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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)									DATE June 2001		
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0303112F AIR FORCE COMMUNICATIONS					PROJECT 4884		
COST (\$ in Thousands)		FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4884	Public Key Infrastructure Implementation	0	11,373	31,828	0	0	0	0	0	0	43,201
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0
FY03 - 07 budget numbers do not reflect the DoD strategic review results											
(U) <u>A. Mission Description</u> PUBLIC KEY INFRASTRUCTURE (PKI):											
<p>PKI encompasses the techniques and standards used to manage certificates and public and private keys in order to authenticate the validity of each party involved in an electronic transaction. Department of Defense (DoD) PKI was mandated by the Deputy Secretary of Defense on 8 Aug 97 and the Services were further directed to use the capabilities in a 6 May 99 memo. PKI supports the overall Defense-in-Depth strategy for information assurance capabilities -- user identification, non-repudiation, digital signatures and encryption for government electronic business and network transactions -- protecting/securing all network information.</p> <p>Funds will be used to support initial implementation and integration of PKI user smart card , public key directory storage of the PKI certificates, PKI registration for both users and servers, and initial training. In particular, the RDT&E funds will be applied to the Smart Card/Common Access Card (CAC) to integrate and test with the current Defense Enrollment Reporting System (DEERS)/Real-Time Automated Personnel Identification Systems (RAPIDS) ID and registration system. Additionally, the funds will be used to prototype and test replicating the DoD Public Key directory to each Air Force base-level directory structure. Furthermore, the funds will be used to perform technology integration and testing of new hardware CAC token into the user desktop environment. Finally, a small amount of funds were allotted to the AF SPO for program support activities.</p>											
(U) <u>FY 2000 (\$ in Thousands)</u>											
(U) \$0 No Activity											
(U) \$0 Total											
(U) <u>FY 2001 (\$ in Thousands)</u>											
(U) \$7,005 Prototyping support for Interface/Integration of registration Common Access Card tokens, peripheral readers with Air Force-wide computer and communication architectures											
(U) \$3,810 Testing support of Public Key Infrastructure Certificate Directories and other infrastructure components											
(U) \$558 Program and management control (SPO activities)											
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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT		
07 - Operational System Development	0303112F AIR FORCE COMMUNICATIONS	4884		
(U) <u>A. Mission Description Continued</u>				
(U) <u>FY 2001 (\$ in Thousands) Continued</u>				
(U) \$11,373	Total			
(U) <u>FY 2002 (\$ in Thousands)</u>				
(U) \$29,582	Initial implementation of Class 3 Public Key Infrastructure which includes the initial implementation of registration activities (estimated target of 700,000 certificates to users) and the initial rollout of Common Access Cards to AF users; support of initial reader and middleware implementation at bases that will be issued the Common Access Card; initial support of Public Key Infrastructure use of AF Directory Services for certificate status checking			
(U) \$1,049	Testing support of Public Key Infrastructure Certificate Directories and other infrastructure components			
(U) \$1,197	Program and management control (SPO activities)			
(U) \$31,828	Total			
(U) <u>B. Budget Activity Justification</u>				
This is a budget activity 7, Operational System Development because it supports Air Force requirements to prototype, integrate, and test Public Key Infrastructure components including registration and usage hardware/software/middle-ware, Common Access Cards, and directories on Air Force computer systems and networks.				
(U) <u>C. Program Change Summary (\$ in Thousands)</u>				
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>
(U) Previous President's Budget (FY 2001 PBR)		11,478	31,648	43,126
(U) Appropriated Value		11,478		
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions				
b. Small Business Innovative Research				
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram				
e. Rescissions		-105		
(U) Adjustments to Budget Years Since FY 2001 PBR			180	
(U) Current Budget Submit/FY 2002 PBR		11,373	31,828	43,201
(U) <u>Significant Program Changes:</u>				
Project 4884				

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BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0303112F AIR FORCE COMMUNICATIONS				PROJECT 4884		
(U) D. Other Program Funding Summary (\$ in Thousands)										
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</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>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E										
(U) Other APPN										
(U) E. Acquisition Strategy										
Electronic Systems Center (ESC) Information Assurance Product Area Directorate (PAD) manages the AF PKI Program. All major contractors within this program element have been awarded contracts after full and open competition or through existing government contracting vehicles. Contracts are executed via GSA, Standard AF contract (through the Standard Systems Group, AL), and Information Technology Services Program (ITSP) to support engineering effort and equipment for the integration of Common Access Card tokens and prototyping of AF base level directories.										
(U) F. Schedule Profile										
		<u>FY 2000</u>				<u>FY 2001</u>			<u>FY 2002</u>	
		1	2	3	4	1	2	3	4	1
(U) Prototyping support for PKI Interface/Integration of Tokens						X				X
(U) Testing support of Public Key Infrastructure Certificate Directories						X				X
X denotes planned event										
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE June 2001				
BUDGET ACTIVITY 07 - Operational System Development					PE NUMBER AND TITLE 0303112F AIR FORCE COMMUNICATIONS			PROJECT 4884			
(U) A. Project Cost Breakdown (\$ in Thousands)											
					<u>FY 2000</u>		<u>FY 2001</u>		<u>FY 2002</u>		
(U)	Prototyping support for Interface/Integration of registration Common Access Card tokens, peripheral readers with Air Force-wide computer and communication architectures						7,005		29,582		
(U)	Testing support of PKI Certificate Directories and other infrastructure components						3,810		1,049		
(U)	Program and management control (SPO activities)						558		1,197		
(U)	Total						11,373		31,828		
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or or Funding</u>	<u>Obligation</u>	<u>Performing Activity</u>	<u>Project Office</u>	<u>Total Prior to FY 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Product Development Organizations</u>											
Prototyping Support	PR	Dec 00		TBD	TBD			7,005	29,582		36,587
<u>Support and Management Organizations</u>											
ESC/DIW SPO Activities	PR	Dec 00		TBD	TBD			558	1,197		1,755
<u>Test and Evaluation Organizations</u>											
Test Support	PR	Dec 00		TBD	TBD	0	0	3,810	1,049		4,859
						<u>Total Prior to FY 2000</u>	<u>Budget FY 2000</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget to Complete</u>	<u>Total Program</u>
<u>Subtotals</u>								7,005	29,582		36,587
Subtotal Product Development								558	1,197		1,755
Subtotal Support and Management								0	3,810	1,049	4,859
Subtotal Test and Evaluation						0	0	11,373	31,828		43,201
Total Project											