

**UNCLASSIFIED**

PE NUMBER: 0708011F  
 PE TITLE: Industrial Preparedness

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2007</b>
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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>
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Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	56.683	66.122	39.906	40.173	40.982	41.384	42.183	43.042	Continuing	TBD
2865 Manufacturing Technology	56.683	66.122	39.906	40.173	40.982	41.384	42.183	43.042	Continuing	TBD

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

This 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 2007, Congress added \$29.7 million for Technical Insertion Demonstration and Evaluation (TIDE) Program (\$3.0 million), Nanomaterial Manufacturing and Military Application (\$4.6 million), Aerial Multi-Axis Platform (\$2.2 million), Rapid Manufacturing and Repair Composites for High Temp Applications Program (\$1.3 million), Reactive Plastics CO2 Absorbent Production Capacity Program (\$2.0 million), Supply Chain Optimization Universal Tool Kit (SCOUT) Program (\$2.0 million), Radio Frequency Identification (RFID) Rapid Adoption Collaboration Initiative (\$5.0 million), Improving MANPADS Survivability Coatings Program (\$1.2 million), Laser Peening Fatigue Life Extension Technology for Military Aircraft Landing Gear (\$1.4 million), F-35 Joint Strike Fighter Composite Engine Case Program (\$4.0 million), EFG Sapphire Sheets for Large Aperture EO/IR Windows Program (\$2.0 million) and Ceramic Ballistic Armor for Soldier and Vehicle Protection Program (\$1.0 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.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	55.137	36.673	27.559	27.667
(U) Current PBR/President's Budget	56.683	66.122	39.906	40.173
(U) Total Adjustments	1.546			
(U) Congressional Program Reductions				
Congressional Rescissions	-0.002	-0.251		
Congressional Increases		29.700		
Reprogrammings	2.787			
SBIR/STTR Transfer	-1.239			
(U) <u>Significant Program Changes:</u>				
Not Applicable.				

**Exhibit R-2a, RDT&E Project Justification**

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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 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
2865 Manufacturing Technology	56.683	66.122	39.906	40.173	40.982	41.384	42.183	43.042	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

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

This 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 2007, Congress added \$29.7 million for Technical Insertion Demonstration and Evaluation (TIDE) Program (\$3.0 million), Nanomaterial Manufacturing and Military Application (\$4.6 million), Aerial Multi-Axis Platform (\$2.2 million), Rapid Manufacturing and Repair Composites for High Temp Applications Program (\$1.3 million), Reactive Plastics CO2 Absorbent Production Capacity Program (\$2.0 million), Supply Chain Optimization Universal Tool Kit (SCOUT) Program (\$2.0 million), Radio Frequency Identification (RFID) Rapid Adoption Collaboration Initiative (\$5.0 million), Improving MANPADS Survivability Coatings Program (\$1.2 million), Laser Peening Fatigue Life Extension Technology for Military Aircraft Landing Gear (\$1.4 million), F-35 Joint Strike Fighter Composite Engine Case Program (\$4.0 million), EFG Sapphire Sheets for Large Aperture EO/IR Windows Program (\$2.0 million) and Ceramic Ballistic Armor for Soldier and Vehicle Protection Program (\$1.0 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 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) MAJOR THRUST: Pursues 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.	5.835	6.317	4.268	5.658
(U) In FY 2006: 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 2007: Continue high value efforts to verify advantages of flexible manufacturing, commercial/military integration, quality processing, and supplier improvements. Continue development				

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<b>07 Operational System Development</b>	<b>0708011F Industrial Preparedness</b>	<b>2865 Manufacturing Technology</b>			
		<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
<b>(U) B. Accomplishments/Planned Program (\$ in Millions)</b>					
of manufacturing capabilities for more affordable low-observable structures. Continue rapid response productivity improvement efforts with selected high value programs.					
<b>(U) In FY 2008:</b> 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. Develop manufacturing capabilities for advanced propulsion technologies. Continue rapid response productivity improvement efforts with selected high value programs. Conduct manufacturing readiness assessments on critical technologies in lab and acquisition programs to ensure affordable, producible technology transition.					
<b>(U) In FY 2009:</b> 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. Develop manufacturing capabilities for advanced propulsion technologies. Continue rapid response productivity improvement efforts with selected high value programs. Conduct manufacturing readiness assessments on critical technologies in lab and acquisition programs to ensure affordable, producible technology transition.					
<b>(U) MAJOR THRUST:</b> Pursues cost-effective repair and manufacturing technologies for affordable sustainment components.					
		3.038	4.619	7.200	7.500
<b>(U) In FY 2006:</b> Continued cost-effective repair and manufacturing technologies for affordable sustainment of aircraft and turbine engine components. Continued 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.					
<b>(U) In FY 2007:</b> 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.					
<b>(U) In FY 2008:</b> 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. Begin assessments and manufacturing technology development to reduce costs and lead times for hi-value supply chain commodities. Continue rapid response productivity improvement efforts					

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<b>(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
with selected high value programs.				
(U) In FY 2009: 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 assessments and manufacturing technology development to reduce costs and lead times for hi-value supply chain commodities. Continue rapid response productivity improvement efforts with selected high value programs.				
(U)				
(U) MAJOR THRUST: Develops 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.	4.900	6.785	3.169	3.758
(U) In FY 2006: Continued to pursue cost-effective manufacturing methods for high performance, reliable components for next generation miniaturized munitions. Continued 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.				
(U) In FY 2008: Continue to pursue cost-effective manufacturing methods for high performance, reliable components for next generation munitions. Conduct manufacturing readiness assessments on critical technologies in lab and acquisition programs to ensure affordable, producible technology transition.				
(U) In FY 2009: Continue to pursue cost-effective manufacturing methods for high performance, reliable components for next generation munitions. Conduct manufacturing readiness assessments on critical technologies in lab and acquisition programs to ensure affordable, producible technology transition.				
(U)				
(U) MAJOR THRUST: Addresses critical manufacturing issues for various Command, Control, Intelligence, Surveillance and Reconnaissance (C2ISR) and space platforms.	24.181	18.813	25.269	23.257
(U) In FY 2006: Continued efforts to address critical manufacturing technologies for various C2ISR and space systems in order to improve affordability and producibility. Continued effort on Active Electronically Scanned Arrays (AESA) to enable improved manufacturing processes, reduced integration and test, and reduce production costs for armament, aeronautical, C2ISR, and space users of AESA systems. Initiated major multi-year and cross sector effort on Affordable Datalink Components to enable improved manufacturing processes, insert lower level test practices prior to subsystem				

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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	
(U) <b>B. Accomplishments/Planned Program (\$ in Millions)</b> integration, and increase production throughput for high value, high demand Intelligence Surveillance and Reconnaissance (ISR) datalinks. Investigated affordability and producibility of key space system components through improved manufacturing processes, technology transition, and/or supplier base improvements. Continued rapid response productivity improvement efforts with selected high value programs.					
(U) In FY 2007: Continue efforts to address critical electronics manufacturing technologies for various C2ISR and space systems in order to improve affordability and producibility. Continue effort on 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 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) In FY 2008: Continue efforts to address critical electronics manufacturing technologies for various C2ISR and space systems in order to improve affordability and producibility. Continue effort on AESA to enable improved manufacturing processes, for reduced costs and cycle times and greater production capacity. Continue efforts on Affordable Datalink components to enable improved manufacturing processes for reduced costs and cycle times and increased production throughput. Conduct manufacturing readiness assessments on critical technologies in lab and acquisition programs to ensure affordable, producible technology transition.					
(U) In FY 2009: Continue efforts to address critical electronics manufacturing technologies for various C2ISR and space systems in order to improve affordability and producibility. Continue efforts on AESA radar to enable improved manufacturing processes for reduced costs and cycle times and greater production capacity. Continue efforts on affordable datalink components to enable improved manufacturing processes for reduced costs and cycle times and increased production throughput. Conduct manufacturing readiness assessments on critical technologies in lab and acquisition programs to ensure affordable, producible technology transition.					
(U) CONGRESSIONAL ADD: Electronic Industry-Wide Network for Characteristics and Specifications (e-LINCS).	0.986	0.000	0.000	0.000	

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(U) <b>B. Accomplishments/Planned Program (\$ in Millions)</b>		<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) In FY 2006: Provided mechanism for flow of specification data. Demonstrated regional pilots involving small producers.					
(U) In FY 2007: Not Applicable.					
(U) In FY 2008: Not Applicable.					
(U) In FY 2009: Not Applicable.					
(U) CONGRESSIONAL ADD: Nanomaterials Manufacturing and Military Application.		2.760	0.000	0.000	0.000
(U) In FY 2006: Designed reaction and purification process optimized for yield improvements. Applied in situ measurement and control process parameters to reduce product variation.					
(U) In FY 2007: Not Applicable.					
(U) In FY 2008: Not Applicable.					
(U) In FY 2009: Not Applicable.					
(U) CONGRESSIONAL ADD: Affordable Multi-Junction Solar Cells.		0.986	0.000	0.000	0.000
(U) In FY 2006: Improved germanium wafer production yield and packaging processes.					
(U) In FY 2007: Not Applicable.					
(U) In FY 2008: Not Applicable.					
(U) In FY 2009: Not Applicable.					
(U) CONGRESSIONAL ADD: Rapid Qualification/Certification/Inspection Parts.		0.986	0.000	0.000	0.000
(U) In FY 2006: Established 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) In FY 2008: Not Applicable.					
(U) In FY 2009: Not Applicable.					
(U) CONGRESSIONAL ADD: Technical Insertion Demonstration and Evaluation (TIDE) Program.		3.943	2.989	0.000	0.000
(U) In FY 2006: Studied current state of Original Equipment Managers (OEM) - Refined capabilities and improved Subject Matter Experts collaboration. Further developed 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.					

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<b>(U) B. Accomplishments/Planned Program (\$ in Millions)</b>		<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) In FY 2007: Complete development of a suite of commercial collaboration supply chain assessment processes/tools for Government and OEM program managers. Deploy into the weapon system supply chain and demonstrate accelerated development/production processes, reduced cycle times and corresponding costs.					
(U) In FY 2008: Not Applicable.					
(U) In FY 2009: Not Applicable.					
(U) CONGRESSIONAL ADD: Aerial Multi-Axis Platform.		2.661	2.192	0.000	0.000
(U) In FY 2006: Demonstrated operator controlled de-paint manipulator performing abrasive blasting. Demonstrated hazmat friendly and ergonomically friendly operator interface.					
(U) In FY 2007: Continue demonstration and development of operator controlled de-paint manipulator performing abrasive blasting and hazmat friendly and ergonomically friendly operator interface.					
(U) In FY 2008: Not Applicable.					
(U) In FY 2009: Not Applicable.					
(U) CONGRESSIONAL ADD: Supply Chain Optimization Universal Tool Kit (SCOUT).		1.380	1.992	0.000	0.000
(U) In FY 2006: Continued 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: 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 2008: Not Applicable.					
(U) In FY 2009: Not Applicable.					
(U) CONGRESSIONAL ADD: Wright Brothers Institute (WBI) - Radio Frequency Identification (RFID) Rapid Adoption Collaboration Initiative.		5.027	4.981	0.000	0.000
(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: Continue 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.					

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<b>(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) In FY 2008: Not Applicable.				
(U) In FY 2009: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: Ceramic Ballistic Armor for Soldier and Vehicle Protection	0.000	0.996	0.000	0.000
(U) In FY 2006: Not Applicable.				
(U) In FY 2007: Demonstrate manufacturing capability for contoured ceramic armor for vehicle and body armor applications, to include new conformal body armor and appendage armor designs. Demonstrate manufacturability/process control to consistently produce ballistic ceramic to meet DoD requirements.				
(U) In FY 2008: Not Applicable.				
(U) In FY 2009: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: EFG Sapphire Sheets for Large Aperture EO/IR Windows	0.000	1.992	0.000	0.000
(U) In FY 2006: Not Applicable.				
(U) In FY 2007: Identify/prioritize manufacturing, cost and technology drivers and their associated risks that limit the ability to manufacture large EGF Sapphire Sheets for use as an EO/IR window. Implement solutions to drivers/risks based on resources available and impact to success of large sheet production.				
(U) In FY 2008: Not Applicable.				
(U) In FY 2009: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: F-35 Joint Strike Fighter Composite Engine Case	0.000	3.985	0.000	0.000
(U) In FY 2006: Not Applicable.				
(U) In FY 2007: Conduct efforts to reduce the total cycle time for producing an F135 OMC engine duct and reduce the cost of the prepreg used in making an F135 OMC engine duct.				
(U) In FY 2008: Not Applicable.				
(U) In FY 2009: Not Applicable.				
(U)				
(U) CONGRESSIONAL ADD: Improving MANPADS Survivability Coatings	0.000	1.195	0.000	0.000
(U) In FY 2006: Not Applicable.				
(U) In FY 2007: Begin development of advanced manufacturing technologies for improving MANPADS survivability coatings.				
(U) In FY 2008: Not Applicable.				
(U) In FY 2009: Not Applicable.				

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(U) <b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>		<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	
(U) CONGRESSIONAL ADD: Laser Penning Fatigue Life Extension Technology for Military Aircraft Landing Gear		0.000	1.395	0.000	0.000	
(U) In FY 2006: Not Applicable.						
(U) In FY 2007: Begin development of application of laser peening fatigue life extension technology for military aircraft landing gear.						
(U) In FY 2008: Not Applicable.						
(U) In FY 2009: Not Applicable.						
(U) CONGRESSIONAL ADD: Rapid Manufacturing and Repair of Composites for High Temp Applications.		0.000	1.295	0.000	0.000	
(U) In FY 2006: Not Applicable.						
(U) In FY 2007: Begin development of advanced manufacturing technologies for rapid manufacturing and repair of composites for high temperature applications.						
(U) In FY 2008: Not Applicable.						
(U) In FY 2009: Not Applicable.						
(U) CONGRESSIONAL ADD: Reactive Plastic CO2 Absorbent Production Capacity.		0.000	1.992	0.000	0.000	
(U) In FY 2006: Not Applicable.						
(U) In FY 2007: Begin development of advanced manufacturing technologies for reactive plastic CO2 absorbent production capacity.						
(U) In FY 2008: Not Applicable.						
(U) In FY 2009: Not Applicable.						
(U) CONGRESSIONAL ADD: Nanomaterial Advanced Prototyping		0.000	4.584	0.000	0.000	
(U) In FY 2006: Not Applicable.						
(U) In FY 2007: Develop prototype process for optimized nanomaterial yield and reduced product variation.						
(U) In FY 2008: Not Applicable.						
(U) In FY 2009: Not Applicable.						
(U) Total Cost		56.683	66.122	39.906	40.173	

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(U) **C. Other Program Funding Summary (\$ in Millions)**

	<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>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</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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<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2006 Cost</u>	<u>FY 2006 Cost</u>	<u>FY 2006 Award Date</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>(U) Product Development</u>														
Anteon	Various			1.084		0.470						0.000	1.554	
Argonne	Various			0.147									0.147	
Bell				0.140									0.140	
Boeing	Various			0.241								0.000	0.241	
Booz-Allen				0.150		0.600							0.750	
Doyle Center for MTech, PA	Various			3.606									3.606	
GE	Coop			1.024		1.047						0.000	2.071	
	Agmt													
H.N. Burns				1.327									1.327	
Harris				0.234		2.050							2.284	
Honeywell	Various			0.500		1.200						0.000	1.700	
Infoscribe	Various			0.140		0.231							0.371	
Killdeer Mountain Manufacturing Inc.				1.236									1.236	
L3 Communications				2.800		1.800							4.600	
Lockheed Martin	Various											0.000	0.000	
Luna Technologies				2.531									2.531	
NASA Glenn				0.964									0.964	
Northrop Grumman	Various			4.144		4.173						0.000	8.317	
Pratt & Whitney	Tech Int			1.027		1.430						0.000	2.457	
	Agr													
Raytheon	Coop			3.310		4.431						0.000	7.741	
	Agmt													
Renaissance Service Inc.				0.879									0.879	
Rockwell				0.150		1.550							1.700	
Rolls Royce				0.168		0.160							0.328	
Surmet	Various												0.000	
Tiburon				0.190		0.200							0.390	
Univ Dayton Res Inst	Cost Plus			0.461		0.851						0.000	1.312	
US Technology	Various			2.417									2.417	
UTC	Various			0.705		0.700						0.000	1.405	
Wright Brothers Institute				4.607		4.981							9.588	
Wyle				0.235		0.433							0.668	
Various	Various			22.266	Sep-06	39.815	Sep-07	39.906		40.173		Continuing	TBD	
Subtotal Product Development			0.000	56.683		66.122		39.906		40.173		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	0.000
Remarks:														

R-1 Line Item No. 231

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Project 2865

Exhibit R-3 (PE 0708011F)

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

DATE

**February 2007**

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT NUMBER AND TITLE							
<b>07 Operational System Development</b>	<b>0708011F Industrial Preparedness</b>	<b>2865 Manufacturing Technology</b>							
(U) <u>Test &amp; Evaluation</u>									
Subtotal Test & Evaluation	0.000	0.000	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	0.000	0.000
Remarks:									
(U)									
Subtotal	0.000	0.000	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	0.000	0.000
Remarks:									
(U) Total Cost	0.000	56.683	66.122	39.906	40.173	Continuing	TBD	0.000	

Exhibit R-4, RDT&E Schedule Profile

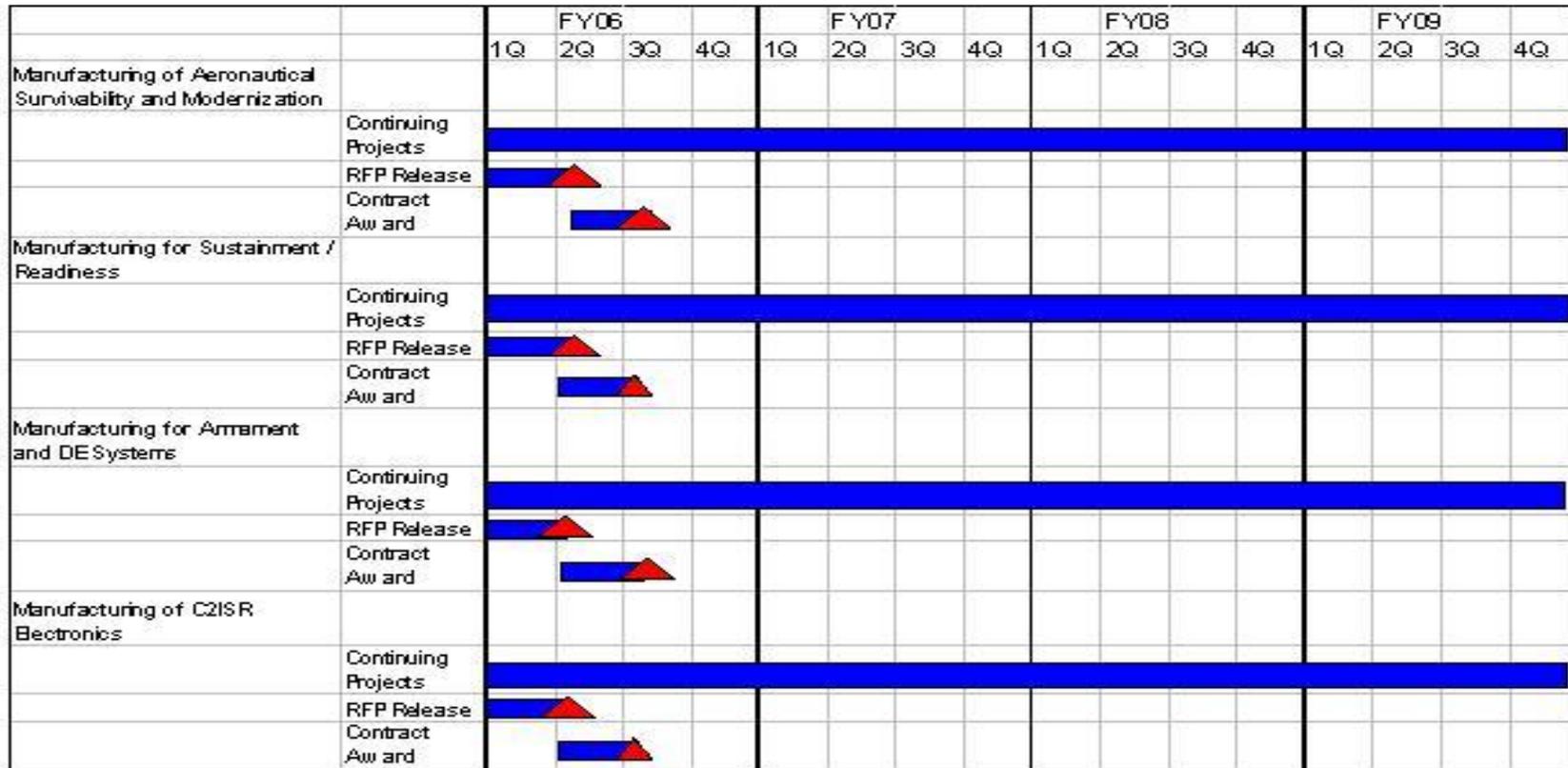
DATE  
February 2007

BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0708011F Industrial Preparedness

PROJECT NUMBER AND TITLE  
2865 Manufacturing Technology

# ManTech Schedule Summary



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<b>Exhibit R-4a, RDT&amp;E Schedule Detail</b>	DATE <b>February 2007</b>
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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>
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	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <b>Schedule Profile</b>				
(U) Manufacturing Technology for Aeronautical Survivability and Modernization.	1-4Q	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	2Q	2Q	2Q	2Q
(U) Contract Awards	3Q	3Q	3Q	3Q
(U) Manufacturing Technology for Sustainment / Readiness	1-4Q	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q	1Q
(U) Contract Awards	2Q	2Q	2Q	2Q
(U) Manufacturing for Armament and Directed Energy Systems.	1-4Q	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q	1Q
(U) Contract Awards	2Q	2Q	2Q	2Q
(U) Manufacturing for command, control, intelligence, surveillance, and reconnaissance (C2ISR) electronics	1-4Q	1-4Q	1-4Q	1-4Q
(U) Request for Proposal Release	1Q	1Q	1Q	1Q
(U) Contract Awards	2Q	2Q	2Q	2Q