.

Income Tax Expense

Our effective tax rates are substantially lower than the statutory rates primarily due to research and development tax credits.

Critical Accounting Policies and Estimates

Management's Discussion and Analysis of Financial Condition and Results of Operations discusses our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. When we prepare these consolidated financial statements, we are required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Some of our accounting policies require that we make subjective judgments, including estimates that involve matters that are inherently uncertain. Our most critical estimates include those related to revenue recognition, inventories and reserves for excess and obsolescence, self-insured liabilities, accounting for stock-based awards, and income taxes. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for our judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting estimates affect our more significant judgments and estimates used in preparing our consolidated financial statements. See Note 1 of the Notes to Consolidated Financial Statements for our Organization and Significant Accounting Policies. There have been no material changes made to the critical accounting estimates during the periods presented in the consolidated financial statements.

Revenue Recognition

Significant management judgments and estimates must be made and used in connection with the recognition of revenue in any accounting period. Material differences in the amount of revenue in any given period may result if these judgments or estimates prove to be incorrect or if management's estimates change on the basis of development of the business or market conditions.

The substantial majority of our revenue is generated pursuant to written contractual arrangements to design, develop, manufacture and/or modify complex products, and to provide related engineering, technical and other services according to customer specifications. These contracts may be fixed price or cost-reimbursable. We consider all contracts for treatment in accordance with authoritative guidance for contracts with multiple deliverables.

Revenue from product sales not under contractual arrangement is recognized at the time title and the risk and rewards of ownership pass, which typically occurs when the products are shipped and collection is reasonably assured.

Revenue and profits on fixed-price contracts are recognized using percentage-of-completion methods of accounting. Revenue and profits on fixed-price production contracts, whose units are produced and delivered in a continuous or sequential process, are recorded as units are delivered based on their selling prices, or the units-of-delivery method. Revenue and profits on other fixed-price contracts with significant engineering as well as production requirements are recorded based on the ratio of total actual incurred costs to date to the total estimated costs for each contract, or the cost-to-cost method. Under percentage-of-completion methods of accounting, a single estimated total profit margin is used to recognize profit for each contract over its entire period of performance, which can exceed one year. Accounting for revenue and profits on a fixed-price contract requires the preparation of estimates of (1) the total contract revenue, (2) the total costs at completion, which is equal to the sum of the actual incurred costs to date on the contract and the estimated costs to complete the contract's statement of work and (3) the measurement of progress towards completion. The estimated profit or loss at completion on a contract is equal to the difference between the total estimated contract revenue and the total estimated cost at completion. Under the units-of-delivery

method, sales on a fixed-price type contract are recorded as the units are delivered during the period based on their contractual selling prices. Under the cost-to-cost method, sales on a fixed-price type contract are recorded at amounts equal to the ratio of actual cumulative costs incurred divided by total estimated costs at completion, multiplied by (A) the total estimated contract revenue, less (B) the cumulative sales recognized in prior periods. The profit recorded on a contract in any period using either the units-of-delivery method or cost-to-cost method is equal to (X) the current estimated total profit margin multiplied by the cumulative sales recognized, less (Y) the amount of cumulative profit previously recorded for the contract. In the case of a contract for which the total estimated costs exceed the total estimated revenue, a loss arises, and a provision for the entire loss is recorded in the period that it becomes evident. The unrecoverable costs on a loss contract that are expected to be incurred in future periods are recorded in the program cost.

Revenue and profits on cost-reimbursable type contracts are recognized as costs are incurred on the contract, at an amount equal to the costs plus the estimated profit on those costs. The estimated profit on a cost-reimbursable contract is generally fixed or variable based on the contractual fee arrangement.

We review cost performance and estimates to complete at least quarterly and in many cases more frequently. Adjustments to original estimates for a contract's revenue, estimated costs at completion and estimated profit or loss are often required as work progresses under a contract, as experience is gained and as more information is obtained, even though the scope of work required under the contract may not change, or if contract modifications occur. The impact of revisions in profit estimates for all types of contracts are recognized on a cumulative catch-up basis in the period in which the revisions are made. Amounts representing contract change orders or claims are included in revenue only when they can be reliably estimated and their realization is probable. Incentives or penalties and awards applicable to performance on contracts are considered in estimating revenue and profit rates, and are recorded when there is sufficient information to assess anticipated contract performance.

Inventories and Reserve for Excess and Obsolescence

Our policy for valuation of inventory, including the determination of obsolete or excess inventory, requires us to perform a detailed assessment of inventory at each balance sheet date, which includes a review of, among other factors, an estimate of future demand for products within specific time horizons, valuation of existing inventory, as well as product lifecycle and product development plans. Inventory reserves are also provided to cover risks arising from slow-moving items. We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based on assumptions about future demand and market conditions. We may be required to record additional inventory write-downs if actual market conditions are less favorable than those projected by our management.

Self-Insured Liability

We are self-insured for employee medical claims, subject to individual and aggregate stop-loss policies. We estimate a liability for claims filed and incurred but not reported based upon recent claims experience and an analysis of the average period of time between the occurrence of a claim and the time it is reported to and paid by us. We perform an annual evaluation of this policy and have determined that for all prior years during which this policy has been in effect there have been cost advantages to this policy, as compared to obtaining commercially available employee medical insurance. However, actual results may differ materially from those estimated and could have a material impact on our consolidated financial statements.

Impairment of Long-Lived Assets

We review the recoverability of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The estimated future cash flows are based upon, among other things, assumptions about expected future operating performance, and may differ from actual cash flows. If the sum of the projected undiscounted cash flows (excluding interest) is less than the carrying value of the assets, the assets will be written down to the estimated fair value in the period in which the determination is made.

Long-Term Incentive Awards

We grant long-term incentive awards and we establish a target payout at the beginning of each performance period. The actual payout at the end of the performance period is calculated based upon our achievement of revenue and operating profit growth. Payouts are made in cash and restricted stock units. Upon vesting of the restricted stock units, we have the discretion to settle the restricted stock units in cash or stock.

The cash component of the award is accounted for as a liability. The equity component is accounted for as a stock-based liability as the restricted stock units may be settled in cash or stock. At each reporting period, we reassess the probability of achieving the performance targets. The estimation of whether the performance targets will be achieved requires judgment, and to the extent actual results or updated estimates differ from our current estimates, the cumulative effect on current and prior periods of those changes will be recorded in the period estimates are revised. Upon settlement of these awards, the total compensation expense recorded over the vesting period of the awards will equal the settlement amount, which is based on our stock price on the vesting date.

Income Taxes

We are required to estimate our income taxes, which includes estimating our current income taxes as well as measuring the temporary differences resulting from different treatment of items for tax and accounting purposes. We currently have significant deferred assets, which are subject to periodic recoverability assessments. Realizing our deferred tax assets principally depends on our achieving projected future taxable income. We may change our judgments regarding future profitability due to future market conditions and other factors, which may result in recording a valuation allowance against those deferred tax assets.

Fiscal Periods

Our fiscal year ends on April 30. Due to our fixed year end date of April 30, our first and fourth quarters each consist of approximately 13 weeks. The second and third quarters each consist of 13 weeks. Our first three quarters end on a Saturday.

Results of Operations

The following table sets forth certain historical consolidated income statement data expressed in dollars (in thousands) and as a percentage of revenue for the periods indicated. Certain amounts may not sum due to rounding.

	Fiscal Year Ended April 30,					
	2011		2010		2009	
Revenue	$ 292,503	100%	$ 249,518	100%	$ 247,662	100%
Cost of sales	175,352	60%	152,692	61%	159,065	64%
Gross margin	117,151	40%	96,826	39%	88,597	36%
Selling, general and administrative	47,431	16%	42,429	17%	34,246	14%
Research and development	35,769	12%	24,510	10%	21,798	9%
Income from operations	33,951	12%	29,887	12%	32,553	13%
Interest income	277	0%	195	0%	1,244	1%
Income before income taxes	34,228	12%	30,082	12%	33,797	14%
Income tax expense	8,319	3%	9,366	4%	9,552	4%
Net income	$ 25,909	9%	$ 20,716	8%	$ 24,245	10%

The following table sets forth our revenue and gross margin generated by each operating segment for the periods indicated:

	Fiscal Year Ended April 30,		
	2011	2010	2009
	(In thousands)		
Revenue:			
UAS	$ 249,769	$ 224,179	$ 211,364
EES	42,734	25,339	36,298
Total	$ 292,503	$ 249,518	$ 247,662
Gross margin:			
UAS	$ 99,513	$ 85,157	$ 70,968
EES	17,638	11,669	17,629
Total	$ 117,151	$ 96,826	$ 88,597

Fiscal Year Ended April 30, 2011 Compared to Fiscal Year Ended April 30, 2010

Revenue. Revenue for the fiscal year ended April 30, 2011 was $292.5 million, as compared to $249.5 million for the fiscal year ended April 30, 2010, representing an increase of $43.0 million, or 17%. UAS revenue increased $25.6 million, or 11%, to $249.8 million for the fiscal year ended April 30, 2011, primarily due to an increase in service revenue of $48.4 million and higher product deliveries of $21.9 million, partially offset by decreased customer-funded R&D work of $45.0 million. The increase in UAS service revenue was primarily due to an increase in support services revenue for the digital Puma AE systems. The increase in product deliveries was primarily due to the deliveries of our new digital Puma AE systems. The decrease in customer-funded R&D was primarily due to decreased activity on the Global Observer program. EES revenue increased $17.4 million, or 69%, to $42.7 million for the fiscal year ended April 30, 2011, due primarily to increased product deliveries of our electric vehicle charging systems and power cycling and test systems.

Cost of Sales. Cost of sales for the fiscal year ended April 30, 2011 was $175.4 million, as compared to $152.7 million for the fiscal year ended April 30, 2010, representing an increase of $22.7 million, or 15%, including an impairment charge of $2.0 million on certain long-lived assets related to the Global Observer contract. For additional information regarding the impairment charge, please see Note 5 to our consolidated financial statements, which are included in Item 8, "Financial Statements and Supplementary Data" of this Form 10-K. The increase in cost of sales was caused by higher UAS cost of sales of $11.2 million and EES cost of sales of $11.4 million.

Gross Margin. Gross margin for the fiscal year ended April 30, 2011 was $117.2 million, as compared to $96.8 million for the fiscal year ended April 30, 2010, representing an increase of $20.4 million, or 21%. As a percentage of revenue, gross margin increased from 39% to 40%. UAS gross margin increased $14.4 million, or 17%, to $99.5 million for the fiscal year ended April 30, 2011, primarily due to increased sales volume. As a percentage of revenue, gross margin for UAS increased from 38% to 40%, primarily due to a higher amount of fixed-price contract revenue compared to cost-reimbursable contract revenue. EES gross margin increased $6.0 million, or 51%, to $17.6 million for the fiscal year ended April 30, 2011, primarily due to increased sales volume. As a percentage of revenue, EES gross margin decreased from 46% to 41%, primarily due to higher manufacturing and engineering support overhead costs.

Selling, General and Administrative. SG&A expense for the fiscal year ended April 30, 2011 was $47.4 million, or 16% of revenue, compared to SG&A expense of $42.4 million, or 17% of revenue, for the fiscal year ended April 30, 2010. SG&A expense increased primarily due to higher bid and proposal costs, selling and marketing expenses and administrative costs.

Research and Development. R&D expense for the fiscal year ended April 30, 2011 was $35.8 million, or 12% of revenue, compared to R&D expense of $24.5 million, or 10% of revenue, for the fiscal year ended April 30, 2010. R&D expense increased primarily due to increased investment in various UAS and EES technology development initiatives.

Interest Income. Interest income for the fiscal year ended April 30, 2011 was $0.3 million, as compared to interest income of $0.2 million for the fiscal year ended April 30, 2010, representing an increase of $0.1 million. Interest income increased primarily due to higher average cash and short-term investment balances.

Income Tax Expense. Our effective income tax rate was 24.3% for the fiscal year ended April 30, 2011, as compared to 31.1% for the fiscal year ended April 30, 2010. The decrease was caused primarily by higher federal R&D tax credits in the fiscal year ended April 30, 2011.

Fiscal Year Ended April 30, 2010 Compared to Fiscal Year Ended April 30, 2009

Revenue. Revenue for the fiscal year ended April 30, 2010 was $249.5 million, as compared to $247.7 million for the fiscal year ended April 30, 2009, representing an increase of $1.8 million, or 1%. UAS revenue increased $12.8 million, or 6%, to $224.2 million for the fiscal year ended April 30, 2010, primarily due to higher service revenue of $20.9 million and increased customer-funded R&D work of $12.0 million, partially offset by lower product deliveries of $20.1 million. The increase in UAS service revenue was primarily due to the retrofitting of Raven B systems with our DDL technology. The increase in customer-funded R&D work was primarily due to increased activity on the Global Observer program. The decrease in product deliveries was primarily due to the reduction in our analog Raven B production as we migrated into the production and retrofit of Raven B systems with our DDL technology. EES revenue decreased $11.0 million, or 30%, to $25.3 million for the fiscal year ended April 30, 2010, primarily due to decreased product deliveries of our industrial electric vehicle charging systems and power cycling and test systems.

Cost of Sales. Cost of sales for the fiscal year ended April 30, 2010 was $152.7 million, as compared to $159.1 million for the fiscal year ended April 30, 2009, representing a decrease of $6.4 million, or 4%. The decrease in cost of sales was caused by lower EES cost of sales of $5.0 million and UAS cost of sales of $1.4 million.

Gross Margin. Gross margin for the fiscal year ended April 30, 2010 was $96.8 million, as compared to $88.6 million for the fiscal year ended April 30, 2009, representing an increase of $8.2 million, or 9%. As a percentage of revenue, gross margin increased from 36% to 39%. UAS gross margin increased $14.2 million, or 20%, to $85.2 million for the fiscal year ended April 30, 2010, primarily due to increased sales volume. As a percentage of revenue, gross margin for UAS increased from 34% to 38%, primarily due to a higher amount of fixed-price contract revenue compared to cost-reimbursable contract revenue. EES gross margin decreased $6.0 million, or 34%, to $11.7 million for the fiscal year ended April 30, 2010, primarily due to decreased sales volume. As a percentage of revenue, EES gross margin decreased from 49% to 46%, primarily due to a lower level of product deliveries compared to service related revenue.

Selling, General and Administrative. SG&A expense for the fiscal year ended April 30, 2010 was $42.4 million, or 17% of revenue, compared to SG&A expense of $34.2 million, or 14% of revenue, for the fiscal year ended April 30, 2009. SG&A expense increased primarily due to higher bid and proposal activity, selling and marketing expenses, and administrative costs.

Research and Development. R&D expense for the fiscal year ended April 30, 2010 was $24.5 million, or 10% of revenue, compared to R&D expense of $21.8 million, or 9% of revenue, for the fiscal year ended April 30, 2009. R&D expense increased primarily due to increased investment in development initiatives for industrial electrical vehicle charging systems infrastructure.

Interest Income. Interest income for the fiscal year ended April 30, 2010 was $0.2 million, as compared to interest income of $1.2 million for the fiscal year ended April 30, 2009, representing a decrease of $1.0 million. Interest income decreased primarily due to lower yields on investment grade securities.

Income Tax Expense. Our effective income tax rate was 31.1% for the fiscal year ended April 30, 2010, as compared to 28.3% for the fiscal year ended April 30, 2009. The increase was caused primarily by lower R&D tax credits in the fiscal year ended April 30, 2010.

Liquidity and Capital Resources

We currently have no material cash commitments, except for normal recurring trade payables, accrued expenses and ongoing research and development costs, all of which we anticipate funding through our existing working capital and funds provided by operating activities. The majority of our purchase obligations are pursuant to funded contractual arrangements with our customers. In addition, we do not currently anticipate significant investment in property, plant and equipment, and we believe that our existing cash, cash equivalents, cash provided by operating activities and other financing sources will be sufficient to meet our anticipated working capital, capital expenditure and debt service requirements, if any, during the next twelve months. There can be no assurance, however, that our business will continue to generate cash flow at current levels. If we are unable to generate sufficient cash flow from operations, then we may be required to sell assets, reduce capital expenditures or obtain additional financing. The current challenging economic environment continues to create volatility and disruption in the capital markets, diminished liquidity and credit availability, and increased counterparty risk. Nevertheless, we anticipate that existing sources of liquidity and cash flows from operations will be sufficient to satisfy our cash needs for the foreseeable future.

Our primary liquidity needs are for financing working capital, investing in capital expenditures, supporting product development efforts, introducing new products and enhancing existing products, and

marketing acceptance and adoption of our products and services. Our future capital requirements, to a certain extent, are also subject to general conditions in or affecting the defense and electric vehicle industries and are subject to general economic, political, financial, competitive, legislative and regulatory factors that are beyond our control. Moreover, to the extent that existing cash, cash equivalents, cash from operations, and cash from short-term borrowing are insufficient to fund our future activities, we may need to raise additional funds through public or private equity or debt financing. Although we are currently not a party to any agreement or letter of intent with respect to potential investment in, or acquisitions of, businesses, services or technologies, we may enter into these types of arrangements in the future, which could also require us to seek additional equity or debt financing.

Our working capital requirements vary by contract type. On cost-plus-fee programs, we typically bill our incurred costs and fees monthly as work progresses, and therefore working capital investment is minimal. On fixed-price contracts, we typically are paid as we deliver products, and working capital is needed to fund labor and expenses incurred during the lead time from contract award until contract deliveries begin.

Cash Flows

The following table provides our cash flow data as of:

	Fiscal Year Ended April 30,		
	2011	2010	2009
		(In thousands)	
Net cash provided by operating activities	$ 33,486	$ 35,984	$ 39,770
Net cash used in investing activities	$ (933)	$ (124,764)	$ (29,480)
Net cash provided by financing activities	$ 823	$ 944	$ 1,147

Cash Provided by Operating Activities. Net cash provided by operating activities for the fiscal year ended April 30, 2011 decreased by $2.5 million to $33.5 million, compared to net cash provided by operating activities of $36.0 million for the fiscal year ended April 30, 2010. This decrease in net cash provided by operating activities was primarily due to higher working capital needs of $8.3 million and lower tax benefits from stock option exercises of $2.0 million, partially offset by higher income of $5.2 million, higher depreciation of $1.6 million, and an impairment charge of $2.0 million.

Net cash provided by operating activities for the fiscal year ended April 30, 2010 decreased by $3.8 million to $36.0 million, compared to net cash provided by operating activities of $39.8 million for the fiscal year ended April 30, 2009. This decrease in net cash provided by operating activities was primarily due to higher working capital needs of $3.6 million and lower tax benefits on exercises of stock options of $9.0 million, partially offset by higher deferred income taxes of $4.1 million and higher depreciation of $3.6 million.

Cash Used in Investing Activities. Net cash used in investing activities decreased by $123.8 million to $0.9 million for the fiscal year ended April 30, 2011, compared to net cash used by investing activities of $124.8 million for the fiscal year ended April 30, 2010. The decrease in net cash used in investing activities was primarily due to net redemptions of U.S. Treasury bills and municipal bonds of $123.2 million and lower capital expenditures of $0.6 million. During the fiscal years ended April 30, 2011 and April 30, 2010, we used cash to purchase property and equipment totaling $10.2 million and $10.8 million, respectively.

Net cash used in investing activities increased by $95.3 million to $124.8 million for the fiscal year ended April 30, 2010, compared to net cash used by investing activities of $29.5 million for the fiscal year ended April 30, 2009. The increase in net cash used in investing activities was primarily due to higher net purchases of U.S. Treasury bills and municipal bonds of $97.8 million, partially offset by

lower capital expenditures of $2.5 million. During the fiscal years ended April 30, 2010 and April 30, 2009, we used cash to purchase property and equipment totaling $10.8 million and $13.3 million, respectively.

Cash Provided by Financing Activities. Net cash provided by financing activities decreased by $0.1 million to $0.8 million for the fiscal year ended April 30, 2011, compared to $0.9 million for the fiscal year ended April 30, 2010. The decrease was due to lower exercises of stock options.

Net cash provided by financing activities decreased by $0.2 million to $0.9 million for the fiscal year ended April 30, 2010, compared to $1.1 million for the fiscal year ended April 30, 2009. The decrease was due to lower exercises of stock options.

Contractual Obligations

The following table describes our commitments to settle contractual obligations as of April 30, 2011:

	Payments Due By Period				
	Total	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years
			(In thousands)		
Operating lease obligations	$ 12,912	$ 3,844	$ 6,220	$ 2,804	$ 44
Purchase obligations(1)	25,909	$ 25,909	—	—	—
Total	$ 38,821	$ 29,753	$ 6,220	$ 2,804	$ 44

(1) Consists of all cancelable and non-cancelable purchase orders as of April 30, 2011.

Off-Balance Sheet Arrangements

As of April 30, 2011, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of the SEC's Regulation S-K.

Inflation

Our operations have not been, and we do not expect them to be, materially affected by inflation. Historically, we have been successful in adjusting prices to our customers to reflect changes in our material and labor costs.

New Accounting Standards

In January 2010, the Financial Accounting Standards Board, or FASB, issued fair value guidance requiring new disclosures and clarification of existing disclosures for assets and liabilities that are measured at fair value on either a recurring or non-recurring basis. The guidance requires disclosure of transfer activity into and out of Level 1 and Level 2 fair value measurements and also requires more detailed disclosure about the activity within Level 3 fair value measurements. The majority of the requirements in this guidance are effective for interim and annual periods beginning after December 15, 2009. Requirements related to Level 3 disclosures are effective for interim and annual periods beginning after December 15, 2010. We do not expect that the adoption of the guidance will have a material impact on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

It is our policy not to enter into interest rate derivative financial instruments. We do not currently have any significant interest rate exposure.

Foreign Currency Exchange Rate Risk

Since a significant part of our sales and expenses are denominated in U.S. dollars, we have not experienced significant foreign exchange gains or losses to date, and do not expect to incur significant foreign exchange gains or losses in the future. We occasionally engage in forward contracts in foreign currencies to limit our exposure on non-U.S. dollar transactions.

Item 8. Financial Statements and Supplementary Data.

AeroVironment, Inc.

Audited Consolidated Financial Statements

Index to Consolidated Financial Statements and Supplementary Data

All other schedules are omitted because they are not applicable, not required or the information required is included in the Consolidated Financial Statements, including the notes thereto.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
AeroVironment, Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheets of AeroVironment, Inc. and subsidiaries as of April 30, 2011 and 2010, and the related consolidated statements of income, stockholders' equity and cash flows for each of the three years in the period ended April 30, 2011. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These consolidated financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of AeroVironment, Inc. and subsidiaries at April 30, 2011 and 2010, and the consolidated results of their operations and their cash flows for each of the three years in the period ended April 30, 2011, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Aerovironment, Inc.'s internal controls over financial reporting as of April 30, 2011, based upon criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated June 21, 2011 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Los Angeles, California
June 21, 2011

AEROVIRONMENT, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands except share data)

	April 30,	
	2011	2010
Assets		
Current assets:		
Cash and cash equivalents	$ 62,041	$ 28,665
Short-term investments	126,839	135,770
Accounts receivable, net of allowance for doubtful accounts of $639 at April 30, 2011 and $745 at April 30, 2010	44,376	38,645
Unbilled receivables and retentions	21,966	18,710
Inventories, net	38,137	20,928
Deferred income taxes	2,300	956
Prepaid expenses and other current assets	2,372	1,921
Total current assets	298,031	245,595
Long-term investments	6,275	6,515
Property and equipment, net	17,498	20,025
Deferred income taxes	9,762	9,747
Other assets	181	89
Total assets	$ 331,747	$ 281,971
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 31,134	$ 20,205
Wages and related accruals	15,458	10,336
Income taxes payable	7,404	6,507
Other current liabilities	7,384	4,473
Liability for uncertain tax positions	724	2,592
Total current liabilities	62,104	44,113
Wages and related accruals	762	—
Deferred rent	1,275	1,268
Liability for uncertain tax positions	4,138	3,170
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.0001 par value:		
Authorized shares—10,000,000; none issued or outstanding	—	—
Common stock, $0.0001 par value:		
Authorized shares—100,000,000		
Issued and outstanding shares—21,949,884 shares at April 30, 2011 and 21,732,413 at April 30, 2010	2	2
Additional paid-in capital	119,765	115,602
Accumulated other comprehensive loss	(784)	(760)
Retained earnings	144,485	118,576
Total stockholders' equity	263,468	233,420
Total liabilities and stockholders' equity	$ 331,747	$ 281,971

See accompanying notes to consolidated financial statements.

AEROVIRONMENT, INC.

CONSOLIDATED STATEMENTS OF INCOME

(In thousands except share and per share data)

	Year Ended April 30,		
	2011	2010	2009
Revenue:			
Product sales	$ 137,724	$ 103,268	$ 136,173
Contract services	154,779	146,250	111,489
	292,503	249,518	247,662
Cost of sales:			
Product sales	74,843	59,266	82,427
Contract services	100,509	93,426	76,638
	175,352	152,692	159,065
Gross margin	117,151	96,826	88,597
Selling, general and administrative	47,431	42,429	34,246
Research and development	35,769	24,510	21,798
Income from operations	33,951	29,887	32,553
Other income:			
Interest income	277	195	1,244
Income before income taxes	34,228	30,082	33,797
Provision for income taxes	8,319	9,366	9,552
Net income	$ 25,909	$ 20,716	$ 24,245
Earnings per share data:			
Basic	$ 1.20	$ 0.97	$ 1.15
Diluted	$ 1.17	$ 0.94	$ 1.11
Weighted average shares outstanding:			
Basic	21,591,333	21,391,795	21,023,590
Diluted	22,081,266	21,977,364	21,775,727

See accompanying notes to consolidated financial statements.

AEROVIRONMENT, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands except share data)

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance at April 30, 2008	20,614,044	$ 2	$ 96,123	$ 73,615	$ —	$ 169,740
Net income	—	—	—	24,245	—	24,245
Other comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(537)	(537)
Comprehensive income	—	—	—	—	—	23,708
Stock options exercised	690,437	—	1,049	—	—	1,049
Restricted stock awards	166,000	—	—	—	—	—
Tax benefit from exercise of stock options	—	—	12,004	—	—	12,004
Stock-based compensation	—	—	926	—	—	926
Balance at April 30, 2009	21,470,481	2	110,102	97,860	(537)	207,427
Net income	—	—	—	20,716	—	20,716
Other comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(223)	(223)
Comprehensive income	—	—	—	—	—	20,493
Stock options exercised	205,132	—	836	—	—	836
Restricted stock awards	63,000	—	—	—	—	—
Restricted stock awards forfeited	(6,200)	—	—	—	—	—
Tax benefit from stock-based compensation	—	—	3,010	—	—	3,010
Stock-based compensation	—	—	1,654	—	—	1,654
Balance at April 30, 2010	21,732,413	2	115,602	118,576	(760)	233,420
Net income	—	—	—	25,909	—	25,909
Other comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(24)	(24)
Comprehensive income	—	—	—	—	—	25,885
Stock options exercised	120,561	—	619	—	—	619
Restricted stock awards	98,910	—	—	—	—	—
Restricted stock awards forfeited	(2,000)	—	—	—	—	—
Tax benefit from stock-based compensation	—	—	1,238	—	—	1,238
Stock-based compensation	—	—	2,306	—	—	2,306
Balance at April 30, 2011	21,949,884	$ 2	$ 119,765	$ 144,485	$ (784)	$ 263,468

See accompanying notes to consolidated financial statements.

AEROVIRONMENT, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year ended April 30,		
	2011	2010	2009
Operating activities			
Net income	$ 25,909	$ 20,716	$ 24,245
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization	10,599	8,982	5,355
Impairment of long-lived assets	2,043	—	—
Provision for doubtful accounts	(105)	454	71
Deferred income taxes	(1,343)	(253)	(4,355)
Stock-based compensation	2,306	1,654	926
Tax benefit from exercise of stock options	1,034	2,902	11,906
Excess tax benefit from stock-based compensation	(204)	(108)	(98)
(Gain) loss on disposition of property and equipment	(51)	3	17
Changes in operating assets and liabilities:			
Accounts receivable	(5,626)	3,452	(12,834)
Unbilled receivables and retentions	(3,256)	1,360	520
Inventories	(17,209)	(9,326)	4,321
Income tax receivable	—	3,415	(983)
Prepaid expenses and other assets	(543)	(172)	298
Accounts payable	10,929	(3,785)	9,910
Other liabilities	9,003	6,690	471
Net cash provided by operating activities	33,486	35,984	39,770
Investing activities			
Acquisition of property and equipment	(10,173)	(10,792)	(13,302)
Net sales (purchases) of held-to-maturity investments	8,931	(114,247)	(21,523)
Net sales of available-for-sale investments	200	275	5,325
Proceeds from sale of property and equipment	109	—	20
Net cash used in investing activities	(933)	(124,764)	(29,480)
Financing activities			
Excess tax benefit from stock-based compensation	204	108	98
Exercise of stock options	619	836	1,049
Net cash provided by financing activities	823	944	1,147
Net increase (decrease) in cash and cash equivalents	33,376	(87,836)	11,437
Cash and cash equivalents at beginning of year	28,665	116,501	105,064
Cash and cash equivalents at end of year	$ 62,041	$ 28,665	$ 116,501
Supplemental disclosures of cash flow information			
Cash paid during the year for:			
Income taxes	$ 9,873	$ 104	$ 2,781
Non-cash investing activities			
Unrealized losses on long-term investments recorded in other comprehensive income, net of deferred tax benefit of $16, $143 and $357, respectively	$ 24	$ 223	$ 537

See accompanying notes to consolidated financial statements.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Significant Accounting Policies

Organization

AeroVironment, Inc., a Delaware corporation, is engaged in the design, development, production and support of unmanned aircraft systems and efficient energy systems for various industries and governmental agencies.

Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of AeroVironment, Inc. and its wholly-owned subsidiaries: AV S.r.l., Skytower, LLC, AV GmbH, Skytower Inc., AILC, Inc. and Regenerative Fuel Cell Systems, LLC (collectively referred to herein as the "Company"). All intercompany balances and transactions have been eliminated in consolidation.

Segments

The Company's products are sold and divided among two reportable segments to reflect the Company's strategic goals. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the Chief Operating Decision Maker ("CODM") in deciding how to allocate resources and in assessing performance. The Company's CODM is the Chief Executive Officer, who reviews the revenue and gross margin results for each of these segments in order to make resource allocation decisions, including the focus of research and development, or R&D, activities, and assessing performance. The Company's reportable segments are business units that offer different products and services and are managed separately.

Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Significant estimates made by management include, but are not limited to, valuation of: inventory, deferred tax assets and liabilities, useful lives of property, plant and equipment, medical and dental liabilities, and estimates of anticipated contract costs and revenue utilized in the revenue recognition process. Actual results could differ from those estimates.

Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the time of purchase to be cash equivalents. The Company's cash equivalents are comprised of money market funds, certificates of deposit of major financial institutions, and U.S. Treasury bills.

Investments

The Company's investments are accounted for as held-to-maturity and available-for-sale and reported at amortized cost and fair value, respectively.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Unrealized gains and losses are excluded from earnings and reported as a separate component of stockholders' equity, net of deferred income taxes for available-for-sale investments.

Gains and losses realized on the disposition of investment securities are determined on the specific identification basis and credited or charged to income. Premium and discount on investments are amortized and accreted using the interest method and charged or credited to investment income.

Management determines the appropriate classification of securities at the time of purchase and re-evaluates such designation as of each balance sheet date.

Investments are considered to be impaired when a decline in fair value is judged to be other-than-temporary. On a quarterly basis, the Company considers available quantitative and qualitative evidence in evaluating potential impairment of our investments. If the cost of an investment exceeds its fair value, the Company evaluates, among other factors, general market conditions, the duration and extent to which the fair value is less than cost, and our intent and ability to hold the investment to maturity. The Company also considers potential adverse conditions related to the financial health of the issuer based on rating agency actions. Once a decline in fair value is determined to be other-than-temporary, an impairment charge is recorded in earnings and a new cost basis in the investment is established.

Fair Values of Financial Instruments

Fair values of cash and cash equivalents, accounts receivable, unbilled receivables, retentions and accounts payable approximate cost due to the short period of time to maturity.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash, cash equivalents, U.S. Treasury bills and accounts receivable. The Company currently invests the majority of its cash in U.S. Treasury bills. The Company's revenue and accounts receivable are with a limited number of corporations and governmental entities. In the aggregate, 83%, 80% and 78% of the Company's revenue came from agencies of the U.S. government for the years ended April 30, 2011, 2010 and 2009, respectively. These agencies accounted for 59% and 58% of the accounts receivable balances at April 30, 2011 and 2010, respectively. One such agency, the U.S. Army, accounted for 48%, 44% and 43% of the Company's consolidated revenue for the years ended April 30, 2011, 2010 and 2009, respectively. The U.S. Army accounted for approximately 56%, 48% and 51% of UAS reportable segment sales for the years ended April 30, 2011, 2010 and 2009, respectively. The Company performs ongoing credit evaluations of its commercial customers and maintains an allowance for potential losses.

Accounts Receivable, Unbilled Receivables and Retentions

Accounts receivable represents primarily U.S. government, and to a lesser extent commercial receivables, net of allowances for doubtful accounts. Unbilled receivables represent costs in excess of billings on incomplete contracts and, where applicable, accrued profit related to government long-term contracts on which revenue has been recognized, but for which the customer has not yet been billed.

Retentions represent amounts withheld by customers until contract completion. The Company determines the allowance for doubtful accounts based on historical customer experience and other currently available evidence. When a specific account is deemed uncollectible, the account is written off against the allowance. The allowance for doubtful accounts reflects the Company's best estimate of

probable losses inherent in the accounts receivable balance; such losses have historically been within management's expectations. An account is deemed past due based on contractual terms rather than on how recently payments have been received.

Inventories

Inventories are stated at the lower of cost (using the weighted average costing method) or market value. Inventory write-offs and write-down provisions are provided to cover risks arising from slow-moving items or technological obsolescence and for market prices lower than cost. The Company periodically evaluates the quantities on hand relative to current and historical selling prices and historical and projected sales volume. Based on this evaluation, provisions are made to write inventory down to its market value.

Long-Lived Assets

Property and equipment are carried at cost. Depreciation of property and equipment, including amortization of leasehold improvements, are provided using the straight-line method over the following estimated useful lives:

Machinery and equipment	2 to 7 years
Computer equipment and software	2 to 5 years
Furniture and fixtures	3 to 7 years
Leasehold improvements	Lesser of useful life or term of lease

Maintenance, repairs and minor renewals are charged directly to expense as incurred. Additions and betterments to property and equipment are capitalized at cost. When the Company disposes of assets, the applicable costs and accumulated depreciation and amortization thereon are removed from the accounts and any resulting gain or loss is included in selling, general and administrative expense in the period incurred.

The Company reviews the recoverability of its long-lived assets whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The estimated future cash flows are based upon, among other things, assumptions about expected future operating performance, and may differ from actual cash flows. If the sum of the projected undiscounted cash flows (excluding interest) is less than the carrying value of the assets, the assets will be written down to the estimated fair value in the period in which the determination is made. At April 30, 2011, there were indicators of impairment identified and an impairment charge of $2,043,000 was recorded. See Note 5, "Property and Equipment, net" for further details. At April 30, 2010, no indicators of impairment were identified and no impairment charge was recorded.

Product Warranty

The Company accrues an estimate of its exposure to warranty claims based upon both current and historical product sales data and warranty costs incurred. Product warranty reserves are recorded in other current liabilities.

Self-Insurance Liability

The Company is self-insured for employee medical claims, subject to individual and aggregate stop-loss policies. The Company estimates a liability for claims filed and incurred but not reported based upon recent claims experience and an analysis of the average period of time between the

occurrence of a claim and the time it is reported to and paid by the Company. As of April 30, 2011 and 2010, the Company estimated and recorded a self insurance liability in wages and related accruals of approximately $898,000 and $1,014,000, respectively.

Income Taxes

Deferred income tax assets and liabilities are computed annually for differences between the financial statement and income tax bases of assets and liabilities that will result in taxable or deductible amounts in the future. The provision for income taxes reflects the taxes to be paid for the period and the change during the period in the deferred income tax assets and liabilities. The Company records a valuation allowance to reduce the deferred tax assets to the amount of future tax benefit that is more likely than not to be realized. For uncertain tax positions, the Company determines whether it is "more likely than not" that a tax position will be sustained upon examination by the appropriate taxing authorities before any part of the benefit can be recorded in the financial statements. For those tax positions where it is "not more likely than not" that a tax benefit will be sustained, no tax benefit is recognized. Where applicable, associated interest and penalties are also recorded.

Customer Advances and Amounts in Excess of Cost Incurred

The Company receives advances, performance-based payments and progress payments from customers that may exceed costs incurred on certain contracts, including contracts with agencies of the U.S. government. These advances are classified as advances from customers and will be offset against billings.

Revenue Recognition

The substantial majority of the Company's revenue is generated pursuant to written contractual arrangements to design, develop, manufacture and/or modify complex products, and to provide related engineering, technical and other services according to the specifications of the buyers (customers). These contracts may be fixed price or cost-reimbursable. The Company considers all contracts for treatment in accordance with authoritative guidance for contracts with multiple deliverables.

Revenue arrangements with multiple deliverables should be divided into separate units of accounting if the deliverables have value to the customer on a stand-alone basis; there is objective and reliable evidence of the fair value of the undelivered item(s); and, if the arrangement includes a general right of return, delivery or performance of the undelivered item(s) is considered probable and substantially in the control of the vendor. The Company occasionally enters into arrangements that consist of installation and repair contracts associated with hardware sold by the Company. Such arrangements consist of separate contractual arrangements and are divided into separate units of accounting where the delivered item has value to the customer on a stand- alone basis and there is objective and reasonable evidence of the fair value of the installation contract. Consideration is allocated among the separate units of accounting based on their relative fair values.

Product sales revenue is composed of revenue recognized on contracts for the delivery of production hardware and related activities. Contract services revenue is composed of revenue recognized on contracts for the provision of services, including repairs, training, engineering design, development and prototyping activities.

Revenue from cost-plus-fee contracts are recognized on the basis of costs incurred during the period plus the fee earned. Revenue from fixed-price contracts are recognized on the percentage-of-completion method. Contract costs include all direct material and labor costs and those

indirect costs related to contract performance. Unbilled receivables represent costs incurred and related profit on contracts not yet billed to customers, and are invoiced in subsequent periods.

Product sales revenue is recognized on the percentage-of-completion method or upon transfer of title to the customer, which is generally upon shipment. Shipping and handling costs incurred are included in cost of sales.

Revenue and profits on fixed-price production contracts, where units are produced and delivered in a continuous or sequential process, are recorded as units are delivered based on their selling prices (the "units-of-delivery method"). Revenue and profits on other fixed-price contracts with significant engineering as well as production requirements are recorded based on the ratio of total actual incurred costs to date to the total estimated costs for each contract (the "cost-to-cost method"). Accounting for revenue and profits on a fixed-price contract requires the preparation of estimates of (1) the total contract revenue, (2) the total costs at completion, which is equal to the sum of the actual incurred costs to date on the contract and the estimated costs to complete the contract's statement of work and (3) the measurement of progress towards completion. The estimated profit or loss at completion on a contract is equal to the difference between the total estimated contract revenue and the total estimated cost at completion. Under the units-of-delivery method, sales on a fixed-price type contract are recorded as the units are delivered during the period based on their contractual selling prices. Under the cost-to-cost method, sales on a fixed-price type contract are recorded at amounts equal to the ratio of actual cumulative costs incurred divided by total estimated costs at completion, multiplied by (i) the total estimated contract revenue, less (ii) the cumulative sales recognized in prior periods. The profit recorded on a contract in any period using either the units-of-delivery method or cost-to-cost method is equal to (i) the current estimated total profit margin multiplied by the cumulative sales recognized, less (ii) the amount of cumulative profit previously recorded for the contract. In the case of a contract for which the total estimated costs exceed the total estimated revenue, a loss arises, and a provision for the entire loss is recorded in the period that it becomes evident. The unrecoverable costs on a loss contract that are expected to be incurred in future periods are recorded in the program cost.

Significant management judgments and estimates must be made and used in connection with the recognition of revenue in any accounting period. Material differences in the amount of revenue in any given period may result if these judgments or estimates prove to be incorrect or if management's estimates change on the basis of development of the business, market conditions or other factors. Management judgments and estimates have been applied consistently and have been reliable historically.

Stock-Based Compensation

Stock-based compensation is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is generally the vesting period of the respective award. No compensation cost is ultimately recognized for awards for which employees do not render the requisite service and are forfeited.

Long-Term Incentive Awards

For long-term incentive awards, a target payout is established at the beginning of each performance period. The actual payout at the end of the performance period is calculated based upon the Company's achievement of revenue and operating profit growth. Payouts are made in cash and restricted stock units. Upon vesting of the restricted stock units, the Company has the discretion to settle the restricted stock units in cash or stock.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The cash component of the award is accounted for as a liability. The equity component is accounted for as a stock-based liability, as the restricted stock units may be settled in cash or stock. At each reporting period, the Company reassesses the probability of achieving the performance targets. The estimation of whether the performance targets will be achieved requires judgment, and, to the extent actual results or updated estimates differ from the Company's current estimates, the cumulative effect on current and prior periods of those changes will be recorded in the period estimates are revised. Upon settlement of these awards, the total compensation expense recorded over the vesting period of the awards will equal the settlement amount, which is based on the Company's stock price on the vesting date.

Research and Development

Internally funded research and development costs, or IRAD, sponsored by the Company relate to both U.S. government products and services and those for commercial and foreign customers. IRAD costs for the Company are recoverable and allocable under government contracts in accordance with U.S. government procurement regulations.

Customer-funded research and development costs are incurred pursuant to contracts (revenue arrangements) to perform research and development activities according to customer specifications. These costs are direct contract costs and are expensed to cost of sales when the corresponding revenue is recognized, which is generally as the research and development services are performed. Revenue from customer-funded research and development was approximately $33,952,000, $80,552,000 and $66,321,000 for the years ended April 30, 2011, 2010 and 2009, respectively. The related costs of sales for customer-funded research and development totaled approximately $33,003,000, $56,532,000 and $46,493,000 for the years ended April 30, 2011, 2010 and 2009, respectively.

Lease Accounting

The Company accounts for its leases and subsequent amendments as operating leases or capital leases for financial reporting purposes. Certain operating leases contain rent escalation clauses, which are recorded on a straight-line basis over the initial term of the lease with the difference between the rent paid and the straight-line rent recorded as a deferred rent liability. Lease incentives received from landlords are recorded as deferred rent liabilities and are amortized on a straight-line basis over the lease term as a reduction to rent expense. Deferred rent liabilities were approximately $1,275,000 and $1,268,000 as of April 30, 2011 and 2010, respectively.

Advertising Costs

Advertising costs consist of tradeshows and other marketing activities, and are expensed as incurred. Advertising expenses included in selling, general and administrative expenses were approximately $979,000, $994,000 and $549,000 for the years ended April 30, 2011, 2010 and 2009, respectively.

Earnings Per Share

Basic earnings per share are computed using the weighted-average number of common shares outstanding and excludes any anti-dilutive effects of options and restricted stock. The dilutive effect of potential common shares outstanding is included in diluted earnings per share.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The reconciliation of diluted to basic shares is as follows:

	Year Ended April 30,		
	2011	2010	2009
Numerator for basic earnings per share:			
Net income	$ 25,909,000	$ 20,716,000	$ 24,245,000
Denominator for basic earnings per share:			
Weighted average common shares	21,591,333	21,391,795	21,023,590
Dilutive effect of employee stock options and restricted stock	489,933	585,569	752,137
Denominator for diluted earnings per share	22,081,266	21,977,364	21,775,727

During the years ended April 30, 2011, 2010 and 2009, certain options and shares of restricted stock were not included in the computation of diluted earnings per share because their inclusion would have been anti-dilutive. The number of options and restricted stock which met this anti-dilutive criterion was approximately 36,000, 70,000 and 104,000 for the years ended April 30, 2011, 2010 and 2009, respectively.

Recently Issued Accounting Standards

In January 2010, the Financial Accounting Standards Board ("FASB") issued fair value guidance requiring new disclosures and clarification of existing disclosures for assets and liabilities that are measured at fair value on either a recurring or non-recurring basis. The guidance requires disclosure of transfer activity into and out of Level 1 and Level 2 fair value measurements and also requires more detailed disclosure about the activity within Level 3 fair value measurements. The majority of the requirements in this guidance are effective for interim and annual periods beginning after December 15, 2009. Requirements related to Level 3 disclosures are effective for interim and annual periods beginning after December 15, 2010. The Company does not expect that the adoption of the guidance will have a material impact on the Company's consolidated financial statements.

2. Investments

Investments consist of the following:

	April 30,	
	2011	2010
	(In thousands)	
Short-term investments:		
Held-to-maturity securities:		
U.S. Treasury bills	$ 126,839	$ 135,770
Total short-term investments	$ 126,839	$ 135,770
Long-term investments:		
Available-for-sale securities:		
Auction rate securities	$ 6,275	$ 6,515
Total long-term investments	$ 6,275	$ 6,515

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Held-To-Maturity Securities

As of April 30, 2011 and 2010, the balance of held-to-maturity securities consisted of U.S. Treasury bills. Interest earned from these investments is recorded in interest income.

The amortized cost, gross unrealized losses, and estimated fair value of the held-to-maturity investments as of April 30, is as follows (in thousands):

	2011				2010			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury bills	$ 126,839	$ 38	$ (3)	$ 126,874	$ 135,770	$ 5	$ (3)	$ 135,772
Total held-to-maturity investments	$ 126,839	$ 38	$ (3)	$ 126,874	$ 135,770	$ 5	$ (3)	$ 135,772

The amortized cost and fair value of the Company's held-to-maturity securities by contractual maturity at April 30, 2011, are as follows:

	Cost	Fair Value
Due within one year	$ 126,839	$ 126,874
Total	$ 126,839	$ 126,874

Available-For-Sale Securities

As of April 30, 2011 and 2010, the entire balance of available-for-sale securities consisted of four investment grade auction rate municipal bonds with maturities ranging from 8 to 23 years. These investments have characteristics similar to short-term investments, because at pre-determined intervals, generally ranging from 30 to 35 days, there is a new auction process at which the interest rates for these securities are reset to current interest rates. At the end of such period, the Company chooses to roll-over its holdings or redeem the investments for cash. A market maker facilitates the redemption of the securities and the underlying issuers are not required to redeem the investment within 365 days. Interest earned from these investments is recorded in interest income.

During the fourth quarter of the fiscal year ended April 30, 2008, the Company began experiencing failed auctions on some of its auction rate securities. A failed auction occurs when a buyer for the securities cannot be obtained and the market maker does not buy the security for its own account. The Company continues to earn interest on the investments that failed to settle at auction, at the maximum contractual rate until the next auction occurs. In the event the Company needs to access funds invested in these auction rate securities, the Company may not be able to liquidate these securities at the fair value recorded on April 30, 2011 until a future auction of these securities is successful or a buyer is found outside of the auction process.

As a result of the failed auctions, the fair values of these securities are estimated utilizing a discounted cash flow analysis as of April 30, 2011 and 2010. The analysis considers, among other items, the collateralization underlying the security investments, the creditworthiness of the counterparty, the timing of expected future cash flows, and the expectation of the next time the security is expected to have a successful auction.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Based on the Company's ability to access its cash and cash equivalents, expected operating cash flows, and other sources of cash, the Company does not anticipate the current lack of liquidity on these investments will affect its ability to operate the business in the ordinary course. The Company believes the current lack of liquidity of these investments is temporary and expects that the securities will be redeemed or refinanced at some point in the future. The Company will continue to monitor the value of its auction rate securities at each reporting period for a possible impairment if a further decline in fair value occurs. The auction rate securities have been in an unrealized loss position for more than 12 months. The Company has the ability and the intent to hold these investments until a recovery of fair value, which may be maturity and as of April 30, 2011, it did not consider these investments to be other-than-temporarily impaired.

The amortized cost, gross unrealized losses, and estimated fair value of the available-for-sale investments is as follows (in thousands):

	April 30,	
	2011	2010
Auction rate securities		
Amortized cost	$ 7,575	$ 7,775
Gross unrealized gains	—	—
Gross unrealized losses	(1,300)	(1,260)
Fair value	$ 6,275	$ 6,515

The amortized cost and fair value of the Company's auction rate securities by contractual maturity at April 30, 2011 are as follows (in thousands):

	Cost	Fair Value
Due after five through 10 years	$ 1,975	$ 1,792
Due after 10 years	5,600	4,483
Total	$ 7,575	$ 6,275

3. Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The fair value hierarchy contains three levels as follows:

- Level 1—Inputs to the valuation based upon quoted prices (unadjusted) for identical assets or liabilities in active markets that are accessible as of the measurement date.

- Level 2—Inputs to the valuation include quoted prices in either markets that are not active, or in active markets for similar assets or liabilities, inputs other than quoted prices that are observable, and inputs that are derived principally from or corroborated by observable market data.

- Level 3—Inputs to the valuation that are unobservable inputs for the asset or liability.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company's financial assets measured at fair value on a recurring basis at April 30, 2011, were as follows (in thousands):

	Fair Value Measurement Using			
Description	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Auction rate securities	$ —	$ —	$ 6,275	$ 6,275
Total	$ —	$ —	$ 6,275	$ 6,275

The following table provides a reconciliation between the beginning and ending balances of items measured at fair value on a recurring basis in the table above that used significant unobservable inputs (Level 3) (in thousands):

Description	Fair Value Measurements Using Significant Unobservable Inputs (Level 3) Auction Rate Securities
Balance at May 1, 2010	$ 6,515
Transfers to Level 3	—
Total losses (realized or unrealized)	
Included in earnings	—
Included in other comprehensive income	(40)
Purchases, issuances and settlements, net	(200)
Balance at April 30, 2011	$ 6,275
The amount of total gains or (losses) for the period included in earnings (or change in net assets) attributable to the change in unrealized gains or losses relating to assets still held at April 30, 2011	$ —

The auction rate securities are valued using a discounted cash flow model. The analysis considers, among other items, the collateralization underlying the security investments, the creditworthiness of the counterparty, the timing of expected future cash flows, and the expectation of the next time the security is expected to have a successful auction.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. Inventories, net

Inventories consist of the following:

	April 30,	
	2011	2010
	(In thousands)	
Raw materials	$ 13,737	$ 6,629
Work in process	7,994	6,336
Finished goods	17,647	9,154
Inventories, gross	39,378	22,119
Reserve for inventory obsolescence	(1,241)	(1,191)
Inventories, net	$ 38,137	$ 20,928

5. Property and Equipment, net

Property and equipment consist of the following:

	April 30,	
	2011	2010
	(In thousands)	
Leasehold improvements	$ 8,207	$ 7,804
Machinery and equipment	27,370	25,512
Furniture and fixtures	2,370	2,164
Computer equipment and software	11,758	7,197
Construction in process	3,111	2,347
Property and equipment, gross	52,816	45,024
Less accumulated depreciation and amortization	(35,318)	(24,999)
Property and equipment, net	$ 17,498	$ 20,025

At April 30, 2011, an analysis of the Company's long-lived assets related to the Global Observer customer-funded R&D contract indicated impairment. On April 14, 2011, the Company received a stop-work order for the Global Observer Joint Capabilities Technology Demonstration contract due to the contract essentially reaching its funding limit. As a result of the stop-work order, the carrying value of this asset group, primarily consisting of tooling, test and manufacturing support equipment, may not be recoverable over the remaining useful life of such assets. Accordingly, the Company completed an impairment test in accordance with the accounting policy for this asset group, which resulted in an impairment charge of $2,043,000 that was recorded in cost of sales for contract services. To determine the amount of the impairment charge, the Company was required to make estimates of the fair value of the assets in this group, and these estimates were based on the use of the income approach to determine the fair value of the equipment. The Company considers these assets "held and used."

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. Warranty Reserves

Warranty reserve activity is summarized as follows:

	April 30,	
	2011	2010
	(In thousands)	
Beginning balance	$ 804	$ 523
Warranty expense	1,449	1,512
Warranty costs incurred	(1,126)	(1,231)
Ending balance	$ 1,127	$ 804

7. Employee Savings Plan

The Company has an employee 401(k) savings plan covering all eligible employees. The Company expensed approximately $2,401,000, $1,995,000 and $1,790,000 in contributions to the plan for the years ended April 30, 2011, 2010 and 2009, respectively.

8. Stock-Based Compensation

For the years ended April 30, 2011, 2010 and 2009, the Company recorded stock-based compensation expense of approximately $2,306,000, $1,654,000 and $926,000, respectively.

On January 14, 2007, the stockholders of the Company approved the 2006 Equity Incentive Plan, or 2006 Plan, effective January 21, 2007, for officers, directors, key employees and consultants. Under the 2006 Plan, incentive stock options, nonqualified stock options, restricted stock awards, stock appreciation right awards, performance share awards, performance stock unit awards, dividend equivalents awards, stock payment awards, deferred stock awards, restricted stock unit awards, other stock-based awards, performance bonus awards or performance-based awards may be granted at the discretion of a committee, which consists of outside directors. A maximum of 3,684,157 shares of stock may be issued pursuant to awards under the 2006 Plan. The maximum number of shares of common stock with respect to one or more awards that may be granted to any one participant during any twelve month period is 950,000. A maximum of $9,500,000 may be paid in cash as a performance-based award during any twelve month period. The exercise price for any incentive stock option shall not be less than 100% of the fair market value on the date of grant. Vesting of awards is established at the time of grant.

The Company had an equity incentive plan, or 2002 Plan, for officers, directors and key employees. Under the 2002 Plan, incentive stock options or nonqualified stock options were granted, as determined by the administrator at the time of grant. Stock purchase rights were also granted under the 2002 Plan. Options under the 2002 Plan were granted at their fair market value (as determined by the board of directors). The options become exercisable at various times over a five-year period from the grant date. The 2002 Plan was terminated on the effective date of the 2006 Plan. Awards outstanding under the 2002 Plan remain outstanding and exercisable; no additional awards may be made under the 2002 Plan.

The Company had a 1992 nonqualified stock option plan, or 1992 Plan, for certain officers and key employees. Options under the 1992 Plan were granted at their fair market value (as determined by the board of directors) at the date of grant and became exercisable at various times over a five-year period from the grant date. The 1992 Plan expired in August 2002.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The fair value of stock options granted was estimated at the grant date using the Black-Scholes option pricing model with the following weighted average assumptions for the years ended April 30, 2011, 2010 and 2009:

	Year Ended April 30,		
	2011	2010	2009
Expected term (in years)	5.00	5.00	5.84
Expected volatility	24.72%	24.16%	20.83%
Risk-free interest rate	2.08%	2.43%	2.33%
Expected dividend	—	—	—
Weighted average fair value at grant date	$ 6.48	$ 6.44	$ 6.66

The expected term of stock options represents the weighted average period the Company expects the stock options to remain outstanding, based on the Company's historical exercise and post-vesting cancellation experience and the remaining contractual life of its outstanding options.

The expected volatility is based on peer group volatility in the absence of historical market data for the Company's stock. The peer group volatility was derived based on historical volatility of a comparable peer group index consisting of companies operating in a similar industry.

The risk free interest rate is based on the implied yield on a U.S. Treasury zero-coupon bond with a remaining term that approximates the expected term of the option.

The expected dividend yield of zero reflects that the Company has not paid any cash dividends since inception and does not anticipate paying cash dividends in the foreseeable future.

Information related to the stock option plans at April 30, 2011, 2010 and 2009, and for the years then ended is as follows:

	2006 Plan		2002 Plan		1992 Plan	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at April 30, 2008	379,310	$ 21.86	1,077,477	$ 2.20	626,895	$ 0.49
Options granted	160,000	25.34	—	—	—	—
Options exercised	(20,100)	21.35	(445,606)	1.13	(224,731)	0.51
Options canceled	(22,000)	22.27	(48,563)	2.66	—	—
Outstanding at April 30, 2009	497,210	22.98	583,308	2.97	402,164	0.48
Options granted	75,000	24.68	—	—	—	—
Options exercised	(18,800)	20.76	(171,169)	2.55	(15,164)	0.59
Options canceled	(60,200)	22.71	(7,038)	5.99	—	—
Outstanding at April 30, 2010	493,210	23.36	405,101	3.10	387,000	0.48
Options granted	72,500	24.91	—	—	—	—
Options exercised	(17,500)	22.27	(35,634)	5.67	(67,427)	0.41
Options canceled	(12,800)	27.25	(1,408)	11.79	—	—
Outstanding at April 30, 2011	535,410	23.51	368,059	2.81	319,573	0.49
Options exercisable at April 30, 2011	220,536	$ 22.94	350,814	$ 2.37	319,573	$ 0.49

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The total intrinsic value of all options exercised during the years ended April 30, 2011, 2010 and 2009 was approximately $2,904,000, $5,581,000, and $21,177,000, respectively. The intrinsic value of all options outstanding at April 30, 2011 and 2010 was $21,445,000 and $21,046,000, respectively. The intrinsic value of all exercisable options at April 30, 2011 and 2010, was $19,544,000 and $17,971,000, respectively.

A summary of the status of the Company's non-vested stock options as of April 30, 2011 and the year then ended is as follows:

Non-vested Options	Shares	Weighted Average Grant Date Fair Value
Non-vested at April 30, 2010	440,786	$ 6.78
Granted	72,500	6.48
Expired	(1,408)	4.12
Canceled	(4,800)	7.91
Vested	(174,959)	6.63
Non-vested at April 30, 2011	332,119	$ 6.76

As of April 30, 2011, there was approximately $6,275,000 of total unrecognized compensation cost related to non-vested share-based compensation awards granted under the equity plans. That cost is expected to be recognized over an approximately five-year period or a weighted average period of approximately four years.

The weighted average fair value of options issued for the years ended April 30, 2011, 2010 and 2009 was $6.48, $6.44 and $6.66, respectively. The total fair value of shares vesting during the years ended April 30, 2011, 2010 and 2009 was $1,111,000, $780,000 and $637,000, respectively.

Proceeds from all option exercises under all stock option plans for the years ended April 30, 2011, 2010 and 2009 were approximately $619,000, $836,000 and $1,049,000, respectively. The tax benefit realized from stock-based compensation during the years ended April 30, 2011, 2010 and 2009 was approximately $1,238,000, $3,010,000, and $12,004,000, respectively.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following tabulation summarizes certain information concerning outstanding and exercisable options at April 30, 2011:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	As of April 30, 2011	Weighted Average Remaining Contractual Life In Years	Weighted Average Exercise Price	As of April 30, 2011	Weighted Average Exercise Price
$ 0.37	142,406	2.97	$ 0.37	142,406	$ 0.37
0.59	177,167	8.50	0.59	177,167	0.59
0.64-0.78	199,638	2.12	0.72	199,638	0.72
2.13-19.76	178,421	4.86	6.10	157,176	5.13
19.90-22.15	159,000	6.79	20.95	78,200	20.97
22.38-23.25	192,510	7.23	22.70	94,936	22.64
23.42-32.19	173,900	7.96	26.96	41,400	27.79
$ 0.37-32.19	1,223,042	5.79	$ 11.27	890,923	$ 6.79

The remaining weighted average contractual life of exercisable options at April 30, 2011 was 5.12 years.

Information related to the Company's restricted stock awards at April 30, 2011 and for the year then ended is as follows:

	2006 Plan	
	Shares	Weighted Average Grant Date Fair Value
Unvested stock at April 30, 2010	190,600	$ 24.36
Stock granted	98,910	25.34
Stock vested	(46,000)	24.25
Stock canceled	(2,000)	31.76
Unvested stock at April 30, 2011	241,510	$ 24.72

9. Long-Term Incentive Awards

During the year ended April 30, 2011, the Company granted two performance awards under the 2006 Plan to key employees, a two-year and three-year performance award. The performance periods for the two-year and three-year awards are the two-year and three-year periods ending April 30, 2012 and 2013, respectively. A target payout was established at the beginning of each performance period. The actual payout at the end of each performance period will be calculated based upon the Company's achievement of revenue and operating profit growth. Payouts will be made in cash and restricted stock units. Upon vesting of the restricted stock units, the Company has the discretion to settle the restricted stock units in cash or stock.

The cash component of the award is accounted for as a liability. The equity component is accounted for as a stock-based liability, as the restricted stock units may be settled in cash or stock. At each reporting period, the Company reassesses the probability of achieving the performance targets.

The estimation of whether the performance targets will be achieved requires judgment, and, to the extent actual results or updated estimates differ from the Company's current estimates, the cumulative effect on current and prior periods of those changes will be recorded in the period estimates are revised. Upon settlement of these awards, the total compensation expense recorded over the vesting period of the awards will equal the settlement amount, which is based on the Company's stock price on the vesting date.

During the year ended April 30, 2011, the Company recorded compensation expense of $762,000 and $0 related to the two-year and three-year awards, respectively. As there were no performance awards granted in prior years, there was no compensation expense for the years ended April 30, 2010 and 2009. At April 30, 2011, the Company accrued $762,000 and $0 for the two-year and three-year performance awards, respectively. The maximum compensation expense that may be recorded for the two-year and three-year awards is $5,436,000 and $5,617,000, respectively.

10. Income Taxes

A reconciliation of income tax expense computed using the U.S. federal statutory rates to actual income tax expense is as follows:

	Year Ended April 30,		
	2011	2010	2009
U.S. federal statutory income tax rate	35.0%	35.0%	35.0%
State and local income taxes, net of federal benefit	1.1	1.9	2.2
R&D credits	(11.3)	(2.3)	(7.6)
Other	(0.5)	(3.5)	(1.3)
Effective income tax rate	24.3%	31.1%	28.3%

The components of the provision for income taxes are as follows (in thousands):

	Year ended April 30,		
	2011	2010	2009
Current:			
Federal	$ 8,660	$ 8,663	$ 13,793
State	641	1,229	471
	9,301	9,892	14,264
Deferred:			
Federal	859	492	(2,105)
State	(1,836)	(900)	(2,600)
Foreign	—	(105)	—
	(977)	(513)	(4,705)
Change in valuation allowance	(5)	(13)	(7)
Total income tax expense	$ 8,319	$ 9,366	$ 9,552

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Significant components of the Company's deferred income tax assets are as follows (in thousands):

	April 30, 2011	April 30, 2010
Deferred income tax assets:		
Book over tax depreciation	$ 449	$ 567
Accrued expenses	7,743	4,991
Allowances, reserves, and other	322	1,330
Capital loss and credit carry-forwards	3,076	3,357
Unrealized loss on securities	530	521
Total deferred income tax assets, gross	12,120	10,766
Less: valuation allowance	(58)	(63)
Total deferred income tax assets, net	$ 12,062	$ 10,703

At April 30, 2011 and 2010, the Company had approximately $4,655,000 and $5,052,000, respectively, of unrecognized tax benefits all of which would impact the Company's effective tax rate if recognized. The Company estimates that $588,000 of its unrecognized tax benefits will decrease in the next twelve months due to statute of limitation expiration.

The following table summarizes the activity related to our gross unrecognized tax benefits for the years ended April 30, 2011 and 2010 (in thousands):

	April 30, 2011	April 30, 2010
Balance as of May 1	$ 5,052	$ 5,663
Increases related to prior year tax positions	371	123
Decreases related to prior year tax positions	(145)	(406)
Increases related to current year tax positions	1,208	927
Decreases related to lapsing of statute of limitations	(1,831)	(1,255)
Balance as of April 30	$ 4,655	$ 5,052

The Company records interest and penalties on uncertain tax positions to income tax expense. As of April 30, 2011 and April 30, 2010, the Company had accrued approximately $207,000 and $710,000, respectively, of interest and penalties related to uncertain tax positions. The Company is currently under audit by various state jurisdictions but does not anticipate any material adjustments from these examinations. The tax years 2009 and 2010 remain open to examination by the IRS for federal income taxes. The tax years 2005 to 2010 remain open for major state taxing jurisdictions.

11. Related Party Transactions

Pursuant to a consulting agreement, the Company paid a board member approximately $210,000, $222,000 and $216,000 during the years ended April 30, 2011, 2010 and 2009, respectively, for consulting services independent of his board service. The agreement stipulates the payment of $17,500 plus expenses per month, in exchange for consulting services.

During the year ended April 30, 2011, the Company purchased materials in the amount of $1,674,000 from a vendor with a common board member. As of April 30, 2011, the Company had a

trade payable of $654,000 to this vendor. There were no significant transactions with this vendor during the years ended April 30, 2010 and 2009.

During the year ended April 30, 2010, the Company made an equipment sale in the amount of $1,705,000 to a customer with a common board member. There were no sales to this customer during the years ended April 30, 2011 and 2009. As of April 30, 2010, there was no trade receivable due from this customer.

12. Commitments and Contingencies

Commitments

The Company's operations are conducted in leased facilities. Following is a summary of non-cancelable operating lease commitments:

	Year ending April 30 (In thousands)
2012	$ 3,844
2013	3,133
2014	3,087
2015	1,844
2016	960
Thereafter	44
	$ 12,912

Rental expense under operating leases was approximately $3,812,000, $3,660,000 and $3,348,000 for the years ended April 30, 2011, 2010 and 2009, respectively.

Contingencies

The Company is subject to legal proceedings and claims which arise out of the ordinary course of its business. Although adverse decisions or settlements may occur, the Company, in consultation with legal counsel, believes that the final disposition of such matters will not have a material adverse effect on the consolidated financial position, results of operations or cash flows of the Company.

Contract Cost Audits

Payments to the Company on government cost reimbursable contracts are based on provisional, or estimated indirect rates, which are subject to an annual audit by the Defense Contract Audit Agency, or DCAA. The cost audits result in the negotiation and determination of the final indirect cost rates that the Company may use for the period(s) audited. The final rates, if different from the provisional rates, may create an additional receivable or liability for the Company.

For example, during the course of its audits, the DCAA may question the Company's incurred costs, and if the DCAA believes the Company has accounted for such costs in a manner inconsistent with the requirements under Federal Acquisition Regulations, or FAR, the DCAA auditor may recommend to the Company's administrative contracting officer to disallow such costs. Historically, the Company has not experienced material disallowed costs as a result of government audits. However, the Company can provide no assurance that the DCAA or other government audits will not result in material disallowances for incurred costs in the future.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company's revenue recognition policy calls for revenue recognized on all cost reimbursable government contracts to be recorded at actual rates unless collectability is not reasonably assured.

13. Segment Data

The Company's product segments are as follows:

- Unmanned Aircraft Systems ("UAS")—The UAS segment focuses primarily on the design, development, production and support of innovative UAS that provide situational awareness and other mission effects to increase the security and operational effectiveness of the Company's customers.

- Efficient Energy Systems ("EES")—The EES segment focuses primarily on the design, development, production and support of innovative efficient electric energy systems that address the growing demand for electric transportation solutions.

The accounting policies of the segments are the same as those described in Note 1, "Organization and Significant Accounting Policies." The operating segments do not make sales to each other. Depreciation and amortization related to the manufacturing of goods is included in gross margin for the segments. The Company does not discretely allocate assets to its operating segments, nor does the CODM evaluate operating segments using discrete asset information. Consequently, the Company operates its financial systems as a single segment for accounting and control purposes, maintains a single indirect rate structure across all segments, has no inter-segment sales or corporate elimination transactions, and maintains only limited financial statement information by segment.

The segment results are as follows (in thousands):

	Year Ended April 30,		
	2011	2010	2009
Revenue:			
UAS	$ 249,769	$ 224,179	$ 211,364
EES	42,734	25,339	36,298
Total	292,503	249,518	247,662
Gross margin:			
UAS	99,513	85,157	70,968
EES	17,638	11,669	17,629
Total	117,151	96,826	88,597
Selling, general and administrative	47,431	42,429	34,246
Research and development	35,769	24,510	21,798
Income from operations	33,951	29,887	32,553
Interest income	277	195	1,244
Income before income taxes	$ 34,228	$ 30,082	$ 33,797

Geographic Information

Sales to non-U.S. customers accounted for 7.0% of revenue for each of the fiscal years ended April 30, 2011, 2010 and 2009.

AEROVIRONMENT, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Quarterly Results of Operations (Unaudited)

The following tables present selected unaudited consolidated financial data for each of the eight quarters in the two-year period ended April 30, 2011. In the Company's opinion, this unaudited information has been prepared on the same basis as the audited information and includes all adjustments (consisting of only normal recurring adjustments) necessary for a fair statement of the financial information for the period presented. The Company's fiscal year ends on April 30. Due to the fixed year end date of April 30, the first and fourth quarters each consist of approximately 13 weeks. The second and third quarters each consist of 13 weeks. The first three quarters end on a Saturday.

	Three Months Ended			
	July 31, 2010	October 30, 2010	January 29, 2011	April 30, 2011
	(In thousands except per share data)			
Year ended April 30, 2011				
Revenue	$ 38,228	$ 63,781	$ 84,434	$ 106,060
Gross margin	$ 12,036	$ 21,775	$ 34,129	$ 49,211
Net (loss) income	$ (3,443)	$ 262	$ 11,454	$ 17,636
Net (loss) income per share—basic(1)	$ (0.16)	$ 0.01	$ 0.53	$ 0.81
Net (loss) income per share—diluted(1)	$ (0.16)	$ 0.01	$ 0.52	$ 0.79

	Three Months Ended			
	August 1, 2009	October 31, 2009	January 30, 2010	April 30, 2010
	(In thousands except per share data)			
Year ended April 30, 2010				
Revenue	$ 37,940	$ 51,367	$ 60,861	$ 99,350
Gross margin	$ 10,715	$ 19,649	$ 23,481	$ 42,981
Net (loss) income	$ (3,587)	$ 2,216	$ 6,515	$ 15,572
Net (loss) income per share—basic(1)	$ (0.17)	$ 0.10	$ 0.30	$ 0.72
Net (loss) income per share—diluted	$ (0.17)	$ 0.10	$ 0.30	$ 0.71

(1) Earnings per share is computed independently for each of the quarters presented. The sums of the quarterly earnings per share do not equal the total earnings per share computed for the year due to rounding.

SUPPLEMENTARY DATA
SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

Description	Balance at Beginning of Period	Additions		Deductions	Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts		
			(In thousands)		
Allowance for doubtful accounts for the year ended April 30:					
2009	$ 220	$ 183	$ —	$ (112)	$ 291
2010	$ 291	$ 601	$ —	$ (147)	$ 745
2011	$ 745	$ 492	$ —	$ (598)	$ 639
Warranty reserve for the year ended April 30:					
2009	$ 344	$ 1,182	$ —	$ (1,003)	$ 523
2010	$ 523	$ 1,512	$ —	$ (1,231)	$ 804
2011	$ 804	$ 1,449	$ —	$ (1,126)	$ 1,127
Reserve for inventory excess and obsolescence for the year ended April 30:					
2009	$ 1,541	$ 491	$ —	$ (643)	$ 1,389
2010	$ 1,389	$ 434	$ —	$ (632)	$ 1,191
2011	$ 1,191	$ 579	$ —	$ (529)	$ 1,241
Reserve for self-insured medical claims for the year ended April 30:					
2009	$ 399	$ 3,758	$ —	$ (3,477)	$ 680
2010	$ 680	$ 5,170	$ —	$ (4,836)	$ 1,014
2011	$ 1,014	$ 7,322	$ —	$ (7,438)	$ 898

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

Not applicable.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. As required by Rule 13a-15(b) under the Exchange Act, we have carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective and were operating at a reasonable level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company;

- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and

- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of management, including our principal executive and financial officers, we assessed our internal control over financial reporting as of April 30, 2011, based on criteria for effective internal control over financial reporting established in *Internal Control—Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway

Commission (COSO). Based on this assessment, management concluded that the Company maintained effective internal control over financial reporting as of April 30, 2011 based on the specified criteria.

The effectiveness of our internal control over financial reporting as of April 30, 2011 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Item 9B. Other Information.

None.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of AeroVironment, Inc. and Subsidiaries

We have audited AeroVironment Inc.'s internal control over financial reporting as of April 30, 2011, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). AeroVironment Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, AeroVironment, Inc. maintained, in all material respects, effective internal control over financial reporting as of April 30, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of AeroVironment, Inc. and subsidiaries as of April 30, 2011 and 2010, and the related consolidated statements of income, stockholders' equity, and cash flows for each of the three years in the period ended April 30, 2011 of AeroVironment, Inc. and subsidiaries and our report dated June 21, 2011 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Los Angeles, California
June 21, 2011

PART III

Item 10. Directors, Executive Officers, and Corporate Governance.

Certain information required by Item 401 and Item 405 of Regulation S-K will be included in the Proxy Statement for our 2011 Annual Meeting of Stockholders, and that information is incorporated by reference herein.

Codes of Ethics

We have adopted a Code of Business Conduct and Ethics, or Code of Conduct. The Code of Conduct is posted on our website, http://investor.avinc.com. We intend to disclose on our website any amendments to, or waivers of, the Code of Conduct covering our Chief Executive Officer, Chief Financial Officer and/or Controller promptly following the date of such amendments or waivers. A copy of the Code of Conduct may be obtained upon request, without charge, by contacting our Secretary at (626) 357-9983 or by writing to us at AeroVironment, Inc., Attn: Secretary, 181 W. Huntington Dr., Suite 202, Monrovia, CA 91016. The information contained or connected to our website is not incorporated by reference into this annual report on Form 10-K and should not be considered part of this or any reported filed with the SEC.

No family relationships exist among any of our executive officers or directors.

There have been no material changes to the procedures by which security holders may recommend nominees to our board of directors.

The information required by Item 407(d)(4) and (5) of Regulation S-K will be included in the Proxy Statement for our 2011 Annual Meeting of Stockholders, and that information is incorporated by reference herein.

Item 11. Executive Compensation.

The information required by Item 402 and Item 407(e)(4) and (5) of Regulation S-K will be included in the Proxy Statement for our 2011 Annual Meeting of Stockholders, and that information is incorporated by reference herein.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by Item 201(d) and Item 403 of Regulation S-K will be included in the Proxy Statement for our 2011 Annual Meeting of Stockholders, and that information is incorporated by reference herein.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by Item 404 and Item 407(a) of Regulation S-K will be included in the Proxy Statement for our 2011 Annual Meeting of Stockholders, and that information is incorporated by reference herein.

Item 14. Principal Accounting Fees and Services.

The information required by Item 14 will be included in the Proxy Statement for our 2011 Annual Meeting of Stockholders, and that information is incorporated by reference herein.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following are filed as part of this Annual Report on Form 10-K:

1. Financial Statements

The following consolidated financial statements are included in Item 8:

- Report of Independent Registered Public Accounting Firm
- Consolidated Balance Sheets at April 30, 2011 and 2010
- Consolidated Statements of Income for the Years ended April 30, 2011, 2010 and 2009
- Consolidated Statements of Stockholders' Equity for the Years ended April 30, 2011, 2010 and 2009
- Consolidated Statements of Cash Flows for the Years ended April 30, 2011, 2010 and 2009
- Notes to Consolidated Financial Statements

2. Financial Statement Schedules

The following Schedule is included in Item 8:

- Schedule II—Valuation and Qualifying Accounts

All other schedules have been omitted since the required information is not present, or not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements or the Notes thereto.

Exhibits—See Item 15(b) of this report below.

(b) Exhibits

Exhibit Number	Exhibit
3.1(1)	Amended and Restated Certificate of Incorporation of AeroVironment, Inc.
3.3(2)	Second Amended and Restated Bylaws of AeroVironment, Inc.
4.1(3)	Form of AeroVironment, Inc.'s Common Stock Certificate
10.1#(3)	Form of Director and Executive Officer Indemnification Agreement
10.2#(3)	AeroVironment, Inc. Nonqualified Stock Option Plan
10.3#(3)	Form of Nonqualified Stock Option Agreement pursuant to the AeroVironment, Inc. Nonqualified Stock Option Plan
10.4#(3)	AeroVironment, Inc. Directors' Nonqualified Stock Option Plan
10.5#(3)	Form of Directors' Nonqualified Stock Option Agreement pursuant to the AeroVironment, Inc. Directors' Nonqualified Stock Option Plan
10.6#(3)	AeroVironment, Inc. 2002 Equity Incentive Plan
10.7#(3)	Form of AeroVironment, Inc. 2002 Equity Incentive Plan Stock Option Agreement
10.8#(3)	AeroVironment, Inc. 2006 Equity Incentive Plan
10.9#(3)	Form of Stock Option Agreement pursuant to the AeroVironment, Inc. 2006 Equity Incentive Plan
10.10#(3)	Form of Performance Based Bonus Award pursuant to the AeroVironment, Inc. 2006 Equity Incentive Plan
10.11#(4)	Form of Long-Term Compensation Award Grant Notice and Long-Term Compensation Award Agreement pursuant to the AeroVironment, Inc. 2006 Equity Incentive Plan
10.12(5)	Standard Industrial/Commercial Single-Tenant Lease, dated February 12, 2007, between AeroVironment, Inc. and OMP Industrial Moreland, LLC, for the property located at 85 Moreland Road, Simi Valley, California, including the addendum thereto

Exhibit Number	Exhibit
10.13(6)	Standard Industrial/Commercial Single-Tenant Lease, dated March 3, 2008, between AeroVironment, Inc. and Hillside Associates III, LLC, for the property located at 900 Enchanted Way, Simi Valley, California, including the addendum thereto
10.14(6)	Standard Industrial/Commercial Single-Tenant Lease, dated April 21, 2008, between AeroVironment, Inc. and Hillside Associates II, LLC, for the property located at 994 Flower Glen Street, Simi Valley, California, including the addendum thereto
10.15†(3)	AV Direct Project Request, dated July 7, 2005, between AeroVironment, Inc. and Marine Corps System Command
10.16†(3)	Award Contract, dated December 22, 2005, between AeroVironment, Inc. and Marine Corps System Command
10.17†(7)	Award Contract, dated August 15, 2005, between AeroVironment, Inc. and U.S. Army Aviation & Missile Command
10.18†(3)	Award Contract, dated September 21, 2004, between AeroVironment, Inc. and Natick Contracting Division
10.19†(3)	Award Contract, dated January 2, 2004, between AeroVironment, Inc. and U.S. Army Aviation & Missile Command
10.20†(8)	Award Contract, dated September 24, 2007, between AeroVironment, Inc. and United States Special Operations Command, as amended
10.21†(9)	Award Contract, dated December 22, 2006, between AeroVironment, Inc. and the United States Air Force/Air Force Research Laboratory, Aeronautical Systems Center, as amended
10.22#(2)	Standard Consulting Agreement, dated November 1, 2008, between AeroVironment, Inc. and Charles R. Holland
10.23(10)	Amendment No. 2 to Standard Consulting Agreement, dated December 17, 2009, between AeroVironment, Inc. and Charles R. Holland
10.24(10)	Task Order #FY-10-001, dated December 17, 2009, between AeroVironment, Inc. and Charles R. Holland
10.25#(3)	Retiree Medical Plan
10.26†(11)	Award Contract, dated June 30, 2008, between AeroVironment, Inc. and United States Special Operations Command, as amended
10.27†	Award Contract, dated March 1, 2011, between AeroVironment, Inc. and United States Army Contracting Command
21.1	Subsidiaries of AeroVironment, Inc.
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm
24.1	Power of Attorney (incorporated by reference to the signature page of this report on Form 10-K)
31.1	Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934
31.2	Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(1) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q filed March 9, 2007 (File No. 001-33261).

(2) Incorporated by reference herein to the exhibits on the Company's Annual Report on Form 10-K filed June 24, 2009 (File No. 001-33261).

(3) Incorporated by reference herein to the exhibits to the Company's Registration Statement on Form S-1 (File No. 333-137658).

(4) Incorporated by reference herein to the exhibits to the Company's Current Report on Form 8-K filed July 28, 2010 (File No. 001-33261).

(5) Incorporated by reference herein to the exhibits on the Company's Annual Report on Form 10-K filed June 29, 2007 (File No. 001-33261).

(6) Incorporated by reference herein to the exhibits to the Company's Annual Report on Form 10-K filed June 26, 2008 (File No. 001-33261).

(7) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q filed March 10, 2010 (File No. 001-33261).

(8) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q filed December 6, 2007 (File No. 001-33261).

(9) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q filed March 4, 2008 (File No. 001-33261).

(10) Incorporated by reference herein to the exhibits to the Company's Current Report on Form 8-K filed December 22, 2009 (File No. 001-33261).

(11) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q filed September 10, 2008 (File No. 001-33261).

† Confidential treatment has been requested for portions of this exhibit.

# Indicates management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AEROVIRONMENT, INC.

Date: June 21, 2011

/s/ TIMOTHY E. CONVER

By: Timothy E. Conver
Its: Chairman, Chief Executive Officer and President
(Principal Executive Officer)

KNOW ALL PERSONS BY THESE PRESENTS, that each of the persons whose signature appears below hereby constitutes and appoints Timothy E. Conver and Jikun Kim, each of them acting individually, as his attorney-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming our signatures as they may be signed by our said attorney-in-fact and any and all amendments to this Annual Report on Form 10-K.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Name	Title	Date
/s/ TIMOTHY E. CONVER Timothy E. Conver	Chairman, President and Chief Executive Officer and Director (Principal Executive Officer)	June 21, 2011
/s/ JIKUN KIM Jikun Kim	Chief Financial Officer (Principal Financial and Accounting Officer)	June 21, 2011
/s/ JOSEPH F. ALIBRANDI Joseph F. Alibrandi	Director	June 21, 2011
/s/ KENNETH R. BAKER Kenneth R. Baker	Director	June 21, 2011
/s/ ARNOLD L. FISHMAN Arnold L. Fishman	Director	June 21, 2011
/s/ MURRAY GELL-MANN Murray Gell-Mann	Director	June 21, 2011
/s/ CHARLES R. HOLLAND Charles R. Holland	Director	June 21, 2011

Exhibit 10.27

CERTAIN MATERIAL (INDICATED BY AN ASTERISK [***]) HAS BEEN OMITTED FROM THIS DOCUMENT PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

AWARD/CONTRACT	1. This Contract Is A Rated Order Under DPAS (15 CFR 700)	Rating DOA2	Page 1 of 40 Pages
2. Contract (Proc. Inst. Ident.) No. W31P4Q-11-D-0032	3. Effective Date 2011MAR01	4. Requisition/Purchase Request/Project No. SEE SCHEDULE	

5. Issued By Code W31P4Q

US ARMY CONTRACTING COMMAND
CCAM-AP-C
VALERIE L TIPTON (256) 313-4106
AMCOM CONTRACTING CENTER
REDSTONE ARSENAL AL 35898-5280

e-mail address: VALERIE.TIPTON@US.ARMY.MIL

6. Administered By (If Other Than Item 5) Code S0512A

DCMA LOS ANGELES
PO BOX 9608
MISSION HILLS CA 91346-9608

SCD C **PAS** NONE **ADP PT** HQ0339

7. Name And Address Of Contractor (No., Street, City, County, State and Zip Code)

AEROVIRONMENT, INC.
181 W HUNTINGTON DR STE 202
MONROVIA, CA 91016-1456

TYPE BUSINESS: Other Small Business Performing in U.S.

Code 60107 Facility Code

8. Delivery

o **FOB Origin** **x Other (See Below)**

9. Discount For Prompt Payment

10. Submit Invoices (4 Copies Unless Otherwise Specified) To The Address Shown In: Item 12

11. Ship To/Mark For Code
SEE SCHEDULE

12. Payment Will Be Made By Code HQ0339

DFAS-COLUMBUS CENTER
DFAS-CO WEST ENTITLEMENT OPERATIONS
P.O. BOX 182381
COLUMBUS, OH 43218-2301

13. Authority For Using Other Than Full And Open Competition:

o **10 U.S.C. 2304(c)( )** **o 41 U.S.C. 253(c)( )**

14. Accounting And Appropriation Data

15A. Item No.	15B. Supplies/Services	15C. Quantity	15D. Unit	15E. Unit Price	15F. Amount
SEE SCHEULE	CONTRACT TYPE: Cost-Plus-Fixed-Fee	KIND OF CONTRACT: Research and Development Contracts			

Contract Expiration Date: 2016FEB28

15G. Total Amount Of Contract $0.00

16. Table Of Contents

(X)	Sec.	Description	Page(s)	(X)	Sec.	Description	Page(s)
		Part I — The Schedule				**Part II — Contract Clauses**	
X	A	Solicitation/Contract Form	1	X	I		28
X	B	Supplies or Services and Prices/Costs	3			**Part III — List of Documents, Exhibits, And Other Attachments**	
X	C	Description/Specs./Work Statement	9	X	J	List of Attachments	40
X	D	Packaging and Marking	19			**Part IV — Representations And Instructions**	
X	E	Inspection and Acceptance	20		K	Representations, Certifications, and Other Statements of Offerors	
X	F	Deliveries or Performance	21				
X	G	Contract Administration Data	22		L	Instrs., Conds., and Notices to Offerors	
X	H	Special Contract Requirements	24		M	Evaluation Factors for Award	

Contracting Officer Will Complete Item 17 Or 18 As Applicable

17. x Contractor's Negotiated Agreement (Contractor Is required to sign this document and return 2 signed **copies to issuing office.) Contractor agrees to furnish and deliver all items or performed all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein).**

18. o Award (Contractor Is not required to sign this document.) Your offer on Solicitation Number , including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

19A. Name And Title Of Signer (Type Or Print)

AEROVIRONMENT, INC.
[***]

20A. Name Of Contracting Officer

TONYA WOOD
TONYA.WOODS@US.ARMY.MIL (256) 876-2112

19B. Name of Contractor	19C. Date Signed	20B. United States Of America	20C. Date Signed
By /SIGNED/ (Signature of person authorized to sign)	2011MAR01	By /SIGNED/ (Signature of person authorized to sign)	2011MAR01

AUTHORIZED FOR LOCAL REPRODUCTION

Standard Form 26 (Rev.4/2008)
Prescribed by GSA — FAR (48 CFR) 53.21 4(a)

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SECTION A - SUPPLEMENTAL INFORMATION

	Regulatory Cite	Title	Date
A-1	52.248-4702	NOTICE REGARDING TECHNOLOGY IMPROVEMENTS (USAAMCOM)	JUN/1997

The Army is actively soliciting improved technology ideas for weapon systems. Be on notice that the VECP clause in this contract allows contractors to share in both instant and long term savings for technology improvements. You are encouraged to take advantage of this vehicle for change.

(End of clause)

A-3 EXECUTIVE SUMMARY

This contract provides services to develop, integrate, and flight demonstrate critical component and system-level performance of small organic precision munitions. The Contracting Officer has determined that use of an Indefinite Delivery Indefinite Quantity (IDIQ) Task Order type contract with provisions for issuance of a cost plus fixed fee level of effort task order is the most appropriate and advantageous strategy for providing services to the Weapons Development and Integration (WDI) Directorate. Individual requirements will be solicited, negotiated and awarded as task orders during the term of the contract. The minimum guarantee for the contract is $114,627.00 with a maximum ceiling in the amount of $39,267,040.00.

A-4 NOTICE: SOLICITATION/TASK ORDER OMBUDSMAN

The U.S. Army Aviation and Missile Command (AMCOM) has established the office of Solicitation/Task Order Ombudsman to assist industry in removing unnecessary and burdensome requirements from AMCOM solicitation and task orders.

If you feel that this contract or any task order issued under this contract contains improper elements or can be further streamlined to promote more efficient use of taxpayer dollars, you should first identify these issues to the Procuring Contracting Officer (PCO). If the PCO is unable to resolve your concerns satisfactorily, or cannot do so in a timely manner, you are encouraged to call the AMCOM Ombudsman at (256) 876-6659. The PCO/Ombudsman should be advised of any deficiency at least five (5) days prior to solicitation or task order closing date. Your may also write to the following:

Commander, U.S. Army Aviation and Missile Command
Solicitation/Task Order Ombudsman
ATTN: AMSAM-OM (Randy Richardson)
Redstone Arsenal

*** END OF NARRATIVE A0001 ***

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

0001 LMAMS LABOR HR

SECURITY CLASS: Unclassified

MINIMUM	TO	MAXIMUM
[***] Hours		[***] Hours

This CLIN is to support the requirement specified in the PWS which is incorporated via Attachment 0001. This is an Indefinite Quantity Contract in accordance with FAR Clause 52.216-22. Funds will be obligated upon the issuance of each Task Order. The Government will be obligated upon the issuance of each task order. The Government will only be obligated to order the initial task quantity. The Government is not obligated to issue any additional orders against this contract; however, the government reserves the right to order up to the total maximum quantity of the contract.

The Government's minimum quantity to be awarded simultaneously with the award of the contract is the [***] labor hours for Task 0001. The Government's maximum quantity is [***] labor hours for the complete requirement (all tasks).

The level of effort required to support the requirement specified in the SOW (Attachment 0001) is shown below:

Direct Labor**	$	[***]
Fixed Fee	$	[***]
Total CPFF	$	[***]

**Amount shown includes labor, labor overhead, G&A and fee.

(End of narrative B001)

Inspection and Acceptance
INSPECTION: Destination ACCEPTANCE: Destination

The period of performance is five (5) years after contract award.

(End of narrative F001)

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

0002 LMAMS MATERIAL LO

SECURITY CLASS: Unclassified

$[***]

Material purchases will be on a cost reimbursable no fee basis. This CLIN represents material necessary/ incidental in the performance of the Performance Work Statement which is incorporated via Attachment 0001.

Total Material $[***]

Amount shown include material, material overhead and G&A costs on material.

(End of narrative B001)

Inspection and Acceptance
INSPECTION: Destination ACCEPTANCE: Destination

The period of performance is five (5) years after contract award.

(End of narrative F001)

0003 LMAMS TRAVEL LO

SECURITY CLASS: Unclassified

$[***]

Travel will be on a cost reimbursable no fee basis. This CLIN represents travel necessary to perform the various tasks called out in the Performance Work Statement which is incorporated via Attachment 0001.

Total Travel $[***]

Amount shown include travel and G&A costs on travel.

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(End of narrative B001)

Inspection and Acceptance
INSPECTION: Destination ACCEPTANCE: Destination

The period of performance is five (5) years after contract award.

(End of narrative F001)

0004 LMAMS CONTRACTOR MANPOWER REPORTING LO $ ** NSP ** $ ** NSP **

SECURITY CLASS: Unclassified

Reference Performance Work Statement, Attachment 0001 for Contractor Manpower Reporting implementation language.

(End of narrative B001)

Inspection and Acceptance
INSPECTION: Destination ACCEPTANCE: Destination

The period of performance is five (5) years after contract award.

(End of narrative F001)

0005	LMAMS CONTRACT DATA REQUIREMENT LIST	LO	$ ** NSP **	$	** NSP **

SECURITY CLASS: Unclassified

Data and reports in accordance with the Contract Data Requirements List,
DD Form 1423, Exhibit A.

(End of narrative B001)

Inspection and Acceptance
INSPECTION: Destination ACCEPTANCE: Destination

The period of performance is five (5) years after

contract award.

(End of narrative F001)

	Regulatory Cite	Title	Date
B-1	52.209-4709	ATTAINMENT OF OBJECTIVES (USAAMCOM)	JUN/1997

The quality and depth of effort required for the attainment of the objectives of this contract shall be performed by personnel possessing not less than the level of qualifications proposed by the contractor and considered by the Government in the award of this contract.

(End of Clause)

B-2 AUTHORIZED ORDERING AGENCIES

a. The following Government Agencies are authorized to issue task/delivery orders under this Indefinite Delivery-Indefinite Quantity contract:

Army Contracting Command- Redstone

Redstone Arsenal, AL 35898

b. The U.S. Army Contracting Command, Army Contracting Command-Redstone may modify this Indefinite Quantity contract with a modification authorizing or deleting additional ordering agencies.

B-3 ESTIMATED COST, FIXED FEE AND PAYMENT

In consideration for its undertakings under the resulting contract, the Government shall pay to the Contractor the cost thereof determined by the Contracting Officer to be allowable and a fixed fee on labor, subject to the following:

a. The cost of labor for performing this contract (including all tasks) shall be reimbursed in accordance with the clauses entitled “Allowable Cost and Payment” and “Fixed Fee” of the General Provisions (Section I) of this contract. The fixed fee for the basic award is set forth in this section. The fixed fee per hour amount shall be set forth in each task order in which labor hours are purchased. Such fee shall be paid as it accrues in monthly and/or bi-monthly installments. Each installment, thus payable, shall be based upon the number of labor hours incurred and billed during such period. The maximum available fixed fee is based upon the number of hours awarded, with fixed fee being paid only for hours actually worked.

b. The cost of material and travel for performing this contract (including all tasks) shall be reimbursed in accordance with the clause entitled “Allowable Cost and Payment” of the General Provisions (Section I) of the resulting contract. No fixed fee shall be paid on material or travel. Domicile to workplace travel will not be an allowable cost.

c. Indirect Costs: Interim reimbursable for Indirect Costs shall be on the basis of the billing rates as agreed upon between the Contractor and the Cognizant Administrative Contracting Officer. Final rates will be determined by audit.

B-4 ESTIMATED COST SCHEDULE

a. The estimated total cost (less Fixed Fee) of the resulting contract (including labor, material, travel and any ODC) is $[***]. Fixed Fee, applicable to labor cost only, pursuant to paragraph B-2 above, is $[***]. The estimated cost and fee associated with the task shall be stated in the task order in which the task is awarded. Pricing of the task order shall be as stated in B-2 above.

b. The “Limitation of Cost” (FAR 52.232-20) clause of the General Provisions, Section I, shall apply to the above estimated total cost of the contract and to the total estimated cost of each task. It is agreed that the notice required by paragraph (b) of FAR 52.232-20, “Limitation of Cost” shall be made at the

individual task cost level rather than the total contract cost level.

B-5 CONTRACT CEILING

The total contract ceiling for this Indefinite Delivery Indefinite Quantity/Cost Contract is $39,267,040.00. The contract ceiling for each CLIN is as follows:

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

CLIN 0001	Labor	$	[***]
CLIN 0002	Material	$	[***]
CLIN 0003	Travel	$	[***]
CLIN 0004	CMR	$	[***]
CLIN 0005	CDRL	$	[***]

*** END OF NARRATIVE B0002 ***

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

	Regulatory Cite	Title	Date
C-1	52.223-4701	NOTICE TO OFFERORS - USE OF CLASS I OZONE-DEPLETING SUBSTANCES (ASSISTANT SECRETARY OF THE ARMY RDA) (USAAMCOM)	JUN/1993

(a) In accordance with Section 326 of P.L. 102-484, the Government is prohibited from awarding any contract which includes a specification or standard that requires the use of a Class I ozone-depleting substance (ODS) identified in Section 602(a) of the Clean Air Act, (42 U.S.C. 767a(1), or that can be met only through the use of such a substance unless such use has been approved, on an individual basis, by a senior acquisition official who determines that there is no suitable substitute available.

(b) To comply with this statute, the Government has conducted a best efforts screening of the specifications and standards associated with this acquisition to determine whether they contain any ODS requirements. To the extent that ODS requirements were revealed by this review they are identified below with the disposition determined in each case.

(c) If offerors possess any special knowledge about any other ODSs required directly or indirectly at any level of contract performance, the U.S. Army would appreciate if such information was surfaced to the Contracting Officer for appropriate action. To preclude delay to the procurement, offerors should provide any information as soon as possible after release of the solicitation and prior to the submission of offers to the extent practicable. It should be understood that there is no obligation on offerors to comply with this request and that no compensation can be provided for doing so.

ODS Identified	Specification/Standard	Disposition
None	None	None

(End of Clause)

C-2	52.222-4700	CONTRACTOR EMPLOYEES (USAAMCOM)	JUN/1997

a. The Government shall not exercise supervision or control over contractor employees performing services under this contract. Such contractor employees shall be accountable, not to the Government, but solely to the contractor who, in turn, shall be accountable to the Government.

b. Contractor employees must conform to local and other applicable regulations. Contractor shall take appropriate personnel action as required in the event employees become involved with civilian or military law enforcement authorities.

(End of Clause)

C-3	52.246-4707	SUBCONTRACT WARRANTY (USAAMCOM)	JUN/1997

The contractor agrees to extend to the Government any warranty(s) received from any subcontractor as a result of any work performed under orders issued against this agreement. The contractor shall not bargain for warranties nor include the cost of such warranties in the contract price unless such subcontracts are approved by the PCO.

(End of Clause)

C-4 SERVICES TO BE PERFORMED UNDER STATEMENT OF WORK

The services to be performed shall be in accordance with Attachment 0001, Statement of Work (SOW), entitled "Technology Development and Integration Program for a Lethal Miniature Aerial Munition System" and other documents set forth in Section J - List of Attachments. Attachment 0001 is the general Statement of Work to be followed. Each task order issued will have a Statement of Work within the framework of Attachment 0001.

*** END OF NARRATIVE C0001 ***

C-6 WAGE DETERMINATION - APPLICABLE TO SERVICE CONTRACT ACT OF 1965 AS AMENDED

Any employees proposed in response to the solicitation that are governed by the Service Contract Act will be paid in accordance with the applicable wage determination for the county and state in which the work is performed. Below is the wage determination anticipated to be incorporated into the resulting contract which includes the counties that govern Los Angeles, Orange:

WD 05-2047 (Rev.-9) was first posted on www.wdol.gov on 06/02/2009

****

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Shirley F. Ebbesen
Director

Division of
Wage Determinations

Wage Determination No.: 2005-2047
Revision No.: 9
Date Of Revision: 05/26/2009

State: California

Area: California Counties of Los Angeles, Orange
OCCUPATION NOTES:

Heating, Air Conditioning and Refrigeration: Wage rates and fringe benefits can be found on Wage Determinations 1986-0879.

Laundry: Wage rates and fringe benefits can be found on Wage Determination 1977-1297.

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	FOOTNOTE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		14.59
01012 - Accounting Clerk II		16.38
01013 - Accounting Clerk III		18.61
01020 - Administrative Assistant		26.82
01040 - Court Reporter		19.38
01051 - Data Entry Operator I		12.05
01052 - Data Entry Operator II		13.15
01060 - Dispatcher, Motor Vehicle		22.41
01070 - Document Preparation Clerk		13.66
01090 - Duplicating Machine Operator		13.66
01111 - General Clerk I		10.69
01112 - General Clerk II		14.92
01113 - General Clerk III		16.67
01120 - Housing Referral Assistant		21.90

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01141 - Messenger Courier		10.62
01191 - Order Clerk I		16.98
01192 - Order Clerk II		18.53
01261 - Personnel Assistant (Employment) I		17.26
01262 - Personnel Assistant (Employment) II		19.31
01263 - Personnel Assistant (Employment) III		22.26
01270 - Production Control Clerk		23.51
01280 - Receptionist		14.51

01290 - Rental Clerk	15.10
01300 - Scheduler, Maintenance	16.84
01311 - Secretary I	16.84
01312 - Secretary II	19.17
01313 - Secretary III	21.90
01320 - Service Order Dispatcher	19.54
01410 - Supply Technician	26.82
01420 - Survey Worker	19.38
01531 - Travel Clerk I	14.25
01532 - Travel Clerk II	15.43
01533 - Travel Clerk III	16.57
01611 - Word Processor I	15.03
01612 - Word Processor II	16.87
01613 - Word Processor III	18.76
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	22.94
05010 - Automotive Electrician	21.60
05040 - Automotive Glass Installer	20.29
05070 - Automotive Worker	20.29
05110 - Mobile Equipment Servicer	18.66
05130 - Motor Equipment Metal Mechanic	22.94
05160 - Motor Equipment Metal Worker	20.29
05190 - Motor Vehicle Mechanic	22.94
05220 - Motor Vehicle Mechanic Helper	17.90
05250 - Motor Vehicle Upholstery Worker	19.86
05280 - Motor Vehicle Wrecker	20.29
05310 - Painter, Automotive	21.60
05340 - Radiator Repair Specialist	20.29
05370 - Tire Repairer	15.47
05400 - Transmission Repair Specialist	22.94
07000 - Food Preparation And Service Occupations	
07010 - Baker	12.21
07041 - Cook I	12.91
07042 - Cook II	14.31
07070 - Dishwasher	9.89
07130 - Food Service Worker	10.85
07210 - Meat Cutter	15.92
07260 - Waiter/Waitress	9.85
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	18.59
09040 - Furniture Handler	12.42
09080 - Furniture Refinisher	18.59
09090 - Furniture Refinisher Helper	14.82
09110 - Furniture Repairer, Minor	17.04
09130 - Upholsterer	18.59
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	11.19
11060 - Elevator Operator	11.19
11090 - Gardener	17.46
11122 - Housekeeping Aide	11.44
11150 - Janitor	13.27
11210 - Laborer, Grounds Maintenance	13.09
11240 - Maid or Houseman	9.36
11260 - Pruner	13.27
11270 - Tractor Operator	15.57
11330 - Trail Maintenance Worker	13.09
11360 - Window Cleaner	15.03

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

12000 - Health Occupations	
12010 - Ambulance Driver	17.82
12011 - Breath Alcohol Technician	17.82
12012 - Certified Occupational Therapist Assistant	26.03
12015 - Certified Physical Therapist Assistant	25.97
12020 - Dental Assistant	16.41
12025 - Dental Hygienist	38.30
12030 - EKG Technician	26.48
12035 - Electroneurodiagnostic Technologist	26.48
12040 - Emergency Medical Technician	17.82

12071 - Licensed Practical Nurse I		16.75
12072 - Licensed Practical Nurse II		18.77
12073 - Licensed Practical Nurse III		22.42
12100 - Medical Assistant		14.82
12130 - Medical Laboratory Technician		19.73
12160 - Medical Record Clerk		15.93
12190 - Medical Record Technician		17.82
12195 - Medical Transcriptionist		17.59
12210 - Nuclear Medicine Technologist		34.87
12221 - Nursing Assistant I		9.63
12222 - Nursing Assistant II		10.82
12223 - Nursing Assistant III		11.81
12224 - Nursing Assistant IV		13.26
12235 - Optical Dispenser		16.65
12236 - Optical Technician		15.71
12250 - Pharmacy Technician		17.34
12280 - Phlebotomist		13.26
12305 - Radiologic Technologist		24.54
12311 - Registered Nurse I		30.80
12312 - Registered Nurse II		37.68
12313 - Registered Nurse II, Specialist		37.68
12314 - Registered Nurse III		45.63
12315 - Registered Nurse III, Anesthetist		45.63
12316 - Registered Nurse IV		54.69
12317 - Scheduler (Drug and Alcohol Testing)		22.81
13000 - Information And Arts Occupations		
13011 - Exhibits Specialist I		24.83
13012 - Exhibits Specialist II		30.76
13013 - Exhibits Specialist III		37.63
13041 - Illustrator I		25.31
13042 - Illustrator II		31.37
13043 - Illustrator III		38.35
13047 - Librarian		30.36
13050 - Library Aide/Clerk		16.49
13054 - Library Information Technology Systems Administrator		26.57
13058 - Library Technician		21.38
13061 - Media Specialist I		18.51
13062 - Media Specialist II		20.69
13063 - Media Specialist III		23.07
13071 - Photographer I		17.95
13072 - Photographer II		20.08
13073 - Photographer III		26.61
13074 - Photographer IV		33.56
13075 - Photographer V		40.61
13110 - Video Teleconference Technician		18.25
14000 - Information Technology Occupations		
14041 - Computer Operator I		17.32
14042 - Computer Operator II		19.38
14043 - Computer Operator III		22.89
14044 - Computer Operator IV		25.73
14045 - Computer Operator V		25.80
14071 - Computer Programmer I	(see 1)	24.93
14072 - Computer Programmer II	(see 1)	
14073 - Computer Programmer III	(see 1)	

14074 - Computer Programmer IV	(see 1)	
14101 - Computer Systems Analyst I	(see 1)	
14102 - Computer Systems Analyst II	(see 1)	
14103 - Computer Systems Analyst III	(see 1)	
14150 - Peripheral Equipment Operator		17.32
14160 - Personal Computer Support Technician		25.73
15000 - Instructional Occupations		
15010 - Aircrew Training Devices Instructor (Non-Rated)		34.08
15020 - Aircrew Training Devices Instructor (Rated)		41.23
15030 - Air Crew Training Devices Instructor (Pilot)		49.43
15050 - Computer Based Training Specialist / Instructor		34.08
15060 - Educational Technologist		32.81
15070 - Flight Instructor (Pilot)		49.43
15080 - Graphic Artist		25.66
15090 - Technical Instructor		23.72
15095 - Technical Instructor/Course Developer		29.02

15110 - Test Proctor	19.15
15120 - Tutor	19.15
19000 - Machine Tool Operation And Repair Occupations	
19010 - Machine-Tool Operator (Tool Room)	18.52
19040 - Tool And Die Maker	23.95
21000 - Materials Handling And Packing Occupations	
21020 - Forklift Operator	14.46
21030 - Material Coordinator	23.51
21040 - Material Expediter	23.51
21050 - Material Handling Laborer	13.02
21071 - Order Filler	13.31
21080 - Production Line Worker (Food Processing)	14.46
21110 - Shipping Packer	15.08
21130 - Shipping/Receiving Clerk	15.08
21140 - Store Worker I	11.30
21150 - Stock Clerk	16.13
21210 - Tools And Parts Attendant	14.46
21410 - Warehouse Specialist	14.46
23000 - Mechanics And Maintenance And Repair Occupations	
23010 - Aerospace Structural Welder	30.78
23021 - Aircraft Mechanic I	29.10
23022 - Aircraft Mechanic II	30.78
23023 - Aircraft Mechanic III	31.94
23040 - Aircraft Mechanic Helper	20.38
23050 - Aircraft, Painter	24.41
23060 - Aircraft Servicer	23.55
23080 - Aircraft Worker	24.58
23110 - Appliance Mechanic	19.52
23120 - Bicycle Repairer	15.47
23125 - Cable Splicer	29.85
23130 - Carpenter, Maintenance	27.29
23140 - Carpet Layer	19.20
23160 - Electrician, Maintenance	30.18
23181 - Electronics Technician Maintenance I	23.38
23182 - Electronics Technician Maintenance II	24.90
23183 - Electronics Technician Maintenance III	26.53
23260 - Fabric Worker	23.38
23290 - Fire Alarm System Mechanic	20.30
23310 - Fire Extinguisher Repairer	18.25
23311 - Fuel Distribution System Mechanic	25.48
23312 - Fuel Distribution System Operator	19.48
23370 - General Maintenance Worker	23.26
23380 - Ground Support Equipment Mechanic	29.10
23381 - Ground Support Equipment Servicer	23.55
23382 - Ground Support Equipment Worker	24.58
23391 - Gunsmith I	18.25
23392 - Gunsmith II	21.11
23393 - Gunsmith III	23.87
23430 - Heavy Equipment Mechanic	26.97

23440 - Heavy Equipment Operator	31.04
23460 - Instrument Mechanic	25.70
23465 - Laboratory/Shelter Mechanic	22.49
23470 - Laborer	12.49
23510 - Locksmith	18.81
23530 - Machinery Maintenance Mechanic	24.65
23550 - Machinist, Maintenance	25.41
23580 - Maintenance Trades Helper	14.82
23591 - Metrology Technician I	25.70
23592 - Metrology Technician II	27.13
23593 - Metrology Technician III	29.73
23640 - Millwright	25.45
23710 - Office Appliance Repairer	20.86
23760 - Painter, Maintenance	21.05
23790 - Pipefitter, Maintenance	23.40
23810 - Plumber, Maintenance	22.04
23820 - Pneudraulic Systems Mechanic	23.87
23850 - Rigger	26.81
23870 - Scale Mechanic	21.11
23890 - Sheet-Metal Worker, Maintenance	22.13
23910 - Small Engine Mechanic	18.70
23931 - Telecommunications Mechanic I	24.92

23932 - Telecommunications Mechanic II		26.39
23950 - Telephone Lineman		24.18
23960 - Welder, Combination, Maintenance		19.75
23965 - Well Driller		23.18
23970 - Woodcraft Worker		21.73
23980 - Woodworker		16.81
24000 - Personal Needs Occupations		
24570 - Child Care Attendant		13.05
24580 - Child Care Center Clerk		16.03
24610 - Chore Aide		10.57
24620 - Family Readiness And Support Services Coordinator		15.39
24630 - Homemaker		19.21
25000 - Plant And System Operations Occupations		
25010 - Boiler Tender		26.22
25040 - Sewage Plant Operator		26.21
25070 - Stationary Engineer		26.22
25190 - Ventilation Equipment Tender		18.34
25210 - Water Treatment Plant Operator		26.21
27000 - Protective Service Occupations		
27004 - Alarm Monitor		23.77
27007 - Baggage Inspector		12.80
27008 - Corrections Officer		29.13
27010 - Court Security Officer		30.28
27030 - Detection Dog Handler		23.77
27040 - Detention Officer		29.13
27070 - Firefighter		29.97
27101 - Guard I		12.80
27102 - Guard II		23.77
27131 - Police Officer I		35.71
27132 - Police Officer II		39.68
28000 - Recreation Occupations		
28041 - Carnival Equipment Operator		12.76
28042 - Carnival Equipment Repairer		13.74
28043 - Carnival Equipment Worker		9.67
28210 - Gate Attendant/Gate Tender		14.09
28310 - Lifeguard		13.26
28350 - Park Attendant (Aide)		15.76
28510 - Recreation Aide/Health Facility Attendant		11.11
28515 - Recreation Specialist		18.75
28630 - Sports Official		12.55
28690 - Swimming Pool Operator		16.97
29000 - Stevedoring/Longshoremen Occupational Services		

29010 - Blocker And Bracer		21.53
29020 - Hatch Tender		21.53
29030 - Line Handler		21.53
29041 - Stevedore I		20.46
29042 - Stevedore II		22.93
30000 - Technical Occupations		
30010 - Air Traffic Control Specialist, Center (HFO)	(see 2)	39.06
30011 - Air Traffic Control Specialist, Station (HFO)	(see 2)	27.98
30012 - Air Traffic Control Specialist, Terminal (HFO)	(see 2)	29.66
30021 - Archeological Technician I		20.47
30022 - Archeological Technician II		22.01
30023 - Archeological Technician III		31.33
30030 - Cartographic Technician		31.33
30040 - Civil Engineering Technician		28.07
30061 - Drafter/CAD Operator I		22.60
30062 - Drafter/CAD Operator II		25.28
30063 - Drafter/CAD Operator III		28.18
30064 - Drafter/CAD Operator IV		34.68
30081 - Engineering Technician I		18.14
30082 - Engineering Technician II		20.37
30083 - Engineering Technician III		22.78
30084 - Engineering Technician IV		28.23
30085 - Engineering Technician V		34.88
30086 - Engineering Technician VI		41.77
30090 - Environmental Technician		25.20
30210 - Laboratory Technician		21.03
30240 - Mathematical Technician		30.84
30361 - Paralegal/Legal Assistant I		21.17

30362 - Paralegal/Legal Assistant II		26.22
30363 - Paralegal/Legal Assistant III		32.07
30364 - Paralegal/Legal Assistant IV		38.81
30390 - Photo-Optics Technician		30.84
30461 - Technical Writer I		23.03
30462 - Technical Writer II		28.18
30463 - Technical Writer III		34.09
30491 - Unexploded Ordnance (UXO) Technician I		24.82
30492 - Unexploded Ordnance (UXO) Technician II		30.03
30493 - Unexploded Ordnance (UXO) Technician III		36.00
30494 - Unexploded (UXO) Safety Escort		24.82
30495 - Unexploded (UXO) Sweep Personnel		24.82
30620 - Weather Observer, Combined Upper Air Or Surface Programs	(see 2)	27.65
30621 - Weather Observer, Senior	(see 2)	30.72
31000 - Transportation/Mobile Equipment Operation Occupations		
31020 - Bus Aide		13.63
31030 - Bus Driver		19.62
31043 - Driver Courier		12.90
31260 - Parking and Lot Attendant		8.83
31290 - Shuttle Bus Driver		14.07
31310 - Taxi Driver		12.03
31361 - Truckdriver, Light		14.07
31362 - Truckdriver, Medium		20.63
31363 - Truckdriver, Heavy		21.78
31364 - Truckdriver, Tractor-Trailer		21.78
99000 - Miscellaneous Occupations		
99030 - Cashier		12.13
99050 - Desk Clerk		12.65
99095 - Embalmer		21.08
99251 - Laboratory Animal Caretaker I		10.66
99252 - Laboratory Animal Caretaker II		11.63
99310 - Mortician		34.35
99410 - Pest Controller		15.17
99510 - Photofinishing Worker		14.87

99710 - Recycling Laborer	19.12
99711 - Recycling Specialist	22.43
99730 - Refuse Collector	17.05
99810 - Sales Clerk	15.57
99820 - School Crossing Guard	9.51
99830 - Survey Party Chief	34.71
99831 - Surveying Aide	19.43
99832 - Surveying Technician	25.56
99840 - Vending Machine Attendant	12.77
99841 - Vending Machine Repairer	14.67
99842 - Vending Machine Repairer Helper	12.77

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $3.35 per hour or $134.00 per week or $580.66 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year’s Day, Martin Luther King Jr’s Birthday, Washington’s Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans’ Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than $27.63 (or on a salary or fee basis at a rate not less than $455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541. 400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds $27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

(1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

(2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;

(3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or

(4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of “wash and wear” materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the “Service Contract Act Directory of Occupations”, Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

*** END OF NARRATIVE C0002 ***

SECTION D - PACKAGING AND MARKING

	Regulatory Cite	Title	Date
D-1	52.208-4700	REPLACEMENT PRESERVATIVE FOR PENTACHLOROPHENOL (USAAMCOM)	JUN/1997

If packaging requirements of this contract specify the use of wood products and a preservative is required, Pentachlorophenol, commonly referred to as "Penta" or "PCP" is prohibited. Replacement preservatives are 2 percent copper naphthenate, 3 percent zinc naphthenate or 1.8 percent copper 8 quinolinolate.

(End of clause)

D-2	52.208-4701	WOOD PACKING MATERIALS REQUIREMENTS	JUL/2007

A. Wood packaging material (WPM) means wood pallets, skids, load boards, pallet collars, wooden boxes, reels, dunnage, crates, frame and cleats. The definition excludes materials that have undergone a manufacturing process, such as corrugated fiberboard, plywood, particleboard, veneer, and oriented strand board (OSD).

B. All Wood Packaging Material (WPM)) acquired by DOD must meet requirements of International Standards for Phytosanitary Measures (ISPM) 15, "Guidelines for Regulating Wood Packaging Materials International Trade." DOD shipments inside and outside of the United States must meet ISPM 15 whenever WPM is used to ship DOD cargo.

(1) All WPM shall comply with the official quality control program for heat treatment (HT) or kiln dried heat treatment (KD HT) in accordance with American Lumber Standard Committee, incorporated (ALSC) Wood Packaging Material Program and WPM Enforcement Regulations (see http://www.alsc.org/).

(2) All WPM shall include certification/quality markings in accordance with the ALSC standard. Marking shall be placed in an unobstructed area that will be readily visible to inspectors. Pallet markings shall be applied to the stringer or block on diagonally opposite sides of the pallet and be contrasting and clearly visible. All containers shall be marked on a side other than the top or bottom, contrasting and clearly visible. All dunnage used in configuring and/or securing the load shall also comply with ISPM 15 and be marked with an ALSC approved DUNNAGE stamp.

C. Failure to comply with the requirements of this restriction may result in refusal, destruction, or treatment at entry. The Agency reserves the right to recoup from the Contractor any remediation costs incurred by the Government.

D. Replacement Preservative for Pentachlorophenol

If packaging requirements of this contract specify the use of wood products and a preservative is required, Pentachlorophenol, commonly referred to as "Penta" or "PCP" is prohibited. Replacement preservatives are 2 percent copper naphthenate, 3 percent zinc naphthenate or 1.8 percent copper 8 quinolinolate.

(1) Heat Treatment: Boxes/pallets and any wood used as inner packaging made of non-manufactured wood shall be heat-treated. All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall be affiliated with an inspection agency accredited by the board of review of the American Lumber Standard Committee. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment.

(2) Marking: Each box/pallet shall be marked to show the conformance to the International Plant Protection Convention Standard. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens: on two sides of the pallet. Foreign manufacturers shall have the heat treatment of non-manufactured wood process verified in accordance with their National Plant Protection Organization's compliance program. In addition, wood used as dunnage for blocking and bracing shall be ordered with ALSC certified marking for dunnage or the markings may be applied locally at two foot intervals.

(End of Clause)

SECTION E - INSPECTION AND ACCEPTANCE

This document incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

http://farsite.hill.af.mil/VFFARA.HTM or http://farsite.hill.af.mil/VFDFARA.HTM or http://farsite.hill.af.mil/VFAFARa.HTM

If the clause requires additional or unique information, then that information is provided immediately after the clause title.

	Regulatory Cite	Title	Date
E-1	52.246-3	INSPECTION OF SUPPLIES—COST-REIMBURSEMENT	MAY/2001
E-2	52.246-5	INSPECTION OF SERVICES—COST-REIMBURSEMENT	APR/1984
E-3	52.246-8	INSPECTION OF RESEARCH AND DEVELOPMENT—COST REIMBURSEMENT	MAY/2001
E-4	52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)	APR/1984
E-5	52.246-16	RESPONSIBILITY FOR SUPPLIES	APR/1984
E-6	52.246-4705	PREPARATION OF DD FORM 250 (USAAMCOM)	AUG/2001

Material Inspection and Receiving Reports (DD FORM 250) will be prepared and distributed in accordance with DoD FAR Supplement 252.246-7000 and Appendix F. Copies for the purchasing office and inventory control manager will be forwarded to the address in the "Issued By" block on the face of the contractual document. If an individual order contains the clause entitled 'Warranty of Systems and Equipment under Performance Specifications or Design Criteria', the statement below shall accompany each copy of the DD Form 250:

Supplies are covered by a warranty for a period of one hundred twenty (120) calendar days after acceptance. If an item is found to be defective, notify Commander, U.S. Army Aviation and Missile Command, Redstone Arsenal, Al 35898, ATTN: AMSAM-RD-SE-QM-AH/GS. Forward an information copy of the notification to the cognizant ACO.

(End of Clause)

SECTION F - DELIVERIES OR PERFORMANCE

This document incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

http://farsite.hill.af.mil/VFFARA.HTM or http://farsite.hill.af.mil/VFDFARA.HTM or http://farsite.hill.af.mil/VFAFARa.HTM

If the clause requires additional or unique information, then that information is provided immediately after the clause title.

	Regulatory Cite	Title	Date
F-1	52.242-15	STOP-WORK ORDER	AUG/1989
F-2	52.242-17	GOVERNMENT DELAY OF WORK	APR/1984
F-3	52.247-34	F.O.B. DESTINATION	NOV/1991

SECTION G - CONTRACT ADMINISTRATION DATA

	Regulatory Cite	Title	Date
G-1	52.232-4003	INVOICING AND PAYMENT (WAWF) INSTRUCTIONS	JAN/2010

All requests for payment shall be submitted electronically through Wide Area Workflow - Receipt and Acceptance (WAWF). Payment requests include receiving reports, invoice and vouchers. Hardcopy submission of receiving reports and invoices will no longer be accepted.

The contractor shall ensure an Electronic Business point of contact is designated in the Central Contractor Registration at http://www.ccr.gov and register to use WAWF-RA at https://wawf.eb.mil. Vendor training is available at http://www.wawftraining.com. Additional support can be obtained by calling the Army WAWF at 1-877-2-DA-WAWF (1-877-232-9293).

Types of WAWF Documents: Services (Cost Type) - Select Cost Voucher

If none of the above types apply to this contract, please call the Army WAWF help desk at 1-877-2-DA-WAWF (1-877-232-9293).

The following codes will be required to route your receiving reports, invoices and vouchers correctly through WAWF:

CONTRACT NUMBER: W31P4Q-11-D-0032

DELIVERY ORDER NUMBER: Refer to DD Form 1155, Block 2.

CAGE CODE: 60107

ISSUE BY DODAAC: W31P4Q

ADMIN BY DODAAC: S0512A

ACCEPTOR DODAAC: W90BWX

SERVICE APPROVER: W90BWX

DCAA OFFICE DODAAC: HAA656

Send Additional Email Notifications.

After submitting a document in WAWF, the contractor will be prompted to send additional email notifications. Additional emails are to be sent to the following:

Technical POC - Christina Brantley, email - christina.brantley@us.army.mil
Contracts POC - Lillie Stanford, email - lillie.stanford@us.army.mil

G-2	52.242-4700	CONTRACT ADMINISTRATION (USAAMCOM)	AUG/2001

Administrative Contracting Officer (ACO) functions for this contract are delegated to DCMA Los Angeles. All correspondence of an administrative nature should be forwarded to the ACO, with an information copy to Commander, US Army Contracting Command, Army Contracting Command-Redstone, ATTN: CCAM-RD-B/Lllie Stanford, Redstone Arsenal, AL 35898.

(End of Clause)

G-3	52.215-4715	PLACE OF PERFORMANCE (USAAMCOM)	JUN/1997

The principal place of performance shall be at the contractor's facility.

(End of Clause)

G-4 DFAS PAYMENT INSTRUCTIONS

The paying office shall ensure that the invoice/voucher is disbursed from each order SubCLIN as indicated on the invoice/voucher. Payment from "Oldest SubCLIN and ACRN first" is NOT AUTHORIZED.

*** END OF NARRATIVE G0001 ***

SECTION H - SPECIAL CONTRACT REQUIREMENTS

	Regulatory Cite	Title	Date
H-1	252.222-7006	RESTRICTIONS ON THE USE OF MANDATORY ARBITRATION AGREEMENTS	DEC/2010
H-2	52.242-4702	TECHNICAL LIAISON AND SURVEILLANCE CLAUSE (USAAMCOM)	JUN/1997

Performance by the Contractor of the technical aspects of this contract shall be under the cognizance of the Director of the Weapons Development and Integration Directorate, appointed Contracting Officer's Representative (COR), Christina Brantley. All technical liaison with and technical surveillance of the contractor, within the scope of this contract, will be furnished by COR, Christina Brantley, or authorized representative. Communication of technical matters pertaining to this contract shall be directly between the Contractor and the US Army Research, Development and Engineering Command, Aviation and Missile Research, Development and Engineering Center, ATTN: Christina Brantley, Redstone Arsenal, AL, 35898-5000, with a copy of such correspondence to the ACO and PCO.

The above clause is governed by the following:

No change in the scope or within the scope of this contract which would effect a change in any term or provision of this contract shall be made except by a modification executed by the Contracting Officer. The Contractor is responsible to insure that all contractor personnel are knowledgeable and cognizant of

this contract provision. Changes to contract effort accepted and performed by contractor personnel outside of the contract without specific authorization of the Contracting Officer shall be the responsibility of the Contractor.

(End of Clause)

H-3	52.204-4706	PROTECTION AND HANDLING OF FOR OFFICIAL USE ONLY INFORMATION (USAAMCOM)	JUN/1997

Information and/or material identified ‘For Official Use Only’ (FOUO) shall be protected and handled in accordance with the following:

a. DEFINITION. Information that has not been given a security classification pursuant to the criteria of an Executive Order, but which may be withheld from the public for one or more reasons cited in Freedom of Information Act (FOIA) Exemptions 2 through 9 shall be considered as being For Official Use Only. No other material shall be considered or marked ‘For Official Use Only’ (FOUO). FOUO is not authorized as a form of classification to protect national security interests.

b. SAFEGUARDING FOUO INFORMATION.

(1) During Duty Hours: During normal working hours information determined to be FOUO shall be placed in an out-of-sight location if visitors, casual traffic and other nongovernment/noncontractor personnel have access to the work area.

(2) During Nonduty Hours: At the close of business, FOUO records shall be stored so as to preclude unauthorized access. Filing such material with other unclassified records in unlocked files or desks, etc., is adequate when normal U.S. Government or government/contractor internal building security is provided during nonduty hours. When such internal security control is not exercised, locked buildings or rooms normally provide adequate after-hours protection. If such protection is not considered adequate, FOUO material shall be stored in locked receptacles such as file cabinets, desks or bookcases.

c. TRANSMISSION OF FOUO INFORMATION. FOUO information will be transported in a manner that precludes disclosure of its contents. When not commingled with classified information, FOUO information may be sent via first-class mail or parcel post. Bulky shipments that otherwise qualify under postal regulations may be sent fourth-class mail. Transmittal documents will call attention to the presence of FOUO attachments.

d. TERMINATION, DISPOSAL AND UNAUTHORIZED DISCLOSURES.

(1) Termination: The originator or other competent authority, e.g., initial denial and appellate authorities, shall terminate ‘For Official Use Only’ markings or status when circumstances indicate that the information no longer requires protection from public disclosure. When FOUO status is terminated, all known holders shall be notified, to the extent practical. Upon notification, holders shall efface or remove the ‘For Official Use Only’ markings, but records in file or storage need not be retrieved solely for that purpose.

(2) Disposal: FOUO materials may be destroyed by tearing each copy into pieces to preclude reconstruction, and placing them in regular trash containers. When local circumstances or experience indicates that this destruction method is not sufficiently protective of FOUO information, local authorities may direct other methods but must give due consideration to the additional expense balanced against the degree of sensitivity of the type of FOUO information contained in the records.

(3) Unauthorized Disclosure: The unauthorized disclosure of FOUO information does not constitute an unauthorized disclosure of DOD information classified for security purposes. Appropriate administrative action should be taken, however, to fix responsibility for unauthorized disclosure whenever feasible, and appropriate disciplinary action should be taken against those responsible. The DOD component that originated the FOUO information shall be informed of its unauthorized disclosure.

(End of Clause)

H-4	52.204-4708	NON-U.S. CITIZENS	SEP/2007

Prior approval to use Non-U.S. Citizens to perform on this contract, at either the prime or sub-contract level, must be obtained from the Contracting Officer. If approval is granted, such approval does not grant an exception to U.S. export law(s) and the contractor is responsible for obtaining necessary export licenses.

To request approval for use of Non-U.S. Citizens in performance of this contract, the contractor must provide by letter addressed to the Contracting Officer the following:

(a) Method Non-U.S. Citizen will be utilized, i.e., as a subcontractor or as an employee of the contractor.

(b) If a subcontractor, identify company, country of origin, and tasks to be performed, and provide employer’s verification of work authorization (visa, green card).

(c) If a company employee, identify country of origin and tasks to be performed, and provide employer’s verification of work authorization (visa, green card).

(d) In either case (items b and c above) identify the technology involved and what type information, Classified, Controlled Unclassified Information (CUI), or Unclassified, will be released to the Non-U.S. Citizen to enable satisfactory performance on the contract.

(e) If the contractor currently possesses a munitions export license to export the data to Non-U.S. Citizens (whether the Non-U.S. Citizen is an employee of the company or a subcontractor) provide the license number.

(f) Provide justification as to why the Non-U.S. Citizen is needed to perform the contract.

(g) Company point of contact name and phone number.

The above clause shall not flow down to subcontracts with Universities. The following replacement text shall be inserted into subcontracts with Universities:

Prior notice of the use of Non-U.S. Citizens to perform on this prime contract at the University subcontract level must be provided through the Prime Contractor to the Contracting Officer. This notice does not grant an exception to U.S. Export Law(s) and the Contractor and/or Subcontractor are responsible for obtaining necessary Export Licenses.

Prior notice shall be provided by the Subcontractor, through the Prime Contractor, to the Contracting Officer, by letter addressed to the Contracting Officer, containing the following:

(a) Individual's Name;

(b) Country of Origin;

(c) Tasks to be performed; and,

(d) Employer's verification of work authorization (visa, green card).

End of Clause

H-5	52.228-4701	SAFETY REQUIREMENTS (USAAMCOM)	JUN/1997

In the performance of work under this contract, the contractor and its employees shall observe all the rules and regulations of Redstone Arsenal, Alabama, pertaining to conduct, safety, and security. AMCR 385-100, Safety Manual, is incorporated herein by reference and made a part hereof.

(End of Clause)

H-5 MATERIALS AND SPECIAL EQUIPMENT

The material and special equipment purchased for this contract shall be itemized at the completion of this contract, and disposition instructions will be provided for all non-consumables.

H-6 REPORTS

Submission of reports shall be as specified in the applicable contract Data Requirements List (DD Form 1423) identified in Section J. The Contracting Officer may effect changes in the distribution shown on the DD Form 1423 by additions thereto or deletions therefrom, unilaterally, by change order using Standard Form 30 in accordance with the authority of FAR 53.243.

H-7 IMPORTANT NOTICE — INSTRUCTIONS BY CONTRACTING OFFICER

a. The Contractor will not accept any instructions issued by any person other than the Contracting Officer or the COR when one is appointed. If a COR is appointed, the appointment will be done by letter to the COR with the scope of the COR's authority set forth in the appointment letter. A copy of the appointment letter will be furnished to the Contractor.

b. No information other than that which may be contained in an authorized modification to the purchase instrument, duly issued by the Contracting Officer which may be received from any person employed by the U.S. Government or otherwise, will be considered as grounds for deviation from any stipulation of this purchase instrument or reference drawings and/or specifications.

*** END OF NARRATIVE H0001 ***

H-8 SECURITY REQUIREMENTS:

This effort is unclassified, and access to classified material may be required. Any proposed public releases of information associated with this effort should be submitted to Commander, US Army Contracting Command, Aviation and Missile Contracting Center, Attn: CCAM-RD-B for forwarding to the releasing agency a minimum of 60 days prior to the proposed release date.

H-9 ORDERING PROCEDURES

a. Supplies and services to be furnished under this contract shall be ordered by the issuance of a Task Order using a DD Form 1155.

b. Upon award of this contract, the Government will issue an initial task order requiring an estimate minimum of [***] labor hours which represents the Government's minimum requirement under this contract. It is anticipated that the Government will require the issuance of additional orders under this contract during the terms of the contract. The Government will be under no obligation to issue any subsequent orders, and no liability to the contractor shall be incurred in the event that no subsequent orders are issued. Further, the Government will not issue orders exceeding a maximum amount of [***] labor hours in the five-year period except by bilateral agreement of both parties. The contractor shall furnish to the Government, when and if ordered, the supplies or services as set forth in the Schedule.

c. Prior to the issuance of a bilateral order, the Government will transmit to the contractor the statement of work of the contemplated order and any other appropriate terms. Within 30 days after receipt of that communication the contractor shall submit a written proposal containing an estimate of the kinds and quantity of resources required for performance and priced in accordance with Section B. The Government will promptly enter into discussion to

reach agreement on any difference between the Government's and contractor's estimates within 30 days after receipt of the contractor's proposal. Upon reaching an agreement, the Government may issue a bilateral order containing the agreement.

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

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d. Each order shall contain labor category(s), hourly rate(s) pertinent to the period of performance, and associated material, travel and ODC. Any costs incurred prior to the effective date of the Task Order will not be allowed.

f. The contractor shall perform each bilateral order with the labor category(s) negotiated and set forth in the order and within the total dollars negotiated for the order. The contractor shall not transfer labor, material, travel or ODC dollars between separate orders.

g. Only the Contracting Officer has the authority to direct the contractor in any way to alter any Task Order. The contractor shall take no action on any changes until appropriate authorization has been received.

h. If it is necessary to modify the scope of any Task Order, the Contracting Officer will negotiate any necessary adjustments to the level of effort, estimated costs and delivery schedule and will execute a bilateral modification. Any modification that increases or decreases the level of effort due to a change in scope will be equitably adjusted.

*** END OF NARRATIVE H0002 ***

H-10 TRAVEL

a. All travel requests shall be submitted to the COR or designee for concurrence prior to travel.

b. Allowances for persons in travel status shall not exceed the amount set forth in Vol. 2 of the Joint Travel Regulation (JTR).

c. The contractor shall be reimbursed for the actual and allowable cost incurred for travel expenses as stipulated in the schedule and SOW. Travel and per diem which is reimbursable IAW the SOW shall be administered on a cost-reimbursable no fee basis. Travel will be authorized in writing, signed by the COR or designee, before the effort is to begin. The contractor shall not incur costs for travel prior to advising the COR or designee of the travel and obtaining approval.

H-11 GOVERNMENT FURNISHED INFORMATION AND PROPERTY

The Government reserves the right to provide Government Furnished information and/or property on an as needed basis in the performance of specific tasks.

H-12 PERIOD OF PERFORMANCE

The required period of performance for services shall be specified in each task order issued. The Government may issue orders against this contract for a five year period from date of award. The period of performance for the resultant contract will not exceed 5 years or 60 months.

*** END OF NARRATIVE H0003 ***

SECTION I - CONTRACT CLAUSES

This document incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at these addresses:

http://farsite.hill.af.mil/VFFARA.HTM or http://farsite.hill.af.mil/VFDFARA.HTM or http://farsite.hill.af.mil/VFAFARa.HTM

If the clause requires additional or unique information, then that information is provided immediately after the clause title.

	Regulatory Cite	Title	Date
I-1	52.202-1	DEFINITIONS	JUL/2004
I-2	52.203-3	GRATUITIES	APR/1984
I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	APR/1984
I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEP/2006
I-5	52.203-7	ANTI-KICKBACK PROCEDURES	OCT/2010
I-6	52.203-8	CANCELLATION, RECISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-8	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	OCT/2010
I-9	52.203-13	CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT	APR/2010

I-10	52.204-2	SECURITY REQUIREMENTS	AUG/1996
I-11	52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER	AUG/2000
I-12	52.204-7	CENTRAL CONTRACTOR REGISTRATION	APR/2008
I-13	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	DEC/2010
I-14	52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	APR/2008
I-15	52.215-8	ORDER OF PRECEDENCE—UNIFORM CONTRACT FORMAT	OCT/1997
I-16	52.215-9	CHANGES OR ADDITIONS TO MAKE-OR-BUY PROGRAM (OCT 1997) — ALTERNATE II (OCT 2010)	OCT/2010
I-17	52.215-10	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA	OCT/2010
I-18	52.215-11	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA—MODIFICATIONS	OCT/2010
I-19	52.215-12	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA	OCT/2010
I-20	52.215-13	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA—MODIFICATIONS	OCT/2010
I-21	52.215-14	INTEGRITY OF UNIT PRICES	OCT/2010
I-22	52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS	OCT/2010
I-23	52.215-18	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS	JUL/2005
I-24	52.215-21	REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA —MODIFICATIONS	OCT/2010
I-25	52.215-23	LIMITATIONS ON PASS-THROUGH CHARGES	OCT/2009
I-26	52.216-8	FIXED FEE	MAR/1997
I-27	52.216-11	COST CONTRACT—NO FEE	APR/1984
I-28	52.219-6	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE	JUN/2003
I-29	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	JAN/2011
I-30	52.219-14	LIMITATIONS ON SUBCONTRACTING	DEC/1996
I-31	52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB/1997
I-32	52.222-3	CONVICT LABOR	JUN/2003
I-33	52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT—OVERTIME COMPENSATION	JUL/2005
I-34	52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT	OCT/2010
I-35	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
I-36	52.222-26	EQUAL OPPORTUNITY	MAR/2007
I-37	52.222-35	EQUAL OPPORTUNITY FOR VETERANS	SEP/2010
I-38	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	OCT/2010
I-39	52.222-37	EMPLOYMENT REPORTS ON VETERANS	SEP/2010
I-40	52.222-41	SERVICE CONTRACT ACT OF 1965	NOV/2007
I-41	52.222-50	COMBATING TRAFFICKING IN PERSONS	FEB/2009
I-42	52.222-54	EMPLOYMENT ELIGIBILITY VERIFICATION	JAN/2009
I-43	52.223-5	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION	AUG/2003
I-44	52.223-6	DRUG-FREE WORKPLACE	MAY/2001
I-45	52.223-14	TOXIC CHEMICAL RELEASE REPORTING	AUG/2003
I-46	52.223-18	CONTRACTOR POLICY TO BAN TEXT MESSAGING WHILE DRIVING	SEP/2010

	Regulatory Cite	Title	Date
I-47	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN/2008
I-48	52.227-1	AUTHORIZATION AND CONSENT (DEC 2007) — ALTERNATE I (APR 1984)	APR/1984
I-49	52.227-13	PATENT RIGHTS—OWNERSHIP BY THE GOVERNMENT	DEC/2007
I-50	52.228-7	INSURANCE—LIABILITY TO THIRD PERSONS	MAR/1996
I-51	52.232-1	PAYMENTS	APR/1984
I-52	52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR/1984
I-53	52.232-17	INTEREST	OCT/2010
I-54	52.232-18	AVAILABILITY OF FUNDS	APR/1984
I-55	52.232-20	LIMITATION OF COST	APR/1984
I-56	52.232-22	LIMITATION OF FUNDS	APR/1984
I-57	52.232-23	ASSIGNMENT OF CLAIMS (JAN 1986) — ALTERNATE I (APR 1984)	APR/1984
I-58	52.232-24	PROHIBITION OF ASSIGNMENT OF CLAIMS	JAN/1986
I-59	52.232-25	PROMPT PAYMENT	OCT/2008
I-60	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION	OCT/2003
I-61	52.233-1	DISPUTES	JUL/2002
I-62	52.233-3	PROTEST AFTER AWARD (AUG 1996) — ALTERNATE I (JUN 1985)	JUN/1985
I-63	52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	OCT/2004
I-64	52.242-1	NOTICE OF INTENT OF DISALLOW COSTS	APR/1984
I-65	52.242-3	PENALTIES FOR UNALLOWABLE COSTS	MAY/2001
I-66	52.242-4	CERTIFICATION OF FINAL INDIRECT COSTS	JAN/1997
I-67	52.242-13	BANKRUPTCY	JUL/1995
I-68	52.243-2	CHANGES - COST-REIMBURSEMENT (AUG 1987) — ALTERNATE V (APR 1984)	APR/1984

I-69	52.243-6	CHANGE ORDER ACCOUNTING	APR/1984
I-70	52.244-5	COMPETITION IN SUBCONTRACTING	DEC/1996
I-71	52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS	DEC/2010
I-72	52.245-1	GOVERNMENT PROPERTY	AUG/2010
I-73	52.245-9	USE AND CHARGES	AUG/2010
I-74	52.246-23	LIMITATION OF LIABILITY	FEB/1997
I-75	52.246-24	LIMITATION OF LIABILITY—HIGH-VALUE ITEMS	FEB/1997
I-76	52.246-24	LIMITATION OF LIABILITY—HIGH-VALUE ITEMS (FEB 1997) — ALTERNATE I (APR 1984)	APR/1984
I-77	52.246-25	LIMITATION OF LIABILITY—SERVICES	FEB/1997
I-78	52.247-63	PREFERENCE FOR U.S.-FLAG AIR CARRIERS	JUN/2003
I-79	52.248-1	VALUE ENGINEERING	OCT/2010
I-80	52.249-6	TERMINATION (COST REIMBURSEMENT)	MAY/2004
I-81	52.249-14	EXCUSABLE DELAYS	APR/1984
I-82	52.250-1	INDEMNIFICATION UNDER PUBLIC LAW 85-804 (APR 1984) — ALTERNATE I (APR 1984)	APR/1984
I-83	52.251-1	GOVERNMENT SUPPLY SOURCES	AUG/2010
I-84	52.253-1	COMPUTER GENERATED FORMS	JAN/1991
I-85	252.201-7000	CONTRACTING OFFICER'S REPRESENTATIVE	DEC/1991
I-86	252.203-7000	REQUIREMENTS RELATING TO COMPENSATION OF FORMER DOD OFFICIALS	JAN/2009
I-87	252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT- RELATED FELONIES	DEC/2008
I-88	252.203-7002	REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS	JAN/2009
I-89	252.204-7000	DISCLOSURE OF INFORMATION	DEC/1991
I-90	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-91	252.204-7005	ORAL ATTESTATION OF SECURITY RESPONSIBILITIES	NOV/2001
I-92	252.204-7008	EXPORT-CONTROLLED ITEMS	APR/2010
I-93	252.205-7000	PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS	DEC/1991
I-94	252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY	DEC/2006
I-95	252.215-7000	PRICING ADJUSTMENTS	DEC/1991
I-96	252.215-7002	COST ESTIMATING SYSTEM REQUIREMENTS	DEC/2006
I-97	252.223-7002	SAFETY PRECAUTIONS FOR AMMUNITION AND EXPLOSIVES	MAY/1994
I-98	252.223-7003	CHANGE IN PLACE OF PERFORMANCE—AMMUNITION AND EXPLOSIVES	DEC/1991
I-99	252.223-7004	DRUG-FREE WORK FORCE	SEP/1988
I-100	252.225-7001	BUY AMERICAN ACT AND BALANCE OF PAYMENTS PROGRAM	JAN/2009
I-101	252.225-7002	QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS	APR/2003
I-102	252.225-7004	REPORT OF INTENDED PERFORMANCE OUTSIDE THE UNITED STATES AND CANADA—SUBMISSION AFTER AWARD	OCT/2010
I-103	252.225-7006	QUARTERLY REPORTING OF ACTUAL CONTRACT PERFORMANCE OUTSIDE THE UNITED	OCT/2010

	Regulatory Cite	Title	Date
		STATES	
I-104	252.225-7007	PROHIBITION ON ACQUISITION OF UNITED STATES MUNITIONS LIST ITEMS FROM COMMUNIST CHINESE MILITARY COMPANIES	SEP/2006
I-105	252.225-7008	RESTRICTION ON ACQUISITION OF SPECIALTY METALS	JUL/2009
I-106	252.225-7009	RESTRICTION ON ACQUISITION OF CERTAIN ARTICLES CONTAINING SPECIALTY METALS	JAN/2011
I-107	252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	JUN/2010
I-108	252.225-7015	RESTRICTION ON ACQUISITION OF HAND OR MEASURING TOOLS	JUN/2005
I-109	252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS	DEC/2010
I-110	252.225-7025	RESTRICTION ON ACQUISITION OF FORGINGS	DEC/2009
I-111	252.225-7030	RESTRICTION ON ACQUISITION OF CARBON, ALLOY, AND ARMOR STEEL PLATE	DEC/2006
I-112	252.226-7001	UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES, AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS	SEP/2004
I-113	252.227-7013	RIGHTS IN TECHNICAL DATA—NONCOMMERCIAL ITEMS	NOV/1995
I-114	252.227-7013	RIGHTS IN TECHNICAL DATA—NONCOMMERCIAL ITEMS (NOV 1995) — ALTERNATE I (JUN 1995)	JUN/1995
I-115	252.227-7014	RIGHTS IN NONCOMMERCIAL COMPUTER SOFTWARE AND NONCOMMERCIAL COMPUTER SOFTWARE DOCUMENTATION	JUN/1995
I-116	252.227-7015	TECHNICAL DATA—COMMERCIAL ITEMS	NOV/1995
I-117	252.227-7018	RIGHTS IN NONCOMMERCIAL TECHNICAL DATA AND COMPUTER SOFTWARE—SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM	JAN/2011
I-118	252.227-7019	VALIDATION OF ASSERTED RESTRICTIONS—COMPUTER SOFTWARE	JUN/1995
I-119	252.227-7025	LIMITATIONS ON THE USE OR DISCLOSURE OF GOVERNMENT-	JAN/2011

		FURNISHED INFORMATION MARKED WITH RESTRICTIVE LEGENDS	
I-120	252.227-7030	TECHNICAL DATA—WITHHOLDING OF PAYMENT	MAR/2000
I-121	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	SEP/1999
I-122	252.227-7039	PATENTS—REPORTING OF SUBJECT INVENTIONS	APR/1990
I-123	252.231-7000	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
I-124	252.232-7003	ELECTRONIC SUBMISSION OF PAYMENT REQUESTS AND RECEIVING REPORTS	MAR/2008
I-125	252.232-7010	LEVIES ON CONTRACT PAYMENTS	DEC/2006
I-126	252.235-7011	FINAL SCIENTIFIC OR TECHNICAL REPORT	NOV/2004
I-127	252.243-7002	REQUESTS FOR EQUITABLE ADJUSTMENT	MAR/1998
I-128	252.244-7000	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DOD CONTRACTS)	NOV/2010
I-129	252.246-7000	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/2008
I-130	252.246-7001	WARRANTY OF DATA	DEC/1991
I-131	252.247-7023	TRANSPORTATION OF SUPPLIES BY SEA	MAY/2002
I-132	252.247-7024	NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA	MAR/2000
I-133	252.251-7000	ORDERING FROM GOVERNMENT SUPPLY SOURCES	NOV/2004

I-134	52.203-14	DISPLAY OF HOTLINE POSTER(S)	DEC/2007

Insert DOD Inspector General, Attn: Defense Hotline, 400 Army Havy Dr, Washington, DC 22202-2884 in the blank in paragraph (b)(3) within the above referenced clause.

I-135	52.222-2	PAYMENT FOR OVERTIME PREMIUMS	JUL/1990

Insert $0.00 in the blank in paragraph (a) within the above referenced clause.

I-136	52.227-11	PATENT RIGHTS — OWNERSHIP BY THE CONTRACTOR (DEC 2007) – ALTERNATE V (DEC 2007)	DEC/2007

Communications.

I-137	52.243-7	NOTIFICATION OF CHANGES	APR/1984

After negotiations, insert 30 days in the blank in paragraph (b) and insert 30 days in the blank in paragraph (d) within the above referenced clause.

I-138	52.216-7	ALLOWABLE COST AND PAYMENT	DEC/2002

(a) Invoicing.

(1) The Government will make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Federal Acquisition Regulation (FAR) Subpart 31.2 in effect on the date of this contract and the terms of this contract. 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 for performing this contract.

(2) Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act. Interim payments made prior to the final payment under the contract are contract financing payments, except interim payments if this contract contains Alternate I to the clause at 52.232-25.

(3) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request. In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(b) Reimbursing costs.

(1) For the purpose of reimbursing allowable costs (except as provided in subparagraph (b)(2) of this clause, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term costs includes only —

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

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for —

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

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

(2) Ordinarily within 30 days of the submission of the Contractors payment request to the Government;

(B) Materials issued from the Contractors inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

(E) Other direct in-house costs; and

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

(iii) The amount of financing payments that have been paid by cash, check or other form of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless

(i) The Contractors practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractors indirect costs for payment purposes).

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) of this clause, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) of this clause.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractors expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

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

(d) Final indirect cost rates.

(1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2) (i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractors actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractors proposal.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify

(i) the agreed-upon final annual indirect cost rates,

(ii) the bases to which the rates apply,

(iii) the periods for which the rates apply,

(iv) any specific indirect cost items treated as direct costs in the settlement, and

(v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates.

The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(5) Within 120 days (or longer period if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates.

(6) (i) If the Contractor fails to submit a completion invoice or voucher within the time specified in paragraph (d)(5) of this clause, the Contracting Officer may—

(A) Determine the amounts due to the Contractor under the contract; and

(B) Record this determination in a unilateral modification to the contract.

(ii) This determination constitutes the final decision of the Contracting Officer in accordance with the Disputes clause.

(e) Billing rates. Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates —

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) Quick-closeout procedures. Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(g) Audit. At any time or times before final payment, the Contracting Officer may have the Contractors invoices or vouchers and statements of cost audited. Any payment may be —

(1) Reduced by amounts found by the Contracting Officer not to constitute allowable costs; or

(2) Adjusted for prior overpayments or underpayments.

(h) Final payment.

(1) Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with paragraph (d)(5) of this clause, and upon the Contractors compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver —

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except —

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractors indemnification of the Government against patent liability.

(End of Clause)

I-139	52.216-19	ORDER LIMITATIONS	OCT/1995

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than $114,627.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor —

(1) Any order for a single item in excess of $39,267,040.00;

(2) Any order for a combination of items in excess of $39,267,040.00; or

(3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (b)(1) or (2) of this section.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 5 days after issuance, with written notice stating the Contractors intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of Clause)

I-140	52.216-22	INDEFINITE QUANTITY	OCT/1995

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the

Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the maximum. The Government shall order at least the quantity of supplies or services designated in the Schedule as the minimum.

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractors and Governments rights and obligations with respect to that order to the same extent as if the order were completed during the contracts effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after the period of performance of the contract.

(End of Clause)

I-141	52.244-2	SUBCONTRACTS	OCT/2010

(a) Definitions. As used in this clause

Approved purchasing system means a Contractors purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR)

Consent to subcontract means the Contracting Officers written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) or this clause.

(c) If the contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the national Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For contracts awarded by a civilian agency other that the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officers written consent before placing the following subcontracts: None

(e) (1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractors current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractors Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting —

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason certified cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractors certified cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractors certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractors price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) or this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractors purchasing system shall constitute a determination —

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractors purchasing system as set forth in FAR Subpart 44.3.i

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: No subcontractors were evaluated during negotiations for which paragraphs (c) and (e) of this clause do apply.

I-142	252.234-7002	EARNED VALUE MANAGEMENT SYSTEM	APR/2008

(a) In the performance of this contract, the Contractor shall use—

(1) An Earned Value Management System (EVMS) that complies with the EVMS guidelines in the American National Standards Institute/Electronic Industries Alliance Standard 748, Earned Value Management Systems (ANSI/EIA-748); and

(2) Management procedures that provide for generation of timely, reliable, and verifiable information for the Contract Performance Report (CPR) and the Integrated Master Schedule (IMS) required by the CPR and IMS data items of this contract.

(b) If this contract has a value of $50,000,000 or more, the Contractor shall use an EVMS that has been determined by the Cognizant Federal Agency (CFA) to be in compliance with the EVMS guidelines as stated in paragraph (a)(1) of this clause. If, at the time of award, the Contractor's EVMS has not been determined by the CFA to be in compliance with the EVMS guidelines as stated in paragraph (a)(1) of this clause, the Contractor shall apply its current system to the contract and shall take necessary actions to meet the milestones in the Contractor's EVMS plan.

(c) If this contract has a value of less than $50,000,000, the Government will not make a formal determination that the Contractor's EVMS complies with the EVMS guidelines in ANSI/EIA-748 with respect to the contract. The use of the Contractor's EVMS for this contract does not imply a Government determination of the Contractor's compliance with the EVMS guidelines in ANSI/EIA-748 for application to future contracts. The Government will allow the use of a Contractor's EVMS that has been formally reviewed and determined by the CFA to be in compliance with the EVMS guidelines in ANSI/EIA-748.

(d) The Contractor shall submit notification of any proposed substantive changes to the EVMS procedures and the impact of those changes to the CFA. If this contract has a value of $50,000,000 or more, unless a waiver is granted by the CFA, any EVMS changes proposed by the Contractor require approval of the CFA prior to implementation. The CFA will advise the Contractor of the acceptability of such changes as soon as practicable (generally within 30 calendar days) after receipt of the Contractor's notice of proposed changes. If the CFA waives the advance approval requirements, the Contractor shall disclose EVMS changes to the CFA at least 14 calendar days prior to the effective date of implementation.

(e) The Government will schedule integrated baseline reviews as early as practicable, and the review process will be conducted not later than 180 calendar days after (1) contract award, (2) the exercise of significant contract options, and (3) the incorporation of major modifications. During such reviews, the Government and the Contractor will jointly assess the Contractor's baseline to be used for performance measurement to ensure complete coverage of the statement of work, logical scheduling of the work activities, adequate resourcing, and identification of inherent risks.

(f) The Contractor shall provide access to all pertinent records and data requested by the Contracting Officer or duly authorized representative as necessary to permit Government surveillance to ensure that the EVMS complies, and continues to comply, with the performance criteria referenced in paragraph (a) of this clause.

(g) When indicated by contract performance, the Contractor shall submit a request for approval to initiate an over-target baseline or over-target schedule to the Contracting Officer. The request shall include a top-level projection of cost and/or schedule growth, a determination of whether or not performance variances will be retained, and a schedule of implementation for the rebaselining. The Government will acknowledge receipt of the request in a timely manner (generally within 30 calendar days).

(h) The Contractor shall require its subcontractors to comply with EVMS requirements as follows:

(1) For subcontracts valued at $50,000,000 or more, the following subcontractors shall comply with the requirements of this clause:

Not Applicable

(2) For subcontracts valued at less than $50,000,000, the following subcontractors shall comply with the requirements of this clause, excluding the requirements of paragraph (b) of this clause:

Not Applicable

(End of clause)

I-143	252.235-7010	ACKNOWLEDGMENT OF SUPPORT AND DISCLAIMER	MAY/1995

(a) The Contractor shall include an acknowledgment of the Governments support in the publication of any material based on or developed under this contract, stated in the following terms: This material is based upon work supported by the US Army Aviation and Missile Contracting Command under Contract No. To be completed prior to contract award.

(b) All material, except scientific articles or papers published in scientific journals, must, in addition to any notices or disclaimers by the Contractor, also contain the following disclaimer: Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the US Army Aviation and Missile Contracting Command.

(End of clause)

I-144	52.215-19	NOTIFICATION OF OWNERSHIP CHANGES	OCT/1997

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall —

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractors ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

(c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of Clause)

I-145	52.219-28	POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION	APR/2009

(a) Definitions. As used in this clause—

“Long-term contract” means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

“Small business concern” means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is “not dominant in its field of operation” when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall rerepresent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at http://www.sba.gov/services/contractingopportunities/sizestandardstopics/ .

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the rerepresentation required by paragraph (b) of this clause by validating or updating all its representations in the Online Representations and Certifications Application and its data in the Central Contractor Registration, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in ORCA, or does not have a representation in ORCA for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

The Contractor represents that it [X] is, [ ] is not a small business concern under NAICS Code 541712 assigned to contract number W31P4Q-11-D-0032. [Contractor to sign and date and insert authorized signer's name and title].

(End of clause)

I-146	52.252-2	CLAUSES INCORPORATED BY REFERENCE	FEB/1998

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address:

http://www.acq.osd.mil/dpap/dars/far.html or http://www.acq.osd.mil/dpap/dars/index.htm or http://farsite.hill.af.mil/VFAFARa.HTM

(End of Clause)

I-147	52.252-6	AUTHORIZED DEVIATIONS IN CLAUSES	APR/1984

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the clause.

(b) The use in this solicitation or contract of any DoD FAR SUPPLEMENT (48 CFR 2) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.

(End of Clause)

I-148	52.219-4702	PILOT MENTOR-PROTEGE PROGRAM	NOV/2006

1. The Pilot Mentor-Protege Program (MPP) assists small businesses (Proteges) to successfully compete for prime contract and subcontract awards by partnering with large companies or graduated 8(a) firms (Mentors) under individual, project-based Agreements.

2. a. A Mentor firm must be currently performing under at least one active approved subcontract negotiated with DoD or another Federal agency pursuant to FAR 19.702, and be currently eligible for the award of Federal contracts. New mentor applications must be approved and must be submitted to the Office of Small Business Programs (OSBP) of the Cognizant Military Service or Defense Agency (if concurrently submitting a reimbursable Agreement) or to the DoD OSBP, prior to the submission of an Agreement. Mentors and Proteges are solely responsible for finding their counterpart. Legislatively, DoD OSBPs participation in the teaming of partnering Mentors and Proteges is prohibited. Therefore, firms are strongly encouraged to explore existing business relationships to establish a Mentor-Protege relationship.

b. Graduated 8(a) firms may be mentors. To be eligible to participate as a mentor, an 8(a) firm must be —

1) A graduated 8(a) firm that provides documentation of its ability to serve as a mentor;

2) Approved to participate as a mentor in accordance with DFARS Appendix I-105; and

3) A graduate of the 8(a) program. A firm's graduation can be validated by either

(a) The Small Business Dynamic Search link of the Central Contractor Registration (CCR) (http://www.ccr.gov/) if the firm retains its small business size, or

(b) Contacting the graduated 8(a) firm's SBA District Office.

3. A Protege firm must be either a small disadvantaged business (SDB), a qualifying organization employing the severely disabled, a women-owned small business (WOSB), a service-disabled veteran-owned small business (SDVOSB), or a historically underutilized business zone (HUBZone). Protege certifications are available from the following sources: for SDB, contact the Small Business Administration (SBA) for certification; for a WOSB, self-certification is sufficient; for an organization employing the severely disabled, they must comply with Section 8046A PL 102-172; for a SDVOSB, they must meet the standards set in Section 8(d)(3) of the Small Business Act (15 U.S.C. 637(d)(3)); and for a HUBZone Small Business, this is a determination to be made by the SBA in accordance with 13 C.F.R. Part 126.

4. Utilization of the Pilot Mentor-Protege Program (hereafter referred to as the "Program") is encouraged. Under the Program, eligible companies approved as mentor firms enter into mentor-protege agreement with eligible protege firms. The goal of the program is to provide appropriate developmental assistance to enhance the capabilities of the protege firm. The Mentor firm may be eligible for cost reimbursement or credit against their applicable subcontracting goals.

5. There are two types of DoD MPP Agreements; direct reimbursement or credit. Direct reimbursed Agreements are those in which the Mentor receives reimbursement costs of developmental assistance provided to the protege. These Agreements are approved by the OSBP of the Cognizant Military Service or Defense Agency as outlined in the Defense Federal Acquisition Supplement (DFARS) Appendix I. Credit Agreements are those in which the Mentor receives a multiple of credit toward their SDB subcontracting goal based on the cost of developmental assistance provided to the Protege. Credit Agreements are currently approved by the Defense Contract Management Agency (DCMA). MPP Agreements must meet the requirements set forth in DFARS Appendix I and the Agreement template. For direct reimbursed Agreement submissions, the Agreement proposal should be submitted to the OSBP of the Cognizant Military Service or Defense Agency. For credit Agreements, the Agreement proposal should be submitted to DCMA. Credit Agreements start on the day they are approved. Direct reimbursement Agreements start on the date that the specific contract vehicle is modified. Mentors cannot incur cost for credit or reimbursement until the Agreement has been approved. Semi-annual reports, annual DCMA performance reviews and Protege 2-year out reports are required for each DoD MPP Agreement.

6. Mentor firms are encouraged to identify and select protege firms from concerns that are defined as: Certified Small Disadvantaged Business, Qualified organization employing the severely disabled, Women-Owned Small Business, Indian-Owned Small Business, Native Hawaiian Organization-Owned Small Business, Qualified HUBZone Small Business, or Service-Disabled Veteran-Owned Small Business.

7. Full details of the program are located at http://www.acq.osd.mil/osbp/mentor_protege/, http://sellingtoarmy.info/, DFARS Appendix I, and DFARS Subpart 219.72, "Pilot Mentor-Protege Program", or, call the Mentor-Protege Hotline at (800) 540-8857.

8. For additional questions after reviewing the information provided, contact the OSBP serving your area.

(End of clause)

SECTION J - LIST OF ATTACHMENTS

List of Addenda	Title	Date	Number of Pages	Transmitted By
Exhibit A	CONTRACT DATA REQUIREMENT LIST	23-APR-2010	019	ELECTRONIC IMAGE
Attachment 0001	LMAMS PERFORMANCE WORK STATEMENT	19-MAR-2010	013	ELECTRONIC IMAGE
Attachment 0002	LMAMS DD FORM 254	04-MAR-2010	002	ELECTRONIC IMAGE
Attachment 0003	QUALITY ASSURANCE SURVEILLANCE PLAN	25-MAR-2010	003	ELECTRONIC IMAGE
Attachment 0004	TECHNICAL DATA ASSERTIONS	05-JAN-2011	006	ELECTRONIC IMAGE

CONTRACTORS ARE ENCOURAGED TO OFFER SUGGESTIONS, COMMENTS, OR ALTERNATIVES TO THE DOCUMENTS CITED HEREIN. TAILORING, CATEGORY OF APPLICATION, REVISION LEVELS, AND THE DOCUMENTS CITED ARE ALL CANDIDATES.

Definition of Document Categories:

1. Category 0 (Cat. 0). The requirements contained in the directly cited document are non-mandatory and are for reference or information only.

2. Category 1 (Cat. 1). The requirements contained in the directly cited document are contractually applicable to the extent specified. All requirements contained in reference and subsequently referenced documents are contractually for information only unless otherwise specified in the solicitation, contract, or contract modification.

3. Category 2 (Cat. 2). The requirements contained in the directly cited document are contractually applicable to the extent specified. All requirements contained in referenced documents are also imposed to the extent specified. All requirements contained in subsequently referenced documents are contractually for information only unless otherwise specified in the solicitation, contract or contract modification.

Definitions of DD Form 1423:

Blocks 10, 11, 12, and 13: "Submit" means to deliver to the Government as specified in the shipping instructions for data which are located in section F of the contract.

Block 14: Regular/Repro Copies

Regular Copy - Blueline, Blackline, Xerographic (originals of reports, plans, or routine data also fall into this definition). Repro Copy - Multilith, Vellum, photographic negatives, etc. (Originals of drawings, engineering change proposals (ECPs), engineering release records (ERRs), or technical publications). Note: Type of electronic media, e.g., diskette, CD-ROM, may be designated in Block 16.

CONTRACTUAL REQUIREMENTS OF DATA ITEM DESCRIPTION (DID) Preparation Instructions/Requirements: This section contains the only portion of the DID that represents a contractual requirement imposed on the contractor. All other sections are for Government use and for reference and information only.

ALL REFERENCES TO SOURCE DOCUMENTS IN BLOCK 10 OR THE REQUIREMENTS SECTION OF THE DID ARE USED FOR REFERENCE AND INFORMATION ONLY.

DOCUMENT SUMMARY LIST (DSL)

	REFERENCE DOC	DESCRIPTION	DATE/CAT
1.	DI-MGMT-80004A Data Item A001	Management Plan (Task Plan)	30 Oct 06 Cat 1
2.	DI-NDTI-80566A Data Item A002	Test Plan	14 Nov 06 Cat 13
3.	DI-MCCR-80700 Data Item A003	Computer Software Product End Item (Software/Model Documentation)	26 Oct 88 Cat I
4.	DI-MISC-80711A Data Item A004 Data Item A005	Scientific & Technical Reports (Task Technical Assessment Report) (Task Final Report)	21 Jan 00 Cat 1
5.	DI-NDTI-80809B Data Item A006	Test/Inspection Report	24 Jan 97 Cat 1
6.	DI-CMAN-81248A Data Item A007	Interface Control Document	30 Sept 00 Cat 1
7.	DI-CMAN-80858B Data Item A008	Configuration Management Plan	30 Sep 00 Cat 1
8.	DI-ILSS-80872 Data Item A009	Training Materials	29 Jun 89 Cat 1
9.	DI-FNCL-80912 Data Item A010	Performance & Cost Report	06 Oct 89 Cat 1
10.	DI-SESS-81002E Data Item A011	Dev Design Drawings/Models & Associated Lists (Corresponds to Data Item A011) (Design Data Package)	05 Nov 09 Cat 1
11.	DI-ADMN-81373 Data Item A012	Presentation Material (Meetings/Reviews)	01 Oct 93 Cat 1
12.	DI-SDMP-81493A Data Item A013	Program-Unique Specification Documents (Design Data Package)	01 Aug 03 Cat 1
13.	DI-SESS-81000D Data Item A014	Product Drawings/Models & Associated Lists (Technical Data Package)	05 Nov 09 Cat 1
14.	MIL-STD-31000 Cat 1	Standard Practice Technical Data Packages	05 Nov 09
15.	MIL-STD-961	Defense and Program-unique Specifications Format and Content	05 Nov 09 Cat 1
16.	MIL-STD-962	Defense Standards Format and Content	10 Mar 10 Cat 1
17.	MIL-STD-2073-1	Standard Practice for Military Packaging Cat 1	23 May 08
18.	DOD-STD-2101	Classification of Characteristics Cat 1	10 May 79
19.	MIS-STD-52406A-IS	Interface Standard for Engineering Cat 1	14 Feb 05

DSL Attachment A

Data Item Numbers: A001 through A014

a. Distribution Statement B: Distribution authorized to DoD and DoD contractors only; Critical Technology; November 2009. Other requests for Data Item Numbers A001-A014 shall be referred to the Project Manager, Lethality Miniature Aerial Munition System (LMAMS), ATTN: Susan Dunbar, RDMR-WDP-S, Redstone Arsenal, AL 35898-5600.

b. Export Control Act Warning — WARNING - This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, USC, Sec 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, USC, App. 2401 et seq. Violations of these export laws are subject to severe criminal penalties. Disseminate IAW provisions of DoD Directive 5230.25.

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER	
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR	
1. DATA ITEM NO.: A001	2. TITLE OF DATA ITEM: Management Plan	3. SUBTITLE: Task Plan	17. PRICE GROUP
4. AUTHORITY (Data Acquisition Document No.): DI-MGMT 80004A	5. CONTRACT REFERENCE: SOW para 3.1.4	6. REQUIRING OFFICE: RDMR-WDG-C	18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B
7. DD 250 REQ: LT	8. DIST STATEMENT REQUIRED: B	10. FREQUENCY: See 16	12. DATE OF FIRST SUBMISSION: See 16
9. APP CODE: A		11. AS OF DATE: N/A	13. DATE OF SUBSEQUENT SUBMISSION: See 16

14. DISTRIBUTION

a. ADDRESSES	b. COPIES Draft	Final Reg.	Final Repro
RDMR-WDG-C	0	1	0
15. TOTAL	0	1	0

16. REMARKS:

Block 8: Government approval/disapproval within 10 days after receipt. Contractor has 10 days for re-submittal if disapproved.

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Block 10, 12, 13: Task plan submitted 15 days after each increment task award. Final Task Plan submitted 15 days after approval by Government.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C	4/23/10	Gloria S. Grady Contract Specialist	4/23/10

DD Form 1423-1, 1 Jun 90

RDMR-SET CONCUR
20100094 A001 A014
LOG# NO PAGES 4 DI NO. THRU
NO. LINE ITEM 14 DATE 3/23/10

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER	
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR	
1. DATA ITEM NO.: A002	2. TITLE OF DATA ITEM: Test Plan	3. SUBTITLE: N/A	17. PRICE GROUP
4. AUTHORITY (Data Acquisition Document No.): DI-NDTI-80566A	5. CONTRACT REFERENCE: SOW para 3.2.1; 3.2.2; 3.2.3; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	6. REQUIRING OFFICE: RDMR-WDG-C	18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B
7. DD 250 REQ: LT	8. DIST STATEMENT REQUIRED: B	10. FREQUENCY: See 16	12. DATE OF FIRST SUBMISSION: See 16
9. APP CODE: A		11. AS OF DATE: N/A	13. DATE OF SUBSEQUENT SUBMISSION: See 16

14. DISTRIBUTION

a. ADDRESSES	b. COPIES Draft	Final Reg.	Final Repro
RDMR-WDG-C	0	1	0
15. TOTAL	0	1	0

16. REMARKS:

Block 8: Government approval/disapproval within 10 days after receipt. Contractor has 10 days for re-submittal if disapproved.

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 10, 12 & 13: Test Plans in contractor format required a minimum of 30 days prior to test for approval.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files or Adobe PDF files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A003	Computer Software Product End Item	Software/Model Documentation

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MCCR-80700	SOW para 3.1.1; 3.1.2; 3.1.3; 3.1.3.1; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		See 16	See 16
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**
A	B	N/A	See 16

14. DISTRIBUTION	b. COPIES		
a. ADDRESSEE	Draft	Final Reg	Final Repro
RDMR-WDG-C	0	1	0
15. TOTAL →	0	1	0

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE
INSERT IN SECT. B

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 8, 10, 12, & 13: The contractor shall prepare Computer Software Product End Item as needed to provide the Government with necessary documentation, software and hardware as dictated in each Task Order. The contractor shall submit the data item in draft form. The Government has 15 working days to review and return the data item. The contractor's final version of the data item shall be returned to the Government at least 15 working days prior to end of the Task Order.

Block 14: Material shall be submitted in digital format consisting of ASCII; text; native or binary format, as appropriate; and/or Microsoft Office files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A004	Scientific and Technical Report	Technical Assessment Report

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80711A	SOW para 3.1.1; 3.1.2; 3.1.2.1; 3.1.3; 3.1.3.1; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		See 16	See 16
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**
N/A	B	N/A	N/A

14. DISTRIBUTION	b. COPIES		
a. ADDRESSEE	Draft	Final Reg	Final Repro
RDMR-WDG-C	0	1	0
15. TOTAL →	0	1	0

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE
INSERT IN SECT. B

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Block 10 and 12: Technical Assessment Reports issued as required by the Government during each task effort.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A005	Scientific and Technical Report	Final Report

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-MISC-80711A	SOW para 3.1.1; 3.1.2; 3.1.3; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		See 16	See 16	
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**	
N/A	B	N/A	N/A	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE
INSERT
IN
SECT. B

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Block 10 and 12: Final Report submitted 15 days after each increment task.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files to christina.brantley@us.army.mil.

15. TOTAL →	a. ADDRESSEE	b. COPIES: Draft	Final: Reg.	Final: Repro
	RDMR-WDG-C	0	1	0
		0	1	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A006	Test/Inspection Report	Test Report

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-NDTI-80809B	SOW para 3.2.1; 3.2.3; 3.3.3; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		See 16	See 16	
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**	
N/A	B	N/A	See 16	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE
INSERT
IN
SECT. B

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 10, 12 & 13: Submit in contractor format NLT 30 days after completion of each test/inspection.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office or Adobe PDF files to christina.brantley@us.army.mil.

15. TOTAL →	a. ADDRESSEE	b. COPIES: Draft	Final: Reg.	Final: Repro
	RDMR-WDG-C	0	1	0
		0	1	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A007	Interface Control Document	Interface Control

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-81248A	SOW para 3.1.1; 3.1.2; 3.1.2.2; 3.1.3; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		See 16	See 16	

8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
A	B	N/A	See 16	RDMR-WDG-C	0	1	0
				15. TOTAL →	0	1	0

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 8, 10, 12, & 13: The contractor shall prepare an ICD as needed to provide the Government with necessary documentation of component and system interfaces as described in each Task Order. The contractor shall submit the data item in draft form. The Government has 15 working days to review and return the data item. The contractor's final version of the data item shall be returned to the Government at least 15 working days prior to end of the Task Order.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A008	Contractor's Configuration Management Plan	Configuration Management

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80858B	SOW para 3.1.1; 3.1.2; 3.1.3; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		See 16	See 16	

8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
A	B	0	See 16	RDMR-WDG-C	0	1	0
				15. TOTAL →	0	1	0

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 8, 10, 12, & 13: The contractor shall prepare Configuration Management Plan as needed to provide the Government with necessary documentation as described in each Task Order. The contractor shall submit the data item in draft form. The Government has 15 working days to review and return the data item. The contractor's final version of the data item shall be returned to the Government at least 15 working days prior to end of the Task Order

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER	

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A009	Training Materials	Training Documentation	18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-ILSS-80872	SOW para 3.1.4; 3.6.2; 3.6.2.1	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		See 16	See 16	
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**	
A	B	N/A	See 16	

a. ADDRESSEE	b. COPIES: Draft	Final: Reg.	Final: Repro
RDMR-WDG-C	0	1	0
15. TOTAL	0	1	0

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 8, 10, 12, & 13: The contractor shall prepare Training Material as needed to provide the Government with necessary documentation of as described in each Task Order. The contractor shall submit the data item in draft form. The Government has 15 working days to review and return the data item. The contractor's final version of the data item shall be returned to the Government at least 15 working days prior to end of the Task Order

Block 14: Material shall be submitted in digital format consisting of Adobe PDF, DVD video and/or Microsoft Office files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER	

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A010	Performance and Cost Report		18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-FNCL-80912	SOW para 3.1.4	RDMR-WDG-C

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
LT		Monthly	See 16	
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**	
N/A	B	0	See 16	

a. ADDRESSEE	b. COPIES: Draft	Final: Reg.	Final: Repro
RDMR-WDG-C	0	1	0
15. TOTAL	0	1	0

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Block 12/13: The 15th of each month starting the second month and continuing through effort completion.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files or Adobe PDF files to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER

D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A011	Dev Design Drawings/Models & Associated Lists	Design Data Package	

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-SESS-81002E	SOW para 3.1.1; 3.1.2; 3.1.3; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C	INSERT IN SECT. B

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT	B	See 16	See 16
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**
A		N/A	See 16

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
RDMR-WDG-C	0	1	0
15. TOTAL →	0	1	0

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 8, 10, 12, & 13: The contractor shall prepare drawings, models, and associated lists as needed to provide the Government with necessary documentation and hardware of milestone achievements as dictated in each Task Order. The contractor shall submit the data item in draft form. The Government has 15 working days to review and return the data item. The contractor's final version of the data item shall be returned to the Government at least 15 working days prior to end of the Task Order.

Block 14: Material shall be submitted in digital format as defined in the tailoring worksheet to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

TDP OPTION SELECTION WORKSHEET

SYSTEM: DATE PREPARED: 19Mar10

A. CONTRACT NO.	B. EXHIBIT/ATTACHMENT NO.	C. CLIN	D. CDRL DATA ITEM NO(s).
			A011

1. TDP Level (X and complete as applicable.)

A. ☐ CONCEPTUAL LEVEL
■ DEVELOPMENTAL LEVEL
■ PRODUCTION LEVEL

B. REMARKS: The Technical Data Package shall be prepared at a Level (2) for a natural progression into a Level (3).

2. TYPE AND FORMAT (X all that apply and complete as applicable.)

A.
☐ TYPE 2D: 2D DRAWINGS
☐ TYPE 3D: 3D MODELS ONLY
■ TYPE 3D: 3D MODELS WITH ASSOCIATED 2D DRAWINGS

B.
■ NATIVE CAD (SPECIFY TYPE)
■ ISO 10303 STEP FORMAT (Specify STEP PROTOCOL AP203, AP 214 etc.)
■ ISO 32000 PORTABLE DOCUMENT FORMAT
■ OTHER ELECTRONIC FORMAT (SPECIFY TYPE)
■ HARDCOPY

REMARKS:

3. CAGE Code AND DOCUMENT NUMBERS

A. ☐ CONTRACTOR CAGE AND DOCUMENT NUMBERS
■ GOVERNMENT CAGE (COMPLETE 3B & 3C OR 3D)

B. USE CAGE CODE:

C. USE DOCUMENT NUMBERS:

D. To Be Assigned By: RDMR-SET

4. DRAWING FORMATS (X one and complete as applicable)

☐ CONTRACTOR FORMAT.
■ GOVERNMENT FORMAT.
REMARKS: ______

5. TDP ELEMENTS REQUIRED (X all that apply)

☐ ELEMENTS REQUIRED TO BE DETERMINED BY CONTRACTOR - OR THE FOLLOWING ARE REQUIRED:

☐ CONCEPTUAL DRAWINGS/MODELS AND ASSOCIATED LISTS
■ DEVELOPMENTAL DESIGN DRAWINGS/MODELS AND ASSOCIATED LISTS
■ PRODUCT DRAWINGS/MODELS AND ASSOCIATED LISTS
☐ COMMERCIAL DRAWINGS/MODELS AND ASSOCIATED LISTS
☐ QUALITY ASSURANCE PROVISIONS
☐ SPECIAL INSPECTION EQUIPMENT (SIE) DRAWINGS/MODELS AND ASSOCIATED LISTS
☐ SPECIAL TOOLING (ST) DRAWINGS/MODELS AND ASSOCIATED LISTS
■ SPECIFICATIONS
■ SOFTWARE DOCUMENTATION
☐ SPECIAL PACKAGING INSTRUCTIONS (SPI) DRAWINGS/MODELS AND ASSOCIATED LISTS

6. ASSOCIATED LIST (X and complete as applicable)

■ A. PARTS LIST (X ONE)	☐ (1) INTEGRAL	■ (2) SEPARATE
■ B. DATA LISTS (X ONE)	☐ (1) NOT REQUIRED	☐ (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY)
☐ C. INDEX LISTS (X ONE)	☐ (1) NOT REQUIRED	☐ (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY)
■ D. WIRING LISTS (X ONE)	☐ (1) NOT REQUIRED	■ (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY)
☐ E. INDENTURED DATA LISTS (X ONE)	☐ (1) NOT REQUIRED	☐ (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY)
☐ F. APPLICATION LISTS (X ONE)	☐ (1) NOT REQUIRED	☐ (2) REQUIRED (SPECIFY LEVELS OF ASSEMBLY)

7. APPLICABILITY OF STANDARDS. The following Standards apply: (X as applicable)

■ ASME Y14.100 ENGINEERING DRAWING PRACTICES WITH APPENDICES: ■ B ■ C ■ D ■ E

■ ASME Y14.24 TYPES AND APPLICATIONS OF ENGINEERING DRAWINGS
■ ASME Y14.34 ASSOCIATED LIST
■ ASME Y14.35M REVISION OF ENGINEERING DRAWINGS AND ASSOCIATED LIST
■ ASME Y14.41 DIGITAL PRODUCT DEFINITION DATA PRACTICES
■ ASME Y14.5 DIMENSIONING AND TOLERANCING

■ OTHER STANDARDS APPLY AS DESCRIBED:

COMPANY STANDARDS PERMITTED ☐ YES ■ NO

8. OTHER TAILORING (Attach additional sheets as necessary)

FIGURE 1: TDP Option Selection Worksheet

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Send completed form to the Government Issuing Contracting Officer for Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER	
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACT	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A012	Presentation Material	Meetings/Reviews	18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-ADMN-81373	SOW para 3.1.4	RDMR-WDG-C

7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION	15. COPIES		
LT	B	See 16	See 16	a. ADDRESSEE	Draft	Final	
9. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION			Reg.	Repro
N/A		N/A	See 16	RDMR-WDG-C	0	1	0

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 10, 12 & 13: Presentation material from all government/contractor meetings shall be required within 5 working days of close of meeting.

Block 14: Material shall be submitted in digital format consisting of Microsoft Office files to christina.brantley@us.army.mil.

15. TOTAL →	0	1	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Spencer Hudson RDMR-WDP-S		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Send completed form to the Government Issuing Contracting Officer for Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER	
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR	

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A013	Program-Unique Specification Documents	Design Data Package	18. ESTIMATED TOTAL PRICE: INSERT IN SECT. B

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-SDMP-81493A	SOW para 3.1.1; 3.1.2; 3.1.2.3; 3.1.3; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	RDMR-WDG-C

7. DD 250 REQ	8. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION	15. COPIES		
LT	B	See 16	See 16	a. ADDRESSEE	Draft	Final	
9. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION			Reg.	Repro
A		N/A	See 16	RDMR-WDG-C	0	1	0

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

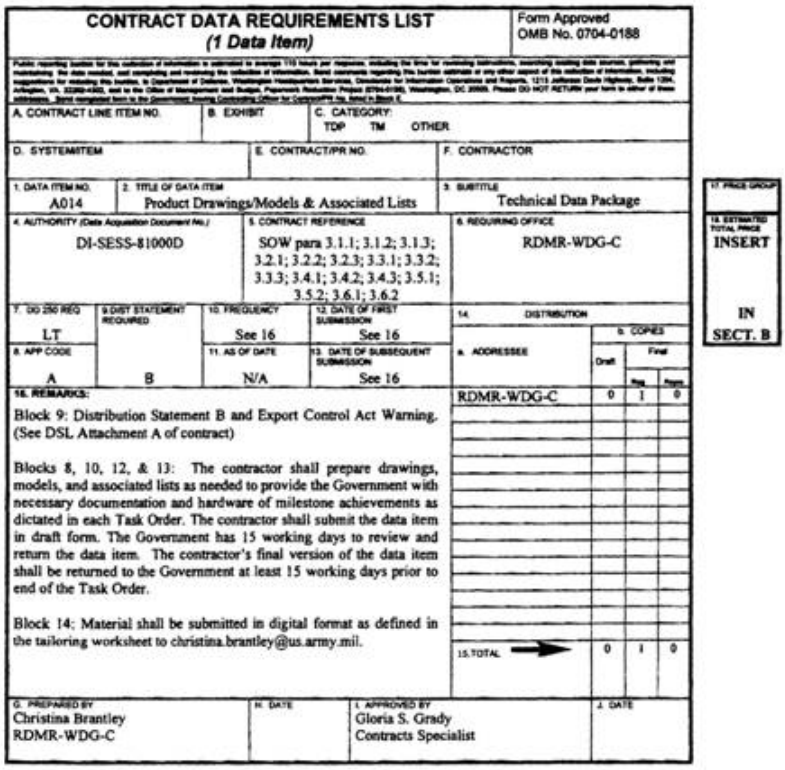
Blocks 8, 10, 12, & 13: The contractor shall prepare specification documents as needed to provide the Government with necessary documentation of milestone achievements as dictated in each Task Order. The contractor shall submit the data item in draft form. The Government has 15 working days to review and return the data item. The contractor's final version of the data item shall be returned to the Government at least 15 working days prior to end of the Task Order.

Block 14: Material shall be submitted in digital form as defined in the incremental Task Orders to christina.brantley@us.army.mil.

15. TOTAL →	0	1	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

DD Form 1423-1, 1 Jun 90



CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP TM OTHER	
D. SYSTEM/ITEM	E. CONTRACT/PR NO.	F. CONTRACTOR	
1. DATA ITEM NO. A014	2. TITLE OF DATA ITEM Product Drawings/Models & Associated Lists	3. SUBTITLE Technical Data Package	17. PRICE GROUP
4. AUTHORITY (Data Acquisition Document No.) DI-SESS-81000D	5. CONTRACT REFERENCE SOW para 3.1.1; 3.1.2; 3.1.3; 3.2.1; 3.2.2; 3.2.3; 3.3.1; 3.3.2; 3.3.3; 3.4.1; 3.4.2; 3.4.3; 3.5.1; 3.5.2; 3.6.1; 3.6.2	6. REQUIRING OFFICE RDMR-WDG-C	18. ESTIMATED TOTAL PRICE INSERT IN SECT. B

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION	15. COPIES		
					Draft	Final	
LT		See 16	See 16	a. ADDRESSEE		Reg	Repro
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION				
A	B	N/A	See 16	RDMR-WDG-C	0	1	0
				15. TOTAL →	0	1	0

16. REMARKS:

Block 9: Distribution Statement B and Export Control Act Warning. (See DSL Attachment A of contract)

Blocks 8, 10, 12, & 13: The contractor shall prepare drawings, models, and associated lists as needed to provide the Government with necessary documentation and hardware of milestone achievements as dictated in each Task Order. The contractor shall submit the data item in draft form. The Government has 15 working days to review and return the data item. The contractor's final version of the data item shall be returned to the Government at least 15 working days prior to end of the Task Order.

Block 14: Material shall be submitted in digital format as defined in the tailoring worksheet to christina.brantley@us.army.mil.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Christina Brantley RDMR-WDG-C		Gloria S. Grady Contracts Specialist	

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13 May 2010

PERFORMANCE WORK STATEMENT

FOR

TECHNOLOGY DEVELOPMENT AND INTEGRATION

PROGRAM FOR A LETHAL MINIATURE

AERIAL MUNITION SYSTEM (LMAMS)

Prepared by

AVIATION AND MISSILE RESEARCH, DEVELOPMENT, AND ENGINEERING CENTER

PERFORMANCE WORK STATEMENT

TECHNOLOGY DEVELOPMENT AND INTEGRATION PROGRAM

FOR A

LETHAL MINIATURE AERIAL MUNITION SYSTEM (LMAMS)

1.0 SCOPE. This Phase III SBIR effort is a logical extension of the two prior Phase I and Phase II SBIR funded contracts (Phase I SBIR - Contract No. H92222-06-P-0020, "Off-Board Sensing UAS System Concept", Phase II SBIR — Contract No. FA9453-06-C-0202, "Miniature Unmanned Aerial Vehicle (MUAV)"). The efforts of both Phase I and Phase II have yielded a 'basic' Lethal Miniature Aerial Munition System (LMAMS) configuration with daytime optical capability, global positioning system (GPS) navigation system, automatic flight controls, RAVEN ground control system user interface, warhead and Electronic Safe and Arm Device (ESAD), and a vision based target lock capability with pilot override functionality.

This Performance Work Statement (PWS) defines the Technology Development and Integration Program tasks that are required to provide to the Aviation and Missile Research Development and Engineering Center (AMRDEC) to further develop and enhance the LMAMS. These tasks will provide for evaluation and continued system development of the current LMAMS configuration (referred to as basic electro-optical (EO) munition) as well as technology and system development for performance enhancements for future LMAMS configurations to include but not limited to an enhanced developmental electro-optical munition, enhanced developmental infrared (IR) munition, developmental ground support equipment and controls, and developmental Warhead/ESAD assemblies.

1.1 BACKGROUND. The Special Operations Community (United States Army Special Operations Command (USASOC), Naval Special Warfare Command (NAVSPECWARCOM), Air Force Special Operations Command (AFSOC), Marine Corps Forces Special Operations Command (MARSOC) and the United States Army Maneuver Center of Excellence (MCOE)) share an identified requirement for a LMAMS that supports the critical military need to enhance the individual Warfighter's lethality, survivability and improve precision indirect fire power at the lowest tactical echelon. The LMAMS will provide a small tactical unit with an organic precision guided aerial munitions system capable of engaging enemy forces that are in advantageous positions such as rooftops, inside of buildings, alleyways, ridgelines, and/or other positions that may provide them an advantage over the friendly forces. This capability enhances the small unit's ability to quickly identify and precisely engage combatants in complex terrains and at standoff ranges.

2.0 APPLICABLE DOCUMENTS. Applicable top level documents are identified by number, title, date, and category in the Document Summary List (DSL). The document versions specified on the DSL take precedence over the generic references (without revision letters) cited in the PWS.

3.0 TASKS. The Contractor, as an independent contractor and not an agent of the Government, shall conduct data development, technology development, technology integration, technology demonstration, design support efforts, system development and test required for current increment and enhancements for future technology insertions for the LMAMS IAW with the

PWS. The LMAMS may consist of a ground control station (w/antenna, associated cables, repair kit, manuals), laptop, and munitions (with electro-optical and/or infrared sensors) including launchers, and warheads. Technology enhancements and insertions may include but are not limited to imaging sensors/camera, warhead and fuzing, height of burst sensor, tracker algorithms, guidance and control electronics, and power/battery subsystems.

The tasks described in this PWS shall be performed per detailed task order PWSs.

3.1 DATA DEVELOPMENT. The contractor shall produce analysis data required to support technology development, technology integration, and technology demonstration for current LMAMS configuration (basic E0 munition) and future technology insertions for enhanced EO munitions, enhanced infrared munitions and ground support equipment and controls. The contractor shall prepare the necessary documentation as described in Section 3 of the PWS per applicable Task Order PWSs. Technical Data Package deliverables will be IAW MIL-STD-31000 Standard Practice Technical Data Packages, MIL-STD-961 Defense and Program-unique Specifications Format and Content, MIL-STD-962 Defense Standards Format and Content, MIL-STD-2073-1 Standard Practice for Military Packaging, and DOD-STD-2101 Classification of Characteristics, as applicable.

3.1.1 Data Assembly: The contractor shall perform data assembly efforts to provide data for ongoing or previously conducted engineering efforts. Potential deliverables for Section 3.1.1 shall be IAW DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SDMP-81493 Program Unique Specification Documents and DI-SESS-81000 Product Drawings, Models & Associated Lists.

3.1.1.1 Performance Data: The contractor shall provide ongoing or previously developed performance data that defines the component, subsystem or system performance with respect to its intended design. This data shall include products such as subsystem and system performance specifications to quantify requirements.

3.1.1.2 Design Data: The contractor shall provide ongoing or previously developed design data that characterizes the functional and physical properties of the component, subsystem or system elements. This data shall include products such as component lists to include specific listings of the actual parts, materials, and processes that make up the design; drawings; specifications; assembly procedures; and documented supporting analysis and experiments to provide technical justification for the design.

3.1.1.3 Interface Data: The contractor shall provide ongoing or previously developed interface data that defines the mechanical, electrical, and optical interfaces of the component, subsystem or system elements. This data shall include products such as interface drawings and specifications and the supporting analysis and experiments that justify the design.

3.1.2 Design Analysis: The contractor shall perform all analysis efforts to produce new data in support of technology development, technology integration, and technology demonstration. These tasks include all analyses required to clearly identify design shortfalls and develop a

mature technology concept to eliminate the shortfalls, integrate the new technology unit into the system, and demonstrate the system performance with the new technology unit through flight tests. This includes operational analysis to quantify the requirements, system analysis to allocate the requirements, subsystem analysis to identify technology concepts to eliminate the shortfalls, and cost analysis to assure that the proposed solution is cost-effective. Potential deliverables for Section 3.1.2 shall be IAW DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SDMP-81493 Program Unique Specification Documents, and DI-SESS-81000 Product Drawings, Models & Associated Lists.

3.1.2.1 Operational Analyses: The contractor shall perform analyses that include threat assessment, operational scenario definition, mission requirements, and operational requirements. These analyses shall include products such as threat characteristics, reference missions, interface requirements with external systems, operational timeline summaries, and operational requirement documentation. Potential deliverables shall be IAW DI-MISC-80711 Scientific and Technical Reports.

3.1.2.2 System Analyses: The contractor shall perform analyses that result in key performance parameters, system performance specifications, interface definitions, man-machine interfaces, and supportability requirements to allow system performance assessments that identify shortfalls of the system design from meeting the operational requirement. Potential deliverables shall be IAW DI-CMAN-81248A Interface Control Document (ICD). The contractor shall perform root cause analysis of design problems identified in technology development testing in Section 3.2.3. These efforts shall provide documentation of the shortfalls of the system design and concepts for eliminating the design shortfalls to meet the operational requirements.

3.1.2.3 Subsystem Analyses: The contractor shall perform analyses that result in subsystem performance specifications to allow component and subsystem performance assessments that identify shortfalls of the system component and subsystem design from meeting the system performance specifications. The contractor shall identify component and subsystem concepts that eliminate the technology and design shortfalls and conduct comparative analysis to establish comparative advantages and disadvantages. This effort shall provide documentation of the shortfalls of the component and subsystem design and concepts for eliminating the technology and design shortfalls to meet the subsystem system performance requirements. Potential deliverables shall be IAW DI-SDMP-81493 Program Unique Specification Documents.

3.1.2.4 Performance Analysis: The contractor shall identify key requirements of the performance specification and analyze performance against these requirements based on models of the evolving design. Parameters of the models shall be based on alternatives being considered in the trade-off analysis. Parameter variations shall provide information on the sensitivity of system performance to key parameters. Test results shall be incorporated into the analysis to validate system performance with respect to the specification. The analysis shall also highlight significant cost savings that could be realized by adjustments made to the performance specification.

3.1.2.5 Cost Analysis: The contractor shall perform cost analysis that result in engineering estimates and Unit Production Cost (UPC) of modified subsystems and systems that eliminate the shortfalls and optimize performance. Cost shall include both the recurring and non-recurring costs and consider factors such as work breakdown packages, component cost estimates from Trade-off Analysis, production quantities, schedule, producibility, and risk. The contractor shall perform Cost as an Independent Variable (CAIV) trade off analyses on key performance parameters.

3.1.3 Simulation: The contractor shall conduct simulation efforts to produce new data in support of the analysis for technology development, technology integration, and technology demonstration. Potential deliverables for Section 3.1.3 shall be IAW DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists and DI-SDMP-81493 Program Unique Specification Documents,

3.1.3.1 Digital Closed Loop Flight Simulation: The contractor shall provide design data, component mathematical models, flight control algorithms, and simulations to the government for the development of an all-digital closed loop high fidelity six degree-of-freedom integrated flight simulation. Potential deliverables shall be IAW DI-MCCR-80700 Computer Software Product End Item. This simulation will be government developed and used for flight performance analyses, Monte Carlo analyses, flight failure analyses and flight performance reporting and will be the simulation of record for overall performance reporting. The contractor shall provide such data to the government in a form that facilitates the government's in-house development of the integrated flight simulation. The contractor shall provide an algorithm description document for the flight control algorithms. The contractor shall provide such models, algorithms, and simulations as used and shall include the error budget and error sources of each system component modeled. The contractor shall identify all pertinent data and source and executable code necessary for the Government to independently verify and validate flight performance and deliver it to the government. Models, algorithms, and simulations delivered to the government shall be adequately documented. Potential deliverables shall be IAW DI-MISC-80711 Scientific and Technical Reports, and DI-MCCR-80700 Computer Software Product End Item.

3.1.3.2 Hardware-in-the-Loop (HWIL): The contractor shall provide HWIL design and development efforts including planning, integration, and validation, to support testing in the contractor's facilities and in the Government's HWIL facilities. Planning activities include efforts to modify, provide, and implement a HWIL plan to support HWIL in accordance with Government requirements. Integration, validation, and testing activities include support for a fully integrated simulation, as well as safe, non-destructive acceptance tests.

3.1.4 General Support: The contractor shall support the LMAMS technology development, integration, and demonstration. All efforts performed under this paragraph shall be performed in conjunction with and incidental to performance of paragraphs 3.1 through 3.6. Potential deliverables for Section 3.1.4 shall be IAW DI-MGMT-80004 Management Plan, DI-FNCL-

80912 Performance and Cost Report, DI-ADMN-81373 Presentation Materials, and DI-ILSS-80872 Training Materials

3.1.4.1 Assessments: The contractor shall perform programmatic and technical assessments, planning, analyses and investigations to determine impacts and effects of the results obtained above on other areas that affect overall system effectiveness. Contractor shall develop recommendations to correct problems that have been identified. These other areas include schedule, cost, manpower and personnel integration (MANPRINT), training, and other project management critical areas. The contractor shall participate in study teams and Red Teams as described in task orders to address specific design issues and to make technical recommendations for Government consideration. The contractor shall examine Government-Furnished Property (GFP), test plans and procedures, develop recommendations for changes, and review conduct of tests by others, as described in task orders. The contractor shall develop recommendations for modifications based on performed assessments, as described in task orders.

3.1.4.2 Meetings: The contractor shall attend meetings for the purpose of obtaining data required in the performance of contractual efforts under this requirement or to present the results of contractual efforts performed under this requirement. The contractor shall attend such program reviews, design reviews, software walk-throughs and other such information gathering activities to perform contractual efforts as described in task orders. The contractor shall provide support at local briefings and briefings at other sites. The briefings might involve other contractors and/or customers. This shall include the requirement for onsite generation of high quality graphics and briefing materials.

3.1.4.3 Notification of Rights: The contractor shall identify and receive written government approval from the Contracting Officer prior to committing to the use of any privately developed items, components, processes, computer software, and/or technical data which they:

(i) intend to deliver with Limited Rights
(ii) intend to deliver with Government Purpose License Rights
(iii) intend to deliver with restricted rights
(iv) have not yet determined if such rights should apply.

3.2 TECHNOLOGY DEVELOPMENT. The contractor shall perform efforts required to produce a functioning, performing, and qualified technology element prototype that eliminates capability shortfalls, based on the data developed in Section 3.1, and is ready for system integration in Section 3.3. This effort includes design, fabrication, and testing supported by simulation-based analysis.

3.2.1 Technology Development Design: The contractor shall perform component, subsystem, and system design required to begin technology development fabrication in Section 3.2.2. This includes component and subsystem design to convert the technology concept to detailed engineering characteristics and system design to develop engineering data to facilitate incorporation of the required modifications. Potential deliverables for Section 3.2.1 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration

Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.2.1.1 Component and Subsystem Design: The contractor shall perform effort that includes new designs of components or subsystem modifications that incorporate state-of-the-art technology for hardware/software in order to correct component or subsystem deficiencies and to optimize component or subsystem performance. This design effort shall include tradeoff design studies that substantiate that the best approach and components were selected for the design to meet the component or subsystem performance specification of Section 3.1.2.3 and engineering analysis to ensure that modifications and optimizations are timely and are cost and performance effective.

3.2.1.2 System Design: The contractor shall perform effort that includes new system designs to incorporate the components and subsystems designed in Section 3.2.1.1 and to correct system deficiencies and optimize system performance identified in Section 3.1.2.2. This design effort shall include integration studies and engineering design to ensure that modifications accommodated within the system and system optimizations are timely and are cost and performance effective.

3.2.2 Technology Development Fabrication: The contractor shall perform efforts required to fabricate a functioning technology element ready for performance testing in Section 3.2.3. This effort includes the fabrication, assembly, and integration of items at the component, subsystem, and system level. Potential deliverables for Section 3.2.2 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.2.2.1 Parts: The contractor shall perform effort to acquire or develop all items needed in the assembly of the functioning technology element. Elements may include prototypes components, subsystems, specialized test beds, fixtures, and data collection/reduction equipment.

3.2.2.2 Assembly: The contractor shall perform effort to assemble the items developed in 3.2.2.1 into component, subsystem, or system elements which are ready to be integrated into a functioning technology element. The contractor shall employ a computer-driven, virtual fabrication and integration workshop, as appropriate, in order to establish sequences for construction build-up and dimensional tolerance ceilings.

3.2.2.3 Integration: The contractor shall perform effort to integrate the assembled elements into a functioning technology element ready for performance testing. Reconfiguration of existing equipment shall be considered and employed, as appropriate for integration. Appropriate interface control shall be adhered to for optical, mechanical and electrical connections.

3.2.3 Technology Development Performance Testing: The contractor shall perform tasks under this section to include all performance testing efforts required to test and qualify a

functioning and performing technology element ready for system integration in Section 3.3. This effort includes stand-alone laboratory and field testing of the technology element produced in 3.2.2. Performance testing shall include, but not be limited to those tests defined in 3.2.3.1 through 3.2.3.4. Potential deliverables for Section 3.2.3 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.2.3.1 Technology Element Laboratory Tests: The contractor shall conduct fully controllable and adequately observable laboratory tests to obtain performance data on the functioning technology element sufficient to verify that performance meets the design specifications. These tests may be conducted under a variety of test environments such as vibration, shock, temperature, humidity, and natural and man-made environments to qualify the technology element for system integration, as described in task orders. The contractor shall conduct these tests, to include setup troubleshooting, data recording, real-time data analysis, and test analysis and documentation, as delineated in task orders.

3.2.3.2 Technology Element Field Tests: The contractor shall implement fully controllable and adequately observable field tests to obtain performance data on the functioning technology element to validate the performance obtained in laboratory tests in Section 3.2.3.1 to produce a functioning, performing, and qualified technology element ready for system integration. The contractor shall conduct these tests, to include setup troubleshooting, data recording, real-time data analysis, and test analysis and documentation, as delineated in task orders.

3.3 TECHNOLOGY INTEGRATION. The contractor shall perform efforts required to integrate a functioning, performing, and qualified technology element developed in Section 3.2 into a system-level configuration to produce an enhanced EO/IR LMAMS ready for technology demonstration in Section 3.4. This effort includes design, fabrication, and testing supported by simulation-based analysis.

3.3.1 Technology Integration Design: The contractor shall perform mechanical, electrical, optical, and other interface design required for the integration of the technology element into the system-level configuration sufficient for fabrication and assembly in Section 3.3.2. This design effort includes assembly drawings, electrical interface, assembly steps and procedures, and parts lists. Potential deliverables shall be IAW DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists. Potential deliverables for Section 3.3.1 shall be IAW DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.3.2 Technology Integration Fabrication: The contractor shall perform efforts required to develop or acquire the special mechanical, electrical, optical, and other interface parts needed for

system integration, to assemble the interface components, and to integrate those components into functioning and performing munition ready for performance testing in Section 3.3.3. Potential deliverables for Section 3.3.2 shall be IAW DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.3.2.1 Parts: The contractor shall perform effort to acquire or develop all parts needed in the integration of the functioning technology element into the munition system. Elements may include prototype components, subsystems, specialized test beds, fixtures, and data collection/reduction equipment.

3.3.2.2 Assembly: The contractor shall perform effort to assemble the parts developed in 3.3.2.1 into interface components that will allow the functioning technology element to be integrated with the higher-level system configuration. The contractor shall employ a computer-driven, virtual fabrication and integration workshop, as appropriate, in order to establish sequences for construction build-up and dimensional tolerance ceilings.

3.3.2.3 Integration: The contractor shall integrate the functioning technology element system-level configuration, using the interface components assembled in Section 3.3.2.2, to form a functioning and performing munition system ready for performance testing in Section 3.3.3.

3.3.3 Technology Integration Performance Testing: The contractor shall conduct all performance testing efforts required to produce a functioning and performing LMAMS ready for technology demonstration in Section 3.4. This effort includes laboratory, flight, and non-flight field testing of the integrated technology unit produced in 3.3.2. Performance testing shall include, but not be limited to those tests defined in 3.3.3.1 through 3.3.3.4. Potential deliverables for Section 3.3.3 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.3.3.1 LMAMS Laboratory Tests: The contractor shall conduct fully controllable and adequately observable laboratory tests to obtain performance data on the functioning munition system sufficient to verify that performance meets the design specifications and qualify the system for flight testing. These tests shall be conducted under a variety of test environments such as vibration, shock, temperature, humidity, and natural and man-made environments as described in task orders. The contractor shall conduct these tests, to include setup troubleshooting, data recording, real-time data analysis, and test analysis and documentation, as delineated in task orders.

3.3.3.2 Munition Field Tests: The contractor shall implement fully controllable and adequately observable field tests, either flight or non-flight, to obtain performance data on the functioning

munition system to validate the performance obtained in laboratory tests in Section 3.3.3.1 to produce a functioning and performing munition system ready for technology demonstration in Section 3.4. The contractor shall conduct these tests, to include setup troubleshooting, data recording, real-time data analysis, and test analysis and documentation, as delineated in task orders.

3.4 TECHNOLOGY DEMONSTRATION. The contractor shall perform efforts to conduct an integrated system-level demonstration of the technology unit provided in Section 3.3, and proving it ready for further system development. Efforts include planning, testing, and test data reduction supported by simulation-based analysis.

3.4.1 Technology Demonstration Plans: The contractor shall plan and document fully controllable and adequately observable test plans, scenarios, and procedures to demonstrate the LMAMS to establish its performance in the field, incorporating the closed loop and HWIL simulation to fill out the total system configuration. Potential deliverables for Section 3.4.1 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-8l002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.4.2 Technology Demonstration Test: The contractor shall perform efforts to demonstrate the performance of the LMAMS under field conditions. This effort includes pre-flight testing, and Closed Loop Autonomous Flight testing of the system produced in Section 3.3. Potential deliverables for Section 3.4.2 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.4.2.1 Pre-Flight Testing: The contractor shall conduct tests to verify flight readiness of the munition system. This testing shall include all checks to provide a high level of confidence that the munition system will function as designed during closed loop autonomous flight testing. This test includes

electrical and mechanical functioning, subsystem operation, and system integrity. The contractor shall conduct these tests as described in task orders.

3.4.2.2 Closed Loop Autonomous Flight Test: The contractor shall conduct Closed Loop Autonomous Flight tests, according to test plans developed in Section 3.4.1. These tests shall demonstrate the LMAMS capability to autonomously execute a mission given a target lock on command from the user without further user intervention. The tests shall include test range reservation, range support, delivery of the munition system and test equipment to the test site, installation and assembly at the test site, preflight checkout, conduct of the test, and acquisition of test data. Closed Loop Autonomous Flight tests shall provide engineering data to validate simulations.

3.4.3 Technology Demonstration Data Reduction: The contractor shall perform all data efforts required for setup, installation, test conduct, troubleshooting, pre-flight and real-time data analysis, collection, display, data reduction, and demonstration evaluation. Potential deliverables for Section 3.4.3 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.5 DESIGN SUPPORT. The contractor shall perform tasks to produce reliability, maintainability, and manufacturing effort required to support technology development, technology integration, and technology demonstration for current increment enhancements and future technology insertions for the LMAMS.

3.5.1 Reliability and Maintainability: Tasks performed under this section include all efforts to produce reliable and maintainable design during technology development, technology integration, and technology demonstration. The LMAMS, its subsystems and components shall demonstrate an operational (probabilistic) reliability with regard to operational scenarios and requirements defined in individual task orders. Potential deliverables for Section 3.5.1 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDT1-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DIl-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.5.1.1 RAM Modeling and Simulation: The contractor shall perform reliability and maintainability (R&M) modeling and simulation studies and system/component R&M assessments and impact studies in support of risk mitigation activities.

3.5.1.2 RAM Design Support: The contractor shall support the design/analysis, fabrication/integration, and test efforts with the day-to-day planning, management, and assessment of R&M activities. The contractor shall coordinate with the Government and contractor teams to assure appropriate and adequate R&M design and development considerations in order to minimize R&M integration and demonstration issues.

3.5.1.3 RAM Studies: The contractor shall conduct trade studies, reviews, and assessments of R&M technologies and methodologies to identify and recommend areas where R&M performance may be improved.

3.5.2 Manufacturing: The contractor shall produce cost effective manufacturing processes, materials, tooling, and assembly during technology development, technology integration, and technology demonstration. The overall cost of the system, to include the Ground Control Station (GCS), laptop, airframe, warhead and on-board sensor shall not exceed costs described in the task orders. Potential deliverables for Section 3.5.2 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical

Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document ([CD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.5.2.1 Processes, Materials and Tooling: The contractor shall evaluate and validate producibility and evaluate cost drivers. Munition components fabrication, assembly, integration and test models shall be utilized for optics, guidance and control, warhead, motor/propulsion, electronics and cabling, and airframe/structural hardware. The contractor shall evaluate supplier manufacturing and affordability issues for components, materials, fabrication, assembly and test. Simulations and models shall be used to identify technical, cost and schedule risks related to supplier manufacturing.

3.5.2.2 System Assembly and Integration: The contractor shall perform systems engineering analyses of interrelationships between technical performance, production processes, technological status, and cost and schedule performance. The contractor shall perform analyses in the areas of statistics, reliability and hardware performance for various weapon systems and subsystems. The contractor shall research and develop expert systems in support of advanced weapon system manufacturing utilizing artificial intelligence methodologies and techniques for the modeling and representation of knowledge, deduction, and problem solving. The contractor shall identify and establish innovative processes and common/standard procedures to lessen the impact of technology obsolescence and significantly reduce technical risks and production/sustainment costs. The contractor shall conduct studies on systems and subsystems to assess total producibility. This includes, but is not limited to, locating manufacturing bottlenecks and identifying root causes, utilizing corrective actions, and tracking progress on these actions. The contractor shall provide reliability, maintainability, and manufacturing models and simulations to evaluate and validate reliability, maintainability, producibility, and manufacturing cost drivers. These simulations and models shall be used to identify technical, cost and schedule risks related to in-house or supplier capabilities.

3.5.2.3 Cost Assessment Updates: The contractor shall conduct assessments and develop risk mitigation approaches to address affordability and manufacturability with the objective of documenting manufacturing readiness, cost concerns and mitigation approaches. The contractor shall establish product and process benchmarks and define and document estimated production costs for each component. The contractor shall identify cost drivers and evaluate producibility concerns associated with planned manufacturing methods and materials and processes. The contractor shall complete a study regarding assembly labor, and attempt to reduce labor costs using industrial/manufacturing engineering techniques, and provide a report regarding the results of the study. The contractor shall develop, maintain and provide to the government AUPC/AUPP cost estimates to include recurring and nonrecurring costs down to the component level with justification, which includes either vendor quotes, or full labor and materials breakdown analysis; manufacturing readiness levels, manufacturing cost drivers, and list of key suppliers.

3.6 SYSTEM TEST AND EVALUATION SUPPORT. The contractor shall perform tasks for LMAMS current, basic EO configuration and/or future enhanced configurations fabrication,

assembly, and integration into functioning and performing munition ready for test and evaluation by various parties including government test functions, potential end users, and others. The contractor shall develop training materials and perform training necessary for operators to use the LMAMS.

3.6.1 System Fabrication, Assembly, Integration, and Test: The contractor shall perform efforts required to develop or acquire the special mechanical, electrical, optical, and other interface parts needed for system integration, to assemble the interface components, and to integrate those components into functioning and performing munition ready for test and evaluation. Potential deliverables for Section 3.6.1 shall be IAW DI-NDT1-80566 Test Plan, DI-MCCR-80700 Computer Software Product End Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.6.1.1 Parts: The contractor shall perform effort to acquire or develop all parts needed in the integration of the functioning technology element into the munition system. Elements may include prototype components, subsystems, specialized test beds, fixtures, and data collection/reduction equipment.

3.6.1.2 Assembly: The contractor shall perform effort to assemble the parts developed in 3.6.1.1 into interface components that will allow the functioning technology element to be integrated with the higher-level system configuration. The contractor shall employ a computer-driven, virtual fabrication and integration workshop, as appropriate, in order to establish sequences for construction build-up and dimensional tolerance ceilings.

3.6.1.3 Integration: The contractor shall integrate the functioning technology element system-level configuration, using the interface components assembled in Section 3.6.1.2, to form a functioning and performing munition system ready for test and evaluation by various parties including government test functions, potential end users, and others.

3.6.1.4 Test and Evaluation: The contractor shall conduct tests to verify flight readiness of the munition system. This testing shall include all checks to provide a high level of confidence that the munition system will function as designed during flight testing. This test includes electrical and mechanical functioning, subsystem operation, and system integrity. The contractor shall conduct these tests, to include setup troubleshooting, data recording, real-time data analysis, and test analysis and documentation, as delineated in task orders. Test and Evaluation support efforts shall include test range reservation, range support, delivery of the munition system and test equipment to the test site, installation and assembly at the test site, preflight checkout, conduct of the test, and acquisition of test data.

3.6.2 System User Training and Documentation: The contractor shall perform tasks under this section to include all efforts required to develop training documentation and materials and perform system user training for LMAMS operators. Potential deliverables for Section 3.6.2 shall be IAW DI-NDTI-80566 Test Plan, DI-MCCR-80700 Computer Software Product End

Item, DI-MISC-80711 Scientific and Technical Reports, DI-NDTI-80809 Test/Inspection Report, DI-CMAN-81248A Interface Control Document (ICD), DI-CMAN-80858 Configuration Management Plan, DI-ILSS-80872 Training Materials, DI-SESS-81002 Developmental Design Drawings, Models & Associated Lists, DI-SESS-81000 Product Drawings, Models & Associated Lists, and DI-SDMP-81493 Program Unique Specification Documents.

3.6.2.1 Training Documentation and Materials: The contractor shall develop training materials necessary to train LMAMS operators which may include but are not limited to government test functions and potential end users. These materials may include, but are not limited to printed materials, videos, and training manuals. Potential deliverables shall be IAW DI-ILSS-80872 Training Materials.

3.6.2.2 System User Training: The contractor shall perform training in various forms, to include classroom, simulator-based, and hands on flight testing for LMAMS operators as described in task orders.

4.0 TRAVEL. Travel is anticipated in performance of this contract. The contractor shall travel to support all elements of the PWS as described in task orders. The contractor must receive approval from the COR prior to performing any travel. Anticipated travel locations include, but are not limited to Huntsville, AL; Dugway Proving Grounds, UT; and Eglin AFB, FL.

5.0 SECURITY. The contractor shall provide security to a level necessary to meet the requirements of the contract. The contractor's work effort shall not be above the level of SECRET. The contractor shall comply with all applicable security classification guides listed in the contract. The contractor shall be required to obtain and maintain a SECRET facility clearance and provide adequate cleared personnel at the SECRET level to perform classified tasks. The contractor will be authorized to receive, generate, and store classified information at the SECRET level. The contractor will be authorized access to COMSEC.

6.0 CONTRACTOR MANPOWER REPORTING. The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the contractor shall report ALL contractor manpower (including subcontractor manpower) required for performance of this contract. The contractor is required to completely fill in all the information in the format using the following web address: https://contractormanpower.army.pentagon.mil. The required information includes: (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative; (2) Contract number, including task and delivery order number; (3) Beginning and ending dates covered by reporting period; (4) Contractor name, address, phone number, e-mail address, identity of contractor employee entering data; (5) Estimated direct labor hours (including subcontractors); (6) Estimated direct labor dollars paid this reporting period (including subcontractors; (7) Total payments (including subcontractors); (8) Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each sub-contractor if different); (9) Estimated data collection cost; (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information); (11) Locations where contractor and sub-contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas

location, using standardized nomenclature provided on website); (12) Presence of deployment of contingency contract language; and (13) Number of contractor and subcontractor employees deployed in theater this reporting period (by country). As part of its submission, the contractor shall also provide the estimated total cost (if any) incurred to comply with this reporting requirement. Reporting period will be the period of performance not to exceed 12 months ending 30 September of each government fiscal year and must be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a contractor's system to the secure website without the need for separate data entries for each required data element at the website. The specific formats for the XML direct transfer may be downloaded from the website.

7.0 Government Furnished Equipment (GFE)/Government Furnished Information (GFI)/Government Furnished Material (GFM)/ Government Furnished Property (GFP). The contractor personnel shall be off-site at the contractor's facility, and utilize their resources to perform the tasks. The Government will provide access to networked engineering applications as needed. The government on-site test and laboratory areas to be supported are located on Redstone Arsenal (Propulsion Technology Test Site, located at TA-10) and at Eglin Air Force Base. Government test ranges will be used for occasional field tests and for the Live Fire Demonstration. The contractor shall have access to all applicable Government technical manuals, requirement documents, drawings, and other data required for execution of the LMAMS Program. Specific technical areas of interest include developmental drawings and designs for a Government developed Infrared Sensor, image stabilization/tracker software, Height of Burst (HOB) Sensor, and a miniature power source for the munition. Other requirements for GFE, GFI, GFM, and GFP will be listed in the individual Task Order PWS. The parties will follow the procedures and guidance for the handling of GFE/GFI/GFM/GFP as set forth in FAR 52.245-1.

8.0 Safety Requirements. The contractor shall comply with applicable provisions of Army Regulation 385-63, "Range Safety" while performing any tests or demonstrations on Government operated or owned ranges. The contractor shall comply with DOD 4145.26-M, "DOD Contractor's Safety Manual for Ammunition and Explosives" while performing all ammunition and explosives efforts and services.

DEPARTMENT OF DEFENSE

CONTRACT SECURITY CLASSIFICATION SPECIFICATION

(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort.)

1. CLEARANCE AND SAFEGUARDING

a. FACILITY CLEARANCE REQUIRED: SECRET

b. LEVEL OF SAFEGUARDING REQUIRED: SECRET

2. THIS SPECIFICATION IS FOR: (x and complete as applicable)

- ☐ a. PRIME CONTRACT NUMBER
- ☐ b. SUBCONTRACT NUMBER
- ☒ c. SOLICITATION OR OTHER NUMBER: PAN RS167 — DUE DATE (YYMMDD): 10/03/31

3. THIS SPECIFICATION IS: (x and complete as applicable)

- ☒ a. ORIGINAL (Complete date in all cases) — DATE (YYMMDD): 100303
- ☐ b. REVISED (Supersedes all previous specs) — Revision No. — DATE (YYMMDD):
- ☐ c. FINAL (Complete item 5 in all cases) — DATE (YYMMDD):

4. THIS IS A FOLLOW-ON CONTRACT? ☐ YES ☒ NO. If Yes, complete the following:

Classified material received or generated (Preceding Contract Number) is transferred to this follow-on contract.

5. IS THIS A FINAL DD FORM 254? ☐ YES ☒ NO. If Yes, complete the following:

In response to the contractor's request dated _____, retention of the identified classified material is authorized for the period of _____

6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)

a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
AeroVironment Corporate Headquarters 181 W. Huntington Drive, Suite 202 Monrovia, CA 91016	60107	Defense Security Service (IOFWP) 3452 E. Foothill Boulevard, Suite 524 Pasadena, CA 91107-3142 Main: 626-449-0941

7. SUBCONTRACTOR

a. NAME, ADDRESS, AND ZIP CODE	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip code)

8. ACTUAL PERFORMANCE

a. LOCATION	b. CAGE CODE	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)
AeroVironment Corporate Headquarters 181 W. Huntington Drive, Suite 202 Monrovia, CA 91016	60107	Defense Security Service (IOFWP) 3452 E. Foothill Boulevard, Suite 524 Pasadena, CA 91107-3142 Main: 626-449-0941

9. GENERAL IDENTIFICATION OF THIS PROCUREMENT

This Phase III SBIR effort is a logical extension of the two prior Phase I and Phase II SBIR funded contracts (Phase I SBIR - Contract No. H92222-06-P-0020, "Off-Board Sensing UAS System Concept".

Phase II SBIR – Contract No. FA9453-06-C-0202, "Miniature Unmanned Aerial Vehicle (MUAV)"). The contractor (AeroVironment, Inc) efforts of both Phase I and Phase II have yielded a 'basic' Lethal Miniature Aerial Munition System (LMAMS) configuration with daytime optical capability, global positioning system (GPS) navigation system, automatic flight controls, RAVEN ground control system user interface, warhead and Electronic Safe and Arm Device (ESAD), and a vision based target lock capability with pilot override functionality. This Statement of Work (SOW) defines the Technology Development and Integration Program tasks that AeroVironment is required to provide to the Aviation and Missile Research Development and Engineering Center (AMRDEC) to further develop and enhance LMAMS.

10. THIS CONTRACT WILL REQUIRE ACCESS TO:	YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	YES	NO
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	☒	☐	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	☐	☒
b. RESTRICTED DATA	☐	☒	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	☐	☒
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION	☐	☒	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	☒	☐
d. FORMERLY RESTRICTED DATA	☐	☒	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	☐	☒
e. INTELLIGENCE INFORMATION			e. PERFORM SERVICES ONLY	☐	☒
(1) Sensitive Compartmented Information (SCI)	☐	☒	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	☐	☒
(2) Non-SCI	☐	☒	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	☒	☐
f. SPECIAL ACCESS INFORMATION	☐	☒	h. REQUIRE A COMSEC ACCOUNT	☒	☐
g. NATO INFORMATION	☐	☒	i. HAVE TEMPEST REQUIREMENTS	☐	☒
h. FOREIGN GOVERNMENT INFORMATION	☐	☒	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	☒	☐
i. LIMITED DISSEMINATION INFORMATION	☐	☒	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	☐	☒
j. FOR OFFICIAL USE ONLY INFORMATION	☒	☐	l. OTHER (Specify)	☐	☒
k. OTHER (Specify)	☐	☒			

DD FORM 254 December 1999

FOR OFFICIAL USE ONLY

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the NISPOM or unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through (Specify):

Director, U.S. Army Aviation and Missile RD&E Center ATTN: RDMR-P (Public Affairs Office)
Redstone Arsenal, AL 35898; (256) 313-5742
Release through the Weapons Development and Integration (WDI) Directorate, Sensors, Guidance & Electronics (SGE) Division, U.S. Army AMRDEC, RDMR-SG-C, Redstone Arsenal, AL 35898-5000, (256) 842-6909, Fax (256) 955-6963

* Public release of any classified information is not authorized and categorically prohibited.

To the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)* for review.
*In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classification guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.)

1. Classified material generated under this contract shall be marked in accordance with source document.
2. No foreign participation is authorized. U.S. citizens only.
3. Reference Block 10a: NSA/CSS POLICY MANUAL No. 3-16, 5 August 2005 applies to this contract.
4. Reference Block 10j: See attached FOUO statement.
5. Reference Block 11g: Contractor access to DTIC information is restricted to contractual subject matter and SOW performance requirements. The Project Manager will verify contractor need-to-know via submission of DD Forms 1540 and 1541 to DTIC.
6. Reference Block 11h: NSA/CSS POLICY MANUAL No. 3-16, 5 August 2005 applies to this contract.
7. Reference Block 11j: The AMRDEC Operations Security Plan will be provided upon contract award.
8. Contractor is responsible for compliance with all applicable laws and regulations governing access to Classified information and controlled Unclassified information.
9. Technical POC: Christina Brantley, RDMR-WDG-C, 256-842-6921
10. Contracting Officer: Tonya Wood, CCAM-RD-B, tonya.wood@us.army.mil,256.876.2112
11. Estimated Completion Date: 30 September 2016.

Security Requirements:
The contractor shall be required to obtain and maintain a SECRET facility clearance and provide adequate cleared personnel at the SECRET level to perform classified tasks. The contractor will be authorized to receive, generate, and store classified information at the SECRET level. The contractor will be authorized access to COMSEC.

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to NISPOM requirements, are established for this contract. (If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.) ☒ Yes ☐ No

See attached FOUO instruction document

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.) ☐ Yes ☒ No

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	c. TELEPHONE (Include Area Code)
Roark Washington	Security Specialist	256-876-5249

d. ADDRESS (Include Zip Code)
AMRDEC
ATTN: RDMR-SI
Redstone Arsenal, AL 35898

e. SIGNATURE
R. Washington 3-4-10

17. REQUIRED DISTRIBUTION
☒ a. CONTRACTOR
☐ b. SUBCONTRACTOR
☒ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
☒ e. ADMINISTRATIVE CONTRACTING OFFICER
☒ f. OTHERS AS NECESSARY

DD FORM 254 (CONTINUATION)
CONTRACT #

ATTACHMENT A

“FOR OFFICIAL USE ONLY” (FOUO) INFORMATION

1. General. The “FOR OFFICIAL USE ONLY” (FOUO) marking is assigned to information at the time of its creation. It is used to designate official government information that may be withheld from the public under exemptions 2 through 9 of the Freedom of Information Act. Use of the marking does not mean that the information cannot be released to the public, only that it must be reviewed by the government prior to its release to determine whether a significant and legitimate government purpose is served by withholding the information or portions of it.

2. Identification Markings.

a. An unclassified document containing FOUO information will be marked “FOR OFFICIAL USE ONLY” at the bottom and front cover (if any) on the first page, on each page containing FOUO information, on the back page, and on the outside of the back cover (if any). No portion markings will be shown.

b. Within a classified document, an individual page that contains both FOUO and classified information will be marked at the top and bottom with the highest security classification of information appearing on the page. If an individual portion contains FOUO information but no classified information, the portion will be marked, FOUO.

c. Any “FOR OFFICIAL USE ONLY” information released to a contractor by a DoD user agency is required to be marked with the following statement prior to transfer:

This document contains information EXEMPT FROM MANDATORY DISCLOSURE under FOIA. Exemptions apply.

d. Removal of the “FOR OFFICIAL USE ONLY” marking can only be accomplished by the originator or other competent authority.

When the “FOR OFFICIAL USE ONLY” status is terminated, all known holders will be notified to the extent possible.

3. Dissemination. “FOR OFFICIAL USE ONLY” information may be disseminated by contractors to their employees and subcontractors who have a need for the information in connection with a classified contract.

4. Storage. During working hours, “FOR OFFICIAL USE ONLY” information shall be placed in and out-of-sight location if the work area is accessible to persons who do not have a need for the information. During nonworking hours, the information shall be stored to preclude unauthorized access. Filing such material with other unclassified records in unlocked files or desks, is adequate when internal building security is provided during nonworking hours. When such internal security control is not exercised, locked buildings or rooms will provide adequate after hours protection or the material can be stored in locked receptacles such as file cabinets, desks, or bookcases.

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5. Transmission. “FOR OFFICIAL USE ONLY” documents and material can be transmitted via first class mail, parcel post, or for bulk shipments, fourth class mail. Electronic transmission of FOUO information by voice, data, facsimile or similar means, should be by approved secure communications systems whenever possible.

6. Disposition. When no longer needed FOUO, information may be disposed off by tearing each copy into pieces to preclude reconstructing and placing it in a regular trash container.

7. Unauthorized Disclosure. Unauthorized disclosure of “FOR OFFICIAL USE ONLY” does not constitute a security violation but the contracting officer should be informed of any unauthorized disclosure. The unauthorized disclosure of FOUO information protected by the Privacy Act may result in criminal sanctions.

QUALITY ASSURANCE SURVEILLANCE PLAN

SBIR Phase III

“LETHAL MINIATURE AERIAL MUNITION SYSTEM

(LMAMS)”

Description of Action: This Phase III SBIR effort is for requirements definition, prototype development, testing, and software development for a Lethal Miniature Aerial Munition System (LMAMS) for missile technology needs.

Metrics: The SBIR Phase III contract requires submission of technical reports, contract performance and cost reports, and final technical reports for contractual workload. A Contracting Officers Representative (COR) has been appointed to assist with the administration of each task/technical directive performed under the contract. Contractor performance under this contract will be reviewed and assessed on a monthly basis.

a.) Cost metrics will be measured in a monthly cost report. Budgets will be baselined for each effort prior to start. Deltas in actual cost vs. budget cost will be monitored and measured to avoid cost overruns.

b.) Schedule metrics will be measured using the monthly technical status report. Schedules are baselined for each effort prior to start. Deltas in actual schedule vs. baseline are monitored and measured.

c.) Performance metrics are defined prior to the start of any effort and will be monitored through monthly reporting.

PERFORMANCE REQUIREMENTS SUMMARY MATRIX

PERFORMANCE OBJECTIVE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL (AQL)	METHOD OF SURVEILLANCE	PERFORMANCE INCENTIVE
CDRL Requirements	Contract requirements met with little rework/re-performance required and with few minor and no significant problems encountered *Deliverable reports contain all required data and meet all applicable CDRL requirements*	Contractor delivery of products and/or services meets all contract requirements. Performance occurs with no required re-performance/ rework at least 80% of time. Problems that are encountered are minor and resolved in a satisfactory manner.	Routine Inspection of Deliverable Services/Products	Assignment of performance rating for QUALITY criteria: *SATISFACTORY Performance and deliverables meet all contract requirements. Performance delivered with no re performance/rework at least 80% of time; problems that are encountered are minor and resolved in a satisfactory manner.* *UNSATISFACTORY Many contract requirements not met. Numerous re-*

				performances/reworks required. Substantial problems were encountered and inadequate corrective actions employed.
Adherence to Schedule	Contract milestones, periods of performance, and/or data submission dates are met or exceeded	Contractor meets contract delivery requirements at least 80% of the time (excluding Government caused delays)	Routine Inspection of Deliverable Services/Products	Assignment of performance rating for SCHEDULE criteria: *SATISFACTORY Contract milestones/ performance dates met or exceeded at least 80% of time (excluding government caused delays)* *UNSATISFACTORY Contract schedule/performance dates met less than 70% of time*
Adherence to Cost	Contract cost is controlled in efficient and effective manner Cost reports contain all required data and meet all applicable CDRL requirements	Contractor delivery of products and/or services is in the range of 91% to 100% of all contract cost estimates	Routine Inspection of contract Performance and Cost Reports, vouchers	Assignment of performance rating for COST criteria: *SATISFACTORY Performance Costs are maintained in the range of 91% to 100% of the estimated contract costs*

PERFORMANCE OBJECTIVE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL (AQL)	METHOD OF SURVEILLANCE	PERFORMANCE INCENTIVE
				UNSATISFACTORY Performance costs exceed the estimated contact costs
Prototype	Contract prototype requirements met with little rework/re- performance required and with few minor and no significant problems encountered *Performance meets all technical and functional requirements, and is highly responsive to changes in technical direction and/or the technical support environment* *Assessments, evaluations, analyses, recommendations, and related assistance are thorough, reliable, highly relevant to contract requirements, and consist of substantial depth and breadth of subject matter* *Deliverable reports contain all required data and meet all applicable CDRL requirements*	Contractor delivery of products and/or services meets all contract requirements. Performance occurs with no required re-performance/ rework at least 80 % of time. Problems that are encountered are minor and resolved in a satisfactory manner.	Routine Inspection of Deliverable Services/Products	Assignment of performance rating for QUALITY criteria: *SATISFACTORY Performance and deliverables meet all contract requirements. Performance delivered with no re-performance/ rework at least 80% of time; problems that are encountered are minor and resolved in a satisfactory manner.* *UNSATISFACTORY Many contract requirements not met Numerous re-performances/reworks required. Substantial problems were encountered and inadequate corrective actions employed.*

DFARS 252.227-7017, Identification and Assertion of Use, Release, or Disclosure Restrictions (JUN 1995)

LIST OF NONCOMMERCIAL TECHNICAL DATA OR
NONCOMMERCIAL COMPUTER SOFTWARE FURNISHED TO THE GOVERNMENT WITH RESTRICTIONS

Performance of this contract involves the application of privately developed intellectual property as claimed by the contractor. As such, the contractor asserts for it, or the persons identified below, that the Government’s rights to use, release, or disclose the noncommercial technical data or noncommercial computer software listed herein should be restricted.

The Government agrees with the contractor's staled position subject to the following: In the event that it is later determined that the asserted rights herein are inconsistent with other more favorable pre-existing rights previously afforded to the Government, then such more favorable pre-existing rights previously afforded the Government shall apply to this contract.

SBIR III Technology Development and Integration Program
for the Lethal Miniature Aerial Munition System (LMAMS)

Technical Data or Computer Software to be Furnished With Restrictions*	Basis for Assertion **	Asserted Rights Category ***	Name of Person Asserting Restrictions ****
Technical data setting forth or describing the design, configuration or manufacture of the Switchblade (SB) [***] and [***] hardware, Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc. (AV)
SB [***] software, Block 1 and 20 series.	Developed exclusively at private expense	Restricted	AeroVironment Inc.
Technical data setting forth or describing the design, configuration or manufacture of the Switchblade (SB) [***] and [***] systems, Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc. (AV)
Technical data setting forth or describing the deign, configuration or manufacture of the SB [***] and [***] Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical data setting forth or describing the design, configuration or manufacture of the SB [***] Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical data setting forth or describing the design, configuration or manufacture of the SB [***] and [***], Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical data setting forth or describing the design, configuration or manufacture of the SB [***] Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical data setting forth or describing the design, configuration or manufacture of the SB [***] hardware, Block 1.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
SB [***] Software, Block 1.	Developed exclusively at private expense.	Restricted	AeroVironment Inc.
Technical Data setting forth or describing the design, configuration or manufacturing of the SB [***] Hardware, Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical Data setting forth or describing the design, configuration or manufacture of the SB [***], Block 1.	Developed exclusively at private expense.	Limited	AeroVironment Inc.

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Technical Data or Computer Software to be Furnished With Restrictions*	Basis for Assertion **	Asserted Rights Category ***	Name of Person Asserting Restrictions ****
Technical Data setting forth or describing the design, configuration or manufacture of an Unmanned Aerial Vehicle (UAV) [***] configured with a [***], SB Block 1.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical Data setting forth or describing the design, configuration or manufacture of an UAV [***] configured with an [***], SB Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical Data setting forth or describing the design, configuration or manufacture of a [***], SB Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical Data setting forth or describing the design, configuration or manufacturing of a UAV configured to [***] responsive to an [***] and/or [***], SB Block 1 and 20 series	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical Data setting forth or describing the design, configuration or manufacture of an [***], SB Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Technical Data setting forth or describing the design, configuration or manufacture of the Digital Data Link (DDL) communication system and the miniature Digital Data Link (Mini DDL) communication system, SB Block 20.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
Software of the Digital Data Link (DDL) communication system and the miniature Digital Data Link (Mini DDL) communication system, SB Block 20.	Developed exclusively at private expense.	Restricted	AeroVironment Inc.
Technical Data setting forth or describing design, configuration or manufacture of SB in documents and data packages for SB simulation training, SB user guide, SB briefing package, SB technical description of tactics, SB procedures, SB mock-ups, SB flight simulator, SB Block 1 and 20 series.	Developed exclusively at private expense.	Limited	AeroVironment Inc.
SB flight simulator software, SB Block 1 and 20 series.	Developed exclusively at private expense.	Restricted	AeroVironment Inc.
Technical Data generated by AV under this contract and set forth in the Management Plan IAW DI-MGMT-80004A (A001), the Performance and Cost Report IAW D-FNCL-80912 (A010), the Interim Report IAW DI-MISC-80711 (A004), the Final Report IAW	Developed under a Small Business Innovation Research (SBIR) Program	Rights in SBIR data generated under this contract	AeroVironment, Inc.

DI-MISC-80711 (A005), and the Presentation Material IAW DI-ADMN-81373 (A012).			
Software generated by AV under this contract.	Developed under a SBIR Program	Rights in SBIR data generated under this contract	AeroVironment Inc.
Technical Data generated by AV under contract number FA8650-10-C-7013 (AFSOC/AFRL SBIR III - 'Switchblade') warhead enhancements, payload improvements, IR camera integration, and vehicle/warhead pointing algorithms.	Developed under a SBIR Program	Rights in SBIR data generated under another contract	AeroVironment Inc.
Software generated by AV under contract number FA8650-10-C-7013 (AFSOC/AFRL SBIR III — 'Switchblade') programs and coding for pointing the	Developed under a SBIR Program	Rights in SBIR data generated under another contract	AeroVironment Inc.

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Technical Data or Computer Software to be Furnished With Restrictions*	**Basis for Assertion** **	**Asserted Rights Category** ***	**Name of Person Asserting Restrictions** ****
vehicle and/or warhead			
Technical Data generated by AV under contract number H92222-06-P-0020 (Phase I SBIR - "Off-Board Sensing UAS System Concept").	Developed under a SBIR Program	Rights in SBIR data generated under another contract	AeroVironment Inc.
Software generated by AV under contract number H92222-06-P-0020 (Phase I SBIR — "Off-Board Sensing UAS System Concept").	Developed under a SBIR Program	Rights in SBIR data generated under another contract	AeroVironment Inc.
Technical Data generated by AV under contract number FA9453-06-C-0202 (Phase II SBIR — "Miniature Unmanned Aerial Vehicle Munition System (LMAMS)").	Developed under a SBIR Program	Rights in SBIR data generated under another contract	AeroVironment Inc.
Software generated by AV under contract number FA9453-06-C-0202 (Phase II SBIR — "Miniature Unmanned Aerial Vehicle Munition System (LMAMS)").	Developed under a SBIR Program	Rights in SBIR data generated under another contract	AeroVironment Inc.

* For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both deliverable technical data and each such item. components, or processes. For computer software or computer software documentation identify the software or documentation.

** Generally, development at private expense, either exclusively or partially. is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

*** Enter asserted rights category (e.g. government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract or specially negotiated licenses).

**** Corporation, individual, or other person, as appropriate.

***** Enter "none" when all data or software will be submitted without restriction.

Date: 5 August 2010
Printed Name: [***]
Title: Principal Contract Administrator
Signature: /s/ [***]

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

DFARS 252.277-7017 Identification and Assertion of Use, Release, or Disclosure Restrictions (JUN 1995)

LIST OF NONCOMMERCIAL TECHNICAL DATA OR
NONCOMMERCIAL COMPUTER SOFTWARE FURNISHED TO THE GOVERNMENT WITH RESTRICTIONS

Performance of this contract involves the application of privately developed intellectual property as claimed by the contractor. As such, the contractor asserts for it, or the persons identified below, that the Government's rights to use, release, or disclose the noncommercial technical data or noncommercial computer software listed herein should be restricted.

The Government agrees with the contractor's stated position subject to the following: In the event that it is later determined that the asserted rights herein are inconsistent with other more favorable pre-existing rights previously afforded to the Government, then such more favorable pre-existing rights previously afforded to the Government shall apply to this contract.

Technical Data or Computer Software to be Furnished With Restrictions*	Basis for Assertion **	Asserted Rights Category ***	Name of Person Asserting Restrictions ****
Technical Data setting forth or describing the design, configuration, or manufacture of the Switchblade (SB) [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of the SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of the SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of the SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of the SB [***], Block 1 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of the SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of the SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration or manufacture of the SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the	Developed exclusively at	Limited	ATK Aerospace

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Technical Data or Computer Software to be Furnished With Restrictions*	Basis for Assertion **	Asserted Rights Category ***	Name of Person Asserting Restrictions ****
design, configuration, or manufacture of the [***]	private expense.		Systems
Technical Data setting forth or describing the design, configuration, or manufacture of SB [***], Block 1 and 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems
Technical Data setting forth or describing the design, configuration, or manufacture of the SB [***], Block 10 series	Developed exclusively at private expense.	Limited	ATK Aerospace Systems

* For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, components, or processes. For computer software or computer software documentation identify the software or documentation.

** Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software documentation, enter the specific basis for asserting restrictions.

*** Enter asserted rights category (e.g. government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract or specially negotiated licenses). .

**** Corporation, individual, or other person, as appropriate.

***** Enter "none" when all data or software will be submitted without restriction.

Date: 23 November 2010
Printed Name: [***]
Title: Contract Specialist
Signature: /s/ [***]

[***] Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 21.1

AeroVironment and Current Entities

Name	Jurisdiction of Organization
AeroVironment, Inc.	Delaware
AV S.r.l. Italy	
AV GmbH	
AILC, Inc.	Delaware
SkyTower, Inc.	Delaware
SkyTower, LLC	Delaware
Regenerative Fuel Cell Systems, LLC	Delaware
Charger Bicycles, LLC (50%)*	Delaware

***** **inactive, but never officially dissolved**

QuickLinks

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 (Registration No. 333-140237) pertaining to the AeroVironment, Inc. Nonqualified Stock Option Plan, the AeroVironment, Inc. Directors' Nonqualified Stock Option Plan, the AeroVironment, Inc. 2002 Equity Incentive Plan, and the AeroVironment, Inc. 2006 Equity Incentive Plan of our reports dated June 21, 2011, with respect to the consolidated financial statements and schedule of AeroVironment, Inc. and subsidiaries and the effectiveness of internal control over financial reporting of AeroVironment, Inc., and subsidiaries included in this Annual Report on Form 10-K for the year ended April 30, 2011.

/s/ Ernst & Young LLP

Los Angeles, California
June 21, 2011

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QuickLinks -- Click here to rapidly navigate through this document

Exhibit 31.1

Certification of CEO Pursuant to
Securities Exchange Act Rules 13a-14 and 15d-14
as Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Timothy E. Conver, certify that:

1. I have reviewed this annual report on Form 10-K of AeroVironment, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 21, 2011

/s/ TIMOTHY E. CONVER

Timothy E. Conver
Chief Executive Officer and President

QuickLinks

Exhibit 31.2

Certification of CFO Pursuant to
Securities Exchange Act Rules 13a-14 and 15d-14
as Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Jikun Kim, certify that:

1. I have reviewed this annual report on Form 10-K of AeroVironment, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 21, 2011

/s/ JIKUN KIM

Jikun Kim
Chief Financial Officer

QuickLinks

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of AeroVironment, Inc. (the "Company") hereby certifies, to each such officer's knowledge, that:

(i) the accompanying Annual Report on Form 10-K of the Company for the year ended April 30, 2011 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: June 21, 2011

/s/ TIMOTHY E. CONVER

Timothy E. Conver
Chief Executive Officer and President

Date: June 21, 2011

/s/ JIKUN KIM

Jikun Kim
Chief Financial Officer

QuickLinks