

**UNCLASSIFIED**

PE NUMBER: 0708011F  
 PE TITLE: Industrial Preparedness

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>								<b>DATE</b> <b>February 2006</b>	
<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>				<b>PE NUMBER AND TITLE</b> <b>0708011F Industrial Preparedness</b>					
Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	62.501	55.137	36.673	39.732	39.900	40.641	41.111	Continuing	TBD
2865 Manufacturing Technology	62.501	55.137	36.673	39.732	39.900	40.641	41.111	Continuing	TBD

**(U) A. Mission Description and Budget Item Justification**

The DoD Manufacturing Technology (ManTech) program is mandated by Section 2521, Title 10, United States Code, to create an affordable, world-class industrial base manufacturing capability responsive to the warfighter's needs. The Air Force ManTech major program tenets are: improvement of manufacturing processes and technologies; collaboration with government program offices, industry, and academia; investments in technologies beyond reasonable risk level for industry alone; cost-sharing; multiple system/customer applications; potential for significant return on investment; and customer commitment to implement. To this end, ManTech develops, demonstrates, and transitions advanced manufacturing processes and technologies to reduce costs, improve quality/capability, and shorten cycle times of weapon systems during design, development, production, and sustainment. ManTech projects include efforts that respond to government program office acquisition and sustainment requirements to reduce cost, schedule, cycle time, and risks during transition of technology. Where mature processes are not available, laboratory-developed initial process capabilities are matured and inserted into weapon system programs. ManTech objectives are conducted through partnership with all industry levels, from large prime contractors to small material and parts vendors. Program planning centers on the Aeronautical, Sustainment, Armament/Directed Energy, and Command/Control/Intelligence/Surveillance/Reconnaissance (C2ISR), and Space sectors of the industrial base. Note: In FY 2006, Congress added \$19 million for Technical Insertion Demonstration and Evaluation (TIDE) Program (\$4.0 million), Electronic Industry-Wide Network for Characteristics and Specifications (e-LINCS) Program (\$1.0 million), Nanomaterial Manufacturing and Military Application (\$2.8 million), Aerial Multi-Axis Platform (\$2.7 million), Affordable Multi-Junction Solar Cells (\$1.0 million), Rapid Qualification/Certification/Inspection of Manufactured Parts (RQCIMP) Program (\$1.0 million), Supply Chain Optimization Universal Tool Kit (SCOUT) Program (\$1.4 million), and Radio Frequency Identification (RFID) Rapid Adoption Collaboration Initiative (\$5.1 million). ManTech is in Budget Activity 7, Operational System Development, since it provides support for systems in design, production, and/or operational use. ManTech is part of the Industrial Preparedness Program Element supporting the Defense Planning Guidance and the Air Force Planning Guidance.

**(U) B. Program Change Summary (\$ in Millions)**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	56.708	36.934	38.237
(U) Current PBR/President's Budget	62.501	55.137	36.673
(U) Total Adjustments	5.793	18.203	
(U) Congressional Program Reductions			
Congressional Rescissions	-0.043	-0.797	
Congressional Increases		19.000	
Reprogrammings	7.046		
SBIR/STTR Transfer	-1.210		
(U) <u>Significant Program Changes:</u>			

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PE NUMBER AND TITLE

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Not Applicable.

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BUDGET ACTIVITY <b>07 Operational System Development</b>				PE NUMBER AND TITLE <b>0708011F Industrial Preparedness</b>			PROJECT NUMBER AND TITLE <b>2865 Manufacturing Technology</b>		
Cost (\$ in Millions)	FY 2005 Actual	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
2865 Manufacturing Technology	62.501	55.137	36.673	39.732	39.900	40.641	41.111	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

**(U) A. Mission Description and Budget Item Justification**

The DoD Manufacturing Technology (ManTech) program is mandated by Section 2521, Title 10, United States Code, to create an affordable, world-class industrial base manufacturing capability responsive to the warfighter's needs. The Air Force ManTech major program tenets are: improvement of manufacturing processes and technologies; collaboration with government program offices, industry, and academia; investments in technologies beyond reasonable risk level for industry alone; cost-sharing; multiple system/customer applications; potential for significant return on investment; and customer commitment to implement. To this end, ManTech develops, demonstrates, and transitions advanced manufacturing processes and technologies to reduce costs, improve quality/capability, and shorten cycle times of weapon systems during design, development, production, and sustainment. ManTech projects include efforts that respond to government program office acquisition and sustainment requirements to reduce cost, schedule, cycle time, and risks during transition of technology. Where mature processes are not available, laboratory-developed initial process capabilities are matured and inserted into weapon system programs. ManTech objectives are conducted through partnership with all industry levels, from large prime contractors to small material and parts vendors. Program planning centers on the Aeronautical, Sustainment, Armament/Directed Energy, and Command/Control/Intelligence/Surveillance/Reconnaissance (C2ISR), and Space sectors of the industrial base. Note: In FY 2006, Congress added \$19 million for Technical Insertion Demonstration and Evaluation (TIDE) Program (\$4.0 million), Electronic Industry-Wide Network for Characteristics and Specifications (e-LINCS) Program (\$1.0 million), Nanomaterial Manufacturing and Military Application (\$2.8 million), Aerial Multi-Axis Platform (\$2.7 million), Affordable Multi-Junction Solar Cells (\$1.0 million), Rapid Qualification/Certification/Inspection of Manufactured Parts (RQCIMP) Program (\$1.0 million), Supply Chain Optimization Universal Tool Kit (SCOUT) Program (\$1.4 million), and Radio Frequency Identification (RFID) Rapid Adoption Collaboration Initiative (\$5.1 million). ManTech is in Budget Activity 7, Operational System Development, since it provides support for systems in design, production, and/or operational use. ManTech is part of the Industrial Preparedness Program Element supporting the Defense Planning Guidance and the Air Force Planning Guidance.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) MAJOR THRUST: Manufacturing of Aeronautical Survivability and Modernization. Pursue affordable and efficient manufacturing investigations for critical, high quality, reliable structural, propulsion, stealth, and electronic components and assemblies required for existing and next generation aircraft.	11.470	5.597	6.357
(U) In FY 2005: Continued high value efforts to verify advantages of flexible manufacturing, commercial/military integration, quality processing, and supplier improvements. Continued development of manufacturing capabilities for more affordable low-observable structures. Continued rapid response productivity improvement efforts with selected high value programs.			
(U) In FY 2006: Continue high value efforts to verify advantages of flexible manufacturing, commercial/military integration, quality processing, and supplier improvements. Continue development of manufacturing capabilities for more affordable low-observable structures. Begin affordability/producibility improvements for radio frequency/infrared/directed energy countermeasures systems. Continue rapid response productivity improvement			

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(U) <b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
efforts with selected high value programs.			
(U) In FY 2007: Continue high value efforts to verify advantages of flexible manufacturing, commercial/military integration, quality processing, and supplier improvements. Continue development of manufacturing capabilities for more affordable low-observable structures. Continue affordability/producibility improvements for radio frequency/infrared/directed energy countermeasures systems. Continue rapid response productivity improvement efforts with selected high value programs.			
(U)			
(U) MAJOR THRUST: Manufacturing for Sustainment/Readiness. Pursue cost-effective repair and manufacturing technologies for affordable sustainment components.	9.679	2.914	6.438
(U) In FY 2005: Continued cost-effective repair and manufacturing technologies for affordable sustainment of aircraft and turbine engine components. Continued multi-year Engine Rotor Life Extension (ERLE) Spiral I technical efforts to extend the life of critical, high value rotating engine components, which have been in service and scheduled for retirement. Initiated ERLE Spiral II technical effort to extend the life of critical, high value rotating engine components, which have been in service and scheduled for retirement. Continued rapid response productivity improvement efforts with selected high-value programs.			
(U)			
(U) In FY 2006: Continue cost-effective repair and manufacturing technologies for affordable sustainment of aircraft and turbine engine components. Continue ERLE Spiral II technical effort to extend the life of critical, high value rotating engine components, which have been in service and scheduled for retirement. Continue rapid response productivity improvement efforts with selected high value programs.			
(U)			
(U) In FY 2007: Continue cost-effective repair and manufacturing technologies for affordable sustainment of aircraft and turbine engine components. Continue ERLE spiral II technical effort to extend the life of critical, high value rotating engine components, which have been in service and scheduled for retirement. Continue rapid response productivity improvement efforts with selected high value programs.			
(U)			
(U) MAJOR THRUST: Manufacturing for Armament and Directed Energy Systems. Develop efficient and cost-effective manufacturing methods for high performance, high reliability components and materials for advanced tactical missiles, aircraft missile sensors, and directed energy systems.	4.680	4.700	4.721
(U) In FY 2005: Continued to pursue cost-effective manufacturing methods for high performance, reliable components for advanced tactical missiles, missile sensors. Completed ManTech program efforts for Micro-Electro Mechanical Systems (MEMS) Inertial Measurement Units, Selective Availability Anti-Spoofing Module (SAASM) coatings for GPS production, and Joint Programmable Fuze (JPF) production. Began Precision Guided Munitions (PGM) Components Phase 0 analysis effort to identify opportunities for manufacturing improvement for seekers and			

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(U) <b>B. Accomplishments/Planned Program (\$ in Millions)</b>	FY 2005	FY 2006	FY 2007
guidance components for next generation miniaturized munitions.			
(U) In FY 2006: Continue to pursue cost-effective manufacturing methods for high performance, reliable components for next generation miniaturized munitions. Continue PGM Components effort, transitioning into a Phase 1 ManTech program for advanced guidance and seekers.			
(U) In FY 2007: Continue to pursue cost-effective manufacturing methods for high performance, reliable components for next generation miniaturized munitions. Continue Phase 1 PGM Components effort for advanced guidance and seekers and directed energy systems. Begin Phase 0 analysis effort to determine opportunities for manufacturing improvement of directed energy critical components.			
(U) MAJOR THRUST: Manufacturing of Command, Control, Intelligence, Surveillance and Reconnaissance (C2ISR) Electronics and Space. Address critical manufacturing issues for various C2ISR and space platforms.	12.091	23.197	19.157
(U) In FY 2005: Continued efforts to address critical electronics manufacturing technologies for various C2ISR systems in order to improve affordability and producibility. Continued major multi-year and cross-sector effort on Active Electronically Scanned Arrays (AESA) components to enable improved manufacturing processes, reduce integration and test, and reduce production costs for all users of AESA systems. Continued rapid response productivity improvement efforts with selected high value programs.			
(U) In FY 2006: Continue efforts to address critical manufacturing technologies for various C2ISR and space systems in order to improve affordability and producibility. Continue effort on AESA to enable improved manufacturing processes, reduced integration and test, and reduce production costs for armament, aeronautical, C2ISR, and space users of AESA systems. Initiate major multi-year and cross sector effort on Affordable Datalink Components to enable improved manufacturing processes, insert lower level test practices prior to subsystem integration, and increase production throughput for high value, high demand Intelligence Surveillance and Reconnaissance (ISR) datalinks. Investigate affordability and producibility of key space system components through improved manufacturing processes, technology transition, and/or supplier base improvements. Continue rapid response productivity improvement efforts with selected high value programs.			
(U) In FY 2007: Continue efforts to address critical electronics manufacturing technologies for various Command, Control, Intelligence, Surveillance and Reconnaissance (C2ISR) and space systems in order to improve affordability and producibility. Continue effort on Active Electronically Scanned Arrays (AESA) to enable improved manufacturing processes, reduce integration and test, and reduce production costs for armament, aeronautical, C2ISR, and space users of AESA systems. Continue major multi-year and cross sector effort on Affordable Datalink components to enable improved manufacturing processes, insert lower level test practices prior to subsystem integration, and increase production throughput for high value, high demand ISR datalinks. Continue effort to			

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(U) <b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) reduce manufacturing cost of weapon datalink through investments in reduction of touch labor and insertion of automated test processes in addition to subsystem integration efforts at board level. Insertion of power device technologies to achieve unique size, weight, and power requirements necessary for munition applications.			
(U) CONGRESSIONAL ADD: Advanced Low Observable Coatings Production Scale-Up. (U) In FY 2005: Continued tasks to increase production rates and reduce low observable coating cost. (U) In FY 2006: Not Applicable. (U) In FY 2007: Not Applicable.	3.460	0.000	0.000
(U) CONGRESSIONAL ADD: Technical Insertion Demonstration and Evaluation (TIDE) Program. (U) In FY 2005: Studied current state of Original Equipment Managers (OEM) - Subject Matter Experts collaboration and developed capabilities for improvement. Developed a supply chain assessment tool for government and OEM program managers. Continued to deploy commercial collaboration processes/tools into the weapons supply chain to accelerate production. (U) In FY 2006: Studying current state of Original Equipment Managers (OEM) - Subject Matter Experts collaboration and refine capabilities for improvement. Further develop the supply chain assessment tool for government and OEM program managers. Continued to deploy commercial collaboration processes/tools into the weapons supply chain to accelerate production. (U) In FY 2007: Not Applicable.	4.942	3.943	0.000
(U) CONGRESSIONAL ADD: Nickel Hydride Battery. (U) In FY 2005: Continued test and evaluation for suitability in military aircraft. Continued additional production scale-up efficiencies and automation. (U) In FY 2006: Not Applicable. (U) In FY 2007: Not Applicable.	1.285	0.000	0.000
(U) CONGRESSIONAL ADD: Electronic Industry-Wide Network for Characteristics and Specifications (e-LINCS). (U) In FY 2005: Continued refinement of infrastructure, pilot program kick-off, initiation of sub-task training and conducting of Advisory Board Meetings. (U) In FY 2006: Provide mechanism for flow of specification data. Demonstrate through regional pilot involving small producers. (U) In FY 2007: Not Applicable.	0.989	0.986	0.000

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(U) <b>B. Accomplishments/Planned Program (\$ in Millions)</b>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U)			
(U) CONGRESSIONAL ADD: Nanomaterials Manufacturing and Military Application.	1.877	2.760	0.000
(U) In FY 2005: Down selected and validated, synthesis, purification and functionalization methods for pilot plant scale-up for production of high quality single walled nanotubes and metalized nanomaterials.			
(U) In FY 2006: Design reaction and purification process optimized for yield improvements. Apply in situ measurement and control process parameters to reduce product variation.			
(U) In FY 2007: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Aerial Multi-Axis Platform.	0.989	2.661	0.000
(U) In FY 2005: Pursued reducing de-paint flow time by implementing Aerial Multi-Axis Platform in new and existing facilities.			
(U) In FY 2006: Demonstrate operator controlled de-paint manipulator performing abrasive blasting. Demonstrate hazmat friendly and ergonomically friendly operator interface.			
(U) In FY 2007: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Affordable Multi-Junction Solar Cells.	1.483	0.986	0.000
(U) In FY 2005: Investigated and developed lean, domestic sources of high purity Germanium (Ge) wafers required in manufacturing Multi-Junction Solar Cells.			
(U) In FY 2006: Improve germanium wafer production yield and packaging processes.			
(U) In FY 2007: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Laser Peening for F119 Engines.	0.989	0.000	0.000
(U) In FY 2005: Increased damage tolerance of integrally bladed rotors.			
(U) In FY 2006: Not Applicable.			
(U) In FY 2007: Not Applicable.			
(U)			
(U) CONGRESSIONAL ADD: Rapid Manufacturing Using Computers and Lasers.	0.989	0.000	0.000
(U) In FY 2005: Developed rapid manufacturing capabilities by reducing the cost and time of manufacturing through the use of innovative and novel processes.			
(U) In FY 2006: Not Applicable.			
(U) In FY 2007: Not Applicable.			
(U)			

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R-1 Shopping List - Item No. 229-8 of 229-14

Exhibit R-2a (PE 0708011F)

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		<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) <b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>				
(U) CONGRESSIONAL ADD: Supply Chain Optimization Universal Tool Kit (SCOUT).		0.989	1.380	0.000
(U) In FY 2005: Utilized radio frequency identification technology, lean six sigma practices, and e-commerce to effect improvements in DoD value chain.				
(U) In FY 2006: Continue efforts to utilize radio frequency identification technology, lean six sigma practices, and e-commerce to effect improvements in DoD value chain.				
(U) In FY 2007: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: Warner Robbins Air Logistics Center (WR-ALC) Maintenance Operations Support (MOS) Simulation Model.		0.989	0.000	0.000
(U) In FY 2005: Developed tasks associated with WR-ALC MOS Simulation Model.				
(U) In FY 2006: Not Applicable.				
(U) In FY 2007: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: National Aerospace Leadership Initiative.		5.600	0.000	0.000
(U) In FY 2005: Supported U.S. in aerospace research and development and manufacturing supply chain.				
(U) In FY 2006: Not Applicable.				
(U) In FY 2007: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: Rapid Qualification/Certification/Inspection Parts.		0.000	0.986	0.000
(U) In FY 2005: Not Applicable.				
(U) In FY 2006: Establish capability to provide tailored testing services; specializing in design verification testing, product performance, failure analysis, production testing, environmental stress screening and a total quality controlled system with on-line interface.				
(U) In FY 2007: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: Wright Brothers Institute (WBI) - Radio Frequency Identification (RFID) Rapid Adoption Collaboration Initiative.		0.000	5.027	0.000
(U) In FY 2005: Not Applicable.				
(U) In FY 2006: Development and application of RFID for stand-off monitoring inventory and shipment of cargo and parts. Develop an electronically coordinated lean manufacturing toolkit and methodical adoption process for using RFID technology by small and medium enterprise (SME) suppliers.				
(U) In FY 2007: Not Applicable.				



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(U) <b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Total Cost	62.501	55.137	36.673

(U) <b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	

(U) AF RDT&E  
 (U) Other APPN  
 Not Applicable.

(U) **D. Acquisition Strategy**  
 All major contracts in this Program Element were awarded after full and open competition.

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**Exhibit R-3, RDT&E Project Cost Analysis**

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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0708011F Industrial Preparedness</b>	<b>PROJECT NUMBER AND TITLE</b> <b>2865 Manufacturing Technology</b>
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(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &amp;</u> <u>Type</u>	<u>Performing</u> <u>Activity &amp;</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2005</u> <u>Cost</u>	<u>FY 2005</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2007</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target Value</u> <u>of Contract</u>
				<u>Cost</u>	<u>Award</u> <u>Date</u>	<u>Cost</u>	<u>Award</u> <u>Date</u>	<u>Cost</u>	<u>Award</u> <u>Date</u>			
(U) <u>Product Development</u>												
Advanced Technology Inst	Coop Agmt									0.000	0.000	
Aerojet-General Corp	Coop Agmt									0.000	0.000	
Anteon	Various		1.883							0.000	1.883	
AT&T Government Solutions	Cost Plus									0.000	0.000	
Boeing	Various		1.738							0.000	1.738	
Central State University	Cost Share									0.000	0.000	
CMC	Various		0.400								0.400	
Connecticut Center for Advanced Technology			5.793								5.793	
Doyle Center for MTEch, PA	Various		4.956			3.943					8.899	
Electro Energy Inc	Various		1.288								1.288	
Frontier Technologies	Cost Plus									0.000	0.000	
GE	Coop Agmt									0.000	0.000	
General Atomics	Various		3.470								3.470	
GRC	Cost Plus									0.000	0.000	
Honeywell	Various		0.338							0.000	0.338	
Indigo	Various		0.475								0.475	
Infoscribe	Various		0.223								0.223	
Kaman-Dayron	Various		0.200								0.200	
KBSI	Cost Share									0.000	0.000	
Killdeer Mountain Manufacturing Inc.						1.380					1.380	
Lockheed Martin	Various		0.584							0.000	0.584	
Logistic Support Management Group						0.986					0.986	
LSP Technologies	Cost Share		0.992							0.000	0.992	
Luna Technologies						2.760					2.760	
Mississippi State University	Cost Share									0.000	0.000	
MIT	Coop Agmt		2.000							0.000	2.000	
Motorola	Tech Int									0.000	0.000	
	Agr											
Northrop Grumman	Various		3.392							0.000	3.392	
Pratt & Whitney	Tech Int									0.000	0.000	
	Agr											
Raytheon	Coop Agmt		1.908							0.000	1.908	
Renaissance Service Inc.						0.986					0.986	
Surmet	Various		0.550								0.550	
TMCI	Cost Plus									0.000	0.000	
TRW	Coop Agmt									0.000	0.000	
Univ Dayton Res Inst	Cost Plus		4.108							0.000	4.108	
Univ Maryland	Coop Agmt									0.000	0.000	

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R-1 Shopping List - Item No. 229-11 of 229-14

Exhibit R-3 (PE 0708011F)

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**Exhibit R-3, RDT&E Project Cost Analysis**

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US Technology	Various		1.000		2.661					3.661	
UTC	Various							0.000		0.000	
Wright Brothers Institute					5.027					5.027	
Various	Various		27.203		37.394	Sep-06	36.673	Sep-07	Continuing	TBD	
Subtotal Product Development		0.000	62.501		55.137		36.673		Continuing	TBD	0.000
Remarks:											
(U) <u>Support</u>											
In house support										0.000	
Subtotal Support		0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:											
(U) <u>Test &amp; Evaluation</u>											
Subtotal Test & Evaluation		0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:											
(U) <u>Management</u>											
Subtotal Management		0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:											
(U)											
Subtotal		0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:											
(U)											
Subtotal		0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:											
(U) Total Cost		0.000	62.501		55.137		36.673		Continuing	TBD	0.000

Exhibit R-4, RDT&E Schedule Profile

DATE

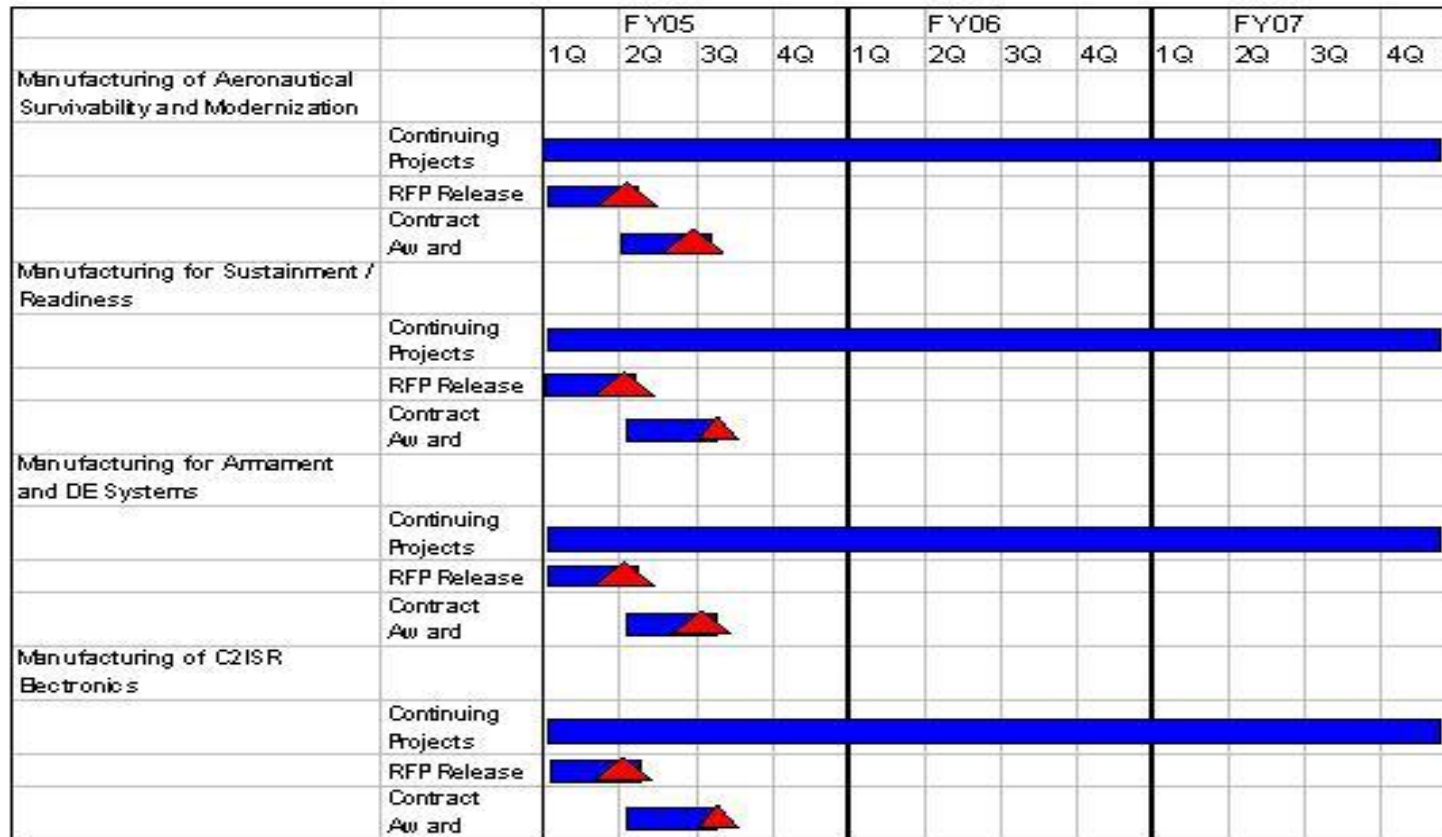
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# ManTech Schedule Summary



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**Exhibit R-4a, RDT&E Schedule Detail**

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<b>(U) <u>Schedule Profile</u></b>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Manufacturing Technology for Aeronautical Survivability and Modernization.	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	2Q	2Q	2Q
(U) Contract Awards	3Q	3Q	3Q
(U) Manufacturing Technology for Sustainment / Readiness	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q
(U) Contract Awards	2Q	2Q	2Q
(U) Manufacturing for Armament and Directed Energy Systems.	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q
(U) Contract Awards	2Q	2Q	2Q
(U) Manufacturing for command, control, intelligence, surveillance, and reconnaissance (C2ISR) electronics	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q
(U) Contract Awards	2Q	2Q	2Q