

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 1999
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BUDGET ACTIVITY 7 - Operational System Development	PE NUMBER AND TITLE 0708011F Industrial Preparedness	PROJECT 2865
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COST (\$ In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
2865 Industrial Preparedness-Manufacturing Technology	42,831	52,351	51,814	53,480	54,053	54,644	55,783	56,944	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

(U) **A. Mission Description:** The Manufacturing Technology (ManTech) program is a corporate Air Force program that establishes and demonstrates advancements in manufacturing process technologies, manufacturing engineering systems, and industrial practices, and transitions these advancements into weapon systems design, development, acquisition, and/or sustainment. ManTech provides cost reduction processes and practices and new manufacturing capabilities applicable to existing as well as new weapon systems under development. ManTech strives to make superior mission enabling technologies an affordable life cycle reality by expanding access to a capable, responsible, multi-use industrial base with efficiencies comparable to world class enterprises. Program efforts accelerate shop floor manufacturing process maturation, at every stage of development, through increased emphasis on cost, time, and quality risks in transition. Best processes are evaluated and adapted for application. Where mature processes are not available, laboratory-developed initial process capabilities are matured and inserted into weapon system programs. ManTech goes beyond just factory floor manufacturing/repair processes and encompasses every activity within an industrial enterprise, ranging from above the shop floor activities, including tools for integrated product process development (IPPD), to supplier base interactions and performance. The strategies and best practices of world-class enterprises are analyzed and the performance of defense suppliers benchmarked. The world's best industrial practices are adapted and validated in multiple pilot projects and deployed in defense applications. Project efforts address and target all industry levels, from large prime contractors to small material and parts vendors. Program efforts also enhance the organic repair/remanufacture capability to affordably sustain the aging weapon systems inventory.

(U) **FY 1998 (\$ in Thousands):**

- (U) \$32,728 Established and demonstrated cost-effective and efficient manufacturing technologies for existing and next generation aircraft.
- (U) \$5,736 Established and demonstrated cost-effective repair and manufacturing technologies for affordable sustainment of existing weapon systems.
- (U) \$2,312 Established and demonstrated efficient and cost-effective manufacturing methods for electronics, structures, and propulsion for advanced tactical missiles.
- (U) \$2,055 Established and demonstrated affordable, flexible manufacturing processes to reduce the cost and lead time of spacecraft and launch vehicles.
- (U) \$42,831 Total

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<p>(U) <u>FY 1999 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$26,236 Establish and demonstrate cost-effective and efficient manufacturing technologies for existing and next generation aircraft. - (U) \$17,760 Establish and demonstrate cost-effective repair and manufacturing technologies for affordable sustainment of existing weapon systems. - (U) \$1,020 Establish and demonstrate efficient and cost-effective manufacturing methods for electronics, structures, and propulsion for advanced tactical missiles. - (U) \$5,939 Establish and demonstrate affordable, flexible manufacturing processes to reduce the cost and lead time of spacecraft and launch vehicles. - (U) \$1,396 Identified as a source for SBIR. - (U) \$52,351 Total <p>(U) <u>FY 2000 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$25,776 Establish and demonstrate cost-effective and efficient manufacturing technologies for existing and next generation aircraft. - (U) \$19,717 Establish and demonstrate cost-effective repair and manufacturing technologies for affordable sustainment of existing weapon systems. - (U) \$572 Establish and demonstrate efficient and cost-effective manufacturing methods for electronics, structures, and propulsion for advanced tactical missiles. - (U) \$5,749 Establish and demonstrate affordable, flexible manufacturing processes to reduce the cost and lead time of spacecraft and launch vehicles. - (U) \$51,814 Total <p>(U) <u>FY 2001 (\$ in Thousands):</u></p> <ul style="list-style-type: none"> - (U) \$24,688 Establish and demonstrate cost-effective and efficient manufacturing technologies for existing and next generation aircraft. - (U) \$19,879 Establish and demonstrate cost-effective repair and manufacturing technologies for affordable sustainment of existing weapon systems. - (U) \$492 Establish and demonstrate efficient and cost-effective manufacturing methods for electronics, structures, and propulsion for advanced tactical missiles. - (U) \$8,421 Establish and demonstrate affordable, flexible manufacturing processes to reduce the cost and lead time of spacecraft and launch vehicles. - (U) \$53,480 Total <p>B. Budget Activity Justification: This program is in Budget Activity 7, Operational System Development, because it provides support to systems in production and/or operational use.</p>		
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BUDGET ACTIVITY
7 - Operational System Development

PE NUMBER AND TITLE
0708011F Industrial Preparedness

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)										DATE February 1999	
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0708011F Industrial Preparedness					PROJECT 2865	
(U) A. <u>Project Cost Breakdown (\$ in Thousands):</u>											
					<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U)	Manufacturing technologies for aircraft components				32,728	26,236	25,776	24,688			
(U)	Repair/remanufacture technologies for weapon system sustainment				5,736	17,760	19,717	19,879			
(U)	Manufacturing methods for missile and munition assemblies				2,312	1,020	572	492			
(U)	Manufacturing processes to reduce spacecraft and launch vehicle costs				2,055	5,939	5,749	8,421			
(U)	Identified as a source for SBIR				0	1,396	0	0			
(U)	Total				42,831	52,351	51,814	53,480			
(U) B. <u>Budget Acquisition History and Planning Information (\$ in Thousands):</u>											
<u>Performing Organizations:</u>											
<u>Contractor or Government Performing Activity</u>	<u>Contract Method/Type or Funding Vehicle</u>	<u>Award or Obligation Date</u>	<u>Performing Activity EAC</u>	<u>Project Office EAC</u>	<u>Total Prior to FY 1998</u>	<u>Budget FY 1998</u>	<u>Budget FY 1999</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget to Complete</u>	<u>Total Program</u>
Product Development Organizations											
Numerous	Various	Various	N/A	N/A	N/A	22,829	28,120	25,019	26,358	Cont	Cont
TRW	CPFF	May 94			17,900	3,100	0	0	0	0	21,000
Howmet	Cost Share	Jul 95			4,500	4,335	4,000	4,000	3,000	0	19,835
Ontek	CPFF	Jan 95			4,500	1,100	1,300	0	0	0	6,900
Spectrolab	CPFF	Sep 95			1,150	1,250	660	0	0	0	3,060
McD Douglas	CPFF	May 94			38,042	2,552	0	0	0	0	40,594
Boeing	CA	Dec 97			150	400	925	1,000	132	0	2,607
Comp Afford Init (Consortium)	CA	Aug 97			1,000	6,515	5,000	5,000	5,300	3,500	26,315
Sustainment Init	Various	Feb 99			0	0	3,500	4,500	5,000	10,000	23,000
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7 - Operational System Development										February 1999	
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT	
7 - Operational System Development					0708011F Industrial Preparedness					2865	
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Engine Forge Init	CA	Jan 99			0	0	1,800	3,000	3,000	1,200	9,000
Elec Parts Obs Init	Various	Various			0	750	3,000	5,345	5,040	5,225	19,360
Sm/Med Enterp Supplier Init	Various	Apr 99			0	0	500	1,800	2,000	6,000	10,300
ManTech for Afford Spacecraft	Various	Jan 99			0	0	2,150	2,150	3,650	9,650	17,600
Identified as a source for SBIR					0	0	1,396				
Total					N/A	42,831	52,351	51,814	53,480	N/A	N/A
Support and Management Organizations - In-House Support.											
Test and Evaluation Organizations - Not Applicable.											
Government Furnished Property: Not Applicable.											
Identified as a source for SBIR							1,396				
Subtotal Product Development						42,831	50,955	51,814	53,480	Cont	Cont
Subtotal Support and Management						0	0	0	0	0	0
Subtotal Test and Evaluation						0	0	0	0	0	0
Total Project						42,831	52,351	51,814	53,480	Cont	Cont

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