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BUDGET ITEM JUSTIFICATION SHEET							DATE					
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE				SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							BLI 2901 NAVAL SPACE SURVEILLANCE SYSTEM (NSSS)				52WV	
	PY	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMP	TOTAL	
QUANTITY												
COST (in millions)			\$2.0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2.0	

Effective FY 2004, The NSSS Program transfers to the Air Force.

The Naval Network and Space Command (NNSOC), headquartered at Dahlgren, Virginia, has operated the Naval Space Surveillance System (NSSS), since 1961. The components of NSSS, also known as "the Fence", are the Sensor and associated mission processing systems which are a critical part of the overall national space surveillance network. The only dedicated, uncued sensor in the world, NSSS provides satellite position information to the United States Naval Fleet as well as satellite maneuver detection and collision avoidance data to the Department of Defense (DoD) National Aeronautics and Space Administration (NASA) and the International Space Station for launch protection and orbit analysis. NSSS also serves as the Alternate Space Control Center (ASCC) to Space Control Center in Cheyenne Mountain, Colorado. Obsolete and aging components impact the ability to maintain a constant surveillance (catalog). Procurement of computer system hardware and software is necessary to adequately manage catalog growth and increased workload caused by lack of ephemerides. Ephemerides are computerized listings of tracks and predictions of locations of both space debris (older orbital objects and other national launches which failed to properly return from orbit) and current active in-use satellites. The ongoing Service Life Extension Program (SLEP) of the NSSS is necessary to ensure continued operation of the nation's only unalerted space sensor.

The surveillance mission is accomplished by sub-systems performing four operational functions as follows:

1. Sensor: Data acquisition of satellites "radar" signals is performed by a network of three transmitting and six receiving stations located along a great circle arc across the southern United States.
2. C2 Connectivity: Each receiver station is connected to Dahlgren by a dedicated network of phone lines for data transfer. The network also links all field stations and Dahlgren for network operational and administrative coordination.
3. Command Center: Satellite detection and correlation with predictions is performed at the Dahlgren Center.
4. Processing: Storage, retrieval, and updating of orbital elements of past, present, and future paths of all known orbital objects are performed at Dahlgren.

Notes:

The NSSS program maximizes the use of Commercial off the Shelf (COTS) software and hardware.

P-1 Shopping List - Item No. 67-1 of 67-2

Exhibit P-40, Budget Item Justification

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COST ANALYSIS										DATE				
										February 2004				
APPROPRIATION ACTIVITY							P-1 ITEM NOMENCLATURE				SUBHEAD			
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							BLI 2901 Naval Space Surveillance System (NSSS)				52WV			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 2002			FY 2003			FY 2004			FY 2005		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
WV006	LIFE EXTENSION	A						1,992			0			0
	C2 Connectivity - Hardware & Software					VAR	N/A	0						
	Command Center - Hardware & Software					VAR	N/A	0						
	Mission Processing - Hardware & Software					VAR	N/A	0						
	Sensor - Hardware & Software					VAR	N/A	1,992						
WV555	PRODUCTION SUPPORT							0			0			0
	TOTAL							1,992			0			0