

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

R QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.

For the quarterly period ended January 26, 2008

OR

£ 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.

Delaware

(State or other jurisdiction of incorporation or organization)

95-2705790

(I.R.S. Employer Identification No.)

181 W. Huntington Drive, Suite 202
Monrovia, California

(Address of principal executive offices)

91016

(Zip Code)

(626) 357-9983

(Registrant's telephone number, including area code)

N/A

(Former name, former address and former fiscal year, if changed since last report)

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 R No £

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

£ Accelerated filer

R Non-accelerated filer

£ Smaller reporting company

(Do not check if smaller reporting company)

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

As of February 28, 2008, the number of shares outstanding of the registrant's common stock, \$0.0001 par value, was 20,178,369.

AeroVironment, Inc.

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Aero Vironment, Inc.
Consolidated Balance Sheets
(In thousands except share data)

	January 26, 2008	April 30, 2007
	<u>(Unaudited)</u>	
Assets		
Current assets:		
Cash and cash equivalents	\$ 79,565	\$ 20,920
Restricted cash	406	389
Short-term investments	30,780	88,325
Accounts receivable, net of allowance for doubtful accounts of \$186 at January 26, 2008 and \$149 at April 30, 2007	25,463	7,691
Unbilled receivables and retentions	18,418	26,494
Inventories, net	16,970	14,015
Income tax receivable	2,623	—
Deferred income taxes	1,843	1,730
Prepaid expenses and other current assets	1,620	1,504
Total current assets	<u>177,688</u>	<u>161,068</u>
Property and equipment, net	10,256	6,229
Deferred income taxes	761	761
Other assets	118	119
Total assets	<u>\$ 188,823</u>	<u>\$ 168,177</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 12,233	\$ 16,024
Wages and related accruals	7,809	8,942
Customer advances	548	139
Income taxes payable	—	4,564
Other current liabilities	4,361	1,544
Total current liabilities	<u>24,951</u>	<u>31,213</u>
Deferred rent	927	541
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 — 20,175,563 at January 26, 2008 and 18,875,957 at April 30, 2007	2	2
Additional paid-in capital	95,741	83,611
Retained earnings	67,202	52,810
Total stockholders' equity	<u>162,945</u>	<u>136,423</u>
Total liabilities and stockholders' equity	<u>\$ 188,823</u>	<u>\$ 168,177</u>

See accompanying notes to consolidated financial statements (unaudited).

AeroVironment, Inc.
Consolidated Statements of Income (Unaudited)
(In thousands except share and per share data)

	<u>Three Months Ended</u>		<u>Nine Months Ended</u>	
	<u>January 26, 2008</u>	<u>January 27, 2007</u>	<u>January 26, 2008</u>	<u>January 27, 2007</u>
Revenue:				
Product sales	\$ 19,947	\$ 32,614	\$ 83,673	\$ 87,426
Contract services	<u>28,588</u>	<u>13,661</u>	<u>67,767</u>	<u>35,595</u>
	48,535	46,275	151,440	123,021
Cost of sales:				
Product sales	9,585	17,677	48,487	50,226
Contract services	<u>19,117</u>	<u>8,962</u>	<u>47,356</u>	<u>23,403</u>
	28,702	26,639	95,843	73,629
Gross margin	19,833	19,636	55,597	49,392
Selling, general and administrative	8,216	4,224	24,515	17,091
Research and development	<u>3,664</u>	<u>2,240</u>	<u>11,766</u>	<u>9,261</u>
Income from operations	7,953	13,172	19,316	23,040
Other income				
Interest income	<u>1,011</u>	<u>173</u>	<u>3,133</u>	<u>520</u>
Income before income taxes	8,964	13,345	22,449	23,560
Provision for income taxes	<u>2,999</u>	<u>4,456</u>	<u>7,476</u>	<u>8,412</u>
Net income	<u>\$ 5,965</u>	<u>\$ 8,889</u>	<u>\$ 14,973</u>	<u>\$ 15,148</u>
Earnings per share data:				
Basic	\$ 0.30	\$ 0.65	\$ 0.77	\$ 1.11
Diluted	\$ 0.28	\$ 0.57	\$ 0.70	\$ 0.98
Weighted average shares outstanding:				
Basic	20,141,903	13,679,665	19,568,819	13,602,975
Diluted	21,517,117	15,691,256	21,320,241	15,528,493

See accompanying notes to consolidated financial statements (unaudited).

AeroVironment, Inc.
Consolidated Statements of Cash Flows (Unaudited)
(In thousands)

	Nine Months Ended	
	January 26, 2008	January 27, 2007
Operating activities		
Net income	\$ 14,973	\$ 15,148
Adjustments to reconcile net income to net cash and cash equivalents provided by operating activities:		
Depreciation and amortization	2,612	2,118
Long-term retirement costs	—	(2,209)
Provision for doubtful accounts	(37)	105
Deferred income taxes	(113)	—
Stock-based compensation	330	32
Tax benefit from exercise of stock options	10,871	220
Gain on disposition of property and equipment	—	(4)
Changes in operating assets and liabilities:		
Accounts receivable	(17,735)	710
Unbilled receivables and retentions	8,076	(3,201)
Inventories	(2,955)	1,459
Income tax receivable	(2,623)	—
Other assets	(115)	(77)
Accounts payable	(3,791)	306
Customer advances	409	(7,112)
Other liabilities	(3,075)	5,118
Net cash and cash equivalents provided by operating activities	<u>6,827</u>	<u>12,613</u>
Investing activities		
Acquisitions of property and equipment	(6,639)	(1,695)
Proceeds from sale of property and equipment	—	15
Purchases of short-term investments	(784,491)	—
Sales of short-term investments	842,036	—
Net cash and cash equivalents provided by (used in) investing activities	<u>50,906</u>	<u>(1,680)</u>
Financing activities		
Transfers (to) from restricted cash	(17)	1,143
Repayments of line of credit	—	(6,232)
Proceeds from line of credit	—	6,232
Exercise of stock options	929	220
Net proceeds from initial public offering	—	80,523
Net cash and cash equivalents provided by financing activities	<u>912</u>	<u>81,886</u>
Net increase in cash and cash equivalents	58,645	92,819
Cash and cash equivalents at beginning of period	20,920	15,388
Cash and cash equivalents at end of period	<u>\$ 79,565</u>	<u>\$ 108,207</u>

See accompanying notes to consolidated financial statements (unaudited).

AeroVironment, Inc.
Notes to Consolidated Financial Statements (Unaudited)

1. Organization and Significant Accounting Policies

Organization

AeroVironment, Inc., a Delaware corporation (the “Company”), is engaged in the design, development and production of unmanned aircraft systems and energy technologies for various industries and governmental agencies.

Basis of Presentation

The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions of Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of management, all adjustments, consisting only of normal recurring adjustments necessary for a fair presentation with respect to the interim financial statements have been included. The results of operations for the three and nine months ended January 26, 2008 are not necessarily indicative of the results for the full year ending April 30, 2008. For further information, refer to the consolidated financial statements and footnotes thereto for the year ended April 30, 2007, included in AeroVironment, Inc.’s Annual Report on Form 10-K.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions, including estimates of anticipated contract costs and revenue utilized in the revenue recognition process, that affect the reported amounts in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates. Certain prior year amounts have been reclassified to conform to the current year presentation.

The Company’s consolidated financial statements include the assets, liabilities and operating results of wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated.

Segments

The Company’s products are sold and divided among three reportable segments, as defined by Statement of Financial Accounting Standards (“SFAS”) No. 131, *Disclosures about Segments of an Enterprise and Related Information*, 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.

Government Contracts

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 (“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 project costs, and if the DCAA believes the Company has accounted for such costs in a manner inconsistent with the requirements under Federal Acquisition Regulations, the DCAA auditor may recommend to the Company’s administrative contracting officer to disallow such costs. Historically, the Company has not experienced significant 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 Consolidated Financial Statements (Unaudited)

Earnings Per Share

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

The reconciliation of diluted to basic shares is as follows:

	Three Months Ended		Nine Months Ended	
	January 26, 2008	January 27, 2007	January 26, 2008	January 27, 2007
Denominator for basic earnings per share:				
Weighted average common shares outstanding	20,141,903	13,679,665	19,568,819	13,602,975
Dilutive effect of employee stock options	1,375,214	2,011,591	1,751,422	1,925,518
Denominator for diluted earnings per share	<u>21,517,117</u>	<u>15,691,256</u>	<u>21,320,241</u>	<u>15,528,493</u>

During the three and nine months ended January 26, 2008 certain options were not included in the computation of diluted earnings per share because their inclusion would have been anti-dilutive. The number of options which met this anti-dilutive criterion was approximately 76,000 and 194,000 for the three and nine months ended January 26, 2008, respectively. During the three and nine months ended January 27, 2007 there were no stock options that were anti-dilutive to earnings per share.

Recently Issued Accounting Standards

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair value measurements. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007, which is the year beginning May 1, 2008 for the Company. The adoption of SFAS No. 157 is not expected to have a material impact on the Company's financial position, results of operations or cash flows.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities — Including an Amendment of FASB Statement No. 115*. SFAS No. 159 permits entities to choose to measure many financial instruments and certain other items at fair value. Unrealized gains and losses on items for which the fair value option has been elected will be recognized in earnings at each subsequent reporting date. SFAS No. 159 is effective for financial statements issued for fiscal years beginning after November 15, 2007, which is the year beginning May 1, 2008 for the Company. The adoption of SFAS No. 159 is not expected to have a material impact on the Company's financial position, results of operations or cash flows.

AeroVironment, Inc.
Notes to Consolidated Financial Statements (Unaudited)

2. Short-term Investments

The Company's short-term investments are accounted for under SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities* as available-for-sale and reported at fair value, which approximates cost.

As of January 26, 2008, the Company's short-term investments consisted entirely of investment grade auction rate municipal notes and bonds with maturities that could range from 11 to 27 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.

Due to the frequent nature of the reset feature, the investment's market price approximates its fair value; there are no realized or unrealized gains or losses associated with these investments. Interest earned from short-term investments is recorded in interest income.

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

Subsequent to January 26, 2008, the Company experienced 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 January 26, 2008 until a future auction of these securities is successful or a buyer is found outside of the auction process.

As of March 3, 2008, including the securities involved in failed auctions, the Company held approximately \$17.4 million of these auction rate securities, all of which carry investment grade ratings.

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 therefore has not recorded any impairment as of January 26, 2008 or through the date of this filing. The Company will continue to monitor the value of its auction rate securities at each reporting period for a possible impairment if a decline in fair value occurs.

3. Inventories, net

Inventories consist of the following:

	January 26, 2008	April 30, 2007
	(In thousands)	
Raw materials	\$ 6,991	\$ 5,418
Work in process	5,738	3,514
Finished goods	<u>5,392</u>	<u>6,221</u>
Inventories, gross	18,121	15,153
Reserve for inventory obsolescence	<u>(1,151)</u>	<u>(1,138)</u>
Inventories, net	<u>\$ 16,970</u>	<u>\$ 14,015</u>

AeroVironment, Inc.
Notes to Consolidated Financial Statements (Unaudited)

4. Warranty Reserves

The warranty reserve is included in other current liabilities. The related expense is included in cost of sales. Warranty reserve activity is summarized as follows for the three and nine months ended January 26, 2008 and January 27, 2007 (in thousands):

	Three Months Ended		Nine Months Ended	
	January 26, 2008	January 27, 2007	January 26, 2008	January 27, 2007
Beginning balance	\$ 382	\$ 365	\$ 263	\$ 344
Warranty expense	123	250	594	552
Warranty costs incurred	(218)	(152)	(570)	(433)
Ending balance	<u>\$ 287</u>	<u>\$ 463</u>	<u>\$ 287</u>	<u>\$ 463</u>

5. Bank Borrowings

The Company has a working capital line of credit with a bank with a borrowing limit of \$25,000,000. Borrowings bear interest at the bank's prime commercial lending rate minus 0.25%, which was 6.25% as of January 26, 2008 and 8.25% as of April 30, 2007. The line of credit is secured by substantially all of the Company's assets. Interest on amounts outstanding under the line of credit are due monthly. All principal plus accrued but unpaid interest on the line of credit is due August 31, 2009. The Company had no outstanding balance on the line of credit as of January 26, 2008 or April 30, 2007.

The credit facility contains several financial covenants, including that the Company not exceed maximum liquidity and leverage ratios, and limitations on additional indebtedness. The facility includes customary default provisions, and all outstanding obligations may become immediately due and payable in the event of the Company's default. The Company was in compliance with these covenants as of January 26, 2008 and April 30, 2007.

The Company has entered into standby letter-of-credit agreements and bank guarantee agreements with financial institutions and customers primarily relating to the guarantee of the Company's future performance on certain contracts to provide products and services and to secure advance payments the Company has received from certain international customers. As of January 26, 2008 and April 30, 2007, the Company had standby letters of credit totaling \$0.4 million and had received no claims against such letters of credit. These letters of credit expire upon release by the customer.

6. Stock-Based Compensation

For the three and nine months ended January 26, 2008 the Company recorded stock-based compensation of approximately \$145,000 and \$330,000, respectively. For the three and nine months ended January 27, 2007, the Company recorded stock-based compensation of approximately \$24,000 and \$32,000, respectively.

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 three and nine months ended January 26, 2008:

	Three Months Ended January 26, 2008	Nine Months Ended January 26, 2008
Expected term (in years)	6.5	6.5
Expected volatility	18.81%	19.52%
Risk-free interest rate	3.55%	4.67%
Expected dividend	—	—
Weighted average fair value at grant date	\$ 7.01	\$ 7.55

AeroVironment, Inc.
Notes to Consolidated Financial Statements (Unaudited)

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 three and nine months ended January 27, 2007:

	Three and Nine Months Ended January 27, 2007
Expected term (in years)	6.5
Expected volatility	22.41%
Risk-free interest rate	4.56%
Expected dividend	—
Weighted average fair value at grant date	\$ 4.12

The expected term of stock options represents the weighted average period the Company expects the stock options to remain outstanding, using a midpoint model 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, as permitted under Statement of Financial Accounting Standards No. 123(R), *Share Based Payment*. 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 Company's stock option plans at January 26, 2008 and for the nine months then ended is as follows:

	2006 Plan		2002 Plan		1994 Directors' Plan		1992 Plan	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at April 30, 2007	—	\$ —	1,532,423	\$ 1.95	35,189	\$ 0.59	1,941,706	\$ 0.55
Options granted	243,310	21.48	—	—	—	—	—	—
Options exercised	—	—	(102,325)	0.76	—	—	(301,527)	.59
Options canceled	—	—	(5,630)	0.64	—	—	—	—
Outstanding at July 28, 2007	243,310	21.48	1,424,468	2.04	35,189	0.59	1,640,179	0.55
Options granted	40,000	19.87	—	—	—	—	—	—
Options exercised	—	—	(176,635)	1.13	—	—	(625,294)	0.58
Options canceled	—	—	(21,113)	3.63	—	—	—	—
Outstanding at October 27, 2007	283,310	21.25	1,226,720	2.09	35,189	0.59	1,014,885	0.53
Options granted	86,000	24.01	—	—	—	—	—	—
Options exercised	—	—	(61,986)	1.62	—	—	(31,839)	0.59
Options canceled	—	—	(18,299)	2.13	—	—	—	—
Outstanding at January 26, 2008	369,310	21.89	1,146,435	2.15	35,189	0.59	983,046	0.52
Options exercisable at January 26, 2008	—	—	655,899	1.26	35,189	0.59	983,046	0.52

AeroVironment, Inc.
Notes to Consolidated Financial Statements (Unaudited)

7. Customer Funded Research & Development

Customer-funded R&D costs are incurred pursuant to contracts (revenue arrangements) to perform R&D 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 R&D services are performed. Revenues from customer-funded R&D were approximately \$6,892,000 and \$16,995,000 for the three and nine months ended January 26, 2008, respectively. Revenues from customer-funded R&D were approximately \$5,297,000 and \$12,324,000 for the three and nine months ended January 27, 2007, respectively.

8. Income Taxes

On May 1, 2007, the Company adopted the provisions of Interpretation No. 48 ("FIN No. 48"), *Accounting for Uncertainty in Income Taxes: an interpretation of FASB Statement No. 109*. The Company recorded a reduction to retained earnings of approximately \$581,000 as a result of the implementation of FIN No. 48. At the adoption date of May 1, 2007, the Company had approximately \$4,369,000 of unrecognized tax benefits. At January 26, 2008, the Company had approximately \$4,476,000 of unrecognized tax benefits all of which would impact the Company's effective tax rate if recognized. The Company estimates that \$1,277,000 of its unrecognized tax benefits will decrease in the next twelve months.

The Company records interest and penalties on uncertain tax positions to income tax expense. As of May 1, 2007 and January 26, 2008, the Company had accrued approximately \$208,000 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 2005 to 2007 remain open to examination by the IRS for federal income taxes. The tax years 2004 to 2007 remain open for major state taxing jurisdictions.

For the three and nine months ended January 26, 2008, the Company increased the unrecognized tax benefits by approximately \$139,000 and \$417,000, respectively, which impacted the Company's effective tax rate.

AeroVironment, Inc.
Notes to Consolidated Financial Statements (Unaudited)

9. Segment Data

The Company's product segments are as follows:

- Unmanned Aircraft Systems (“UAS”) — engages primarily in the design, manufacture, sale and support of small unmanned aircraft systems.
- PosiCharge Systems (“PosiCharge”) — engages primarily in the design, manufacture, sale and support of fast charge systems and related services for users of electrical industrial vehicles.
- Energy Technology Center — provides contract engineering for electric energy-related projects, and engages in the design, manufacture, sale and support of efficient electric energy systems.

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):

	Three Months Ended		Nine Months Ended	
	January 26, 2008	January 27, 2007	January 26, 2008	January 27, 2007
Revenue:				
UAS	\$ 42,162	\$ 38,763	\$ 130,639	\$ 101,621
PosiCharge	4,111	5,431	14,705	14,889
Energy Technology Center	2,262	2,081	6,096	6,511
Total	<u>48,535</u>	<u>46,275</u>	<u>151,440</u>	<u>123,021</u>
Gross margin:				
UAS	17,489	16,695	48,490	40,482
PosiCharge	1,378	1,918	4,725	5,679
Energy Technology Center	966	1,023	2,382	3,231
Total	<u>19,833</u>	<u>19,636</u>	<u>55,597</u>	<u>49,392</u>
Selling, general and administrative	8,216	4,224	24,515	17,091
Research and development	3,664	2,240	11,766	9,261
Income from operations	7,953	13,172	19,316	23,040
Interest income	1,011	173	3,133	520
Income before income taxes	<u>\$ 8,964</u>	<u>\$ 13,345</u>	<u>\$ 22,449</u>	<u>\$ 23,560</u>

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This section and other parts of this Quarterly Report on Form 10-Q contain forward-looking statements that involve risks and uncertainties. In some cases, forward-looking statements can be identified by words such as "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" or similar expressions. Such forward-looking statements are based on current expectations, estimates and projections about our industry, our management's beliefs and assumptions made by our management. Forward-looking statements are not guarantees of future performance and our actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed in Part II, Item 1A, "Risk Factors."

Unless required by law, we expressly disclaim any obligation to update publicly any forward-looking statements, whether as result of new information, future events or otherwise.

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.

There have been no material changes made to the critical accounting estimates during the periods presented in the consolidated financial statements from those disclosed in the Form 10-K for the fiscal year ended April 30, 2007.

Fiscal Periods

Our 2008 fiscal year ends on April 30, 2008 and our fiscal quarters end on the last Saturday of July, October and January.

Results of Operations

Our operating segments are UAS, PosiCharge and our Energy Technology Center. The accounting policies for each of these segments are the same. In addition, a significant portion of our research and development, or R&D, selling, general and administrative, or SG&A, and general overhead resources are shared across our segments.

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

Three Months Ended January 26, 2008 Compared to Three Months Ended January 27, 2007

	Three Months Ended	
	January 26, 2008	January 27, 2007
	(Unaudited)	
Revenue:		
UAS	\$ 42,162	\$ 38,763
PosiCharge	4,111	5,431
Energy Technology Center	2,262	2,081
Total	<u>48,535</u>	<u>\$ 46,275</u>
Gross margin:		
UAS	\$ 17,489	\$ 16,695
PosiCharge	1,378	1,918
Energy Technology Center	966	1,023
Total	<u>\$ 19,833</u>	<u>\$ 19,636</u>

Revenue. Revenue for the three months ended January 26, 2008 was \$48.5 million, as compared to \$46.3 million for the three months ended January 27, 2007, representing an increase of \$2.3 million, or 5%. UAS revenue increased \$3.4 million, or 9%, to \$42.2 million for the three months ended January 26, 2008, primarily due to substantially higher UAS service and customer-funded research and development work partially offset by lower product deliveries. The higher UAS service revenue was primarily due to services to refurbish, reconstitute, and repair over and above current levels of contractors logistical support, or CLS, for delivered Raven units. CLS are cost reimburseable arrangements, which typically result in lower gross margin than fixed price contracts. PosiCharge revenue decreased by \$1.3 million, or 24%, to \$4.1 million for the three months ended January 26, 2008, due to fewer installations of our fast charge systems in non-auto markets. Energy Technology Center revenue increased by \$0.2 million, or 9%, to \$2.3 million for the three months ended January 26, 2008, primarily due to higher deliveries of power processing test equipment.

Cost of Sales. Cost of sales for the three months ended January 26, 2008 was \$28.7 million, as compared to \$26.6 million for the three months ended January 27, 2007, representing an increase of \$2.1 million, or 8%. The increase in cost of sales was caused by higher UAS cost of sales of \$2.6 million and Energy Technology Center cost of sales of \$0.2 million, partially offset by lower PosiCharge cost of sales of \$0.7 million.

Gross Margin. Gross margin for the three months ended January 26, 2008 was \$19.8 million, as compared to \$19.6 million for the three months ended January 27, 2007, representing an increase of \$0.2 million, or 1%. UAS gross margin increased \$0.8 million, or 5%, to \$17.5 million for the three months ended January 26, 2008. As a percentage of revenue, gross margin for UAS decreased from 43% to 41%. PosiCharge gross margin decreased \$0.5 million to \$1.4 million for the three months ended January 26, 2008. As a percentage of revenue, PosiCharge gross margin decreased from 35% to 34%. Energy Technology Center gross margin decreased \$0.1 million to \$1.0 million for the three months ended January 26, 2008. As a percentage of revenue, Energy Technology Center gross margin decreased from 49% to 43%, primarily due to higher sustaining engineering costs.

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Selling, General and Administrative. SG&A expense for the three months ended January 26, 2008 was \$8.2 million, or 17% of revenue, compared to SG&A expense of \$4.2 million, or 9% of revenue, for the three months ended January 27, 2007, which included the supplemental executive retirement plan reversal of \$2.2 million. Without the reversal, SG&A expense increased \$1.8 million, primarily as a result of higher selling and marketing infrastructure costs associated with business growth.

Research and Development. R&D expense for the three months ended January 26, 2008 was \$3.7 million, or 8% of revenue, which was higher than R&D expense of \$2.2 million or 5% of revenue for the three months ended January 27, 2007. R&D expense increased \$1.5 million, primarily due to higher investment in development initiatives including Global Observer, Digital Data Link and Switchblade.

Income Tax Expense. Our effective income tax rate was 33.5% for the three months ended January 26, 2008, as compared to 33.4% for the three months ended January 27, 2007.

Nine Months Ended January 26, 2008 Compared to Nine Months Ended January 27, 2007

	Nine Months Ended	
	January 26, 2008	January 27, 2007
(Unaudited)		
Revenue:		
UAS	\$ 130,639	\$ 101,621
PosiCharge	14,705	14,889
Energy Technology Center	6,096	6,511
Total	<u>\$ 151,440</u>	<u>\$ 123,021</u>
Gross margin:		
UAS	\$ 48,490	\$ 40,482
PosiCharge	4,725	5,679
Energy Technology Center	2,382	3,231
Total	<u>\$ 55,597</u>	<u>\$ 49,392</u>

Revenue. Revenue for the nine months ended January 26, 2008 was \$151.4 million, as compared to \$123.0 million for the nine months ended January 27, 2007, representing an increase of \$28.4 million, or 23%. UAS revenue increased \$29.0 million, or 29%, to \$130.6 million for the nine months ended January 26, 2008, largely due to increased UAS service and customer-funded R&D partially offset by lower product deliveries. The increase in UAS services revenue was primarily due to services to refurbish, reconstitute, and repair over and above current levels of CLS for delivered Raven units. CLS are cost reimbursable arrangements, which typically result in lower gross margin than fixed price contracts. PosiCharge revenue decreased by \$0.2 million, or 1%, to \$14.7 million for the nine months ended January 26, 2008. Energy Technology Center revenue decreased by \$0.4 million, or 6%, to \$6.1 million for the nine months ended January 26, 2008, primarily due to lower sales of power processing test equipment.

Cost of Sales. Cost of sales for the nine months ended January 26, 2008 was \$95.8 million, as compared to \$73.6 million for the nine months ended January 27, 2007, representing an increase of \$22.2 million, or 30%. The increase in cost of sales was caused primarily by higher UAS cost of sales of \$21.0 million, PosiCharge cost of sales of \$0.8 million, and Energy Technology Center cost of sales of \$0.4 million.

Gross Margin. Gross margin for the nine months ended January 26, 2008 was \$55.6 million, as compared to \$49.4 million for the nine months ended January 27, 2007, representing an increase of \$6.2 million, or 13%. UAS gross margin increased \$8.0 million to \$48.5 million for the nine months ended January 26, 2008. As a percentage of revenue, gross margin for UAS decreased from 40% to 37%. The decrease in UAS gross margin percent was primarily due to lower fixed price revenue relative to cost reimbursable revenue and increased program costs resulting in reduced effective fee rates on government contracts compared to the same period in the prior year. PosiCharge gross margin decreased \$1.0 million to \$4.7 million for the nine months ended January 26, 2008. As a percentage of revenue, PosiCharge gross margin decreased from 38% to 32% primarily due to increased engineering support costs. Energy Technology Center gross margin decreased \$0.8 million to \$2.4 million for the nine months ended January 26, 2008. As a percentage of revenue, Energy Technology Center gross margin decreased from 50% to 39%, primarily due to an increase in sustaining engineering costs.

Selling, General and Administrative. SG&A expense for the nine months ended January 26, 2008 was \$24.5 million, or 16% of revenue, compared to SG&A expense of \$17.1 million, or 14% of revenue, for the three months ended January 27, 2007, which included the supplemental executive retirement plan reversal of \$2.2 million. Without the reversal, SG&A expense increased \$5.2 million, primarily due to higher selling and marketing infrastructure associated with business growth and added expense for being a public company.

Research and Development. R&D expense for the nine months ended January 26, 2008 was \$11.8 million, or 8% of revenue, which was higher than R&D expense of \$9.3 million or 8% of revenue for the nine months ended January 27, 2007. R&D expense increased \$2.5 million primarily due to higher investment in development initiatives including Global Observer, Digital Data Link, and Switchblade.

Income Tax Expense. Our effective income tax rate was 33.3% for the nine months ended January 26, 2008, as compared to 35.7% for the nine months ended January 27, 2007. This decrease was largely due to tax-exempt interest income received from the Company's short-term investments. During the nine months ended January 27, 2007, the Company did not receive any tax-exempt interest.

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. Because of possible future changes in delivery schedules and/or cancellations of orders, funded 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 funded backlog represented. As of January 26, 2008 and April 30, 2007, our funded backlog was \$62.1 million and \$60.9 million, respectively.

In addition to our funded backlog, we also had unfunded backlog of \$455.9 million and \$477.5 million as of January 26, 2008 and April 30, 2007, respectively. We define unfunded backlog as the total remaining potential order amounts under cost reimbursable and fixed price contracts with multiple one-year options, or indefinite delivery indefinite quantity ("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. Unfunded backlog does not include the value of options to purchase additional aircraft included in our Global Observer contract.

Liquidity and Capital Resources

We currently have no material cash commitments, except for normal recurring trade payables, accrued expenses and ongoing R&D costs, all of which we anticipate funding through our existing working capital, funds provided by operating activities and our working capital line of credit. The majority of our purchase obligations are pursuant to funded contractual arrangements with our customers. We believe that our existing cash, cash equivalents, cash provided by operating activities, funds available through our working capital line of credit 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.

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 further market 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 industry 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 reimburseable 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.

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Subsequent to January 26, 2008, we experienced failed auctions on some of our 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. We continue 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 we need to access funds invested in these auction rate securities, we may not be able to liquidate these securities at the fair value recorded on January 26, 2008 until a future auction of these securities is successful or a buyer is found outside of the auction process.

As of March 3, 2008, including the securities involved in failed auctions, we held approximately \$17.4 million of these auction rate securities, all of which carry investment grade ratings.

Based on our ability to access our cash and cash equivalents, expected operating cash flows, and other sources of cash, we do not anticipate the current lack of liquidity on these investments will affect our ability to operate the business in the ordinary course. We believe the current lack of liquidity of these investments is temporary and therefore we have not recorded any impairment as of January 26, 2008 or through the date of this filing. We will continue to monitor the value of our auction rate securities at each reporting period for a possible impairment if a decline in fair value occurs.

Cash Flows

The following table provides our cash flow data for the nine months ended January 26, 2008 and January 27, 2007 (in thousands):

	Nine Months Ended	
	January 26, 2008	January 27, 2007
	(Unaudited)	
Net cash provided by operating activities	\$ 6,827	\$ 12,613
Net cash provided by (used in) investing activities	\$ 50,906	\$ (1,680)
Net cash provided by financing activities	\$ 912	\$ 81,886

Cash Provided by Operating Activities. Net cash provided by operating activities for the nine months ended January 26, 2008 decreased by \$5.8 million to \$6.8 million, compared to net cash provided by operating activities of \$12.6 million for the nine months ended January 27, 2007. This decrease in net cash provided by operating activities was primarily due to higher working capital needs of \$19.1 million partially offset by an increase in tax benefits from stock options exercises of \$10.7 million and the reversal of the supplemental executive retirement plan accrual in the prior year of \$2.2 million.

Cash Provided by Investing Activities. Net cash provided by investing activities increased by \$52.6 million to \$50.9 million for the nine months ended January 26, 2008, compared to net cash used in investing activities of \$1.7 million for the nine months ended January 27, 2007. The increase in net cash provided by investing activities was primarily due to net redemption of tax exempt municipal auction rate securities of \$57.5 million partially offset by higher capital expenditures of \$4.9 million. During the nine months ended January 26, 2008 and January 27, 2007, we used cash to purchase property and equipment totaling \$6.6 million and \$1.7 million, respectively.

Cash Provided by Financing Activities. Net cash provided by financing activities decreased by \$81.0 million to \$0.9 million for the nine months ended January 26, 2008, compared to the nine months ended January 27, 2007. On January 23, 2007, we completed an initial public offering that provided net proceeds of \$80.5 million. During the nine months ended January 26, 2008 and January 27, 2007, we received proceeds from stock option exercises of \$0.9 million and \$0.2 million, respectively.

Line of Credit and Term Loan Facilities

We have a revolving line of credit with a bank, under which we may borrow up to \$25.0 million. Borrowings bear interest at the bank's prime commercial lending rate minus 0.25%, which was 6.25% as of January 26, 2008 and 8.25% as of April 30, 2007. The line of credit is secured by substantially all of our assets. Interest on amounts outstanding under the line of credit are due monthly. All principal plus accrued but unpaid interest is due August 31, 2009. We had no outstanding balance on the line of credit as of January 26, 2008 or April 30, 2007.

The credit facility contains certain financial covenants, including that we not exceed maximum liquidity and leverage ratios, and limitations on additional indebtedness. The facility includes customary default provisions, and all outstanding obligations may become immediately due and payable in the event of our default.

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We have entered into standby letter-of-credit agreements and bank guarantee agreements with financial institutions and customers primarily relating to the guarantee of our future performance on certain contracts to provide products and services and to secure advance payments we have received from certain international customers. As of January 26, 2008, we had standby letters of credit totaling \$0.4 million and had received no claims against such letters of credit. These letters of credit expire upon release by the customer.

Off-Balance Sheet Arrangements

During the third quarter, there were no material changes in our off balance sheet arrangements or contractual obligations and commercial commitments from those disclosed in the Form 10-K for the fiscal year ended April 30, 2007.

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

See Notes to Consolidated Financial Statements (Unaudited) included elsewhere herein for disclosure on new accounting pronouncements.

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 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the ordinary course of business, we are exposed to various market risk factors, including fluctuations in interest rates, changes in general economic conditions, domestic and foreign competition, and foreign currency exchange rates. Please refer to Item 7A — Quantitative and Qualitative Disclosures About Market Risk, contained in our April 30, 2007 Annual Report on Form 10-K for the fiscal year ended April 30, 2007, for further discussion on quantitative and qualitative disclosures about market risk.

ITEM 4T. CONTROLS AND PROCEDURES

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 provide only 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.

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As required by Rule 13a-15(b) under the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and 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 assurance level.

Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting or in other factors identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that occurred during the quarter ended January 26, 2008, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. 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 1A. RISK FACTORS

There have been no material changes to the risk factors disclosed under Part I, Item 1A, "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended April 30, 2007 other than the addition of the risk described below under the heading "Additional Risk" and the revisions to the following Risk Factor (the complete text of which is set forth below under the heading "Revised Risk").

- The Risk Factor entitled "We work in international locations where there are high security risks, which could result in harm to our employees and contractors or substantial costs" has been revised to reflect that an increased number of our employees may be operating in high risk locations outside of U.S. military installations.

Additional Risk

Our short-term 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 January 26, 2008, our \$30.8 million of short-term investments consisted entirely of auction rate municipal notes and bonds with maturities that range from approximately 11 to 27 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 2008 we experienced several 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 March 3, 2008, including the securities involved in failed auctions, we held approximately \$17.4 million of these auction rate securities, all of which carry investment grade ratings. 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 significantly 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 27 years) to realize our investments' recorded value. 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.

Revised Risk

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. For example, during fiscal 2008, we have had between 3 and 10 employees operating in Iraq and/or Kuwait at any one time, both within and outside of U.S. government installations. 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.

Please refer to the risk factors disclosed under Part I, Item 1A, "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended April 30, 2007 for further disclosures regarding the risks and uncertainties related to our business.

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ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description
10.1*	Award Contract, dated December 22, 2006, between AeroVironment, Inc. and the United States Air Force/Air Force Research Laboratory, Aeronautical Systems Center, as amended.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from this report and submitted separately to the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements 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.

Date: March 4, 2008

AEROVIRONMENT, INC.

By: /s/ Timothy E. Conver
Timothy E. Conver
Chief Executive Officer and President
(Principal Executive Officer)

/s/ Stephen C. Wright
Stephen C. Wright
Chief Financial Officer (Principal
Financial and Accounting Officer)

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 (15CFR350) >		RATING DO-A1	PAGE OF 1	PAGES 19	
2. CONTRACT NO. (PROC. INST. IDENT.) NO. FA8629-07-D-2376		3. EFFECTIVE DATE 22 DEC 2006		4. REQUISITION PURCHASE REQUEST PROJECT NO. See Section G			
5. ISSUED BY: 356 AESG/PK USAF/AFMC AERONAUTICAL SYSTEMS CENTER (ASC) 670 AESS. 1895 FIFTH STREET WRIGHT-PATTERSON AFB OH 45433-7200 NANCY G. LEGGETT 937-255-1696 nancy.leggett@wpafb.af.mil		CODE FA8629	6. ADMINISTERED BY (IF OTHER THAN ITEM 5) DCMA LOS ANGELES P. O. BOX 9608 MISSION HILLS CA 91346-9608 DCMALOSANGELES@DCMA.MIL		CODE S0512A		
7. NAME AND ADDRESS OF CONTRACTOR (NO., STREET, CITY, COUNTY, STATE AND ZIP CODE) AEROVIRONMENT, INC. 181 W HUNTINGTON DR STE 202 MONROVIA CA 91016-3456 (626) 357-9983			8. DELIVERY <input type="checkbox"/> FOB Origin <input checked="" type="checkbox"/> Other (see below)		9. DISCOUNT FOR PROMPT PAYMENT N		
CAGE CODE 60107		FACILITY CODE		10. SUBMIT INVOICES (4 COPIES UNLESS OTHERWISE SPECIFIED) TO > THE ADDRESS SHOWN IN:		ITEM	
11. SHIP TO MARK FOR See Section F		CODE	12. PAYMENT WILL BE MADE BY: DFAS COLUMBUS CENTER DFAS-CO/WEST ENTITLEMENT OPS P. O. BOX 182381 COLUMBUS OH 43218-2381		CODE HQ0339		
13. AUTHORITY FOR OTHER THAN FULL AND OPEN COMPETITION			14. ACCOUNTING AND APPROPRIATION DATA				
15A. ITEM NO. See Section B	15B. SUPPLIES SERVICES		15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT	
					15G. TOTAL AMOUNT OF CONTRACT > \$0.00		
16. Table of Contents							
	SEC	DESCRIPTION	PAGE(S)		SEC	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
√	A	SOLICITATION/CONTRACT FORM	1	√	I	CONTRACT CLAUSES	
√	B	SUPPLIES OR SERVICES AND PRICES/COSTS	2	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS			
√	C	DESCRIPTIONS/SPECS./WORK STATEMENTS	7	√	J	LIST OF ATTACHMENTS	
√	D	PACKAGING AND MARKING	8	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
√	E	INSPECTION AND ACCEPTANCE	9		K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	
√	F	DELIVERIES OR PERFORMANCE	10		L	INSTRS, CONDS., AND NOTICES TO	
√	G	CONTRACT ADMINISTRATION DATA	11		M	EVALUATION FACTORS FOR AWARD	
√	H	SPECIAL CONTRACT REQUIREMENTS	12				
<i>CONTRACTING OFFICER WILL COMPLETE ITEM 17 OR 18 AS APPLICABLE</i>							
17. <input type="checkbox"/> Contractor's Negotiated Agreement (Contractor is required to sign this document and return _ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform 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. <input checked="" type="checkbox"/> 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)				20A. NAME OF CONTRACTING OFFICER NANCY G. LEGGETT			

<i>19B. Name Of Contractor</i> <i>by _____</i> <i>(Signature of person authorized to sign)</i>	<i>19C. Date Signed</i>	<i>20B. United States of America</i> <i>by _____</i> <i>(Signature of person authorized to sign)</i>	<i>20C. Date Signed</i>
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PART I - THE SCHEDULE
SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0001	<i>Noun:</i>	DEVELOPMENT AND INTEGRATION	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>	The contractor shall provide development and integration efforts in accordance with (IAW) the applicable documents attached to the individual orders issued hereunder and the System Specification attached to this contract.	
0002	<i>Noun:</i>	BATMAV SYSTEMS	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>	The contractor shall deliver BATMAV systems in accordance with (IAW) applicable documents attached to the individual orders issued hereunder and the System Specification attached to this contract.	
0003	<i>Noun:</i>	INITIAL SPARES	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>	The contractor shall deliver initial spares in accordance with (IAW) applicable documents attached to the individual orders issued hereunder and the System Specification attached to this contract.	

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION B

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PART I - THE SCHEDULE
SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0004	<i>Noun:</i>	TRAINING	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>		
	The contractor shall deliver training in accordance with (IAW) applicable documents attached to the individual orders issued hereunder and the System Specification attached to this contract. Each class will consist of six students, and each student will be provided with a Training Reference Manual, as part of the class.		
0005	<i>Noun:</i>	REPAIR AND RETURN	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	Y - TIME AND MATERIALS	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>		
	The contractor shall deliver repair and return services in accordance with (IAW) applicable documents attached to the individual orders issued hereunder and the System Specification attached to this contract.		
0006	<i>Noun:</i>	DATA	
	<i>NSN:</i>	N - Not Applicable	
	<i>DD1423 is Exhibit:</i>	A	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>		
	The contractor shall provide data in accordance with (IAW) applicable documents attached to the individual orders issued hereunder. This CLIN is not separately priced (NSP) and the price will be included in the price of CLIN 0001.		

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION B

NSD\93571.2

The purpose of this contract is the acquisition of the Battlefield Air Targeting Micro Air Vehicle (BATMAV). The procurement includes necessary integration efforts, procurement of the systems, initial spares, training and sustainment. The initial customer will be the Air Force Special Operations Command (AFSOC). However, it is envisioned that other customers can later be added onto this contracting vehicle by the contracting office (670 AESS/PK).

This Request for Proposal (RFP) will result in the award of an indefinite delivery/indefinite quantity (ID/IQ) contract. The Statement of Work (SOW) for the overall contract is generic in nature. All requirements will be acquired by the issuance of a delivery order (DO). Each Delivery Order will have a separate Statement of Work.

Note 1: Rates/Prices for Contract Line Item Numbers (CLINs) X001 - X006 shall apply to each of the contract periods (Government FY), as indicated within the CLIN matrix shown at Attachment 1 this Contract.

CLIN X001: Development and Integration
CLIN X002: BATMAV systems
CLIN X003: Initial Spares
CLIN X004: Training
CLIN X005: Repair and Return
CLIN X006: Data

Note 2: The following identifiers represent the year/item number sequence in effect during each contract period. These numbers will be used in combination with the line item numbers (for example X002), which are established in the first digit of the CLIN, for ordering during each contract period. For example all BATMAV systems purchased during FY07 (October 01 2006 - September 30 2007) will be identified as CLIN 2002, those systems purchased during FY08 (October 01 2007 - September 30 2008) will be identified as CLIN 3002, etc.

I. NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES

II. NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

OTHER CONTRACT CLAUSES IN FULL TEXT

B028 CONTRACT TYPE: FIRM FIXED PRICE (FEB 1997)

Total Price \$[*]

Applicable to following Line Items: 0002, 0003, 0004, 0006
Applies to Firm-Fixed-Price CLIN(s) only.

B036 CONTRACT TYPE: TIME-AND-MATERIALS (FEB 1997)

(a) The Contractor shall furnish at the hourly rates stated below, all necessary and qualified personnel, managing and directing the same to complete CLIN(s) 0005 within the performance period specified in Section F. In performance of these CLIN(s), Contractor shall be reimbursed for direct labor (exclusive of any work performed in an unpaid overtime status) at the hourly rates listed below for the identified labor categories.

[*] 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.

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION B

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PART I - THE SCHEDULE
SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

CATEGORIES HOURLY RATE

Contractors shall give rates for each category by Government Fiscal year beginning in FY07 (01 October 2006 - 30 September 2007) and continuing until FY11 (01 October 2010 - 30 September 2011).

(b) For the purposes of the clause of this contract entitled "Payments Under Time-and-Material and Labor-Hour Contracts", the total ceiling price of the CLIN(s) specified in paragraph (a) above is \$[*].
Applies to Time-and-Materials CLIN(s) only.

B039 INDEFINITE QUANTITY (DEC 2005)

This is an Indefinite Quantity contract as contemplated by FAR 16.504. The total scope of the technical tasks for which orders may be issued is set forth in paragraph 2.0 of the attached Statement of Work (SOW). The maximum dollar amount the Government may order under this contract is \$45,000,000.00; the minimum amount is \$300,000.00.

B040 ORDERING PROCEDURES (DEC 2005)

(a) Orders will be issued by a Procuring Contracting Officer in accordance with the Ordering clause of this contract. However, the following procedures shall be used for negotiation of orders.

(1) The Contracting Officer will provide the Contractor with a copy of the notification of each proposed Order which will include a description of work to be performed, description of expertise required, and desired completion date.

(2) The Contractor shall then: (i) submit to the Contracting Officer a brief technical discussion describing how the work will be performed; (ii) submit a cost proposal identifying labor categories and number of hours within each category required for the performance of the proposed work; (iii) identify and provide rationale for all non-labor cost elements required for performance; and (iv) identify any Government property required for performance.

(3) Upon receipt of the proposal, the Contracting Officer will analyze the proposal and, if acceptable, issue an Order directing the Contractor to commence performance, or if the proposal is not fully acceptable as offered, negotiations shall be conducted prior to issuance of any Order. In the event issues pertaining to proposed work cannot be resolved to the satisfaction of the Contracting Officer, the Contracting Officer reserves the right to withdraw and cancel the proposed work. In such event, the Contractor shall be notified, via letter, of the Contracting Officer's decision. This decision shall be final and conclusive and shall not be subject to the Disputes clause or the Contract Disputes Act.

(b) The Contractor is not authorized to commence performance prior to issuance of the Order by the Contracting Officer.

B042 SEGREGATION OF COSTS (DEC 2005)

The Contractor shall segregate all costs associated with CLIN 0001 of this contract from the costs associated with the other CLINs of this contract.

[*] 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.

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION B

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B054 IMPLEMENTATION OF LIMITATION OF FUNDS (DEC 2005)

Pursuant to the clause FAR 52.232-22 in Section I, entitled, "Limitation of Funds", the total amount available for payment and allotted to this contract for CLIN X001 is shown on the individual delivery order. It is estimated that this amount is sufficient to cover performance through (to be shown on the individual delivery order)

Applies to Cost-Plus-Fixed-Fee CLIN(s) only.

B058 CONTRACT TYPE: COST-PLUS-FIXED-FEE (DEC 2005)

The estimated cost and fee for this contract are shown below. The applicable fixed fee set forth below may be increased or decreased only by negotiation and modification of the contract for added or deleted work. As determined by the contracting officer, it shall be paid as it accrues, in regular installments based upon the percentage of completion of work (or the expiration of the agreed-upon period(s) for term contracts).

Estimated Cost (will be shown on each delivery order)

Fixed Fee (will be shown on each delivery order)

Applies to Cost-Plus-Fixed-Fee CLIN(s) only.

SOFSG/TI-B001 PAYMENT OF FEE (MAR 2006)

The estimated cost and fee for this contract are shown below. The applicable fixed fee set forth below may be increased or decreased only by negotiation and modification of the contract for added or deleted work. As determined by the contracting officer, it shall be paid as it accrues in regular installments based upon the percentage of completion of work .

Estimated cost \$(will be shown on each delivery order)

Fixed Fee \$(will be shown on each delivery order)

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION B

NSD\93571.2

NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

OTHER CONTRACT CLAUSES IN FULL TEXT

C001 WORK DESCRIPTION/SPECIFICATION (MAY 1997)

Work called for by the contract line items specified in SECTION B shall be performed in accordance with the following:

CONTRACT LINE ITEM NUMBERS (CLINs)
ALL

DESCRIPTION/SPECIFICATIONS
BATMAV Statement of Work (See Section J)
or
As cited on applicable Delivery Orders

C002 REFERENCE TO SPECIFIC PARAGRAPHS OF THE STATEMENT OF WORK (MAY 1997)

Reference to specific paragraphs of the Statement of Work (SOW) indicates only where the CLIN/SubCLIN requirement is principally described and does not absolve the Contractor from the requirement to comply with the contractual provisions applicable to those CLINs/SubCLINs.

C003 INCORPORATED DOCUMENTS/REQUIREMENTS (AUG 2006)

(a) The following documents are a part of this contract:

- (1) Statement of Work dated 29 August 2006
- (2) DD Form 1423, Contract Data Requirements Lists apply, see Exhibit A, dated 21 August 2006.

I. NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

AIR FORCE MATERIEL COMMAND FEDERAL ACQUISITION REGULATION SUPPLEMENT CONTRACT CLAUSES

5352.247-9008 CONTRACTOR COMMERCIAL PACKAGING (AFMC) (SEP 1998)

II. NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

OTHER CONTRACT CLAUSES IN FULL TEXT

D001 PRESERVATION, PACKAGING, PACKING AND MARKING REQUIREMENTS (FEB 1997)

Preservation, packaging, packing and marking shall be set forth in the individual order.

I. NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

A. FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION F

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PART I - THE SCHEDULE
SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

52.246-02	INSPECTION OF SUPPLIES -- FIXED-PRICE (AUG 1996)
52.246-03	INSPECTION OF SUPPLIES -- COST-REIMBURSEMENT (MAY 2001)
52.246-06	INSPECTION -- TIME-AND-MATERIAL AND LABOR-HOUR (MAY 2001) - ALTERNATE I (APR 1984)
52.246-09	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM) (APR 1984)
52.246-15	CERTIFICATE OF CONFORMANCE (APR 1984)
52.246-16	RESPONSIBILITY FOR SUPPLIES (APR 1984)

B. DEFENSE FEDERAL ACQUISITION REGULATION SUPPLEMENT CONTRACT CLAUSES

252.246-7000 MATERIAL INSPECTION AND RECEIVING REPORT (MAR 2003)

II. NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

OTHER CONTRACT CLAUSES IN FULL TEXT

E006 PAYMENT REQUEST AND RECEIVING REPORT SUBMISSION INSTRUCTIONS (AUG 2006)

(a) Pursuant to DFARS 252.232-7003, Electronic Submission of Payment Requests, use of the Wide Area Work Flow - Receipt and Acceptance (WAWF-RA) system for electronic submission of payment requests and receipt/acceptance documents is mandatory for this award. In accordance with DFARS 252.246-7000, Material Inspection and Receiving Report, use of WAWF-RA fulfills the requirements for submission of DD Form 250s.

(b) Technical reports are not to be submitted as attachments in WAWF-RA. See F005 for delivery instructions and addresses for these reports.

(c) A copy of the receiving report printed from WAWF-RA shall accompany each shipment which requires a DD Form 250/receiving report.

(d) PROCESSING STATUS. Any inquiry as to the processing status of a payment request or receiving report should be made to the following office: DCMA Los Angeles, PO Box 9608, Mission Hills, CA 91346-9608.

I. NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES

52.242-15	STOP-WORK ORDER (AUG 1989) <i>Applies to Firm-Fixed-Price CLIN(s), Time-and-Materials CLIN(s) only.</i>
52.242-15	STOP-WORK ORDER (AUG 1989) - ALTERNATE I (APR 1984) <i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.242-17	GOVERNMENT DELAY OF WORK (APR 1984) <i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.247-34	F.O.B. DESTINATION (NOV 1991)
52.247-48	F.O.B. DESTINATION -- EVIDENCE OF SHIPMENT (FEB 1999)

II. NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION B

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OTHER CONTRACT CLAUSES IN FULL TEXT

F003 CONTRACT DELIVERIES (FEB 1997)

The following terms, if used within this contract in conjunction with contract delivery requirements (including data deliveries), are hereby defined as follows:

- (a) "MAC" and "MARO" mean "months after the effective date for award of the contractual action (as shown in block 3, Section A, SF 26)".
- (b) "WARO" means "weeks after the effective date for award of the contractual action".
- (c) "DARO" means "days after the effective date for award of the contractual action".
- (d) "ASREQ" means "as required". Detailed delivery requirements are then specified elsewhere in Section F.

F007 SHIPMENT ADDRESS (SEP 1997)

To be cited on applicable delivery orders.

SOFSG/TI-F001 NOTIFICATION REGARDING ADMINISTRATIVE PROBLEMS (MAR 2006)

If at any time during the performance of this contract administrative problems should arise which will have an adverse impact on timely performance by the Contractor or affect the contract price, the Contractor is required to immediately notify SOFSG/TI, WRIGHT-PATTERSON AFB OH 45433-7233 and the cognizant administrative contracting officer (ACO).

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION B

NSD\93571.2

PART I - THE SCHEDULE
SECTION G - CONTRACT ADMINISTRATION DATA

NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

OTHER CONTRACT CLAUSES IN FULL TEXT

G001 ACCOUNTING AND APPROPRIATION DATA (FEB 1997)

Accounting and appropriation data will be set forth on individual orders issued hereunder.

G018 CONTRACT HOLIDAYS (FEB 2003)

(a) The prices/costs in Section B of the contract include holiday observances; accordingly, the Government will not be billed for such holidays, except when services are required by the Government and are actually performed on a holiday. Holidays in addition to those reflected in this contract, which are designated by the Government, will be billable provided the assigned Contractor employee was available for performance and was precluded from such performance.

(b) The following days are contract holidays: 1) New Year's Day, 2) Martin Luther King Jr's B-day, 3) President's Day, 4) Memorial Day, 5) Independence Day, 6) Labor Day, 7) Columbus Day, 8) Veteran's Day, 9) Thanksgiving Day, 10) Christmas Day

SOFSG/TI-G001 REMITTANCE ADDRESS (MAR 2006)

(to be completed for the basic contract)

If the remittance address is different from the mailing address, enter the remittance address below. Failure to provide this information may impact payment.

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION G

NSD\93571.2

PART I - THE SCHEDULE
SECTION H - SPECIAL CONTRACT REQUIREMENTS

NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

OTHER CONTRACT CLAUSES IN FULL TEXT

H001 OPTIONS (MAY 1997)

The Government reserves the right to exercise option(s) subject to the conditions stated in the applicable delivery order. In the event an option is exercised, the affected sections of the contract, e.g., Section B, Section F, Section G, etc., will be modified as appropriate.

H025 INCORPORATION OF SECTION K (OCT 1998)

Section K of the solicitation is hereby incorporated by reference.

H055 INSURANCE CLAUSE IMPLEMENTATION (FEB 2003)

The Contractor shall obtain and maintain the minimum kinds and amounts of insurance during performance of this contract as specified by FAR 28.307-2, Liability, and contemplated by FAR 52.228-5, Insurance--Work on a Government Installation, and/or 52.228-7, Insurance--Liability to Third Persons. *Applies to Cost-Plus-Fixed-Fee CLIN(s) only.*

H087 GOVERNMENT- FURNISHED PROPERTY (GFP) (FEB 2003)

Pursuant to the Government Property clause herein, the Government may furnish the item(s) of property listed below as Government-Furnished Property (GFP) to the Contractor, f.o.b. destination, for use in performance of this contract. Upon completion of the contract, the Contractor shall obtain disposition instructions from the Government Property Administrator of the activity having responsibility for administration of the contract. The full listing of GFP to be used on this contract will be listed on Atch 6.

ITEM DESCRIPTION

FalconView Software - currently fielded version of AF mapping program
UAV Tool Software - prototype video tool for UAV video
AFRL/HE Voice Control software suite - prototype voice control software compatible with AF version of OCU
Panasonic CF-18 Toughbook Computer

SOFSG/TI-H001 MODIFICATION OF DATA REQUIREMENTS (MAR 2006)

During the performance of this contract the CO may desire to make minor changes to the CDRL that are expected to have no impact on the established contract prices and value. These changes include such things as change in place of delivery and other administrative and clarification changes to the CDRL. The contractor will be informed of these changes by issuance of a CO letter that will reference this paragraph as its authority. Within 10 days of receipt of the CO letter the contractor will notify the CO in writing either (1) that he will proceed with the changes at no change in the price(s) of the contract, or (2) that there is an impact on the contract price(s). For those changes described under (2) above, the contractor will, at the COs direction, submit a contract change proposal and will not proceed with any of the changes described in the CO letter until authorization from the CO. For those changes described in (1) above, the contractor will proceed with the change(s) described in, and under the authority of, the CO letter. Once a year, the CDRL changes that have been directed in this manner, and are accomplished at no change in contract price(s), will be formally incorporated into a no change in price, unilateral contract modification.

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION H

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SOFSG/TI-H002 ORDERS (MAR 2006)

Orders will be issued by a Contracting Officer (CO) in accordance with the Ordering clause of this contract. However, the following procedures shall be used for negotiation of orders.

- a) The Contracting Officer will provide the Contractor with a letter request for proposal (letter RFP) which will include a Statement of Work (SOW) describing the work to be performed, and desired completion date. Estimates shall be furnished to the Contracting Officer within fifteen (15) working days from the date of the letter RFP. Each proposal shall, on its face, identify the contract number, the SOW title and date, and the delivery order number.
- b) Upon receipt of any RFP issued hereunder by the Contracting Officer, the Contractor, pursuant to such Order, shall furnish to the Government services, materials, and data of the type and at the prices set forth in the Schedule. Orders may be issued at the sole option of the Government during the period set forth in the "Ordering" clause hereof. Only contracting officers of the office issuing the basic contract may issue orders under this contract.
- c) The Contractor is not authorized to commence performance prior to issuance of the Order by the Contracting Officer.
- d) The Government reserves the right to not award a delivery order after requesting a delivery order estimate.

SOFSG/TI-H003 CONTRACT MINIMUM/MAXIMUM (MAR 2006)

For the purposes of paragraph of the clause entitled "Indefinite Quantity", the minimum shall be \$300,000 for the life of the contract. The maximum shall be \$45,000,000 for all orders.

(IAW FAR 52.215-22(b))

SOFSG/TI-H005 CLIN MATRIX (JUL 2006)

The government reserves the right to procure additional BATMAV systems, initial spares, training, repair and return and data in accordance with the CLIN matrix at Attachment 1 to this contract. The prices apply to the government fiscal year in which the order is placed, and data shall be Not Separately Priced (NSP).

SOSFG/TI-H004 ENGINEERING CHANGES (JUN 2006)

The Firm Fixed Price (FFP) supply CLINs on this contract will be used as a baseline to negotiate a fair and reasonable price for any configuration changes to the initial spiral. Development of configuration changes subsequent to this baseline will be accomplished as an Engineering Change Proposal.

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION H

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PART II - CONTRACT CLAUSES
SECTION I - CONTRACT CLAUSES

Contract Clauses in this section are from the FAR, Defense FAR Sup, Air Force FAR Sup, and the Air Force Materiel Command FAR Sup, and are current through the following updates:

Database_Version: 6.10.x.500; Issued: 1/14/2008; FAR: FAC 2005-23 (Partial); DFAR: DCN20080110; DL.: DL 98-021; Class Deviations: CD 2007o0011; AFFAR: 2002 Edition; AFMCFAR: AFMC 2007; AFAC: AFAC 2007-0823; IPN: 98-009

I. NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

A. FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES

52.202-01	DEFINITIONS (JUL 2004)
52.203-03	GRATUITIES (APR 1984)
52.203-05	COVENANT AGAINST CONTINGENT FEES (APR 1984)
52.203-06	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)
52.203-07	ANTI-KICKBACK PROCEDURES (JUL 1995)
52.203-08	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (SEP 2005)
52.204-04	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)
52.204-07	CENTRAL CONTRACTOR REGISTRATION (JUL 2006)
52.209-06	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (SEP 2006)
52.211-05	MATERIAL REQUIREMENTS (AUG 2000)
52.213-01	FAST PAYMENT PROCEDURE (MAY 2006) <i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.215-02	AUDIT AND RECORDS -- NEGOTIATION (JUN 1999)
52.215-08	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT (OCT 1997)
52.215-11	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA -- MODIFICATIONS (OCT 1997)
52.215-13	SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)
52.215-14	INTEGRITY OF UNIT PRICES (OCT 1997)
52.215-17	WAIVER OF FACILITIES CAPITAL COST OF MONEY (OCT 1997)
52.215-19	NOTIFICATION OF OWNERSHIP CHANGES (OCT 1997)
52.216-07	ALLOWABLE COST AND PAYMENT (DEC 2002) <i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.216-08	FIXED FEE (MAR 1997) <i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.216-18	ORDERING (OCT 1995) Para (a), Issued from date is '15 DEC 2006' Para (a), Issued through date is '30 SEP 2011'
52.216-19	ORDER LIMITATIONS (OCT 1995) Para (a). Insert Dollar amount or quantity. '\$2,500.00' Para (b)(1). Insert dollar amount or quantity '\$45,000,000.00' Para (b)(2). Insert dollar amount or quantity. '\$45,000,000.00' Para (b)(3). Insert number of days. '30' Para (d). Insert number of days. '7'
52.216-22	INDEFINITE QUANTITY (OCT 1995) Para (d), Date is '30 SEP 2014'

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION I

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PART II - CONTRACT CLAUSES
SECTION I - CONTRACT CLAUSES

52.217-07	OPTION FOR INCREASED QUANTITY -- SEPARATELY PRICED LINE ITEM (MAR 1989) Period of time is 'the times specified on individual delivery orders.'
52.219-06	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUN 2003)
52.219-08	UTILIZATION OF SMALL BUSINESS CONCERNS (MAY 2004)
52.219-14	LIMITATIONS ON SUBCONTRACTING (DEC 1996)
52.222-01	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)
52.222-02	PAYMENT FOR OVERTIME PREMIUMS (JUL 1990) Para (a), Dollar amount is '\$0.00'
52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT (DEC 1996)
52.222-21	PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)
52.222-26	EQUAL OPPORTUNITY (APR 2002)
52.222-35	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (DEC 2001)
52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)
52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (DEC 2001)
52.222-39	NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES (DEC 2004)
52.223-06	DRUG-FREE WORKPLACE (MAY 2001)
52.225-08	DUTY- FREE ENTRY (FEB 2000)
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (FEB 2006)
52.227-01	AUTHORIZATION AND CONSENT (JUL 1995)
52.227-02	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)
52.228-07	INSURANCE -- LIABILITY TO THIRD PERSONS (MAR 1996) <i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.229-03	FEDERAL, STATE, AND LOCAL TAXES (APR 2003)
52.229-04	FEDERAL, STATE, AND LOCAL TAXES (STATE AND LOCAL ADJUSTMENTS) (APR 2003)
52.232-01	PAYMENTS (APR 1984) <i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.232-07	PAYMENTS UNDER TIME-AND-MATERIALS AND LABOR-HOUR CONTRACTS (AUG 2005) <i>Applies to Time-and-Materials CLIN(s) only.</i>
52.232-08	DISCOUNTS FOR PROMPT PAYMENT (FEB 2002) <i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.232-11	EXTRAS (APR 1984) <i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.232-16	PROGRESS PAYMENTS (APR 2003) - ALTERNATE I (MAR 2000) <i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.232-17	INTEREST (JUN 1996)
52.232-20	LIMITATION OF COST (APR 1984)
52.232-22	LIMITATION OF FUNDS (APR 1984) <i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.232-23	ASSIGNMENT OF CLAIMS (JAN 1986)
52.232-25	PROMPT PAYMENT (OCT 2003)
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION (OCT 2003)
52.233-01	DISPUTES (JUL 2002)
52.233-03	PROTEST AFTER AWARD (AUG 1996) <i>Applies to Firm-Fixed-Price CLIN(s), Time-and-Materials CLIN(s) only.</i>
52.233-03	PROTEST AFTER AWARD (AUG 1996) - ALTERNATE I (JUN 1985) <i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.233-04	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004)
52.242-01	NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)

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PART II - CONTRACT CLAUSES
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	<i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.242-03	PENALTIES FOR UNALLOWABLE COSTS (MAY 2001)
52.242-04	CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)
	<i>Applies to Time-and-Materials CLIN(s), Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.242-13	BANKRUPTCY (JUL 1995)
52.243-01	CHANGES -- FIXED-PRICE (AUG 1987)
	<i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.243-01	CHANGES -- FIXED-PRICE (AUG 1987) - ALTERNATE II (APR 1984)
	<i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
52.243-02	CHANGES -- COST-REIMBURSEMENT (AUG 1987)
	<i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.243-02	CHANGES -- COST-REIMBURSEMENT (AUG 1987) - ALTERNATE II (APR 1984)
	<i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.243-03	CHANGES -- TIME-AND-MATERIALS OR LABOR-HOURS (SEP 2000)
	<i>Applies to Time-and-Materials CLIN(s) only.</i>
52.244-06	SUBCONTRACTS FOR COMMERCIAL ITEMS (SEP 2006)
52.245-02	GOVERNMENT PROPERTY (FIXED-PRICE CONTRACTS) (MAY 2004)
52.245-04	GOVERNMENT PROPERTY-FURNISHED PROPERTY (SHORT FORM) (JUN 2003)
	<i>Applies to Firm-Fixed-Price CLIN(s), Time-and-Materials CLIN(s) only.</i>
52.245-05	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS) (DEVIATION) (MAY 2004)
	<i>Applies to Time-and-Materials CLIN(s), Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.245-19	GOVERNMENT PROPERTY FURNISHED "AS IS" (APR 1984)
52.246-23	LIMITATION OF LIABILITY (FEB 1997)
52.249-02	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (MAY 2004)
52.249-06	TERMINATION (COST-REIMBURSEMENT) (MAY 2004)
	<i>Applies to Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.249-06	TERMINATION (COST-REIMBURSEMENT) (MAY 2004) - ALTERNATE IV (SEP 1996)
	<i>Applies to Time-and-Materials CLIN(s) only.</i>
52.249-08	DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984)
52.249-14	EXCUSABLE DELAYS (APR 1984)
	<i>Applies to Time-and-Materials CLIN(s), Cost-Plus-Fixed-Fee CLIN(s) only.</i>
52.253-01	COMPUTER GENERATED FORMS (JAN 1991)

B. DEFENSE FEDERAL ACQUISITION REGULATION SUPPLEMENT CONTRACT CLAUSES

252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE- CONTRACT- RELATED FELONIES (DEC 2004)
252.203-7002	DISPLAY OF DOD HOTLINE POSTER (DEC 1991)
252.204-7000	DISCLOSURE OF INFORMATION (DEC 1991)
252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)
252.204-7004	ALTERNATE A TO FAR 52.204-7, CENTRAL CONTRACTOR REGISTRATION (NOV 2003)
252.204-7006	BILLING INSTRUCTIONS (OCT 2005)
252.205-7000	PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)
252.211-7003	ITEM IDENTIFICATION AND VALUATION (JUN 2005)
	Para (c)(1)(ii). Items with acquisition cost less than \$5,000. 'NONE'
	Para (c)(1)(iii). Attachment Nr. 'N/A'
252.215-7000	PRICING ADJUSTMENTS (DEC 1991)
252.225-7002	QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS (APR 2003)
252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (JUN 2004)
252.225-7014	PREFERENCE FOR DOMESTIC SPECIALTY METALS (JUN 2005) - ALTERNATE I (APR 2003)
252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS (MAR 2006)

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PART II - CONTRACT CLAUSES
SECTION I - CONTRACT CLAUSES

252.227-7013	RIGHTS IN TECHNICAL DATA--NONCOMMERCIAL ITEMS (NOV 1995)
252.227-7014	RIGHTS IN NONCOMMERCIAL COMPUTER SOFTWARE AND NONCOMMERCIAL COMPUTER SOFTWARE DOCUMENTATION (JUN 1995)
252.227-7015	TECHNICAL DATA--COMMERCIAL ITEMS (NOV 1995)
252.227-7016	RIGHTS IN BID OR PROPOSAL INFORMATION (JUN 1995)
252.227-7030	TECHNICAL DATA--WITHHOLDING OF PAYMENT (MAR 2000)
252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA (SEP 1999)
252.231-7000	SUPPLEMENTAL COST PRINCIPLES (DEC 1991)
252.232-7004	DOD PROGRESS PAYMENT RATES (OCT 2001)
252.232-7006	ALTERNATE A TO FAR 52.232-7, PAYMENTS UNDER TIME-AND-MATERIALS AND LABOR-HOUR CONTRACTS (DEC 2003) <i>Applies to Time-and-Materials CLIN(s) only.</i>
252.232-7009	MANDATORY PAYMENT BY GOVERNMENTWIDE COMMERCIAL PURCHASE CARD (JUL 2000)
252.232-7010	LEVIES ON CONTRACT PAYMENTS (DEC 2006)
252.243-7001	PRICING OF CONTRACT MODIFICATIONS (DEC 1991) <i>Applies to Firm-Fixed-Price CLIN(s) only.</i>
252.245-7001	REPORTS OF GOVERNMENT PROPERTY (MAY 1994) <i>Applies to Time-and-Materials CLIN(s), Cost-Plus-Fixed-Fee CLIN(s) only.</i>
252.247-7023	TRANSPORTATION OF SUPPLIES BY SEA (MAY 2002)

C. AIR FORCE FEDERAL ACQUISITION REGULATION SUPPLEMENT CONTRACT CLAUSES

5352.201-9101	OMBUDSMAN (AUG 2005) Para (c). Ombudsmen names, addresses, phone numbers, fax, and email addresses. 'Mr. Steve Miller, ASC/AE, 1755 Eleventh Street, Bldg 570, Room 113, Wright-Patterson OH 45433-7404. Phone A/C 937-255-5315. Fax A/C 937-656-7193.'
5352.223-9000	ELIMINATION OF USE OF CLASS I OZONE DEPLETING SUBSTANCES (ODS) (APR 2003) Para (c), List of Class I ODSs. 'NONE'

II. NOTICE: The following contract clauses pertinent to this section are hereby incorporated in full text:

A. FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES IN FULL TEXT

52.211-15 DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS (SEP 1990)

This is a rated order certified for national defense use, and the Contractor shall follow all the requirements of the Defense Priorities and Allocations System regulation (15 CFR 700).

52.252-02 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(es): <http://farsite.hill.af.mil/>

52.252-06 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.

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION I

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(b) The use in this solicitation or contract of any Defense Federal Acquisition Regulation Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

B. AIR FORCE MATERIEL COMMAND FEDERAL ACQUISITION REGULATION SUPPLEMENT CONTRACT CLAUSES IN FULL TEXT

5352.215-9005 INCORPORATION OF CONTRACTOR'S TECHNICAL PROPOSAL (AFMC) (AUG 1998)

(a) The following documents are incorporated herein by reference and made a part of this contract:

The Contractor's Technical Proposal dated 29 August 2006

(b) Nothing contained in the Contractor's technical proposal shall constitute a waiver to any other requirement of this contract. In the event of any conflict between the Contractor's technical proposal and any other requirement of the contract, the conflict shall be resolved in accordance with the Order of Precedence clause. For purposes of the Order of Precedence clause the document(s) listed above shall rank below the schedule, representations and clauses within the contract.

(c) The detailed technical content of the Contractor's proposal was an important factor in the selection of the Contractor for award of this contract. The documents listed above are now contractually binding. The Contractor shall not change or otherwise deviate from the content of these documents without prior written approval from the Contracting Officer.

(d) If it is necessary to change the performance, design, configuration, or other items specified in the technical proposal in order to comply with the requirements of the contract clauses, special contract requirements, or statement of work, the contract shall be modified appropriately.

(e) The Contractor agrees that the documents listed above reflects the results/responses to exchanges and /or Evaluation Notices (ENs) issued during the negotiation process. If, after contract award, it is discovered that changes made during negotiations were not incorporated in the SOW and/or technical proposal, such changes to the Contractor's documents shall be considered administrative in nature and shall be made by unilateral modification to the contract, at no change in contract cost or price or other terms and conditions.

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION I

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PART III - LIST OF DOCUMENTS, EXHIBITS AND ATTACHMENTS
SECTION J - LIST OF ATTACHMENTS

DOCUMENT	PGS	DATE	TITLE
EXHIBIT A This attachment/exhibit was modified by: P00001.	15	30 JAN 2007	DD 1423 CONTRACT DATA REQUIREMENTS LIST
ATTACHMENT 1 This attachment/exhibit was modified by: P00002.	2	20 APR 2007	CLIN MATRIX -- COST OF CLINS IN THE OUTYEARS
ATTACHMENT 2 This attachment/exhibit was modified by: P00002, P00003.	15	16 APR 2007	STATEMENT OF WORK (SOW)
ATTACHMENT 3 This attachment/exhibit was modified by: P00003.	32	14 MAY 2007	SYSTEM SPECIFICATION
ATTACHMENT 4	41	29 AUG 2006	INTEGRATED MASTER PLAN (IMP)
ATTACHMENT 5	1	29 AUG 2006	CONTRACT WORK BREAKDOWN STRUCTURE (CWBS)
ATTACHMENT 6	1	29 AUG 2006	GOVERNMENT FURNISHED PROPERTY
ATTACHMENT 7 This attachment/exhibit was modified by: P00001.	3	07 FEB 2007	WIDE AREA WORKFLOW - RECEIPT AND ACCEPTANCE (WAWF- RA) ELECTRONIC INVOICING AND RECEIVING REPORT INSTRUCTIONS
ATTACHMENT 8 This attachment/exhibit was modified by: P00004.	1	28 AUG 2007	CATALOG LISTING
ATTACHMENT 9 This attachment/exhibit was modified by: P00004.	1	28 AUG 2007	INITIAL SPARES PACKAGE

CONFORMED CONTRACT FA8629-07-D-2376 (01-22-2008) SECTION J

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AUTOMATED DATA MANAGEMENT SYSTEM

03/07/2007

CDRL TABLE OF CONTENTS

10:45:56

CONTRACT #: FA8629-07-D-2376

SET NAME BATMAV-1

CONTRACTOR: AEROVIRONMENT, INC

PROGRAM ID : BATMA

SYSTEM ITEM: BATMAV

<u>DATA ITEM</u>	<u>REQUIRING OFFICE</u>	<u>AUTHORITY / TITLE / SUBTITLE</u>	<u>SOW PARAGRAPH</u>
A001	SOFSG/TI	DI-MISC-81418 Operating Procedures Manual Acceptance Test Procedures	SOW Para.
A002	SOFSG/TI	DI-TMSS-80527A Commercial Off-the-Shelf (COTS) Manual Training and Operator's Manual	SOW Para.
A003	SOFSG/TI	DI-MGMT-80177A/T Bar Code Identification Report UID	SOW Para.
A004	SOFSG/TI	DI-ADMN-81250A Conference Minutes	SOW Para.
A005	SOFSG/TI	DI-NOTI-80566/T Test Plan Contractor's Test Plan	SOW Para.
A006	SOFSG/TI	DI-CMAN-80858B Contractor's Configuration Management Plan	SOW Para.
A007	SOFSG/TI	DI-CMAN-81248A Interface Control Document (ICD) Swappable Payload & Voice Control Software	SOW Para.
A008	SOFSG/TI	DI-MISC-81183A/T Integrated Master Schedule (IMS)	SOW Para.
A009	SOFSG/TI	DI-IPSC-81488 Computer Software Product	SOW Para.
A010	SOFSG/TI	DI-IPSC-81431A System/Subsystem Specification (SSS)	SOW Para.
A011	SOFSG/TI	DI-IPSC-81442A Software Version Description (SVD)	SOW Para.
A012	SOFSG/TI	DI-ADMN-81401A Contract Change Proposal (CCPs)	SOW Para. 3.0
A013	SOFSG/TI	DI-CMAN-80639C/T Engineering Change Proposal (ECP)	SOW Para. 3.0
A014	SOFSG/TI	DI-CMAN-80640C/T Request for Deviation (RFD)	SOW Para. 3.0

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 these addresses. Send completed forms to the Government-Issuing Contracting Officer for the Contract/PR No listed in Block E.										
A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY TDP TM OTHER						
D. SYSTEM/ITEM BATMAV			E. CONTRACT/PR NO. FA8629-07-D-2376		F. CONTRACTOR AEROVIRONMENT, INC.					
1. DATA ITEM NO A001		2. TITLE OF DATA ITEM Operating Procedures Manual			3. SUBTITLE Acceptance Test Procedures					
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-81418			5. CONTRACT REFERENCE SOW Para:		6. REQUIRING OFFICE SOFSG/TI					
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION BLK 16		14. DISTRIBUTION					
8. APP CODE A		11. AS OF DATE BLK 16	13. DATE OF SUBSEQUENT SUBMISSION BLK 16							
10. REMARKS 1. BLOCKS 11, 12 & 13: The contractor shall generate and submit to the Government one complete BATMAV CAV FLIGHT System ATP with each deployment case. 2. The contractor shall provide Government ATP test script two weeks prior to ATP event. 3. Execution of ATP test script will be witnessed by Air Force representatives. 4. Successful ATP execution required before delivery.					a ADDRESSEE	b COPIES				
						Draft	Final			
					SOFSG/TI	0	Reg	1	Repro	0
15. TOTAL --->					0	1	0			
17. PRICE GROUP		18. ESTIMATED TOTAL PRICE								
G PREPARED BY		H DATE	I APPROVED BY		J DATE					

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A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY TDP TM OTHER			
D. SYSTEM/ITEM BATMAV			E. CONTRACT/PR NO. FA8629-07-D-2376		F. CONTRACTOR AEROVIRONMENT, INC.		
1. DATA ITEM NO A002		2. TITLE OF DATA ITEM Commercial Off-the-Shelf (COTS) Manual			3. SUBTITLE Training and Operator's Manual		
4. AUTHORITY (Data Acquisition Document No.) DI-TMSS-80527A			5. CONTRACT REFERENCE SOW Para:		6. REQUIRING OFFICE SOFSG/TI		
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY ONE/R	12. DATE OF FIRST SUBMISSION BLK 16	14. DISTRIBUTION			
8. APP CODE A		11. AS OF DATE BLK 16	13. DATE OF SUBSEQUENT SUBMISSION BLK 16	a ADDRESSEE	b COPIES		
10. REMARKS 1. BLOCK 4: Contractor formal is acceptable 2. BLOCKS 11, 12 & 13: The contractor shall generate and submit to the Government four copies of Battlefield Air Targeting Micro Air Vehicle (BATMAV UAV) Operator's Manual. Revision to the original Manual shall be made by individual page replacement. 3. The contractor shall deliver 4 manuals to SOFSG/TI by: DRAFT: 30 days prior to DT FINAL: 15 days after completion of DT delivery at ATP event.					Final		
					Draft	Reg	Repro
				SOFSG/TI	4	4	0
				15. TOTAL --->			
17. PRICE GROUP		18. ESTIMATED TOTAL PRICE					
G PREPARED BY		H DATE	I APPROVED BY		J DATE		

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)				Form Approved OMB No. 0704-0188			
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A. CONTRACT LINE ITEM NO.		B. EXHIBIT A		C. CATEGORY TDP TM OTHER ADMIN			
D. SYSTEM/ITEM BATMAV			E. CONTRACT/PR NO. FA8629-07-D-2376		F. CONTRACTOR AEROVIRONMENT, INC.		
1. DATA ITEM NO A004		2. TITLE OF DATA ITEM Conference Minutes			3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.) DI-ADMN-81250A			5. CONTRACT REFERENCE SOW Para:		6. REQUIRING OFFICE SOFSG/TI		
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION BLK 16		14. DISTRIBUTION	
8. APP CODE A		11. AS OF DATE ASREQ		13. DATE OF SUBSEQUENT SUBMISSION ASREQ			
10. REMARKS Block 8: Approval for TIM's minutes only. Development up to 4 TIM's. Production up to 6 TIM's. Block 12: Minutes shall be submitted five (5) working days after each review, meeting or audit. The minutes shall be subject to Government approval. Block 14: Each person in attendance shall be furnished one copy of minutes. When minutes are distributed a the meeting and approval is not required no additional distribution needs to be made to attendees.				a ADDRESSEE	b COPIES		
					Final		
					Draft	Reg	Repro
				SOFSG/TI	1	1	0
15. TOTAL --->				1	1	0	
17. PRICE GROUP		18. ESTIMATED TOTAL PRICE					
G PREPARED BY		H DATE	I APPROVED BY		J DATE		

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A. CONTRACT LINE ITEM NO.		B. EXHIBIT A		C. CATEGORY TDP TM OTHER			
D. SYSTEM/ITEM BATMAV			E. CONTRACT/PR NO. FA8629-07-D-2376		F. CONTRACTOR AEROVIRONMENT, INC.		
1. DATA ITEM NO A005		2. TITLE OF DATA ITEM Test Plan			3. SUBTITLE Contractor's Test Plan		
4. AUTHORITY (Data Acquisition Document No.) DI-NOTI-80566/T			5. CONTRACT REFERENCE SOW Para:		6. REQUIRING OFFICE SOFSG/TI		
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY BLK 16	12. DATE OF FIRST SUBMISSION BLK 16	14. DISTRIBUTION			
8. APP CODE A		11. AS OF DATE BLK 16	13. DATE OF SUBSEQUENT SUBMISSION BLK 16	a ADDRESSEE	b COPIES		
10. REMARKS BLOCK 4: Contractor format is Acceptable. BLOCKS 8, 10, 11, 12 and 13: A Draft Master Test Plan (MTP) 90 days after contract award. The Government will provide comments 30 days after receipt. A final MTP (to include Government comments) shall be due 120 days after contract award					Final		
					Draft	Reg	Repro
				SOFSG/TI	1	1	0
17. PRICE GROUP		18. ESTIMATED TOTAL PRICE					
G PREPARED BY		H DATE	I APPROVED BY		J DATE		

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A. CONTRACT LINE ITEM NO.		B. EXHIBIT A		C. CATEGORY TDP TM OTHER MISC				
D. SYSTEM/ITEM BATMAV			E. CONTRACT/PR NO. FA8629-07-D-2376		F. CONTRACTOR AEROVIRONMENT, INC.			
1. DATA ITEM NO A009		2. TITLE OF DATA ITEM Computer Software Product			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-IPSC-81488			5. CONTRACT REFERENCE SOW Para:		6. REQUIRING OFFICE SOFSG/TI			
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY BLK 16	12. DATE OF FIRST SUBMISSION BLK 16		14. DISTRIBUTION			
8. APP CODE		11. AS OF DATE N/A	13. DATE OF SUBSEQUENT SUBMISSION BLK 16		a ADDRESSEE	b COPIES		
10. REMARKS BLOCK 4: Shall consist of all new and/or revised software required to implement the system integration. Including documentation per the data item. BLOCKS 10, 12 and 13: Initial submission shall be required to support the testing. SOW paragraph may be added; Subsequent submissions shall be made as required on further testing and subsequent feedback from user's received such that changes may be incorporated prior to the end of the period of in reference. A final submission of the software shall be made at the end of the period of performance that incorporates all approved changes made during the period of performance. The reproducible copy is the software delivered on the appropriate electronic and/or optical media.						Final		
						Draft	Reg	Repro
					SOFSG/TI	1	1	0
					15. TOTAL --->			
17. PRICE GROUP		18. ESTIMATED TOTAL PRICE						
G PREPARED BY			H DATE	I APPROVED BY		J DATE		

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)				Form Approved OMB No. 0704-0188			
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A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY TDP TM OTHER			
D. SYSTEM/ITEM BATMAV			E. CONTRACT/PR NO. FA8629-07-D-2376		F. CONTRACTOR AEROVIRONMENT, INC.		
1. DATA ITEM NO A014		2. TITLE OF DATA ITEM Request for Deviation (RFD)			3. SUBTITLE		
4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80640C/T			5. CONTRACT REFERENCE SOW Para: 3.0		6. REQUIRING OFFICE SOFSG/TI		
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED D	10. FREQUENCY AS REQ	12. DATE OF FIRST SUBMISSION AS REQ	14. DISTRIBUTION			
8. APP CODE A		11. AS OF DATE AS REQ	13. DATE OF SUBSEQUENT SUBMISSION AS REQ	a ADDRESSEE SOFSG/TI	b COPIES Draft Final Reg Repro		
10. REMARKS Block 4: DID is tailored to include a Safety Impact Statement with each Deviation. Blocks 10, 11, 12 and 13: Request for Deviations shall be submitted NLT 10 days after discovery. A corrective action plan shall be submitted with the Deviation.					0	1	0
17. PRICE GROUP		18. ESTIMATED TOTAL PRICE					
G PREPARED BY		H DATE	I APPROVED BY		J DATE		

CLIN MATRIX – COST OF CLINS BY YEAR

CLIN X001 – DEVELOPMENT & INTEGRATION – [*]

CLIN X002 – BATMAV SYSTEMS

	Qty – [*]	Qty – [*]	Qty [*]	Qty [*]
Unit Price – FY07	[*]	[*]	[*]	[*]
Unit Price – FY08	[*]	[*]	[*]	[*]
Unit Price – FY09	[*]	[*]	[*]	[*]
Unit Price – FY10	[*]	[*]	[*]	[*]
Unit Price – FY11	[*]	[*]	[*]	[*]

CLIN X003 – INITIAL SPARES.

	Qty – [*]	Qty – [*]	Qty [*]	Qty [*]
Unit Price – FY07	[*]	[*]	[*]	[*]
Unit Price – FY08	[*]	[*]	[*]	[*]
Unit Price – FY09	[*]	[*]	[*]	[*]
Unit Price – FY10	[*]	[*]	[*]	[*]
Unit Price – FY11	[*]	[*]	[*]	[*]

(A listing of what is included in the initial spares package for each lot buy will be included as an attachment to the delivery order)

CLIN X004 – TRAINING (Each class shall consist of six (6) students)

Price Per class	Train the Trainer	Long Course	Short Course
Unit Price – FY07	[*]	[*]	[*]
Unit Price – FY08	[*]	[*]	[*]
Unit Price – FY09	[*]	[*]	[*]
Unit Price – FY10	[*]	[*]	[*]
Unit Price – FY11	[*]	[*]	[*]

CLIN X005 – REPAIR AND RETURN. Costs will be based on a loaded rate for each year, and separate material costs. These will be billed against the CLIN as needed.

(LOADED RATES)

[*] 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.

FY07 [*]
FY08 [*]
FY09 [*]

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FY10 [*]
FY11 [*]

CLIN X006 – DATA: All data should be NSP. The contractor shall show which CLIN(s) include the price of data.

Delivery Schedule for CLINs

Proposed delivery schedule. The proposed schedule is subject to the following guidance:

The contractor should propose delivery dates which show a total delivery schedule for CLINs X002, X003, X004 and X005. These may be shown in WARO (weeks after receipt of order) or MARO (months after receipt of order) format or the contractor can use the format shown below:

“Xx systems in xxx weeks/months, with xxx additional systems every week/month until complete”.

An example might be: 10 systems in 4 months, with 5 additional systems every week until complete. (This would be a delivery schedule for 30 systems, with final delivery 5 months after order)

CLIN x002 – BATMAV SYSTEMS

Up to 30 systems in four (4) months, with up to 30 additional systems every month until complete.

CLIN X003 – INITIAL SPARES.

The offeror will deliver the initial spares package in conjunction with the final delivery for each lot buy.

(A listing of what is included in the initial spares package for each lot buy will be included as an attachment to the delivery order)

CLIN X004 – TRAINING (Each class shall consist of six (6) students) –

On as required basis.

[*] 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 X005 – REPAIR AND RETURN.

Period of Performance should be 12 months after lot buy is delivered.

CLIN X006 – DATA:

On as required basis.

NSD93731.2



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GLOSSARY

Acronym	Definition
ATP	Acceptance Test Procedure
BA	Battlefield Airman
BAO	Battlefield Air Operations
BATMAV	Battlefield Air Targeting Micro Air Vehicle
BDA	Battle Damage Assessment
BLOS	Beyond Line of Sight
CDRL	Contract Data Requirements List
CM	Configuration Management
COMSEC	Communications Security
DCID	Director of Central Intelligence Directive
DM	Data Management
DoD	Department of Defense
DT&E	Developmental Test & Evaluation
EO	Electro-Optical
FoS	Family of Systems
FSO	Facility Security Officer
GCS	Ground Control Systems
GPS	Global Positioning System
GUI	Graphical User Interface
IAW	In Accordance With
ICD	Interface Control Document
ILS	Integrated Logistics Support
IMP	Integrated Management Plan
IMS	Integrated Master Schedule
IOC	Initial Operational Capability
IPT	Integrated Product Teams
IR	Infrared
ISO	International Organization for Standardization
ISP	Initial Spares Package
LOS	Line of Sight
NISPOM	National Industrial Security Program Operating Manual
OEM	Original Equipment Manufacturer
OT&E	Operational Test & Evaluation
PCO	Procuring Contract Officer
PO	Program Office
QMSP	Quality Management System Plan
QPP	Quality Program Plan
RF	Radio Frequency
RSTA	Reconnaissance, Surveillance, and Target Acquisition
SAASM	Selective Availability Anti-Spoofing Module
SOO	Statement of Objectives
SOW	Statement of Work
SRD	System Requirement Document
SSS	System/Subsystem Specification

STANAG	Standardization Agreement
Acronym	Definition
TCDL	Tactical Common Data Link
UID	Unique Identification
WBS	Work Breakdown Structure

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1.0 Program Goal

The goal of this program is to deliver and support a rugged, field-repairable, man-packable, single-operator, hand-launched Battlefield Air Targeting Micro Air Vehicle (BATMAV) system that provides real-time reconnaissance, surveillance, and target acquisition (RSTA) and battle damage assessment (BDA). The system shall be capable of employing interchangeable payloads (current and future) through an interchangeable interface.

2.0 Scope

This Statement of Work (SOW), for the basic contract, is for the development, production and support of a rugged, field-repairable, man-packable, single-operator, hand-launched BATMAV system. It includes systems engineering, management, manufacturing, test, evaluation, training, logistics, repair, support, and incorporation of Block Upgrades and delivery.

2.1 Background

Lessons learned from recent military operations have shown that existing equipment used by U.S. Air Force Special Tactics (ST) Combat Controller Battlefield Airmen (BA) has numerous limitations, including size, range, line of sight (LOS), and information management. The BATMAV system is intended to support the Battlefield Air Operations (BAO) Kit family of systems (FoS). The BAO Kit FoS provides the Battlefield Airman the ability to adapt to the warfighting environment as the situation dictates and provides increased situational awareness and a standoff targeting capability. The BATMAV system provides a means for these soldiers to see the battle space beyond the restrictions of LOS, fulfilling the need for real-time RSTA and BDA. A Block Upgrade approach to the Wasp/BATMAV System fielding allows time-phased incorporation of objective-level System Requirements Document (SRD) requirements, continued spiral development and horizontal technology insertion.

2.2 Cross Reference SOO / SOW / WBS / CDRL

The contractor has developed a cross-reference matrix to ensure traceability of program requirements from the Statement of Objectives (SOO), SOW, Work Breakdown Structure (WBS) and Contract Data Requirements List (CDRL) deliverables. This Matrix can be found in Section 5 of this document. The purpose of the matrix is to identify where each SOO element is addressed in the WBS and SOW and how the CDRLs are related to the SOW.

2.3 Applicable Documents

Applicable documents are cited in the Document Summary List (Section 6 of this document) by number, title, date, and as otherwise specified in this contract.

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3.0 Program Requirements

The contractor shall be responsible for total system performance, development, integration, test, evaluation, manufacturing, logistics, repair and support of the BATMAV Systems as defined in this SOW and the BATMAV System Specification through Government performance testing. This SOW describes the contractor's responsibilities and tasks that shall be performed in the development, procurement, delivery and support of the systems. The contractor shall furnish all labor and all required materials in the performance of this SOW except those specified to be Government-furnished. The contractor shall perform all tasks specified under this contract over the period of performance specified by the contract.

3.1 Program Objectives

The program objective is to provide the capability for a single operator to obtain LOS and beyond-line-of-sight (BLOS), real-time RSTA and BDA during day and/or night operations utilizing the BATMAV system. The system shall be delivered to meet the Government's Initial Operational Capability (IOC) requirement. The baseline configuration shall be used for logistics product development, training, developmental and qualification testing, and operational evaluation.

3.2 General System Description

The BATMAV system shall consist of the following basic components: two Air Vehicles, one Ground Control Station (GCS), one infrared (IR) camera payload, one Electro-Optical (EO) camera payload, and one Operator's Kit. Initial Spares Package (ISP) components shall be included for operation and support of the basic system components. The BATMAV system is detailed in the proposal for this contract. The definition of system components shall be updated through the contract period of performance as a result of changes from: incorporation of additional trade-space requirements, fixes resulting from Test and Evaluation, and incorporation of advanced sensors.

3.3 Detailed Requirements

The following requirements provide a framework for the development, integration, production and delivery of hardware and the attendant services required to support training, engineering and fielding of assets.

3.3.1 Management

3.3.1.1 Production Program Support

3.3.1.1.1 Program Management

The contractor shall establish and maintain a BATMAV System Integrated Management Plan (IMP) to support cost, schedule and performance aspects of the production effort of this contract. The contractor shall perform all program management functions necessary to execute the production effort required by this contract, including contract, business, technical and logistics management. The contractor shall provide all planning, organizing, controlling, staffing and direction functions to meet SOW requirements. The contractor shall establish and maintain a Contract Work Breakdown Structure (CWBS) for the efforts of the program.

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The contractor shall maintain an Integrated Master Schedule (IMS) in contractor format that reflects the efforts identified in this SOW. The schedule shall include development, integration milestones, reviews, manufacturing, procurement, assembly, test of completed systems and the tracking of delivered and repair items. The contractor shall provide updates to the IMS on a monthly basis IAW DI-MISC-81183A/T (CDRL A008).

During the production phase of the program, the contractor shall hold program reviews once every two months to provide the status of program activities at the Integrated Product Team (IPT) level and at the integrated system level. The contractor shall provide agendas and minutes for all Contractor-Government meetings/conferences and audits IAW DI-ADMIN-81250A (CDRL A004).

The contractor shall establish, implement, and maintain a proactive, ongoing Risk Management Process that identifies, assesses, handles/mitigates and appropriately reports technical, cost, and schedule risk for the production efforts of this contract. Program reviews, reports and IPT meetings will be used by the contractor and the Government to track risks and mitigation progress across the entire program.

3.3.1.1.2 Contracts

The contractor shall provide all personnel, materials and resources necessary for contract management associated with this effort. This shall include methods, processes and activities for interfacing with the Procuring Contracting Officer (PCO) on this prime contract and any subcontracts required in the performance of this effort.

3.3.1.1.3 Finance

The contractor shall provide all personnel, materials and resources necessary for financial management of this effort. This shall include methods, processes and activities for financial accounting of the program.

3.3.1.1.4 Integrated Product Team (IPTs)

The contractor shall make use of IPTs, enabling membership and direct involvement by Government personnel at the working level. IPTs shall be used to resolve issues/conflicts, and as such, each IPT shall develop and track an objective means to measure its contribution to program success and shall identify risk areas and develop solutions to mitigate these risks. Each IPT shall have joint Government/contractor leads, and contractor and Government representatives on the IPTs shall be identified by name. Any IPT recommendations that require contract modification shall be forwarded to the PCO along with a request to modify the contract. The basic BATMAV IPT structure shall be composed of an overarching management IPT, a logistics management IPT, and an engineering IPT. IPTs shall be empowered to form ad hoc IPTs and Process Action Teams as required to address detailed issues. IPTs shall meet as required..

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3.3.1.2 Engineering Support

3.3.1.2.1 System Engineering

The contractor shall provide systems engineering to support internal and external integration of components, training materials and logistics support. The contractor shall participate in technical interchanges, program reviews, test and integration planning cells, and design reviews. The contractor shall provide programmatic, technical, and test support to the program.

3.3.1.2.2 Product Engineering

The contractor shall provide product engineering for production and support of the BATMAV system. This shall include engineering support in production, training and logistics activities of this effort.

3.3.1.2.3 Configuration Management

The contractor shall perform Configuration Management/Data Management (CM/DM) tasks pertaining to the BATMAV System, hardware, and software components in this SOW IAW the contractor's CM plan for production business practices. The contractor shall be responsible for maintaining established baselines and the entire CM through the program life cycle for the BATMAV System.

Hardware and software changes shall be processed IAW the contractor's CM plan provided under section 3.3.2.7 of this SOW. Class I changes to the system baseline shall be coordinated with the Air Force Program Office (PO) as an Engineering Change Proposal.

For software changes, the contractor shall ensure that the software baselines are controlled and tested at the computer software configuration item level. The contractor shall ensure each software baseline is identified, tracked within the contractor's CM Plan guidelines, and has the necessary number of backup copies. Class 1 changes to the system baseline shall be coordinated with the Air Force PO as an Engineering Change Proposal.

3.3.1.2.4 Obsolescence

Through the period of performance of the contract, the contractor shall: (1) identify alternate sources, replacement parts, or optional part numbers for parts and materials that become obsolete or damaged and need repair; and (2) revise applicable engineering drawings, schematics, and specifications to incorporate the new information. The contractor's Parts Obsolescence program and procedures shall be made available for review by Government IPT members.

3.3.1.3 Overall Program Support

3.3.1.3.1 Security

The BATMAV system shall comply with the BATCAM Security Classification Guide (SCG), which addresses security considerations such as classification levels. In accordance with the guide, this capability does not contain Sensitive Compartmented Information that requires physical security. The contractor shall comply with any additional security measures as documented in the Security Classification Guides for any future classified payloads required. The BATMAV system shall comply with the Information Assurance (IA) standards listed in the System Specification.

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The contractor shall comply with the requirements of the Department of Defense (DoD) Contract Security Classification Specification (DD Form 254) and the BATCAM SCG for classification guidance. Significant upgrades and materiel procurement related to facility clearance shall be assessed and agreed upon jointly by the contractor and the Government. In order to accomplish the technical tasks required under this SOW, the contractor shall maintain a valid U.S. COMSEC account throughout the period of performance of this contract. The contractor shall require access to For Official Use Only (FOUO) documents. The contractor logistic support efforts may require access to classified military operations and deployments. Foreign subcontractors are restricted from access to protected subsystems or functional military exercises.

3.3.1.3.2 Safety

The contractor's established safety guidelines and procedures shall be followed during the execution of this SOW. Contractor and subcontractor activities shall be in compliance with applicable federal, state, and local environmental laws and regulations. The contractor shall ensure that design, maintenance, operation, manufacturing, programmatic decisions, and trade-off studies strive to eliminate or reduce hazardous materials and wastes. The contractor shall provide, through the IPT process, immediate notification of any proposed hazardous material mitigation/elimination efforts that may adversely impact schedules, cost, or performance.

3.3.1.3.3 Quality Program

The contractor shall establish and maintain a quality program conforming to the requirements of International Organization for Standardization (ISO) 9001 or a Government-approved equivalent standard. The contractor shall maintain a Quality Management System Plan (QMSP) that satisfies the requirements of ISO 9001 or equivalent and addresses their operations at the production and flight acceptance sites. The Quality Program Plan (QPP) shall include policies and procedures for the flow down of the necessary quality requirements to its suppliers in order to ensure the delivered products meet their intended requirements. The QPP shall be available for Government review.

3.3.1.3.4 Flight Operations

The contractor shall support development, training and acceptance tests. The contractor shall coordinate procedures and scheduling with appropriate Government and local area personnel to ensure flight procedures comply with local and area requirements and appropriate flight regulations. The contractor shall coordinate identification of frequency management requirements with appropriate Government personnel.

3.3.2 System Development

3.3.2.1 Development - Program Management

The contractor shall establish and maintain a BATMAV System IMP to support cost, schedule and performance aspects of the effort required by the development effort of this contract. The IMP shall include systems engineering and software processes, certifications, tasks, reviews and events. The contractor shall provide planning, organizing, controlling, staffing and direction functions to meet these requirements. The contractor shall establish and maintain a CWBS for the efforts of the program. The contractor shall provide agendas and minutes for Contractor-Government meetings/conferences and audits IAW DI-ADMIN-81250A (CDRL A004).

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The contractor shall maintain an IMS in contractor format that reflects the efforts identified in this SOW. The schedule shall include development, integration milestones, and reviews. The contractor shall provide updates to the IMS on a monthly basis IAW DI-MISC-81183A/T (CDRL A008).

The contractor shall perform contract, finance and IPT activities as described by the scope of production management sections 3.3.1.1.2, 3.3.1.1.3 and 3.3.1.1.4 for the development phase of this contract.

3.3.2.2 ***Develop and Integrate BATMAV Subsystems***

The contractor shall develop and integrate the subsystem components required to transition the demonstrated baseline system into the production BATMAV system. The contractor shall integrate subsystems into the production BATMAV system.

3.3.2.3 ***System Validation, Test and Evaluation***

3.3.2.3.1 ***Validation Testing***

The contractor shall prepare a test plan IAW DI-NDTI-80566/T (CDRL A005) in support of validation of the system with respect to the BATMAV System Specifications defined as part of the scope of this effort. The contractor shall conduct validation testing in support of the development and integration of the production BATMAV System. The contractor shall generate summary reports for studies and analysis tasks performed in this effort.

3.3.2.3.2 ***Developmental Test and Evaluation***

The contractor shall support the Government in Development Test and Evaluation (DT&E) on production hardware to ensure compliance with performance specifications and interoperability. This shall include support of test, analysis and development of detailed test plans.

3.3.2.3.3 ***Operational Test and Evaluation***

The contractor shall support the Government in Operational Test and Evaluation (OT&E) on production hardware to ensure compliance with performance specifications and interoperability. This shall include the support of test, analysis and development of detailed test plans.

3.3.2.4 ***System Specification and Technical Data***

The contractor shall prepare and update a BATMAV System/Subsystem Specification (SSS) IAW DI-IPSC-81431A (CDRL A010) over the period of performance of the contract. Changes to the performance specification shall be made as upgrades are incorporated into the system configuration.

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The contractor shall provide updates to the computer software product used to implement the system integration IAW DI-IPSC-81488 (CDRL A009).

The contractor shall provide updates to the Computer Version Description (SVD) for the OCU and air vehicle autopilot IAW DI-IPSC-81442 (CDRL A011).

3.3.2.4.1 Program Waiver Support

The contractor shall provide technical data support to the PCO in preparing the following waiver packages (as required):

- Tactical Common Data Link (TCDL) waiver
- Secure Global Positioning System (GPS) waiver
- Selective Availability Anti-Spoofing Module (SAASM) waiver
- Standardization Agreement (STANAG) 4586 waiver

The contractor shall support the Government (e.g., participating in planning and technical meetings, engineering analysis, testing, etc.) in completing required military certifications and reviews.

3.3.2.4.2 Acceptance Test Procedure

The contractor shall prepare/update Acceptance Test Procedure (ATP) in contractor format and IAW DI-MISC-81418 (CDRL A001). The ATP shall be consistent with the requirements for the production and reporting efforts defined within section 3.3.3 of this SOW.

3.3.2.4.3 Information Assurance Support

The contractor shall support the development process for creating Information Assurance (IA) and interoperability requirements and documentation including availability, integrity, authentication, confidentiality, and nonrepudiation, as required to achieve Joint Interoperability Test Command (JITC) approval and AF/J6 interoperability certification and if necessary an Interim Approval to Operate (IATO) by the Designated Approval Authority (DAA) as required by CJCSI 6212.01D, 8 March 2006.

The contractor shall perform additional testing, if required, for satisfying the IA and interoperability requirements and documentation including availability, integrity, authentication, confidentiality, and nonrepudiation, as required to achieve JITC approval and AF/J6 interoperability certification and if necessary an IATO by the DAA as defined by the applicable documents section 2.0 of the system specification.

3.3.2.5 Payload and Voice Control Interface Control Documents

The contractor shall publish and maintain a Swappable Payload Interface Control Document (ICD) IAW DI-CMAN-81248A (CDRL A007). The contractor shall publish and maintain a Voice Control Software ICD IAW DI-CMAN-81248A (CDRL A007).

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3.3.2.6 **Develop Operator's Manual and Training Manual**

The contractor shall provide a commercial off-the-shelf (COTS) Operator's Manual in contractor format. The contractor shall prepare and update the Operator's Manual to include operation, maintenance and field repair IAW DI-TMSS-80527A (CDRL A002). The contractor shall provide a Training Manual in contractor format and IAW DI-TMSS-80527A (CDRL A002). The training manual shall have content that supports the conduct of training as defined in section 3.3.4.1 of this SOW.

3.3.2.7 **Configuration Management Plan**

The contractor shall deliver a CM Plan in contractor format and IAW DI-CMAN-80858B (CDRL A006). The plan shall be consistent with the approach used in the performance of CM activities for this effort as defined in section 3.3.1.2.3 of this SOW.

3.3.3 **Production**

The contractor shall provide all labor and material to produce BATMAV Systems for the developmental and production phases of the program. The contractor shall provide all labor and material to produce initial spares and depot stock to support these systems. The initial spares shall be produced concurrently with the BATMAV Systems. The contractor shall work jointly with the Government IPTs to identify and effect changes in the content and quantities of the BATMAV Systems and Spares based on field usage and incorporation of system upgrades. Such changes shall be submitted as a request to the PCO for contract modification.

3.3.3.1 **Systems Production**

The contractor shall deliver production BATMAV systems IAW the contract delivery schedule. The production systems and support components shall be compliant with the latest updated BATMAV SSS. The contractor shall provide systems for training activities defined within this effort prior to the test and deployment phases of the program.

3.3.3.1.1 **Unique Identification Report**

The contractor shall develop and maintain a Unique Identification (UID) approach for BATMAV System and Spares hardware IAW the Battlefield Airmen UID program policy. This program shall describe the materials, methods, and verification criteria for marking deliverable items and producing and maintaining a Bar Code Identification report IAW DI-MGMT-80177A/T (CDRL A003).

3.3.3.1.2 **Inspection and Acceptance**

The contractor shall conduct acceptance testing of BATMAV System and Spares. This includes Air Vehicles, payloads and associated ground control and support equipment. The contractor shall maintain a database of acceptance test results. Final inspection and acceptance testing shall be performed at a contractor-provided test facility. The contractor shall submit a delivery ATP report IAW DI-MISC-81418 (CDRL A001) upon completion of each ATP.

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**3.3.3.2** **Initial Spares Production**

The contractor shall deliver production BATMAV Initial Spares IAW the contract delivery schedule. The production spares and support components shall be compliant with the latest updated BATMAV SSS. The contractor shall produce system spares for training activities defined within this effort prior to the test and deployment phases of the program.

3.3.4 **Contractor Logistics Support**

The contractor shall establish a BATMAV Integrated Logistics Support (ILS) Program in coordination with the Logistics IPT with the logistics concept as defined in the System Specification. The Logistics IPT shall be responsible for the coordination, planning, controlling, implementation and verification of BATMAV logistics support.

The contractor shall perform program management activities defined by the scope of section 3.3.1.1 for logistics activities described in this section of the SOW.

3.3.4.1 **Training Program**

The contractor shall develop and maintain a total training system concept that satisfies the requirements for qualifying and sustaining trainers, operators, and maintainers. The contractor shall develop and maintain a training program and training support package for system training efforts. The contractor shall provide specific personnel performance requirements data necessary to support the design of a training program and manual in contractor format in support of the effort defined in section 3.3.2.6 of this SOW. This shall include providing a Training Reference Manual (TRM) to the U.S. Air Force that describes the operator manipulation of the graphical user interface (GUI) parameters, software variables and voice commands of the software and hardware associated with the (BATMAV) system compatible with the System Specification (SS) document requirements. The contractor shall provide definition and direction for instructors and trainees for the conduct of formal training. The contractor shall provide an instructional media package to support the transfer of knowledge, skills and attitudes for training.

3.3.4.1.1 **Equipment**

The contractor shall provide necessary training equipment, instructional methods, manuals, and related tools for all training levels a minimum of 30 days prior to the delivery date of each increment of BATMAV capability. The contractor shall provide a minimum of one (1) Operator's Manual per student and training package to conduct training operations. The contractor shall supply support materials and consumables necessary for conducting training. The operators will be responsible for supplying BATMAV production hardware for the training session. The contractor shall provide maintenance activities to keep the required training systems operational as part of the maintenance effort for this SOW. All costs/charges for offsite shipping of systems and components for higher-level maintenance will be considered as a charge to the Contractor Logistics Support effort.

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3.3.4.1.2 Services

The training shall consist of a combination of classroom and flight training using system hardware consistent with the contract deliverable hardware. The training program curriculum shall include skills, tasks, accomplishments and capability for system operation, maintenance, airspace management, troubleshooting proficiencies, simulator operation, tactics, techniques and procedures. The contractor shall develop two operator training courses. A short operator training course designed for operators with prior Wasp Block II or Raven B training and a long operator training course designed for operators not currently trained on Wasp Block II or Raven B training. The training shall consist of both classroom and field flight training. The contractor shall conduct the training courses to personnel identified by HQ AFSOC/670th AESS.

The contractor shall provide the specific data necessary for the examination of an individual's skills, knowledge, attitudes and achievement of learning objectives. Students shall be assessed by the contractor on the flight profiles identified in the training program on criteria of Go/No-Go. The contractor shall administer and evaluate these tasks by performance during the practical exercise portion of training events. The contractor shall track and record individual student task proficiency prior to the conclusion of the student's training program, and provide results to the BATMAV Project Office within seven days of each course completion on attendees by name, organization, and follow-on contact information and recommendation on completion assessment (Go/No-Go). The contractor shall make recommendations to the Government for dismissal of any student who has shown an inability to comprehend the course material or who is a behavioral issue.

Contractor personnel shall be fully capable of supporting the training and have the knowledge required to meet the requirements specified in this SOW. The contractor shall assign supporting personnel to perform the services and functions required to execute Training requirements outlined in this document. Personnel assigned to this task shall be capable of conducting training IAW this document, utilizing the training support package in an austere environment.

3.3.4.1.3 Facilities

Training shall be conducted at a Government-approved location. The Government will provide classroom, range, and storage facilities as required. Training location and schedule shall be established by the PCO. The PCO shall notify the contractor of a training location not less than 45 days (minimum) prior to start of training.

3.3.4.2 Maintenance

The contractor shall provide all maintenance and repair actions above the field level (Operator-level) required to support the BATMAV System equipment delivered in the scope of this SOW. Maintenance shall be performed by qualified maintainers using contractor-approved procedures. The contractor shall provide the tools and test equipment required to accomplish maintenance actions. The Government will provide all shipping costs for systems/components, spares and consumables that require retrograde to Depot Main (Original Equipment Manufacturer (OEM)) and material sustainment of the BATMAV systems and spares. The contractor shall provide Depot-level maintenance required to support the BATMAV system equipment without affecting readiness levels. The readiness rate shall be tracked by the Government and provided to the contractor through the logistics IPT. The contractor shall provide spares to support integration, test and operational activities of the program. The BATMAV contractor shall have training in maintenance and operation of BATMAV equipment available prior to the start of test and deployment phases of the program.

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4.0 Government Furnished Equipment and Government Furnished Information

The Government Furnished Equipment or Information required by the contractor in the performance of this contract is summarized below:

4.1 Toughbook Computer

A Panasonic CF-18 Toughbook laptop computer will be made available to the BATMAV contractor for OCU software checkout, peripheral hardware compatibility checks and contractor integration testing. The Toughbook is configured with a Pentium M 733- 1.1GHzULV(Centrino), 10.4" Touch Screen Hi-bright Transmissive XGA, 60GB HDD, 512MB RAM, Intel 802.11a+b+g (DISABLED), Dual pass through antenna connector, 9pin RS232 serial port, WIN XP SP2 operating system, built-in GPS, Bluetooth capability, Backlit keyboard.

4.2 Falcon View 3.3 Software Application

Falcon View 3.3, a government mission planning software package on the Toughbook laptop computer for map display of potential target coordinates, is the current map display program being used by the Battlefield Airmen in the field. Version 4.0 is anticipated to be in use by the time of releasing the BATMAV system. A currently fielded version of Falcon View will be made available to the BATMAV contractor for OCU software checkout, CoT message testing and contractor integration testing.

4.3 UAVTool Software Application

UAVTool is a software application developed by the BA team for viewing video from any UAV. UAVTool uses CoT message handling to view video from the UAV, flying overhead. It is interfaced to the Falcon View application running on the Toughbook computer. A currently fielded version of UAVTool will be made available to the BATMAV contractor for OCU software checkout, CoT message testing and contractor integration testing.

4.4 Other GFE

<u>Quantity</u>	<u>Federal Stock #</u>	<u>Nomenclature</u>	<u>Duration</u>	<u>Rental Value</u>	<u>Reason for Need</u>	<u>Cross Ref. To Cost Prop.</u>
THE ONLY GFP/BASE SUPPORT REQUIRED, IN ADDITION TO THAT SET FORTH IN CLAUSE H-087 OF THE MODEL CONTRACT, IS THE FOLLOWING:						
TBD	N/A	Training Facilities	5-10 days each	Not known	To support Operator Training	N/A

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Attachment 2, Statement of Work (SOW), Basic Contract – Revision B



5.0 SOW/SOO/WBS/CDRL CROSS Reference Matrix

SOW Section	Description	SOO Attach. 6	WBS Element	CDRL Number
1.0	Program Goal	1.		
2.0	Scope	2.		
2.1	Background			
2.2	Cross Reference SOO/SOW/WBS/CDRL			
2.3	Applicable Documents			
3.0	Program Requirements			
3.1	Program Objectives	3.		
3.2	General System Description			
3.3	Detailed Requirements			
3.3.1	Management		1.0	
3.3.1.1	Production Program Support		1.1	A004, A008
3.3.1.2	Engineering Management		1.2	
3.3.1.3	Overall Program Support		1.3	
3.3.2	System Development		2.0	
3.3.2.1	Development Program –Management Support		2.1	A004, A008
3.3.2.2	Develop and Integrate BATMAV Subsystems	3-a, 3-b, 3-c, 3-d	2.2	
3.3.2.3	System Validation, Test and Evaluation	3-g, 3-h, 3-n	2.3	A005
3.3.2.4	System Specification and Technical Data	3-l	2.4	A001, A009, A010, A011
3.3.2.5	Payload and Voice Control Interface Control Documents	3-i	2.5	A007
3.3.2.6	Develop Operator’s Manual and Training Manual	3-e, 3-n	2.6	A002
3.3.2.7	Configuration Management Plan	3-m	2.7	A006
3.3.3	Production		3.0	
3.3.3.1	Systems Production		3.1	A001, A003
3.3.3.2	Initial Spares Production	3-k	3.2	
3.3.4	Contractor Logistics Support	3-j	4.0	
3.3.4.1	Training Program	3-f	4.1	
3.3.4.2	Maintenance		4.2	
4.0	Government Furnished Equipment & Government Furnished Information			
5.0	SOW/SOO/WBS/CDRL Cross Reference Matrix			
6.0	Document Summary List			

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Attachment 2, Statement of Work (SOW), Basic Contract – Revision B



6.0 Document Summary List

DOCUMENT SUMMARY LIST (DSL) FOR THE BATMAV SYSTEM PROGRAM		
DOCUMENT Number/CDRL Number	TITLE	DATE/ CATEGORY
1. CJCSI 6212.01(D)	Interoperability and Supportability of Information Technology and National Security Systems	8-Mar-2006 Cat. 0
2. DI-MISC-81418 (A001)	Operating Procedures Manual - Acceptance Test Procedure	14-Nov-1994 Cat. 1
3. DI-TMSS- 80527A (A002)	Commercial Off-the-Shelf (COTS) Manual- Training and Operators Manual	21-May-1997 Cat. 1
4. DI-MGMT- 80177A/T (A003)	Bar Code Identification Report	26-Aug-1986 Cat. 1
5. DI-ADMIN- 81250A (A004)	Conference Minutes	01-Oct-1993 Cat. 1
6. DI-NDTI- 80566/T (A005)	Test Plan	13-Apr-1988 Cat. 1
7. DI-CMAN- 81248A (A006)	Interface Control Document (ICD) - Swappable Payload & Voice Control Software	30-Sep-2000 Cat. 1
8.a DI-MISC- 81183A/T (A007)	Integrated Master Schedule (IMS)	09-Feb-1996 Cat. 1
9. DI-IPSC-81488 (A008)	Computer Software Product (all new and/or revised software required to implement the system integration)	31-Jul-1995 Cat. 1
10. DI-IPSC- 81431A (A009)	System/Subsystem Specification (SSS)	10-Jan-2000 Cat. 1
11. N/A	BATCAM Security Classification Guide	unknown Cat. 1
12. BATMAV SRD version 2.7	System Requirements Document for Battlefield Air Targeting Micro Air Vehicle (BATMAV) – Increment Two System Development	28-Jul-2006 Cat. 1
13. DD Form 254	Department of Defense Security Classification Specification	1-Dec-90 Cat. 0

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SYSTEM SPECIFICATION

**BATMAV-0001
Rev A**

for

Battlefield Air Targeting Micro Air Vehicle (BATMAV)

Contract # FA8629-07-D-2376

CDRL A010

May 14, 2007

Prepared By: AeroVironment Inc,

On behalf of the U.S. Government, I have reviewed and accept the specification defined in this document.

Signature, U.S. Government Representative

Date

Printed Name

Distribution limited to DOD and DOD contractors only

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Volume 5: Attachment 3, System Specification



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System Specification

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GLOSSARY

Acronym	Definition	Acronym	Definition
AC	Accomplishment Criteria	IPT	Integrated Product Team
ACO	Administrative Contracting Officer	JCCB	Joint Configuration Control Board
AFSOC	Air Force Special Operations Command	MRP	Manufacturing Resource Planning
ATP	Acceptance Test Procedure	MTBOMF	Mean Time Between Operational Mission Failures
AV	Air Vehicle	NDA	Non-Disclosure Agreements
AVI	AeroVironment Inc.	NSA	National Security Administration
AVOLS	AeroVironment Online Logistics System	OCONUS	Outside the Continental United States
BOM	Bill of Material	OCU	Operator Control Unit
CCB	Configuration Control Board	OT&E	Operational Test and Evaluation
CDRL	Contract Data Requirements List	PBL	Performance Based Logistic
CM	Configuration Management	PCO	Principal Contracting Officer
CMC	Configuration Management Coordinator	PE	Program Event
COMSEC	Communications Security	PM	Program Manager
CONUS	Continental United States	PPT&E	Pre Production Test and Evaluation
COTS	Commercial-Off-the-Shelf	QMS	Quality Management System
CSCI	Computer Software Configuration Items	QSP	Quality System Procedure
CSS	Central Security Service	QT	Qualification Test
DARPA	Defense Advanced Research Projects Agency	RD/W	Request for Deviation/Waiver
DCID	Director of Central Intelligence Directives	SA	Significant Accomplishment
DCMA/LA	Defense Contract Management Agency/Los Angeles	SEMP	System Engineering Management Plan
DIAS	Dynamic Information Architecture System	SOO	Statement of Objectives
DID	Data Item Description	SOW	Statement of Work
DoD	Department of Defense	SQA	Software Quality Assurance
DSS	Defense Security Services	SRD	System Requirement Document
DT&E	Development Test and Evaluation	SUAV	Small Unmanned Aerial Vehicle
EAC	Estimates at Completion	TIM	Technical Interchange Meeting
ECO	Engineering Change Order	UAV	Unmanned Aerial Vehicle
ECP	Engineering Change Proposal	UID	Unique Identification
ERP	Enterprise Resource Planning	WBS	Work Breakdown Structure
FMECA	Failure Mode Effects and Criticality Analysis		
FPY	First Pass Yield		
FRACAS	Failure Reporting and Corrective Action System		
GFE	Government Furnished Equipment		
GFP	Government Furnished Property		
GPO	Government Program Office		
HFE	Human Factor Engineering		
HWCI	Hardware Configuration Items		
ICD	Interface Control Document		
IMP	Integrated Master Plan		
IMS	Integrated Master Schedule		
IPD	Integrated Product Development		

**INTEGRATED MASTER PLAN (IMP)****1.0 IMP Event-Based Plan**

The Integrated Master Plan (IMP) event-based plan for the BATMAV program is listed in Table 1. Each program event (PE) is defined by significant accomplishments (SA) necessary to complete the event. Each significant accomplishment is defined by criteria (AC) necessary to complete each accomplishment. The Integrated Master Schedule (IMS), provided in Volume 1, directly correlates to the events, accomplishments and criteria. In the IMS, each criterion is further detailed by tasks necessary to achieve the criterion.

Table 1. Event-Based Plan

Activity Code			Program Event Significant Accomplishment Accomplishment Criteria	Entrance Criteria	WBS	SOW
PE	SA	AC				
A			Management Activities Complete		1.0	3.3.1
	01		Production Management Complete	Award	1.1	3.3.1.1
		a	System Level Delivery Schedule approved and released to ERP		1.1	3.3.1.1
	02		BATMAV Engineering Support Activities Established for AVI UAS Engineering Dept.	Award	1.2	3.3.1.2
		a	Program Engineering requirements reviewed		1.2	3.3.1.2
		b	Adjustments to standard practices / processes in place		1.2	3.3.1.2
	03		BATMAV Program Support Activities Established for AVI UAS Division	Award	1.3	3.3.1.3
		a	Program Support requirements reviewed		1.3	3.3.1.3
		b	Adjustments to standard practices/processes in place		1.3	3.3.1.3
B			BATMAV System Development Complete		2.0	3.3.2
	01		Development Program Management Activities Completed	Award	2.1	3.3.2.1
		a	Program Organization Established		2.1.4	3.3.2.1.4
		b	Program Plans Reviewed		2.1.1	3.3.2.1.1
		c	BATMAV Kick-Off Meeting Conducted		2.1.1	3.3.2.1.1
		d	Program TIMs Completed		2.1.1	3.3.2.1.1
	02		System Development and Integration Completed	B01, X104, X105	2.2	3.3.2.2
		a	GCS/OCU Development, Integration and Test Complete		2.2	3.3.2.2
		b	Air Vehicle Integration and Test Completed		2.2	3.3.2.2
		c	Payload Integration and Test Completed		2.2	3.3.2.2
		d	System Integration Completed		2.2	3.3.2.2
		e	System Level BOM approved and released to ERP System		2.2	3.3.2.2

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	03		Validation and Test Programs Executed	B02, C01	2.3	3.3.2.3
		a	System Validation Complete		2.3.1	3.3.2.3.1
		b	DT&E Completed		2.3.2	3.3.2.3.2
		c	OT&E Completed		2.3.3	3.3.2.3.3
	04		System Specification and Tech Data Completed	B03	2.4	3.3.2.4
		a	System Requirements Finalized		2.4	3.3.2.4
		b	System Specifications Published		2.4	3.3.2.4
		c	System Acceptance Test Procedures Completed		2.4	3.3.2.4
		d	Supporting Documents for Waivers Submitted		2.4	3.3.2.4
	05		ICDs Delivered	B03, B04	2.5	3.3.2.5
		a	ICDs Internally Approved		2.5	3.3.2.5
		b	ICDs Submitted		2.5	3.3.2.5
	06		Operator's and Training Manuals Delivered	B03, B04	2.6	3.3.2.6
		a	Draft Ops Manual Reviewed		2.6	3.3.2.6
		b	Draft Operator's Manual Delivered		2.6	3.3.2.6
		c	Final Ops Manual Reviewed		2.6	3.3.2.6
		d	Final Operator's Manual Delivered		2.6	3.3.2.6
		e	Training Package Delivered		2.6	3.3.2.6
	07		Configuration Management Plan Delivered	B01	2.7	3.3.2.7
		a	Configuration Management Plan Reviewed		2.7	3.3.2.7
		b	Configuration management plan report submitted		2.7	3.3.2.7
C			BATMAV System Production Complete		3.0	3.3.3
	01		System Production Completed	B04	3.1	3.3.3.1
		a	GCSs Production Completed		3.1	3.3.3.1
		b	Air Vehicles Production Completed		3.1	3.3.3.1
		c	Payloads Production Completed		3.1	3.3.3.1
		d	Field Repair Kits Production Completed		3.1	3.3.3.1
		e	Other SubSystems Production Completed		3.1	3.3.3.1
		f	System Integration, Test and Inspection Completed		3.1	3.3.3.1
	02		Initial Spares Production Completed	B04	3.2	3.3.3.2
		a	ISP Assemblies Complete		3.2	3.3.3.2
		b	Integration and Test Complete		3.2	3.3.3.2
D			Contractor Logistics Support Completed		4.0	3.3.4
	01		Training Program Completed	B06, C01	4.1	3.3.4.1
		a	Training Support / Setup Completed		4.1	3.3.4.1
		b	First class of 6 Students trained		4.1	3.3.4.1
		c	Second class of 6 students trained		4.1	3.3.4.1
		d	Third class of 6 students trained		4.1	3.3.4.1
	02		Maintenance Activities Completed	C01, C02	4.2	3.3.4.2
		a	BATMAV Maintenance Program Established for Logistics Dept.		4.2	3.3.4.2

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		DARPA Funded Wasp Block AV Development (for Reference Only)			
X1		DARPA AV Development Complete			
	01	Aircraft Layout Complete			
	02	Payload Design Complete			
	03	Avionics Design Complete			
	04	AV Structural Design Complete			
	05	Engineering Test and Evaluation Complete			
X2		DARPA AV Block III Build Complete			
	01	Procurement Complete			
	02	Integration and Test Complete			

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Attachment 4, Integrated Master Plan (IMP)

**2.0 IMP Narrative****2.1 Management Activities****2.1.1 Production Management****2.1.1.1 System Delivery Schedule Approved****Objective**

Review proposed system delivery and initial spares schedule and update the IMS to reflect the new plan. This data will then be loaded into our Enterprise Resource Planning (ERP) system for the production phase of the program.

Governing Documents

CDRL A008 Integrated Master Schedule (IMS)

QSP 7.5 Production Process Control

Process

The objective is accomplished by executing initial phase of the processes as defined in AVI's Quality System Procedure 7.5. Production management, planning and control are accomplished with the aid of AVI's ERP system, Cincom. The management team plans the delivery schedule and loads requirements into the ERP system. Weekly reports are generated for guiding the Purchasing department in buying requirements necessary to meet the delivery schedule.

Program management works directly with Planning and Manufacturing to develop a build plan master schedule to drive hardware requirements to meet contractual delivery dates. The master schedule reflects a weekly build schedule to meet monthly contract delivery dates. This is a schedule risk mitigation approach which translates to 25% of the monthly deliverables being completed each week. The master schedule further buffers deliveries by allowing two weeks slack to facilitate the scheduling of customer witnessed Acceptance Test Procedures (ATPs).

A full-up regenerative Manufacturing Resource Planning (MRP) is run nightly (seven days per week) to ensure up-to-date information is passed to Planning and Purchasing. Cycle counting is performed daily to ensure inventory accuracy. All assembly and component lead times are entered into the ERP system to ensure sufficient time is allowed to procure and build hardware that supports the contract deliverables. This accomplishment is complete once the delivery schedule has been established and approved by cognizant personnel as defined by the process.

2.1.2 Engineering Support Activities**2.1.2.1 Program Engineering Requirements Reviewed Objective**

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Attachment 4, Integrated Master Plan (IMP)



Review program requirements and make necessary adjustments to engineering support provided to manufacturing, testing, and logistics functions to ensure product conformance and performance for the BATMAV program. This includes support from specialty engineering to ensure that reliability, consideration, and management of Human Factor Engineering (HFE) and obsolescence of Commercial Off-the-Shelf (COTS) parts are included in the Systems Engineering support of the BATMAV program.

Governing Documentation

BATMAV Contract

QSP 7.3 Design and Development

QSP 7.3.7 Control of Design and Development Changes

QSP 4.2.3 Control of Documents

QSP 8.5.2 Quality System Procedure, Corrective Action

MIL-STD-1472F – Human Engineering, 23 August 1999

Process

Support Engineering Process

AVI will provide engineering support in all areas of the BATMAV program. Activities include documentation update, Engineering Change Order (ECO) processing, documentation control, manufacturing and test support, integrated logistics support, and qualification testing. AVI has documentation for processing and controlling changes, maintaining product configuration and conformance, and data reporting and control. AVI will also provide support to Quality Management functions such as failure analysis and corrective actions for incoming inspection, production and field failures. AVI has developed these processes for systems currently in production and will continue to use and make necessary changes specifically for the BATMAV program.

Specialty Engineering Processes – Reliability

The reliability of all AVI Small Unmanned Aerial Vehicle (SUAV) equipment is assessed throughout design, test, and operational phases. Designs are reviewed for component selection to ascertain:

- Reasonable longevity (obsolescence mitigation, alternate sources).
- Compatibility to environment and service conditions.
- De-rating is in accordance with the established guidelines.
- Use of parts with histories of demonstrated successful aging.

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Attachment 4, Integrated Master Plan (IMP)



Reliability analyses, including Part Stress Analysis Prediction and functional Failure Mode Effects and Criticality Analysis (FMECA), are performed to identify areas of weakness in the design. Failures from receiving inspection through final production test, including customer returns, are reported. These failures are evaluated via a Failure Reporting and Corrective Action System (FRACAS) for possible trends and implementation of corrective action.

Field reporting data is collected and reviewed to identify trends in mean time between operational mission failures (MTBOMF) that need to be addressed.

Burn-in testing of electronic assemblies is an example of a test method that AVI routinely does to assess and improve reliability of parts, leading to better reliability of our overall systems.

Specialty Engineering Processes – Part Obsolescence

AVI's design approach is to use only COTS items that are commonly available and have more than one source; exceptions are made to provide a key performance characteristic or best-value enhancement for the system. Items are evaluated with respect to availability and the planned or expected life of the part. Often we may alter the overall system design in order to accept a wider range of alternate components as necessary for service life or future upgrades. In cases where a sole source is necessary, we may develop a closer preferred vendor relationship with the manufacturer of the component in order to gain some configuration control, and/or advanced warning of changes. In addition, we may start production with a sole source and later develop an alternate source.

Our obsolescence program routinely evaluates components for obsolescence. Components that may present a problem are evaluated and a plan is developed to resolve the issue. Often this includes execution of a lifetime buy to cover the service life of the system. We maintain these methods and processes in the Quality Management System (QMS).

Specialty Engineering Process – Human Factors

HFE is included in the design and processes associated with operators, maintainers, sustainers, trainers, and other support personnel. These processes includes analyzing all indicators, visual displays, auditory indicators, and other aids to maximize situational awareness and overall performance, while not interfering with peripheral vision, movement, or effectiveness. Human factors considerations are also applied to displayed data to allow easy understanding and processing, including data processed and passed to the next user system. Operational Use Tests are conducted at each level of the design phase to ensure compatibility with Human Factor considerations.

2.1.2.2 Adjustments to Standard Practices / Processes in Place Objective

Make necessary adjustments to AVI's current policies or procedures to ensure they conform with program requirements.

Governing Documentation

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Attachment 4, Integrated Master Plan (IMP)



QSP 4.2.3 Control of Documents

Process

AVI maintains a configuration management system for all policies and procedures. Each document has a unique part number and is revision controlled. ECOs are generated for any necessary updates and are incorporated upon approval by the Configuration Control Board (CCB).

2.1.3 Program Support Activities

2.1.3.1 Program Support Requirements Reviewed

Objective

Review program requirements for providing program support to development, manufacturing, testing, and logistics functions that ensure product conformance and performance. This objective is completed once the support activities have been reviewed and adjusted as necessary for the BATMAV program.

Governing Documentation

QSP 4.2.3 Control of Documents

QSP 4.2.3-1 Engineering Technical Drawing Standard

QSP 4.2.3-2 Release of Parts, Assemblies and Documents

QSP 7.3.7 Control of Design and Development Changes

Contract Data Requirements List (CDRL) items.

All formally issued contractual documents and technical requirements.

QM9001-2000 Quality Manual

ISO-9001 Quality System Standard

NSA/CSS Policy Manual 3-16 Control of Communications Security Material

DoD 5220.22- National Industrial Security Program Operating Manual
M

Director of Central Intelligence Directives (DCID)

Defense Security Services (DSS)

Customers DD-254

DoD 4161.2-M Department of Defense Manual for the Performance of Government Property Administration

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Attachment 4, Integrated Master Plan (IMP)



FAR Federal Acquisition Regulations

DFARS Defense Federal Acquisition Regulations Supplement

Process

Contract Data Management Process

AVI will manage and maintain all contractual data including the deliverable Contract Data Requirements List (CDRL) items, and formal technical & contractual documentation, during the life of the program and for a reasonable period thereafter.

The program manager and contracts manager will track and manage all CDRL items; i.e. CDRL due date, Data Item Description (DID), format and distribution. The initial submission of a CDRL item will be coordinated with the Government Program Office (GPO) to ensure that the initial CDRL deliverable (and subsequent submissions) has captured the information that is relevant to the GPO. The AVI PM is responsible for maintaining a database reflecting all CDRLs delivered and for handling all questions pertaining to the CDRLs.

Our configuration management organization will manage all *controlled* documentation (drawings, prints, specifications, deviations/waivers, etc) on the program.

Our contracts manager will maintain a comprehensive contracts file that will include all formally issued, *non-controlled* documents (basic contract, amendments, statement of work and all subsequent revisions), and all communications with the Principal Contracting Officer (PCO) and the Administrative Contracting Officer (ACO).

Planning Process for Deviations and Waivers

AVI will maintain a configuration baseline on all of its Unmanned Aerial Vehicle (UAV) products, and process a deviation or waiver only if it is in the best interest of the program, and only if written authorization for the deviation or waiver has been received.

When there is a need to depart from a particular specification performance or design requirement, drawing, or other document, for a specific number of units, or a specific period of time, a Request for Deviation/Waiver (RD/W) shall be submitted to the AVI CCB through the AVI Configuration Management Coordinator (CMC). The RD/W shall cite, as a minimum, the affected program, affected parts, and reason for the deviation/waiver. Once the CCB has ruled on the particular RD/W, its findings are documented and communicated to the appropriate engineering, manufacturing and program personnel.

We will also provide technical guidance and documentation as required in supporting the Air Force Program Office in obtaining waivers required as outline in the System Requirement Document (SRD).

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Quality Process

The ISO QMS extends to all processes associated with the design, manufacture, delivery, installation, and service of all production products. AVI's UAS Manufacturing facility is registered as fully compliant with all requirements of ISO 9001:2000.

The majority of our QMS processes are controlled with a process flowchart. This allows a clear understanding of the process being managed. Analysis of performance metrics is a key aspect of managing our QMS. From Receiving Inspection to First Pass Yield (FPY) out of production, charting and analyzing data are used to provide feedback to our manufacturing processes. The following are examples of our quality processes:

- a. Robust Supplier Management to assure that received product is manufactured/processed to specified requirements.
- b. Documented processes to ensure predictability and reliability of components, sub-assemblies, and final assemblies.
- c. Formal configuration management controls (procedures, work instructions, work orders, BOMs, drawings, specifications, CCBs, ECOs, etc.).
- d. Human resource allocation (Engineering, Technicians, Professional, etc.).
- e. Product conformance status and testing (receiving, in-process, and final).
- f. Computer-based traceability management of manufactured and repaired product AeroVironment Online Logistics System (AVOLS).
- g. One hundred percent verification of product using released ATPs before delivery to the customer.
- h. Audits, Corrective/Preventive Action, and On-Going Training (AVI and customer personnel).

In support of the QMS, are computer-based systems including a state-of-the-art ERP database (Cincom Control), the QMS database that manage the documentation and data collection mechanism, and the AVOLS database that manages Depot repair services. Our Quality manual, QM9001:2000, identifies the system and references the procedures we have in place to ensure continuous improvement and a high level of quality.

Security/COMSEC Process

AVI's Corporate Security Manager is responsible for the overall security of the company and manages security on all programs to ensure compliance with government regulations and customer requirements. We adhere to the governing documents listed above follow the guidelines set forth by DSS for cleared contractor facilities.

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AVI maintains an active Communications Security (COMSEC) account classified at the Secret level with the National Security Agency (NSA). We follow the requirements of NSA/CSS Policy Manual 3-16 for controlling and reporting COMSEC material transactions using NSAs DIAS software program. We have an assigned COMSEC custodian and alternate custodian. All personnel requiring access to COMSEC material receive annual briefings regarding their responsibilities for controlling this material. Debriefing is conducted when necessary. If the BATMAV program requires accessing or handling COMSEC material, AVI has the processes and account in place.

Government Furnished Property Utilization and Handling Process

AVI only anticipates the use of one GFE piece of equipment, the Panasonic CF-18 (Toughbook), used as part of the BATMAV system hardware production. The three other segments of this proposed effort that could require GFE are Manufacturing, Logistics, and Training.

Manufacturing: We plan to procure all items needed to manufacture the BATMAV systems, except the Toughbook, which will be provided as GFE.

Logistics: AVI will manage, track and secure Government property in performance of the maintenance and repair activities of this program.

Training: AVI will use Government furnished system hardware and facilities in the performance of the training activities of this effort.

AVI has a well-established Government Furnished Property (GFP) tracking system to ensure that we know the location of all customer property and to meet the 15 functions of GFP handling as stated by DoD 4161.2-M.

Inside AVI's secure production and depot maintenance facility, we ensure all inbound GFP is accompanied by the appropriate paperwork for chain of custody documentation. Upon appropriate receipt of GFP, the inventory is logged in the AVOLS GFP database. The GFP accountability is maintained in the database until the property is shipped back to the customer or the appropriate disposition instructions are received from the Program Contracting Officer or the appropriate personnel.

AVI undergoes annual, rigorous, third party GFP property audits conducted by Defense Contract Management Agency-Los Angeles (DCMA-LA).

Government Information Exchange

AVI's program manager has overall responsibility for the program. As such, his primary responsibility is to serve as the main interface for the GPO on all programmatic matters including technical, deliveries, schedule and financial.

Contractual matters with both the Government's principal contracting officer and the administrative contracting officer will be handled directly with AVI's contracts manager.

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All data to be transferred to and from the Government will be reviewed by the AVI program manager, transmitted primarily through the contracts manager. It is the goal of AVI to establish clear and concise lines of communication with the Government on this program through the identification of points of contact for the GPO and the Government contracts office for all matters on the program.

Configuration Management

AVI's current Configuration Management (CM) system is used to establish and control the baseline deliverable system, software, hardware, and data configuration items. We maintain a CM system for all products. Each component of the system is given a unique part number and is revision controlled using our ERP software. An indented Bill of Material (BOM) is generated that defines the required hardware and software for the procured system configuration. ECOs are generated for any necessary updates and are incorporated upon approval by the CCB. This includes necessary qualifications defined by contractual configuration control oversight. Software is revision controlled during the development process using Microsoft Source Safe on a secure network server. The correction of software issues is tracked using Test Track software database. Once the software is ready for production, it is released and controlled as a component of the associated BOM. Engineering Change Proposals (ECPs) will be submitted to the contracting authority for any hardware and/or software configuration change that impacts form, fit or function of AVI's production baseline, alters function from the System Performance Specification, or results in the necessity for changes to the system Technical Manuals. All ECPs will be processed through a Joint Configuration Control Board (JCCB). The JCCB will consist of Government and AVI personnel. Class I changes will not be incorporated unless approved by the Government.

2.1.3.2 Adjustments to Standard Practices / Processes in Place

Objective

Any adjustments required to conform to program requirements would be made to AVI's current policies or procedures.

Governing Documentation

QSP 4.2.3 Control of Documents

Process

AVI maintains a configuration management system for all policies and procedures. Each document has a unique part number and is revision controlled. Engineering change orders are generated for any necessary updates and are incorporated upon approval by the CCB.

2.2 BATMAV System Development

2.2.1 Development Program Management Activities

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2.2.1.1 Program Organization Established

Objective

The overall BATMAV program organization will be established within AVI. Integrated Product Teams (IPT) will be established for Program Management, System Engineering, and Logistics. They will be formed with cross-discipline members from the Air Force, AVI, and trusted suppliers (as appropriate).

Governing Documents

None

Process

IPT members will be selected from those disciplines applicable to the team's objectives and area of responsibility. Program reviews, progress reports and other documents will be organized around the activities and performance of the IPTs.

We have an informal class of suppliers that we refer to as trusted suppliers. These suppliers have earned their status through their history of superior program performance. We treat these suppliers as members of the team, working together to prevent or solve problems, and to identify better ways of doing things. We will continue to build these relationships during the BATMAV program.

2.2.1.2 Program Plans Reviewed

Objective

The overall Integrated Master Plan and Integrated Master Schedule for the development phase of the program will be reviewed and updated to reflect the program as awarded to ensure we have adequate resources, including personnel and facilities, to effectively develop, test, and manufacture the proposed BATMAV system. Risk areas in performance, cost and schedule will be identified and mitigation plans further refined.

Governing Documents

BATMAV Contract

CDRL A008 Integrated Master Schedule

QSP 5.6 Management Review

Process

Our approach to risk management is very similar to our approach to quality management. We embed it into our program planning process and monitor for evidence of variation to plan. Risks identified during the planning process are assigned to the Program Management IPT. Research is conducted to determine if the risk can be eliminated and/or risk mitigation options identified. The IPT then reviews the options, conducts cost/schedule/performance tradeoffs, and recommends a course of action to best support the program. The Program Manager confers with senior team management and the Customer PMO, and a course of action is agreed upon. The revised plan is then published with risk mitigation activities authorized and included in the new baseline.

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Identifying and Managing Technical/Performance Risks

As technical risks are identified in this program, we have in place a technical risk management process driven by our engineering IPT. Given the more complex nature of technical risk, as opposed to cost and schedule, this process relies on our proven Systems Engineering practices. Technical risks are properly quantified by engineering and possible solutions are identified and proven out through a series of analyses and tests. Technical risks are reported to program management and mitigation actions are reviewed with impact to schedules and costs. The Program Manager ultimately decides on the appropriate course of action, via the risk management board, to ensure all aspects of the risk and its resolution have been considered. Customer representatives are members of this process and any change to the baseline configuration is addressed through our engineering change process.

Identifying and Managing Cost Risk

Our computer-based system uses a project-based cost accounting methodology that mirrors the program WBS. Actual and committed costs are tracked to the specific WBS sub-element. Cost reports from Cincom allow program management to review actual expenditures versus budget, and commitments versus planned expenditures. This powerful tool allows program management to identify possible cost risks before they occur, and permit cost risk mitigation plans to be developed and implemented. Populating, maintaining, monitoring, and updating the database with cost and schedule information in a timely manner is an established process. This process allows us to closely monitor cost variances and identify any potential cost risks to the program.

Identifying and Managing Schedule Risks

The Integrated Master Schedule is the primary management tool for identifying and developing insight into schedule risk and its overall program consequences. The program management IPT is the central vehicle by which identified risks (in this case, schedule) are identified, researched, mitigated and resolved.

The engineering development IPT holds weekly meetings to review schedule status and identify any potential risks. Identified schedule risks are documented and risk mitigation plans are developed and forwarded to the program manager for resolution. Program management holds weekly meetings to review all non-hardware related program activities. This ensures a close monitoring of performance by task and is the primary vehicle for maintaining the IMS throughout the life of the program.

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2.2.1.3 *Kick-off Meeting Conducted*

Objective:

The Kick-off meeting will be dedicated to providing all members of the BATMAV program with an overview of the program. A review of the overall program objectives and schedule will also be conducted.

Governing Documents:

BATMAV Contract

2.2.1.4 *Program Technical Interchange Meetings*

Objective:

Technical Interchange Meetings (TIMs) will be dedicated to overall program status, critical examination of cost/schedule/technical status, and plans for resolution of identified problems.

Governing Documents:

CDRL A004 Conference Minutes

Process:

Formal BATMAV TIMs will be conducted once every two months throughout the development and production phases of the program. Program reviews will be chaired by the program manager and a typical agenda will include:

- General Program Overview
- Contract Change Status
- Technical/Design Status
- IPT Activities/Status
- Risk Management Activities/Status
- Deliverable Hardware Status
- Contract Data Status
- Government Topics of Interest
- Action Items and Open Issues

2.2.2 **System Development and Integration**

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2.2.2.1 System Engineering

Objective:

The objective of AVI's System Engineering and Development process is to ensure all aspects of product life cycle are addressed.

Governing Documentation

QSP 7.3 Design and Development

Process

AVI's system engineering process is a documented IPT process that guides our development and will be used to execute specific BATMAV activities such as environmental qualification. This process includes requirements definition and documentation, specification generation, design reviews with entry and exit criteria, development test and qualification, production documentation release, and integrated logistics support implementation. Imbedded in this process are activities such as performance analysis, trade studies, and verification and validation.

2.2.2.2 Integrated Product Development

Objective

Planning and control of product development will be realized through a variety of AVI Quality System Procedures (QSPs). The overarching process is QSP 7.3 Integrated Product Design and Development, which describes the key activities and documents required to plan and complete each phase.

Governing Documentation

QSP 7.3 Design and Development

QSP 4.2.3 Control of Documents

QSP 4.2.4 Control of Records

QSP 7.4-1 Supplier Management

QSP 7.5-1 Part Number Creation

CDRL A010 System/Subsystem Specification

Process

The Integrated Product Development (IPD) process is made up of seven phases: Requirements, Concept Design, Preliminary Design, Detailed Design, Design Verification, Design Validation, and Production Readiness.

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Distinct phases will be linked to specific activities identified on the program schedule to measure the progress of the program and provide defined points at which design reviews may be held to make sure the design is consistent with specified requirements and cost objectives. Generally, a program begins with requirements and progresses chronologically through the remaining phases. However, it is common for some phases to overlap in time and for detailed design work to be done while design verification and validation are in progress.

Critical program objectives will be defined and documented clearly during the requirements phase so that the desired product is realized and can be verified against the specification during the verification and validation phase.

Specific organization responsibilities and authority will be managed as follows:

- Program objectives, cost, and schedule will be controlled by Program Manager using Project Management Software, Excel, and accounting software.
- Technical requirements, specifications, and design will be controlled by Engineering Leads, based on the IPD and QSP documents.
- Configuration Control will be managed by the CCB.

2.2.2.3 Software Development Plan

Objective

The Software Development Plan (SDP) establishes the plan for developing the Computer Software Configuration Items (CSCIs) for the BATMAV System.

Governing Documentation

MIL-STD-498 Software Development and Documentation
QSP 7.3.7 Control of Design and Development Changes
QSP 4.2.3 Control of Documents
QSP 8.5.2 Quality System Procedure, Corrective Action
CDRL A009 Computer Software Product

Process

The software development process includes the following phases for all project software:

- Software Requirements Analysis
- Software Design
- Software Implementation and Unit Testing

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- Component/Unit Integration and Testing
- CSCI Qualification Testing
- CSCI/Hardware Configuration Items (HWCI) Integration and Testing
- Qualification Testing

Software development begins with an analysis and definition of all software requirements, proceeding through the detailed design of all software units, culminating with the Internal Design Review. The software is completed using an incremental development process, starting with the Software Implementation and Unit Testing Phase and finishing with the internal Qualification Test (QT). A Software Quality Assurance (SQA) engineer will perform this QT. The incremental development process is accomplished using incremental software builds.

The operational software is developed using C as the primary language, with the exception of the FalconView SUAV Add-on Tool, which is developed in Visual Basic.NET.

2.2.2.4 GCS/OCU Development, Integration and Test

Objective:

To perform the development, integration, and testing required to complete the modification of the existing off-the-shelf Wasp / Raven B GCS for use on the BATMAV system.

Process:

The existing RF Unit, from the Wasp / Raven B GCS, will be modified to include an omni-directional downlink antenna and a software activated switch to enable the user to select between the directional and omni-directional downlink antenna. The development and testing of this modified design will follow our standard process stated above.

The joystick controller will continue to be refined based on user feedback and additional human factors testing. The design will follow the standard product development process as stated above.

The BATMAV Operator Control Unit (OCU) software is based on production-ready software implemented in the Wasp / Raven B GCS, and already adapted for full use in the Toughbook computer. The OCU application will undergo further integration and testing in the BATMAV GCS in accordance with the software development process outlined above.

Governing Documentation

As stated above.

2.2.2.5 Air Vehicle Integration and Test Completed

Objective:

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To perform the incremental development, integration, and testing required to ensure the Wasp Block III air vehicle (AV) meets the requirements of the BATMAV system.

Governing Documents:

As stated above.

Process:

The AV proposed for the BATMAV system will continue to be developed under DARPA Contract MDA972-03-C-0058. Although there are currently no additional BATMAV specific requirements that go beyond DARPA's current goals for the payload, a placeholder for developing and integrating these requirements has been included in the IMS. Any additional development and testing will follow the standard product development process outlined above.

2.2.2.6 Payload Integration and Test Completed Objective:

To perform the incremental development, integration and testing required to ensure the Wasp Block III AV meets the requirements of the BATMAV system.

Governing Documents:

As stated above.

Process:

The IR and EO Payload proposed for the BATMAV system will continue to be developed under DARPA Contract MDA972-03-C-0058. Although there are currently no additional BATMAV specific requirements that go beyond DARPA's current goals for the payloads, a placeholder for developing and integrating these requirements has been included in the IMS. Any additional development and testing will follow the standard product development process outlined above.

2.2.2.7 System Integration Completed

Objective:

Integration of all subsystem components into the complete system to ensure they all work together, prior to the full testing and validation process.

2.2.2.8 System Level BOM approved and released to ERP System

Objective:

Document and release all system level BOMs for placement into the ERP system using the standard release procedure.

Governing Documents:

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QSP 7.5-1 Part Number Creation and Maintenance

2.2.3 Validation and Test Program

2.2.3.1 System Validation

Objective

Ensure the BATMAV system performs to the system/subsystem specification under a variety of test conditions.

Governing Documentation

CDRL A005 Contractor Test Plan

CDRL A010 System/Subsystem Specification

Process

Test, validation, and verification of the system requirements of the BATMAV system is accomplished through the implementation of a 3-stage process consisting of a) Pre-Production Test and Evaluation (PPT&E), b) Developmental Test and Evaluation (DT&E), and c) Operational Test and Evaluation (OT&E). The PPT&E process is executed by AVI and has as a main objective to validate that the BATMAV system meets the system requirements specified in the System Specification. This test program includes verification of all specification requirements via analyses, inspections, field and bench tests, and environmental qualification testing. Environmental tests will expose the BATMAV system to high and low temperature environments, wind, and rain in combinations of operating and non-operating conditions. Detailed test plans and test reports will be produced for customer review and approval as proposed.

The Qualification Test Matrix can be seen in Volume 5, Attachment 3.

2.2.3.2 Developmental and Operational Test Support Objective

AVI will support DT&E and OT&E programs scheduled by the Air Force BATMAV Program Office as required.

Governing Documentation

CDRL A005 Test Plan

CDRL A010 System/Subsystem Specification

Process

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Support will include the direct involvement of AVI System Engineers during the testing process, as well as assistance in formulating applicable test scenarios, and in defining appropriate success criteria that validate the System Specifications of the BATMAV System.

2.2.4 System Specification and Technical Data

2.2.4.1 System Requirements Finalized

Objective:

Establish and flowdown system requirements to the subsystem level to ensure all performance objectives from the contract Statement of Work (SOW) and SRD are met.

Governing Documents:

QSP 7.3 Design and Development

Process:

This process includes requirements definition and documentation, specification generation, development test, and qualification.

2.2.4.2 System Specification Publish

Objective:

Prepare the system/subsystem specification document based on the preliminary specification and the validation and verification testing of the BATMAV system based on the SOW and SRD.

Governing Documents:

QSP 4.2.3 Control of Documents

QSP 7.3 Design and Development

CDRL A010 System/Subsystem Specification

Process:

This process includes reviewing and analyzing the test results and generating and publishing the system/subsystem specification. This process also includes reviews with the customer before the final version is published.

2.2.4.3 System Acceptance Test Procedure

Objective:

Prepare the system ATP for the BATMAV system prior to delivery.

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Governing Documents:

QSP 7.3 Design and Development

Process:

An internal IPT consisting of engineering resources (systems engineer, product engineer, manufacturing engineer, and tech writer) and quality personnel will work together to create the ATP. During the development process, drafts are screened by the program manager and customer representatives to ensure all critical requirements are met. The finalized copy is released through our standard document control system and future revisions are revision controlled.

2.2.4.4 Prepare Supporting Documents for Waivers

Objective:

Prepare technical or performance related documentation to support the government in preparation for waivers required on this program.

Governing Documents:

None.

Process

AVI will work with the Government and the Program Contracting Office to generate the required information to support any waivers required.

2.2.5 Technical Interface Drawings

Objective

Technical Interface Drawings will be maintained to manage compatibility as a normal part of the development process. Physical, electrical, timing, formatting, and content (including standards used), are to be documented and controlled, using an ICD.

Governing Documentation

CDRL A007 Swappable Payload ICD

CDRL A007 Voice Control Software ICD

Process

An internal ICD defines the interconnectivity between system components. This is generated during development and maintained by AVI during the life cycle of the product.

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An external ICD defines the interconnectivity with non-system components, and components and systems, developed in the future for use with the SUAV. The external ICD is available to the customer. TIMs, in which all users of the interface may participate, lead to an approved and controlled ICD.

2.2.6 Operators and Training Manuals

2.2.6.1 Operators Manuals

Objective:

Prepare a comprehensive Operators Manual that includes 0-level maintenance and repair.

Governing Documents:

QSP 4.2.3 Control of Documents

Process:

An internal IPT consisting of engineering resources (product engineer, manufacturing engineer, tech writer, and graphics technician), flight test team personnel, and instructors is tasked with preparing the Operators Manual using standardized formats and lay-outs. During the development process, drafts are screened by flight test, training personnel, and customer representatives and tried out in field operations. The finalized copy is released through our standard document control system and future revisions are revision controlled.

2.2.6.2 Training Package

Objective:

Prepare the training package including manual, visual aids, and auxiliary equipment for use in the training program.

Governing Documents:

QSP 4.2.3 Control of Documents

Process:

Our preferred process is to form a training IPT composed of AV instructors and customer representatives. The initial effort is to closely define the specific needs for the customer and cover aspects such as format, available training sites and facilities, desired class sizes, mission specific requirements, and special needs. The IPT then tailors our standard training course and materials to a custom training package. This package is dry-run through our training team, and released through our document control system. Future revisions are revision controlled.

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2.2.7 Configuration Management Plan Objective

Document AVIs current Configuration Management (CM) system to establish and control the baseline deliverable system, software, and hardware configuration items.

Governing Documentation

QSP 4.2.3 Control of Documents

2.3 BATMAV System Production

2.3.1 Procurement

Objective

The main purpose is to clearly define standard procurement processes for materials, supplies and services. Only authorized purchasing agents can order products and services via Cincom, whereby the company can maintain control of cost of goods and services, supplier relationships, and can more effectively monitor supply chain activities. By following formal and consistent procurement practices, we can manage variation in material, cost, quality, delivery, and as yet unformed supplier relationships, to ensure shipment of quality products on-time and at a predictable price.

Governing Documentation

QSP 7.4 Purchasing

UAS Purchasing Manual

Process

1. Required Material or Services Identified - A requirement for material or services is identified either on the weekly Material Requirements Planning (MRP) report or on a Purchase Requisition (PR). The MRP is systematically generated daily.
2. Buyer Initiates RFQ/RFP - The Buyer prepares an RFQ or RFP and distributes the data to the appropriate supplier. RFQ/RFP's for inventory items used for production in the Manufacturing Center must be distributed to an approved supplier.
3. Quote/Proposal Evaluation - The Buyer compares all of the quotes by analyzing price, volume, lead-time, supplier quality, on-time data, current supplier service levels including capacity, supplier reliability, and supplier technical expertise if purchased product warrants continued supplier support.

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4. Purchase Order Generation - The Buyer generates a Purchase Order via the Cincom PO Entry screens and follows the requirements in Appendix A of QSP 7.4.
5. Purchase Order Acknowledgement - It is the Buyer's responsibility to ensure that the supplier returns a written acknowledgement of the PO via fax or email.
6. Purchase Order Revisions - The Buyer and the Purchasing Manager are the only authorized authorities able to make revisions to POs.
7. Material Receipt Verification - All material received to support production is inspected. At a minimum, material is inspected for identification and damage - this typically applies to commercial-off-the-shelf items. Material supplied to an AV specification is routed to Receiving Inspection for verification of the product to a requirements document - typically a drawing.

2.3.2 Subcontractor/Supply Chain Management

Objective

Ensure our suppliers perform acceptably, on-time and within budget.

Governing Documents

- QSP 7.4-1 Supplier Management
- QSP 7.4.3 Verification of Purchased Product
- QSP 4.2.3 Control of Documents

Process

The AVI subcontractor/supplier contract management approach is based on practical experience in managing both large and small suppliers. Our IPTs are responsible for early identification of subcontractor/vendor risk issues. We use a competitive procurement process and component quality review program to ensure performance and identify critical path components. Subcontractor and supplier performance is measured in real time and reviewed by quality assurance and procurement personnel. Regularly scheduled reviews with key suppliers ensure potential risks are identified. This allows corrective and preventative action plans to be implemented quickly, minimizing the chance of negative schedule impact.

We maintain Non-Disclosure Agreements (NDAs) in place with our key subcontractors. We have negotiated pricing and terms with all key subcontractors to support the production and logistics requirements. Our procurement and contracts people work hand-in-hand with our quality assurance and engineering organizations to ensure that we adequately define the subcontract work, qualify capable suppliers, and monitor their performance. Our contract management office will maintain these contracts and work in conjunction with purchasing to ensure contractual requirements and delivery schedules are met. A comprehensive make/buy analysis will be performed on all subcomponents required on this program.

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2.3.3 Manufacturing

Objective

Provide a consistent and reliable method to flow materials, labor, and process together resulting in a consistent, controlled and predictable output.

Governing Documentation

Quality System Manual

QSP 7.2 Customer related Processes

QSP 7.2.1 System Sell-off Process

QSP 7.5 Production Process Control

QSP 7.5-9 Consumables Process

Process

AVIs UAS Manufacturing facility is registered as fully compliant with all requirements of ISO 9001:2000. The ISO Quality Management System (QMS) extends to all processes within the manufacturing of SUAS products. In conjunction with the QMS, are computer-based systems and key manufacturing processes that have been refined to meet the needs of Military SUAS Programs.

Existing AVI Computer based systems that will be used to support manufacturing for this program:

- ERP/MRP database; Cincom Control
- QMS database that manages the process documentation and data collection mechanism
- Configuration Management Database
- AVOLS database that manages As-built configuration.

Existing AVI manufacturing processes that will be used to support this program cover the following key areas:

- Quality Assurance (ISO 9001:2000 certified)
- Manufacturing (Mechanical and Electronic Assembly)

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- Test and Inspection
- Supply Chain Management Processes
- Configuration Management and Document control
- Flight Operations

Regular and rigorous capacity planning is executed to ensure sufficient resources to meet the production build plan with high probability. Scheduling and release of manufacturing orders (MO) to the stock room is the responsibility of the Material Planning team using our ERP/MRP database. A material control specialist pulls the kit and delivers the MO to the production shop floor. Work Cell-based lean manufacturing techniques are utilized on the production floor allowing focused cross-trained teams to complete the MO routing steps and record labor times. Configuration managed documents are used in the fabrication, assembly, test and inspection of product. Test and yield data is collected at significant points in the process to ensure specifications are met and continuous improvement methods can be employed. As-built configurations of all serialized assemblies are entered into AVOLS for use by AVI's integrated logistics organization and the customer. The stock room completes the MO and material is put into inventory. The entire manufacturing order process is tracked in Cincom Control including; material, labor, assembly, test and inspection.

Once complete sales order line item hardware sets are in stock, a Sales order pick list is provided by the Material Planning team to the stock room. The items are pulled per the pick list and delivered to the Sell-off Cage. Flight Operations commence on applicable hardware and the hardware is prepared for customer acceptance and Sell-off.

Upon customer request, the delivery is packaged and shipped out or shipped in place pending specific instructions.

2.3.4 Inspection and Test

Objective

Ensure inspection and test planning is incorporated in the BATMAV program and that all proper inspections are accomplished at the correct points in the process.

Governing Documentation

- QSP 7.4.3 Verification of Purchased Product
- QSP 7.6 Control of Monitoring and Measurement Devices
- QSP 8.2.4 Monitoring and Measurement of Product
- QSP 8.3 Control of Nonconforming Product

Process

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Inspection and test spans the entire manufacturing process, from purchased components through hardware production, including Customer witnessed ATP. Engineering, Quality Assurance, Procurement and Manufacturing work together to define the production inspection and test plan. Once approved through program management, it becomes embedded in our engineering and manufacturing process in the form of:

- Inspection and test requirements imposed on our supply chain partners to ensure materials meet specification prior to arriving at AVI.
- In plant receiving inspection and test requirements to catch nonconforming material prior to moving it to stock.
- In-process inspection check lists on shop floor work order routings before assemblies move to the next operation.
- Electronic subsystems before and after burn-in tests to eliminate latent defects in components and workmanship.
- Air vehicle and ground equipment final test and inspection prior to validation test flight.
- Validation flight test prior to customer presentation.
- Customer Acceptance Test Procedure to ensure products are fully compliant with system specification.

Throughout this process, nonconforming product is identified and isolated. The nonconforming product enters an existing process, disposition is determined, and it is ultimately brought back into conformance or scrapped. Any changes to the inspection and test procedures must be formally approved by the CCB, using our formal engineering change process.

2.3.5 UID Process

Objective

Implement the current Unique Identification (UID) process on BATMAV program to ensure the appropriate components are tagged per the requirements of MIL-STD-130.

Governing Documentation

MIL-STD-130 Identification Marking of US Military Property

CDRL A003 Bar Code Identification Report

QSP 7.5 Production Process Control

Process

When systems are received in the sell-off cage, the UIDs are printed for each item as specified by the contract and AVIs QSP 7.5. The equipment used for printing is MIL-STD-130 and ISO compliant. The label is printed with the following information: Cage Code, Part Number and Serial Number. Once the label is printed, bar codes have to be verified to make sure the structure of the bar code is correct and is at an acceptable level of clarity. Once that is done, the label can be applied to the equipment according to the production-released drawing.

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2.4 Contractor Logistics Support

2.4.1 Integrated Logistics Support

Objective

The objective of AVI Integrated Logistics Support (ILS) is to achieve a low lifecycle cost for our customer while continuously meeting customer expectations in sustainment, supportability, availability and design.

Governing Documentation

MIL-HDBK-502 Department of Defense Handbook, Acquisition Logistics

MIL-STD-1388-1A Military Standard, Logistic Support Analysis

MIL-STD-1388-2B Military Standard, Department of Defense Requirements for a Logistic Support Analysis Record

Process

AVI ILS is an interactive system including the customer and AVI Logistics, Product Engineering and Program Management. A Supportability Integrated Product Team (SIPT) will be formed in accordance with the AVI program management approach. The SIPT will create and monitor metrics that gauge the effectiveness of the program's supportability. The SIPT creates a contractor infrastructure that is proactive to a customer's needs.

AVI works internally with the Logistics and Product Engineering organizations to increase product reliability and minimize part obsolescence.

Our responsive and proactive Logistics organization has used this concept to sustain multiple product lines for several years and has continuously maintained exceptional Operational Availability (A0) for customers in the combat environment for the last few years.

2.4.2 Training Program

2.4.2.1 Training Support/Set-up

Objective:

AVI will develop a Train-the-Trainer program and provide personnel and support equipment to execute this program.

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Governing Documentation

CDRL A002 BATMAV Operators Manual

CDRL A002 BATMAV Training Manual

Process

The AV BATMAV training program will be developed using a training IPT consisting of engineering resources, training instructors, maintenance specialists, and customer representatives. The IPT starts with specific requirements for the BATMAV program and a review of the published training manual. The training program will be developed leveraging the lessons learned from our other UAV training programs. Established baselines for instructor-to-student ratios, PowerPoint presentations, formats, curriculum, and class duration will be used. Customer inputs and feedback will be used to further refine the training package. The finalized product will be published and used in our Train-the-Trainer program. The proposed training team will consist of a chief trainer, certified instructor, and maintenance specialist. This team will sustain the training assets and support the training program.

2.4.2.2 Training Class

Objective:

AVI will operate Train-the-Trainer program and provide personnel and support equipment to execute this program.

Governing Documentation:

CDRL A002 BATMAV Operators Manual

CDRL A002 BATMAV Training Manual Process:

AVI will use 34 skilled trainers and maintainers to ensure quality BATMAV instructional support at military installations in CONUS and OCONUS. Our trainers consist primarily of former military personnel with real world combat experience. In addition, they have all successfully completed extensive AVI training programs and have recent experience training military personnel at multiple locations in the United States.

We will provide Train-the-Trainer course of instruction that is designed to take a previously untrained individual and qualify him as a BATMAV Trainer. Training will consist of a combination of classroom and flight training using BATMAV Systems. The training program curriculum includes:

- System operation, maintenance
- Airspace management

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- Troubleshooting proficiencies
- Air tactics, techniques, and procedures.

2.4.3 Maintenance

Objective

The objective of AVI's BATMAV two-level maintenance concept is to maximize A_0 and integrate maintenance that is congruent with current Air Force Special Operations Command (AFSOC) UAV maintenance skill levels.

Governing Documentation

CDRL A002 BATMAV Operators Manual

BATMAV Technical Manual

MIL-HDBK-502 Department of Defense, Acquisition Logistics

Process

O-level maintenance and repairs will be trained as part of the Train-the-Trainer program. Operators will utilize FRKs and Operator Kits to repair and maintain fielded BATMAV systems in theater. The combination of spare parts shipped with each AV, FRKs, and Operator Kits is designed to be sufficient materials to maintain fielded systems for 20 to 30 days (depending on operational tempo and environmental conditions). Resupply will be directed from our main depot, where stored ISP's will provide the initial replacements to the field. Major D-level maintenance and repairs will be conducted at our main depot in California. Repaired items will become part of a rotatable to continue resupply efforts.

3.0 IMS Walkthrough

The IMS is located in Volume 1, Appendix A and is provided in Microsoft Project format on our proposal CD. The IMS is an integrated, time-phased schedule that accounts for all activities required to complete the development, integration, production, testing, logistics, and delivery requirements contained in our SOW, the Air Force Statement of Objectives (SOO) and other internal AVI planning documents. The IMS is designed to ensure AVI management meets the Air Force's system performance, quality/test, and delivery schedule requirements for the BATMAV program in a responsive and efficient manner.

The development phase has already begun under the DARPA Wasp contract, shown (for reference only) on the IMS. The proof of concept design for the AV and payload, as well as the initial integration of the OCU software, have already been completed, as will be demonstrated during the source selection process. The remaining developmental items, such as the incremental changes to the existing GCS and full system integration, will begin upon contract award. The system design, integration, test and validation will be performed following our standard product develop process, QSP 7.3, as laid out in the BATMAV System Development portion of the IMS.

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Production management, planning, and control are accomplished through AVI's ERP system. The production portions of the IMS are representations of how the effort takes place with the use of ERP. Production begins with definition of the system and BOM, then release into document control. Production documentation must be completed for some items in transition from R&D prior to assembly phases. The management team plans the delivery schedule and loads the requirements into the ERP system. Weekly reports are generated for guiding the Purchasing department in buying requirements necessary to meet delivery schedule. The summarized report includes requirements for all programs including BATMAV. The purchasing and receiving of parts will take place in a combination of three methods: a single buy to cover near-term requirements; multiple buys over a period of time; or a single blanket purchase that covers multiple deliveries over a long period of time. The latter is preferred, as usually the best price and supplier relationship are achieved using this method. In general, all parts are purchased in time to be received one to two weeks before required. This is represented by a lag link between when purchasing begins and the lead time represented for the purchased item.

The durations shown for purchased items include the supplier lead time, receiving and inspection at AVI. The duration for each was extracted from ERP lead times. The purchasing of key parts is shown for each system subcomponent. In addition, a single task is used to represent the fabrication and purchasing of any other subassemblies contributing to each system component. Each subcomponent is completed and tested at the subassembly level and then leads to system level integration. The systems flow into pre-ATP final testing and then to Government-witnessed ATP. Once signed-off, the systems are shipped to the desired location.

4.0 Management Approach

AVI management approach to the proposed BATMAV Program is based upon the classic disciplines of Department of Defense (DoD) Program Management using an IPT structure and Performance Management to facilitate the planning and control of Cost, Schedule and Technical Performance. This section is organized to describe: 1) the placement of the program within AVI; 2) the overall structure of our program team; 3) position descriptions for the key management personnel; 4) our approach to work planning and performance measurement; and 5) our management plans and processes.

4.1 Placement within AeroVironment

AVI is a 35-year-old technology company dedicated to the development of Efficient Energy Systems and UAVs. Current development programs and products include the following:

- SUAV
- Unmanned Aerial Vehicle R&D

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- Industrial and Posi-Charge Equipment
- Energy Technology R&D
- Electric and Hybrid Vehicle Systems

The UAS business segment originated in 1986, with delivery of the first Pointer UAV System. Today, this business segment is the largest segment within the corporation. AVI remains fully committed to the small UAV product line and its complete support following delivery to the end users.

AVI's organizational structure is depicted in Figure 1. Tim Conver is the President and Chief Executive Officer of the corporation. AVI is divided into two (2) separate business centers with the corporation providing financial, legal, information technology and security resources.

The UAS Division is responsible for research and development, product design, manufacturing and logistic support of Small UAV systems including Wasp, Pointer, Raven, Dragon Eye, Swift and Puma UAV systems. John Grabowsky is the Vice President and General Manager of this Division, which is located in Simi Valley, California. [*]

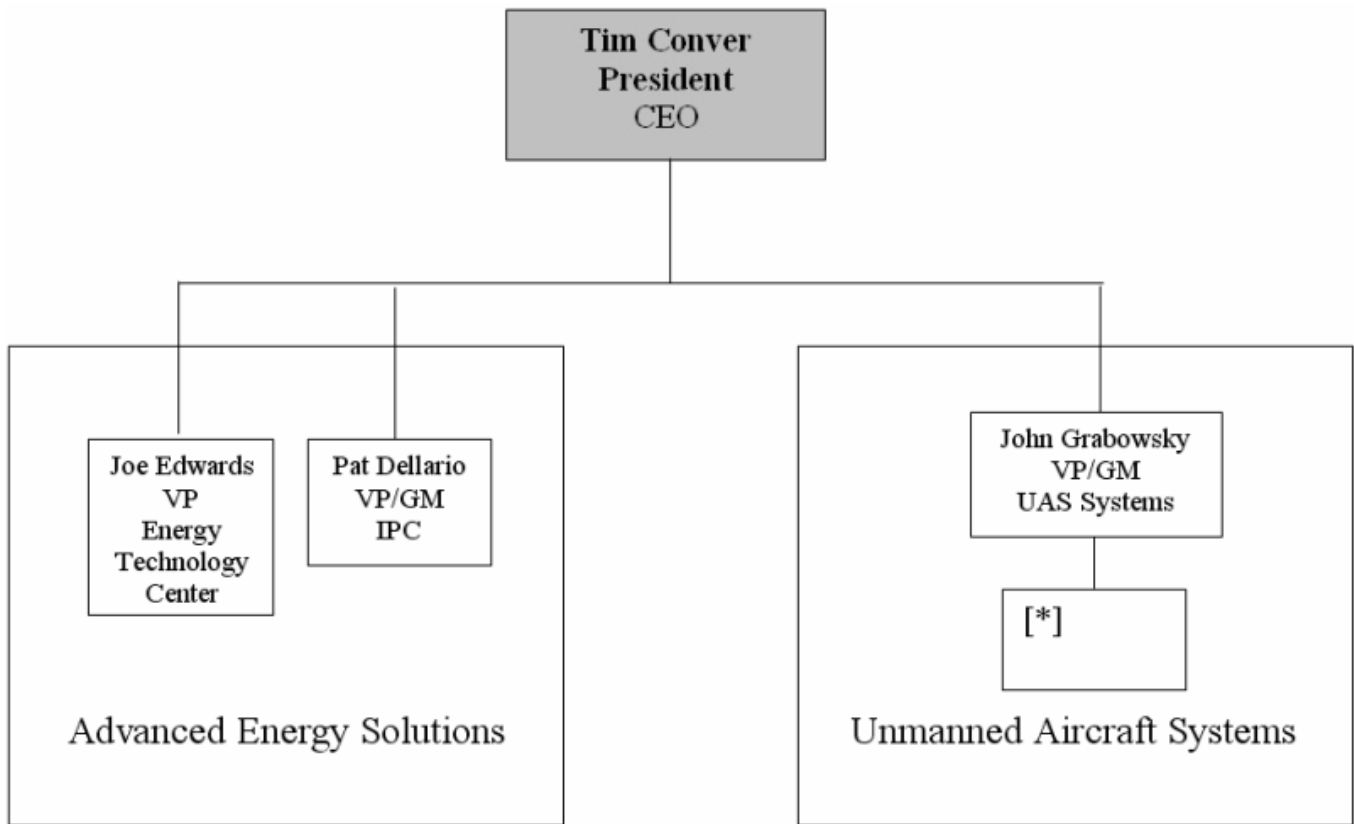


Figure 1. AeroVironment Inc. Organizational Chart

[*] 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.



4.2 Program Management Structure

4.2.1 BATMAV Organizational Structure

For program continuity, the existing experienced Wasp program team will also manage the Air Force’s BATMAV System Program. This existing organization will also be retained and augmented as required. Our BATMAV Organization structure is depicted in Figure 2.

In parallel with the Air Force BATMAV program, AeroVironment is conducting the DARPA/Wasp program. In each of the key leadership positions we have assigned the same experienced personnel. Depending on the respective time phased workload of the two programs, we will increase staffing, including deputies, if necessary.

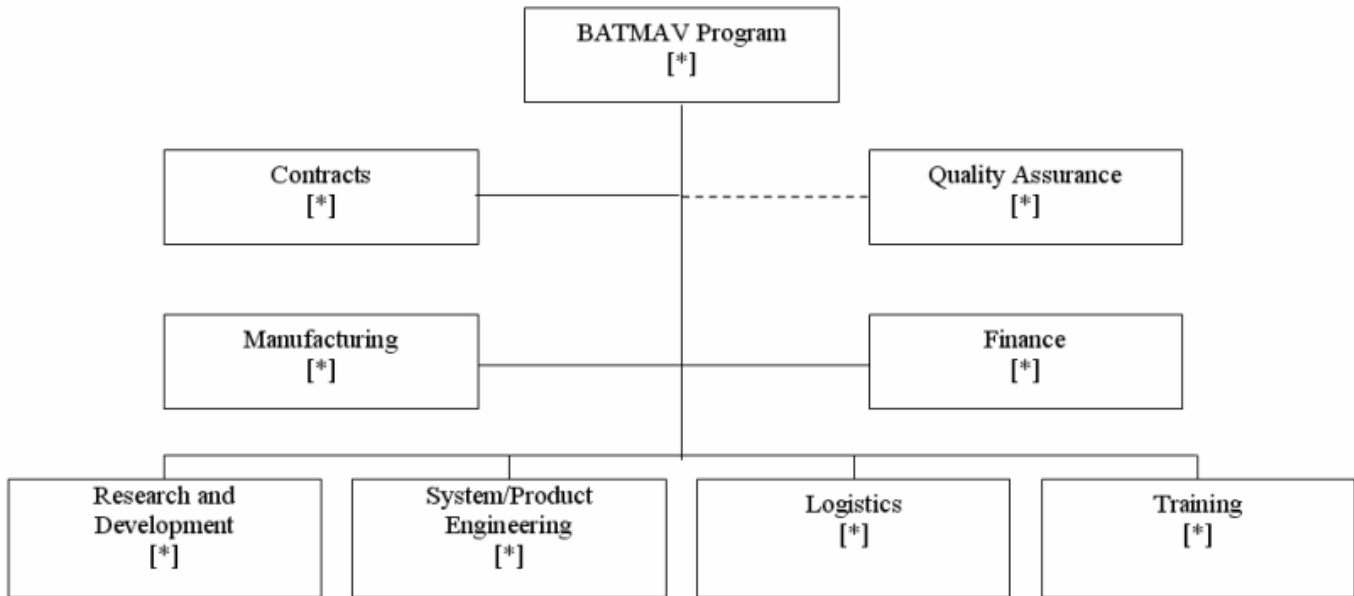


Figure 2. BATMAV Program Structure

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Under this BATMAV Program organization, the R&D, System and Product Engineering, Manufacturing and Logistic Support managers are responsible for the detailed planning and implementation of all BATMAV System work. The BATMAV Program Manager will oversee the overall program planning, control, and support tasks. IPTs will be the basis on which we will plan and accomplish work throughout the organization. Government personnel will be included in the membership of all IPTs. Short-term (ad hoc) IPTs will be formed on an as-required basis. IPTs will be established for Program Management, System Engineering, and Logistics. They will be formed with cross-discipline members from the Air Force, AVI, and trusted suppliers (as appropriate).

The existing Wasp Program organization will transition to the planned BATMAV program organization between proposal submittal and contract award. The organization will continue to support both the DARPA and BATMAV program and additional personnel will be added to ensure both programs are supported. Every person on the leadership team (shown in Figure 2) is already committed to the program and, working together, have formed the backbone of the proposal team.

Integrated Product Teams have been used on prior Wasp programs on a formal basis. We will continue the application of such cross-discipline management teams on the BATMAV program. Each team will be co-chaired by Air Force and AVI designees.

4.2.2 Organizational Commitment

AVI, the UAS Division, and the Wasp Program Team are all fully committed to the development, production and logistic support of BATMAV as a stable, long-term, product line. Our BATMAV system is a low-risk extension of a proven design that is fully backed by the Corporation, performed by the Division's Wasp team and managed by the Program Manager that has made it the one of the most successful Micro Air Vehicles currently in operation.

4.2.3 BATMAV Key Positions and Personnel

All key positions and personnel within the BATMAV program team are identified in Figure 2. All key positions are the same as those in the current Wasp UAV team. Likewise, all key personnel are the same as the current Wasp program. A description of each key position can be found in the following paragraphs.

4.2.3.1 Program Manager – [*]

The BATMAV Program Manager is [*]. He reports directly to the Vice President and General Manager of the UAS division. He is the primary contact with the U.S. Air Force program office and is responsible for all aspects of the planning, execution, and business operations of the entire BATMAV program. [*] is well positioned for this assignment, as he is already Program

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Manager of Wasp programs. The engineering, manufacturing, training, and logistics of the DARPA Wasp program are under his direction and he has been responsible for the development of all new technology incorporated into the Wasp. In his assignment as Program Manager for all Wasp programs, it is his responsibility to ensure that all are adequately staffed. It will be his responsibility ensure that the BATMAV program has what it needs to be successful.

4.2.3.2 Contract Management – [*]

The Contract Manager is responsible for all matters associated with BATMAV contract negotiations. He is the primary contact with the Air Force Procuring Contracting Officer (PCO). He is responsible for the implementation of all BATMAV contract terms and conditions. He maintains a formal contract change log. He plans and implements formal BATMAV work releases to the BATMAV Program office (Finance/Business Management). [*] is currently the Contracts Manager for the ongoing Wasp programs.

4.2.3.3 Quality Assurance Management – [*]

The Quality Assurance Manager is responsible for Quality Assurance matters associated with all UAS programs. He is personally assigned to and is responsible for the coordination of all Quality Assurance matters with the Air Force BATMAV Program. He is the primary contact with the U.S. Air Forces delegated DCMA quality assurance representative. He is responsible for the implementation of all UAS Quality Assurance requirements. He collects and maintains BATMAV Quality performance data (metrics). [*] will continue in this position. He has the responsibility and authority to: ensure that processes needed for the QMS are established, implemented, and maintained; report to the AVI management team on the performance of the QMS and any need for improvement; ensure the promotion of awareness of customer requirements throughout the organization; and ensure accurate sell-off of product to our customer through DCMA and/or other Government representatives.

4.2.3.4 Finance – [*]

The Finance Manager is responsible for all program finance activities. [*] leads the finance function in the UAS division and will personally establish and execute the financial management system for the program. It is her responsibility to ensure a disciplined financial program based on realistic budgeting, clear tracking and reporting upkeep. It will be her responsibility to interpret trend data and to provide an independent assessment to the Program Manager. She will be responsible for providing periodic Estimates at Completion (EACs) for review by the Program Manager and providing EAC reports to the customer.

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4.2.3.5 Research and Development – [*]

Research and Development for Air Force BATMAV will be under the continuing direction of [*]. He is responsible for the R&D efforts that led to the BATMAV advancements based on Wasp, including the configurable AV design and the interchangeable payload. He will develop future technology advances for Block III, including the integration of front/side look IR camera.

4.2.3.6 System / Product Engineering – [*]

AVI has combined System Engineering and Product Engineering activities under [*]. As System and Product Engineering Director, he is responsible for all matters associated with BATMAV Product Engineering. These responsibilities include production engineering, tooling design, special test equipment design, reliability engineering, maintainability engineering and components/materials, as well as engineering development and qualification testing. His responsibilities include product design reviews, ECPs and configuration management. He will conduct trade studies and propose design changes as appropriate, and assure compatibility/interchangeability among major elements of the BATMAV system improvements.

4.2.3.7 Manufacturing – [*]

[*] will continue in the position of Production Manager. He was the Manufacturing Manager that succeeded in achieving the high first-time yield records of the U.S. Army Raven B program. His responsibilities include material acquisition, material inventory management (including government furnished material), tooling/test equipment acquisition and maintenance, manufacturing engineering, assembly/test instructions, fabrication/assembly/test of BATMAV System equipment and spare assemblies and final acceptance test (including flight test) of BATMAV systems. Other responsibilities include change effectivity analysis, configuration control (hardware and software), and packing and shipping.

4.2.3.8 Logistics – [*]

[*] will continue as the Logistics and Repairs Manager. His responsibilities include safety engineering, operator training, maintenance training, supply support analysis, equipment repair/retrofit, acquisition of maintenance tooling/test equipment and PBL analyses.

4.2.3.9 Training – [*]

[*] will continue as the Director of Training. His responsibilities include UAS Instructor Training and currency standards, operator training, OCONUS logistics support, curriculum development and technical manuals. Other responsibilities include component level repair of all AVI UAS product lines including multiple AVs, ground control units, battery packs, battery chargers and related ancillary equipment.

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5.0 Contractor Work Breakdown Structure (CWBS)

5.1 CWBS Chart

The following CWBS has been generated for the management plan and is shown in Figure 3 for reference. The CWBS numbering is identical to the subsections within Section 3.3 of the SOW.

The WBS dictionary for the program is presented in Section 5.2 of this document. The Responsibility Assignment Matrix shows the relationship of the WBS to the program organization and is shown in Section 5.3 of this document.

WBS		
1.0	Management	
	1.1	Production Program Support
	1.1.1	Program Management
	1.1.2	Contracts
	1.1.3	Finance
	1.1.4	IPTs
	1.2	Engineering Management
	1.2.1	System Engineering
	1.2.2	Product Engineering
	1.2.3	Configuration Management
	1.2.4	Obsolescence
	1.3	Overall Program Support
	1.3.1	Security
	1.3.2	Safety
	1.3.3	Quality
	1.3.4	Flight Operations
2.0	System Development	
	2.1	Development Program - Management Support
	2.2	Develop and Integrate BATMAV System
	2.3	System Validation, Test and Evaluation
	2.4	System Specification & Technical Data
	2.5	Payload & Voice Control Interface Control Documents

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	2.6	Develop Operator's and Training Manuals
	2.7	Configuration Management Plan
3.0	Production	
	3.1	System Production
	3.2	Initial Spares
4.0	Contractor Logistics Support	
	4.1	Training Program
	4.1.1	Equipment
	4.1.2	Services
	4.1.3	Facilities
	4.2	Maintenance

Figure 3. Contract Work Breakdown Structure

5.2 WBS Dictionary

WBS 1.1 Production Program Support

This includes the overall management, control and operation of the production program. This includes efforts associated with execution and completion of CDRL data associated with the BATMAV system production.

WBS 1.1.1 Program Management

The program planning, organizing, directing, coordinating, controlling and approval actions necessary to accomplish the overall program objectives that are not associated with the specific systems and facilities and are not included under Engineering or Logistics Management. This element also includes production and maintenance of the WBS, metrics, status reporting and meetings.

WBS 1.1.2 Contracts

The management, administration and coordination of the contract to include reporting, subcontract management, property management and control. This includes elements of reporting associated with contract status and performance.

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WBS 1.1.3 Finance

The financial management of the program to include establishing and maintaining a financial management system and managing and reporting program financial information. This element is also to include the hardware and software necessary to host the financial management system. This includes elements of reporting associated with program budget and cost.

WBS 1.1.4 IPTs

The establishment, planning, communication and maintenance of joint Government/contractor IPT organizations to carry out the management and coordination functions of the program. This includes overall management, logistics and engineering IPTs with additional ad-hoc IPTs as required.

WBS 1.2 Engineering Management

This WBS element includes the technical and management efforts of directing and controlling a totally integrated engineering effort of the program.

WBS 1.2.1 System Engineering

The planning, organizing, directing, coordinating, controlling, approval actions and integration necessary to accomplish the overall program system engineering and technical objectives.

WBS 1.2.2 Product Engineering

This element includes all effort of technical activities associated with the production and manufacturing of the system. This includes analysis of design and production operations, application of manufacturing methods and tooling in support of producing the system.

WBS 1.2.3 Configuration Management

The establishment of configuration items and operation of configuration management for the system and sub system components and software. This includes defining the baseline configuration for the configuration items, controlling the changes to that baseline, accounting and reporting for all approved changes. This includes preparing and documenting necessary items in support of formal ECP submission for Class I changes.

WBS 1.2.4 Obsolescence

This element includes all effort of technical activities associated with maintaining and routinely evaluating components for obsolescence.

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WBS 1.3 Overall Program Support

This element includes all task and efforts used to support the production program.

WBS 1.3.1 Security

This element includes all to task and activities required ensure that AVI adheres to the polices, practices, and procedures of the National Industrial Security Program.

WBS 1.3.2 Safety

The planning, analysis and reporting of system component, operation and transportation safety.

WBS 1.3.3 Quality

The establishment, implementation and operation of a quality assurance program in support of the system production and supportability.

WBS 1.3.4 Flight Operations

The establishment, implementation and operation of flight operations.

WBS 2.0 System Development

This includes the overall management, control and operation of the development program. This includes efforts associated with execution and completion of CDRL data associated with the BATMAV system development effort.

WBS 2.1 Development Program – Management Support

The program planning, organizing, directing, coordinating, controlling and approval actions necessary to accomplish the overall program objectives related to the system development effort. This element also includes maintenance of the WBS, metrics, status reporting and meetings associated with the development effort.

WBS 2.2 Develop and Integrate BATMAV System

This element includes all effort of technical activities associated with the design, development, and integration of BATMAV unique subsystems, including the RF Unit with omni and directional antennas, and joystick controller as well as the integration of all software within the system. This also includes analysis of design and production operations, application of manufacturing methods, analysis and balance of reliability, maintainability, reducibility, safety, human health and interface, environmental protection, and survivability of the system.

WBS 2.3 System Validation, Test and Evaluation

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This activity includes the test and evaluation of prototype to production level assets for acceptance for their intended use. This includes the labor and materials required to conduct PPT&E of the BATMAV system and also includes support for the government run DT&E and OT&E.

WBS 2.4 System Specification & Technical Data

Establishing and maintaining the system technical requirements and specifications for the system, including the acceptance test procedure (ATP). This effort also includes the preparing technical data in support of the Program Office for any required waivers.

WBS 2.5 Payload & Voice Control Interface Control Documents

This element includes the generating and updating ICD for the Swappable Payload and Voice Control Software ICDs for this program

WBS 2.6 Develop Operator's and Training Manuals

This activity includes all labor and material associated with creating the operator's and training material, including the manual.

WBS 2.7 Configuration Management Plan

This effort includes documenting our existing configuration management plan to be delivered as a contract data item. The plan will describe our process for defining the baseline configuration for the configuration items, controlling the changes to that baseline, accounting and reporting for all approved changes.

WBS 3.0 BATMAV Production

This includes the overall tasks associated with producing the BATMAV system hardware and initial spares package.

WBS 3.1 System Production

This element includes the labor, materials and tasks associated with producing the BATMAV system hardware.

WBS 3.2 Initial Spares Production

This element includes the labor, materials and tasks associated with producing the BATMAV spares hardware.

WBS 4.0 Contractor Logistics Support

This element includes all logistics and supportability efforts for the program.

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WBS 4.1 Training Program

Deliverable training services, devices, accessories, aids, equipment, and parts used to facilitate instruction through which personnel will learn to operate and maintain the system with maximum efficiency. This includes all effort associated with the design, development, and production of deliverable training equipment as well as the execution of training services.

WBS 4.1.1 Equipment

This includes all effort associated with the design, development, and production of deliverable training equipment.

WBS 4.1.2 Services

This includes all effort associated with the execution of training services.

WBS 4.1.3 Facilities

This element covers the training facilities and materials.

WBS 4.2 Maintenance

This WBS element includes material and labor to support the 2-level maintenance for the BATMAV system.

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5.3 Responsibility Assignment Matrix

WBS		Program Mgmt	Sys / Prod Eng.	Mfg	Logistics	SOW	CDRL	CLIN
1.0	Management					3.3.1		
	1.1	Production Program Support	x			3.3.1.1		CLIN0002
	1.1.1	Program Management	x			3.3.1.1.1	A004, A008	CLIN0002
	1.1.2	Contracts	x			3.3.1.1.2		CLIN0002
	1.1.3	Finance	x			3.3.1.1.3		CLIN0002
	1.1.4	IPTs	x			3.3.1.1.4		CLIN0002
	1.2	Engineering Management		x		3.3.1.2		CLIN0002
	1.2.1	System Engineering		x		3.3.1.2.1		CLIN0002
	1.2.2	Product Engineering		x		3.3.1.2.2		CLIN0002
	1.2.3	Configuration Management		x		3.3.1.2.3		NSP
	1.2.4	Obsolescence		x		3.3.1.2.4		NSP
	1.3	Overall Program Support	x			3.3.1.3		NSP
	1.3.1	Security	x			3.3.1.3.1		NSP
	1.3.2	Safety	x			3.3.1.3.2		NSP
	1.3.3	Quality	x			3.3.1.3.3		NSP
	1.3.4	Flight Operations	x			3.3.1.3.4		NSP
2.0	System Development					3.3.2		
	2.1	Development Program - Management Support	x			3.3.2.1	A004, A008	CLIN0001
	2.2	Develop and Integrate BATMAV System		x		3.3.2.2		CLIN0001
	2.3	System Validation, Test and Evaluation		x		3.3.2.3		CLIN0001
	2.4	System Specification & Technical Data		x		3.3.2.4	A001, A003, A009, A010, A011	CLIN0001
	2.5	Payload & Voice Control Interface Control Documents		x		3.3.2.5	A007	CLIN0001
	2.6	Develop Operators and Training Manuals		x		3.3.2.6	A002	CLIN0001
	2.7	Configuration Management Plan		x		3.3.2.7	A006	CLIN0001
3.0	Production					3.3.3		
	3.1	System Production		x		3.3.3.1	A001, A003	CLIN0002
	3.2	Initial Spares		x		3.3.3.2		CLIN0003
4.0	Contractor Logistics Support					3.3.4		
	4.1	Training Program				3.3.4.1		
	4.1.1	Equipment			x	3.3.4.1.1		CLIN0004
	4.1.2	Services			x	3.3.4.1.2		CLIN0004
	4.1.3	Facilities			x	3.3.4.1.3		CLIN0004
	4.2	Maintenance			x	3.3.4.2		CLIN0005

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Attachment 4, Integrated Master Plan (IMP)



WBS		Program Mgmt	Sys / Prod Eng.	Mfg	Logistics	SOW	CDRL	CLIN
1.0	Management					3.3.1		
	1.1	Production Program Support	x			3.3.1.1		CLIN0002
	1.1.1	Program Management	x			3.3.1.1.1	A004, A008	CLIN0002
	1.1.2	Contracts	x			3.3.1.1.2		CLIN0002
	1.1.3	Finance	x			3.3.1.1.3		CLIN0002
	1.1.4	IPTs	x			3.3.1.1.4		CLIN0002
	1.2	Engineering Management		x		3.3.1.2		CLIN0002
	1.2.1	System Engineering		x		3.3.1.2.1		CLIN0002
	1.2.2	Product Engineering		x		3.3.1.2.2		CLIN0002
	1.2.3	Configuration Management		x		3.3.1.2.3		NSP
	1.2.4	Obsolescence		x		3.3.1.2.4		NSP
	1.3	Overall Program Support	x			3.3.1.3		NSP
	1.3.1	Security	x			3.3.1.3.1		NSP
	1.3.2	Safety	x			3.3.1.3.2		NSP
	1.3.3	Quality	x			3.3.1.3.3		NSP
	1.3.4	Flight Operations	x			3.3.1.3.4		NSP
2.0	System Development					3.3.2		
	2.1	Development Program - Management Support	x			3.3.2.1	A004, A008	CLIN0001
	2.2	Develop and Integrate BATMAV System		x		3.3.2.2		CLIN0001
	2.3	System Validation, Test and Evaluation		x		3.3.2.3		CLIN0001
	2.4	System Specification & Technical Data		x		3.3.2.4	A001, A003, A009, A010, A011	CLIN0001
	2.5	Payload & Voice Control Interface Control Documents		x		3.3.2.5	A007	CLIN0001
	2.6	Develop Operators and Training Manuals		x		3.3.2.6	A002	CLIN0001
	2.7	Configuration Management Plan		x		3.3.2.7	A006	CLIN0001
3.0	Production					3.3.3		
	3.1	System Production		x		3.3.3.1	A001, A003	CLIN0002
	3.2	Initial Spares		x		3.3.3.2		CLIN0003
4.0	Contractor Logistics Support					3.3.4		
	4.1	Training Program				3.3.4.1		
	4.1.1	Equipment			x	3.3.4.1.1		CLIN0004
	4.1.2	Services			x	3.3.4.1.2		CLIN0004
	4.1.3	Facilities			x	3.3.4.1.3		CLIN0004
	4.2	Maintenance			x	3.3.4.2		CLIN0005

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Attachment 5, Contract Work Breakdown Structure (CWBS)

b



Table 1. Required Information for Using GFP/Base Support (Section L, Table 8.7)

Quantity	Federal Stock #	Nomenclature	Duration	Rental Value	Reason for Need	Cross Ref. To Cost Prop.
1		FalconView s/w	Length of contract	No cost	BAO Kit compatibility	N/A
1		UAV Tool s/w	Length of contract	No cost	BAO Kit compatibility	N/A
1		AFRL/HE Voice Control s/w	Length of contract	No cost	BAO Kit compatibility	N/A
1		EtherRoute s/w	Length of contract	No cost	BAO Kit compatibility	N/A
1		Panasonic CF- 18 Toughbook computer	Length of contract	\$4,000 est.	BAO Kit compatibility	N/A
3	N/A	Training Facilities	17 days each	Not known	To support "Train- the-Trainer"	N/A

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Attachment 6, GFP Listing

**WIDE AREA WORK FLOW – RECEIPT AND ACCEPTANCE (WAWF-RA) ELECTRONIC INVOICING AND RECEIVING REPORT
INSTRUCTIONS (07 Feb 2006)**

1. **CONTRACTORS SHALL SUBMIT INVOICES THROUGH WAWF-RA FOR PAYMENT. SUBMISSION OF INVOICES VIA ANY OTHER METHOD SHALL DELAY PAYMENT.** HARD COPIES OF INVOICES ARE NO LONGER ACCEPTABLE METHODS OF SUBMISSION AND MAY BE RETURNED TO THE CONTRACTOR.
2. The contractor shall be paid after submission of a properly prepared invoice and after final inspection and acceptance by the Government. In accordance with DFARS 252.232-7003, use of electronic payment requests is mandatory. Wide Area Workflow – Receipt and Acceptance (WAWF-RA) is the Department of Defense System preferred choice for submission of electronic payment requests and receipt and acceptance documents. Information found here will aid in the submission of an invoice through WAWF-RA.
3. Invoices shall be submitted (Type an X in the appropriate block):
 - a. T After Delivery of Supplies or Services
 - b. T Monthly (After Performance)
 - c. £ Quarterly (After Performance)
 - d. £ Semi-annually (After Performance)
 - e. £ Yearly (After Performance)
4. The following codes are **required** to properly route your invoices and/or receiving reports through WAWF-RA. Missing elements in the following areas may cause delays in the payment process.
 - a. ISSUE DATE: . .
 - b. CONTRACT NUMBER: . .
 - c. DELIVERY ORDER NUMBER: . . (Note to contractor : Blank unless completed)
 - d. CAGE CODE: . .
 - e. PAY OFFICE DODAAC: . .
5. The contractor shall submit invoices using the following format for Payment Type. Be advised that only the selections noted below shall be used in the submittal process. **THE CONTRACTOR SHALL STRICTLY AHERE TO THE SELECTION NOTED BELOW TO AVOID DELAYS IN THE PAYMENT PROCESS. SUBMISSION OF INVOICE OTHER THAN THAT SPECIFIED BELOW MAY DELAY PAYMENT AND/OR CAUSE INVOICE TO BE RETURNED.**
 - a. £ Invoice (Note to contractor: To be used **ONLY** if authorized by the Contracting Officer)
 - b. £ Invoice 2n1 (Services Only)
 - c. £ Construction Payment Invoice
 - d. £ Commercial Item Financing (Note to contractor: To be used **ONLY** if authorized by the Contracting Officer)

- e. £ Performance Based Payment (Note to contractor: To be used **ONLY** if authorized by the Contracting Officer)
- f. £ Progress Payments (Note to contractor: To be used **ONLY** if authorized by the Contracting Officer)
- g. £ Receiving Report
- h. Invoice and Receiving Report (COMBO)
 - Note: Inspection = .. (source, destination)
 - Note: Acceptance = .. (source, destination)
- i. £ Public Voucher

(Note to contractor: If no selection is specified above, contractor shall utilize the combined Invoice and Receiving Report (COMBO) format. (Exceptions to utilizing the Invoice and Receiving Report (COMBO) is based upon the specific contract type awarded where progress payments, fast payment may be involved (e.g., construction contracts, or contract financing.) However, these exceptions will be identified elsewhere within the contract award document and authorized by the Contracting Officer. When in doubt, contact the Contracting Officer for clarification. When the COMBO method is used, be advised that the contractor shall create both a receiving report and invoice. Also note that if the contractual document requires attachments to be submitted (e.g., a copy of a paid freight bill), this can be accomplished by following instructions under Software User's Manual on the WAWF-RA site regarding "attachments".

6. The following additional codes are required to properly route your invoices and/or receiving reports through WAWF-RA. Note that if errors are received in the creation of your document, stop and call the Contracting Officer for verification of code required. Also note that some fields shown may or may not be included depending upon the type of invoice created. Fields are provided

- a. ISSUE BY DODAAC: FA8629
- b. ADMIN DODAAC: S0512A (Note to contractor: This field may also be referred to as ADMIN BPN)
- c. INSPECT BY DODAAC: EXT: .. (Note to contractor: These fields may be blank if not filled out by the contracting office, EXT may be blank even if the Inspect By DODAAC is shown.)
- d. MARK FOR CODE: Leave Blank
- e. SHIP TO CODE: .. EXT: .. (Note to contractor: EXT may be blank even if the first code here is shown. Also note this may also be referred to as Service Acceptor Code or Contracting Officer Code. In the future, this code may be referred to as BPN)
- f. SHIP FROM CODE: Leave Blank
- g. SHIPMENT NUMBER: (Note to contractor: This field is created and provided by the contractor. If no shipment number is completed in the WAWF process, the invoice number will be the default number.)
- h. INVOICE NUMBER: (Note to contractor: This is the invoice number and is created and provided by the contractor)
- i. ADDRESSES TAB (Note to Contractor: WAWF-RA will pre-populate the address information, ensure it is correct.)
- j. DISCOUNT TAB (Note to contractor: This allows for prompt payment discounts)

- k. FOB: . . (D, S, V) (D denotes destination shipping, S denotes shipment address same as contractor's address, V denotes shipment from other than contractor's address.) (Note to contractor: If other than Destination (D), submission of a paid freight bill may be required as an attachment to substantiate shipping charge.)
7. When creating invoices and/or receiving reports, the contractor shall select the "Additional E-mail Notifications" link and enter the e-mail addresses below. The Government will advise the contractor of changes to these e-mail notifications by letter or e-mail vs. contract modification. Upon receipt of the change(s), the contractor shall include the new e-mail notifications when creating invoices and/or receiving reports. Contractor should send an email notification to the addressees listed below upon submittal of an invoice through Wide Area Work Flow (WAWF-RA).
- a. INSPECTOR: . .
 - b. ACCEPTOR: . .
 - c. CONTRACT ADMINISTRATOR: [*]
 - d. CONTRACTING OFFICER: [*]
 - e. ADDITIONAL CONTACT: . .
8. Questions concerning payments should be directed to the Defense Finance Accounting Services (DFAS) located in Block . . of the contract/order. The contract, purchase order, or invoice number is required when inquiring about payment status. Payment information may also be accessed from the DFAS web site at <http://www.dod.mil/dfas/money/vendor/>
9. Detailed information regarding WAWF-RA is available on the Internet at <https://wawfeb.mil>. Note that the Software Users Manual posted to WAWF-RA is an excellent source for information when completing the invoice submission process. WAWF-RA training is also available at <http://www.wawftraining.com>.
10. DEFINITIONS. Following is a list of definitions that may be helpful. Additional information can be found at <http://farsite.hill.af.mil/> and <http://www.dod.mil/dfas/commpay/contractorpayment/>

SECTION J – LIST OF ATTACHMENTS -

Attachment No. 1 – Glossary of Invoicing Terms

BPN: Business Partner Number. An integrated electronic infrastructure the Government uses to manage (i.e., collect, validate, access and maintain) the information it needs to transact business with its contractors. The BPN is located at <http://www.bpn.gov>.

CAGE CODE: Commercial and Government Entity Code. A CAGE Code is a five (5) position code that identifies companies doing or wishing to do business with the Federal Government. <http://www.ccr.gov/>

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COMMERCIAL ITEM FINANCING is a form of contract financing resulting from the Federal Acquisition Streamlining Act (FASA) of 1994. Use of this type of invoicing shall be approved by the Contracting officer.

CONTRACTING OFFICER: The person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings.

CONTRACTOR: Also known as vendor

DODAAC: Department of Defense Activity Address Code. A six position code that uniquely identifies a unit, activity, or organization that has the authority to requisition and/or receive materiel

DELIVERY ORDER: An order for supplies placed against an established contract or with Government sources.

F.O.B. DESTINATION: Free on board at destination; *i.e.*, the seller or consignor delivers the goods on seller's or consignor's conveyance at destination.

F.O.B. ORIGIN: Free on board at origin; *i.e.*, the seller or consignor places the goods on the conveyance. Unless the contract provides otherwise, the buyer or consignee is responsible for the cost of shipping and risk of loss.

INSPECTION: means examining and testing supplies or services (including, when appropriate, raw materials, components, and intermediate assemblies) to determine whether they conform to contract requirements.

INVOICE: means a contractor's bill or written request for payment under the contract for supplies delivered or services performed (see also "proper invoice").

MUST: see SHALL.

PERFORMANCE BASED PAYMENTS: A provision for the use of Performance Based Payments (PBPs) as an alternative to progress payments for contract financing. Use of Performance Based Payment method shall be approved by the Contracting Officer

PROGRESS PAYMENTS: Progress payments are payments made based on the cost incurred by the contractor as work progresses under the contract. Use of Progress payment method shall be approved by the Contracting Officer.

PROPER INVOICE: An invoice that meets the minimum standards specified in FAR 32.905(b). RECEIVING REPORT: Written evidence that indicates Government acceptance of supplies delivered or services performed.

SHALL: The imperative.

SHOULD: An expected course of action or policy that is to be followed unless inappropriate for a particular circumstance.

TAXPAYER IDENTIFICATION NUMBER (TIN): The number required by the IRS to be used by the offeror in reporting income tax and other returns.

WINS: Web Invoicing System. <https://ecweb.dfas.mil/wins/login.jsp> DFAS has implemented a Web Invoicing System (WInS) available through the Internet system in addition to the traditional Value Added Network (VAN) based EDI.

CATALOG PRICES	Qty	FY 07			FY 08			FY 09			FY 10			FY 11		
		1 - 25	26 - 50	51 +	1 - 25	26 - 50	51 +	1 - 25	26 - 50	51 +	1 - 25	26 - 50	51 +	1 - 25	26 - 50	51 +
ASSY, WASP AIRFRAME	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
MOUNT, FIN, WASP																
ASSY, AVIONICS, WASP																
LEFT SERVO ASSEMBLY																
RIGHT SERVO ASSEMBLY																
PROPELLER, WASP																
FIN, WASP																
ASSY, CAMERA																
ASSY, MOTOR AND MOUNT, WASP																
ASSY, PITOT TUBE, WASP																
ASSY, HATCH, WASP																
ASSY, BATTERY PACK, WASP																
LEFT WING TIP																
RIGHT WING TIP																
HUB & CABLES																
OMNIRF UNIT, GC2 WASP																
GCU BATTERY																
JOYSTICK																
E/O PAYLOAD																
I/R PAYLOAD																
E/O PAYLOAD SHELL																
I/R PAYLOAD SHELL																
BUNGEE LAUNCHER																
LAUNCH DUMMY																
HAND CONTROLLER																
AIR VEHICLE	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]	[*]
UNIVERSAL BATTERY CHARGER																
WASP BATTERY ADAPTER																
TOUGHBOOK																
SYSTEM PACKAGING (4 AV SYSTEM)																
SYSTEM PACKAGING UPGRADE (4 AV SYSTEM)																
FIELD REPAIR KIT																
RF CABLE - 100 FT																
AIR VEHICLE CASE																
PAYLOAD POUCH																
FLIGHT LOG - WASP III																
OPERATOR MANUAL																
OPERATOR KIT																
* CAMELBACK BACKPACK																

* Minimum Buy On The Backpack Is Qty 200

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ISP	Qty	Unit Price	Extended Price
ASSY, WASP AIRFRAME	[*]	[*]	[*]
MOUNT, FIN, WASP			
ASSY, AVIONICS, WASP			
LEFT SERVO ASSEMBLY			
RIGHT SERVO ASSEMBLY PROPELLER, WASP			
FIN, WASP			
ASSY, CAMERA			
ASSY, MOTOR AND MOUNT, WASP			
ASSY, PITOT TUBE, WASP			
ASSY, HATCH, WASP			
ASSY, BATTERY PACK, WASP			
LEFT WING TIP			
RIGHT WING TIP			
HUB & CABLES			
OMNI RF UNIT, GC2 WASP			
GCU BATTERY			
JOYSTICK			
E/O PAYLOAD			
I/R PAYLOAD			
E/O PAYLOAD SHELL			
I/R PAYLOAD SHELL			
FIELD REPAIR KIT			

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ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
1001		1	[*]
		Lot	[*]
	<i>Noun:</i>	DEVELOPMENT AND INTEGRATION	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>	The contractor shall provide development and integration efforts in accordance with (IAW) the Statement of Work (SOW) listed in Section J of this order and the System Specification attached to the basic contract.	
100101			
	<i>Noun:</i>	Funding Info Only	
	<i>ACRN:</i>	AA	[*]
	<i>PR/MIPR:</i>	[*]	[*]
		[*]	[*]
100102			
	<i>Noun:</i>	Funding Info Only	
	<i>ACRN:</i>	AB	[*]
	<i>PR/MIPR:</i>	[*]	[*]
		[*]	[*]
1006		[*]	[*]
		Lot	[*]
	<i>Noun:</i>	DATA	
	<i>ACRN:</i>	AA	
	<i>NSN:</i>	N - Not Applicable	
	<i>DD1423 is Exhibit:</i>	A	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	SOURCE	
	<i>Acceptance:</i>	SOURCE	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>	The contractor shall provide data in accordance with Contract Date Requirements List, DD Form 1423, designated as Exhibit A, Section J, hereof. Data Requirements are not separately priced (NSP). The costs for data are included in the costs of CLIN 1001.	

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CONFORMED DELIVERY ORDER FA8629-07-D-2376 0001 (01/22/2008)

NSD93685.2

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ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
------	----------------------	-------------------	---------------------------------

2002		[*]	[*]
		Each	[*]
	<i>Noun:</i>	BATMAV SYSTEMS	
	<i>ACRN:</i>	AC	
	<i>PR/MIPR:</i>	[*]	[*]
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	

Descriptive Data:

The contractor shall deliver BATMAV systems in accordance with (IAW) the Statement of Work (SOW) listed in Section J of this order and the Systems Specification attached to the basic contract.

Price for this option CLIN shall be [*] per system for a total of [*].

2003		[*]	[*]
		Each	[*]
	<i>Noun:</i>	INITIAL SPARES	
	<i>ACRN:</i>	AC	
	<i>PR/MIPR:</i>	[*]	[*]
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	

Descriptive Data:

The contractor shall deliver BATMAV initial spares in accordance with (IAW) the Statement of Work (SOW) listed in Section J of this order and the Systems Specification on the basic contract. The list of spares for this delivery order is shown as Attachment 3 to this order.

Price for this option CLIN shall be [*]

2004		[*]	[*]
		Each	[*]
	<i>Noun:</i>	TRAINING	
	<i>ACRN:</i>	AC	
	<i>PR/MIPR:</i>	[*]	[*]
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	

Descriptive Data:

The contractor shall deliver training in accordance with (IAW) the Statement of Work (SOW) listed as Attachment 1, Section J of this order and the Systems Specification on the basic contract.

Each class shall consist of 6 students and each student will be provided a Training Reference Manual as part of the class. (in accordance with CDRL A002).

[*] classes at [*] each for a total of [*]

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CONFORMED DELIVERY ORDER FA8629-07-D-2376 0001 (01/22/2008)

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
2005		[*]	[*]
		Lot	[*]
	<i>Noun:</i>	REPAIR AND RETURN	
	<i>ACRN:</i>	AC	
	<i>PR/MIPR:</i>	[*]	[*]
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	Y - TIME AND MATERIALS	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	

Descriptive Data:

The contractor shall deliver repair and return service in accordance with (IAW) the Statement of Work (SOW) listed as Attachment 1, Section J of this order and the Systems Specification on the basic contract. The cost will consist of a loaded labor rate, and a price for material for each repair and return effort (if additional material is necessary).

Cost for this option CLIN is [*] (excluding all materials except consumables)

Period of performance shall be 12 months after delivery of BATMAV systems.

2006		[*]	[*]
		Lot	[*]
	<i>Noun:</i>	DATA	
	<i>ACRN:</i>	AC	
	<i>NSN:</i>	N - Not Applicable	
	<i>DDI423 is Exhibit:</i>	A	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	

Descriptive Data:

The contractor shall provide data in accordance with Contract Date Requirements List, DD Form 1423, designated as Exhibit A, Section J, hereof. Data Requirements are not separately priced (NSP). The costs for data are included in the costs of CLIN 2002.

2007		[*]	[*]
		Lot	[*]
	<i>Noun:</i>	ADDITIONAL TEST ASSETS	
	<i>ACRN:</i>	AB	
	<i>PR/MIPR:</i>	[*]	[*]
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	

Descriptive Data:

The contractor shall provide additional test assets for the BATMAV program, consisting of 4 additional systems in accordance with SOW paragraph 3.3.2.3.4. Each system includes 2 air vehicles, 1 ground station, one infrared (I/R) camera payload, 1 electro-optical camera payload, and 1 operator's kit as described in SOW paragraph 3.3.2.3. The contractor shall also provide 1 additional I/R payload and 1 additional E/O payload in accordance with SOW paragraph 3.3.2.3.4.

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CONFORMED DELIVERY ORDER FA8629-07-D-2376 0001 (01/22/2008)

NSD93685.2

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
2008		[*] Lot	[*] [*]
	<i>Noun:</i>	TRAINING FOR DT/OT TEST TEAM	
	<i>ACRN:</i>	AB	
	<i>PR/MIPR:</i>	[*]	[*]
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	J - FIRM FIXED PRICE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	

Descriptive Data:

The contractor shall provide training to the DT and OT test team in accordance with SOW paragraph 3.3.2.3 and 3.3.4.1.2.

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
1001		[*]	U			30 Sep 2007
	<i>Noun:</i>	DEVELOPMENT AND INTEGRATION				
	<i>ACRN:</i>	[*]				
1006		[*]	U			ASREQ
	<i>Noun:</i>	DATA				
	<i>ACRN:</i>	AA				
2002		[*]	F2FT13			07 Nov 2007
		[*]	F2FT13			14 Nov 2007
		[*]	F2FT13			21 Nov 2007
		[*]	F2FT13			28 Nov 2007
	<i>Noun:</i>	BATMAV SYSTEMS				
	<i>ACRN:</i>	AC				
2003		[*]	F2FT13			28 Nov 2007
	<i>Noun:</i>	INITIAL SPARES				
	<i>ACRN:</i>	AC				
2004		[*]	U			ASREQ
	<i>Noun:</i>	TRAINING				
	<i>ACRN:</i>	AC				

[*] 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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ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
2005		[*]	FA8629			28 Nov 2008
	<i>Noun:</i>		REPAIR AND RETURN			
	<i>ACRN:</i>		AC			
2006		[*]	FA8629			ASREQ
	<i>Noun:</i>		DATA			
	<i>ACRN:</i>		AC			
2007		[*]	U			4 MARO
	<i>Noun:</i>		ADDITIONAL TEST ASSETS			
	<i>ACRN:</i>		AB			
2008		[*]	U			ASREQ
	<i>Noun:</i>		TRAINING FOR DT/OT TEST TEAM			
	<i>ACRN:</i>		AB			

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AA [*]
 57 63600 296 4720 675138 4XFDBA 59200 48011F 503000 F03000
Funding breakdown: On CLIN 1001: [*]
 On CLIN 100101: [*]
 On CLIN 1006: [*]
Descriptive data:
 FSR: 011929 PSR: H53912 DSR: 074976 for PR No. F4FDBV6209B001, dated 28 July 2006.
 FSR: 011929 PSR: H53912 DSR: 133674 for PR No. F4FDBV7212B001, dated 18 July 2007.

AB [*]
 57 73600 297 4720 675138 4G9751 59200 48011F 503000 F03000
Funding breakdown: On CLIN 100102: [*]
 On CLIN 2007: [*]
 On CLIN 2008: [*]
Descriptive data:
 FSR: 014465 PSR: 298736 DSR: 003781 for PR No. F4FDBV6355B002, dated 11 December 2006.
 FSR: 014465 PSR: 298736 DSR: 092944 for PR No. F4FDBZ7093B001, dated 03 April 2007.
 FSR: 014465 PSR: 298736 DSR: 133688 for PR No. F4FDBV7212B001, dated 18 July 2007.

AC [*]
 57 73080 177 4720 837100 000000 00000 48011F 503000 F03000
Funding breakdown: On CLIN 2002: [*]
 On CLIN 2003: [*]
 On CLIN 2004: [*]
 On CLIN 2005: [*]
 On CLIN 2006: [*]
Descriptive data:
 FSR: 028211 PSR: 127787 DSR: 331977 PR No: F4FDBZ7143B006, dated 23 May 2007

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DOCUMENT	PGS	DATE	TITLE
EXHIBIT A	15	30 JAN 2007	DD FORM 1423 - CONTRACT DATA REQUIREMENTS LIST (CDRL)
ATTACHMENT 1	16	31 MAY 2007	STATEMENT OF WORK
ATTACHMENT 2	3	07 FEB 2007	WIDE AREA WORKFLOW - RECEIPT AND ACCEPTANCE (WAWF-RA) ELECTRONIC INVOICING AND RECEIVING REPORT INSTRUCTIONS
ATTACHMENT 3	1	07 SEP 2007	LISTING OF INITIAL SPARES PACKAGE

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Exhibit 31.1

**Certification of Principal Executive Officer
Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934**

I, Timothy E. Conver, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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 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 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)) 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) 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
 - c) 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 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 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 functions):
 - 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: March 4, 2008

/s/ Timothy E. Conver
Timothy E. Conver
Chief Executive Officer and Director

Exhibit 31.2

**Certification of Principal Financial Officer
Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934**

I, Stephen C. Wright, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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 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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) 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) 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
 - c) 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 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 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 functions):
 - 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: March 4, 2008

/s/ Stephen C. Wright

Stephen C. Wright
Chief Financial Officer

Exhibit 32

Certification

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(Subsections (a) and (b) of Section 1350, Chapter 63 of title 18, United States Code)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) (the "Act"), each of the undersigned officers of AeroVironment, Inc., a Delaware corporation (the "Company"), does hereby certify, to each such officer's knowledge, that:

The Quarterly Report on Form 10-Q for the quarter ended January 26, 2008 (the "Periodic Report") of the Company fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 780(d)) and information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Timothy E. Conver

Timothy E. Conver

Chief Executive Officer and Director

/s/ Stephen C. Wright

Stephen C. Wright

Chief Financial Officer

Dated: March 4, 2008

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.
