

UNCLASSIFIED

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)</b>	DATE <b>February 2000</b>
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<b>BUDGET ACTIVITY</b> <b>5 - Engineering and Manufacturing Development</b>	<b>PE NUMBER AND TITLE</b> <b>0604824A Commercial Operating &amp; Support Savings Initiative (COSSI)</b>	<b>PROJECT</b> <b>D112</b>
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COST <i>(In Thousands)</i>	FY1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY2004 Estimate	FY2005 Estimate	Cost to Complete	Total Cost
D112 Commercial Operating & Support Savings Initiative	16351	0	0	0	0	0	0	0	21457

**A. Mission Description and Justification:** The mission of Commercial Operations and Support Savings Initiative (COSSI) is to reduce Army Operations and Support (O&S) costs by routinely inserting commercial items into fielded military systems. The insertion of commercial items is expected to reduce O&S costs by reducing the costs of parts and maintenance, reducing the need for specialized equipment, increasing reliability, and increasing the efficiency of subsystems. An appropriate fielded military system for a COSSI project is one that has some current operational capability and is not near the end of its useful life. Selected proposals will develop, manufacture, and deliver prototype “kits” to the military for installation into a fielded Army system. Each kit will consist of a commercial item, or a combination of items, and will be ready for insertion or use in a fielded military system. COSSI seeks proposals submitted by firms or teams that include at least one for-profit firm. Proposals must also include the written support of a “Military Customer” who has the authority to modify the system and purchase the kits. COSSI is a two-stage process. In Stage I of each selected project, COSSI and the chosen proposer will share the costs of developing and testing the kit, with the proposer contributing at least 25% of the estimated costs of Stage 1. If Stage 1 is successful, Stage II will be initiated. In Stage II, the military customer may then purchase reasonable production quantities of the kit. Payment for the kits and their insertion into the fielded system will be the responsibility of the military customer. The Army further requires that Stage II funding be identified before commencement of Stage I to insure timely transition. COSSI was funded in DOD PE 0603805E through FY1998, transferred to an Army PE 0604824 in FY1999, and is transferred to PE 0708045A in FY2000.

**FY 1999 Accomplishments:**

- 9136 Aviation – Sand Erosion Resistance Kits for Model 36-155 on Apache/Longbow Helicopter. Adapt commercially available sand erosion resistance components into the inlet particle separator currently installed on the main propulsion turbine engine of the Apache to increase its operational life and reduce Operating & Support costs. Switchable Eyesafe Laser Rangefinder Designator (SELRD) for the Apache AH64 A/D Longbow. Replace the existing AH64 laser that suffers from low power output and parts obsolescence with a commercially developed laser to improve its current capabilities. Install, Integrate and Support Commercial Off-the-Shelf Non-Developmental Item Displays, Digital Map, Stores Management System and Infrared Suppressor to the OH-58DI. This replacement will enhance range/payload capability and crew situational awareness, while significantly reducing Operating & Support costs and improving readiness.
- 1171 Combat Service Support – Remotely Monitored Battlefield Sensor System. Modify a commercially available transceiver for application to the RT-1175A ground sensor repeater resulting in lower maintenance cost. Portable Engine Test Cell Capability. Modify a commercially available JETCAL 2000 portable engine test cell to provide a turn-key portable test set solution for testing installed turbine engines in CH-47 aircraft to reduce engine false removal rates.

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**FY 1999 Accomplishments: (continued)**

- 4871 Horizontal Technology Integration - Integrated Mechanical Diagnostics/Health and Usage Management System. Utilize internal hardware and interface components of a commercial unit, developed for the Sikorsky S-76 and S-92 Helicopters, for use on UH-60 Helicopters. This will reduce the spare parts budget and extend the time between overhauls.
- 1173 Maneuver - Low Cost AGT1500 Compressor Blades. Apply patented, low cost, commercial Metal Injection Molding into 1<sup>st</sup> and 2<sup>nd</sup> stage compressor blades for the AGT1500 gas turbine engine on the US Army M1 Abrams Tank. This will enable the use of commercial practices and technologies to develop a lower cost compressor blade and vane manufacturing process to lower O&S costs.

Total 16351

**FY 2000 Planned Program:** Program funded in PE 0708045A.

**FY2001 Planned Program:** Program funded in PE 0708045A.

<b>B. Program Change Summary</b>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget (FY 2000/2001 PB)	21457	0	0
Appropriated Value	21600		
Adjustments to Appropriated Value			
a. Congressional General Reductions	-143		
b. SBIR / STTR	-568		
c. Omnibus or Other Above Threshold Reductions	-275		
d. Below Threshold Reprogramming	-4177		
e. Rescissions	-86		
Adjustments to Budget Years Since (FY 2000/2001 PB)			
Current Budget Submit (FY 2001 PB)	16351	0	0

Change Summary Explanation: Funding – FY 1999 funds realigned (-4177) to higher priority requirements.