

**BUDGET ITEM JUSTIFICATION SHEET  
P-40**

DATE: **FEBRUARY 2004**

APPROPRIATION/BUDGET ACTIVITY <b>Other Procurement, Navy</b> <b>BA-4 Ordnance Support Equipment</b>	P-1 ITEM NOMENCLATURE <b>GUN FIRE CONTROL EQUIPMENT (GFCE) - 5110**</b>
Program Element for Code B Items:	Other Related Program Elements

	ID Code	FY 2002 & Prior	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY											
COST (In Millions)			32.0	0.0	0.0	0.0	0.0	0.0	0.0		
SPARES COST (In Millions)											
EMERGENCY RESPONSE FUND (In Millions)											

\* ERF, D Funding \$2.1M is to procure Night Vision Goggles and related night vision equipment.  
 \*\* MK 86 Fire Control System and Night Vision Devices has been reassigned to BLI 520900/5/6 beginning in FY 2004.  
 \*\*\* SPQ 9B procurement has been reassigned to BLI 202600/05/06 beginning in FY 2004.

**Description: (U)** This program provides for procurement of equipment, materials and Ordnance Alterations (ORDALTs) to improve combat effectiveness of and maintain logistic supportability of Gun Fire Control Systems (GFCS) installed on 65 ships (65 MK 86) and 8 shore installations (8 MK 86).

**UK009 Switchboard ORDALTs** - Procures ORDALTs for GFCS MK 86 Switchboards to improve weapon and combat system data switching capability; provides concurrent changes with other ORDALTs; and provides technical documentation upgrades required by interfacing system/equipment ORDALTs.

**UK024 RMA (Reliability, Maintainability and Availability) MK 86** - Procures product Improvement ORDALTs for GFCS MK 86 to correct problems reported by fleet units; upgrades unreliable components and replaces obsolete components and parts no longer in production. Installations to be in ship classes with MK 86 configuration. MK 86 ORDALTs were procured in prior years and are being installed in blocks to reduce total installation costs.

**UK039 Night Vision Devices** - Procures new Night Vision Devices (NVD) for ships and shore sights. Provides repair or replacement of NVD and NVD Test Equipment.

**UK040 AN/SPQ-9B Radar** - Procures AN/SPQ-9B Radars to add Anti-Ship Missile Defense (ASMD) capability which increases the radar's capability to detect and track low-flying, very small cross-section targets in natural and man-made clutter. Total inventory objective is 118, in the following ship classes: CG-47, DDG-51, CVN, LHD, DD-963, Training unit and LBTS.

**UK040 AN/SPQ-9B GFM** - Upgrade of U.S. Air Force APG-68 Transmitter for use in AN/SPQ-9B Radar System configuration.

**UK042 AN/SPQ-9B Engineering Change Proposals (ECPs)** - Procures product improvements generated by ECPs; corrects problems reported by fleet units; upgrades unreliable components and replaces obsolete components and parts no longer in production for AN/SPQ-9B Radar.

**UK051 MK 46 Optical Sight Systems (OSS) Product Improvement** - Procure Product Improvements for MK 46 OSS on DDG 51 Class ships. The MK 46 OSS is an integral element of the MK 34 gun weapon system. These improvements provide enhanced force protection capabilities and reduce total ownership costs by improved reliability and supportability of in-service equipment systems.

CLASSIFICATION: UNCLASSIFIED

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APPROPRIATION/BUDGET ACTIVITY <b>Other Procurement, Navy</b> <b>BA-4 Ordnance Support Equipment</b>	P-1 ITEM NOMENCLATURE <b>GUN FIRE CONTROL EQUIPMENT (GFCE) - 5110</b>	
Program Element for Code B Items:	Other Related Program Elements	
<p><b>UK830 AN/SPQ-9B Production Support</b> - Supports AN/SPQ-9B Radar program and contractor associated areas.</p> <p><b>UK900 AN/SPQ-9B Consulting Services Support</b> - Supports AN/SPQ-9B Radar program with contractor associated areas.</p> <p><b>UK51N/UK61N - Installation of Equipments</b> - Provides funding to install ORDALTS and AN/SPQ-9B Radars, field changes and other alterations in ships (Fleet Modernization Program - FMP) and shore sites (Non-fleet Modernization Program - NON-FMP)</p>		

CLASSIFICATION: UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS															DATE: FEBRUARY 2004																			
P-5															SUBHEAD: 24UK																			
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE/SUBHEAD																								
Other Procurement, Navy										GUN FIRE CONTROL EQUIPMENT (GFCE) - 5110																								
BA-4 Ordnance Support Equipment																																		
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS																															
						FY 2003			FY 2004			FY 2005																						
			Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost																				
	<b>EQUIPMENT</b>	A																																
UK009	Switchboard O/A's MK 86	A																	0															
UK024	RMA MK 86	A																	1,112															
UK039	Night Vision Devices	A																	1,162															
UK051	MK 46 OSS Product Improvement	A																	7,000															
	<b>INSTALL</b>																																	
UK51N	Installation of Eqmt.-- FMP (RMA MK 86)																		122															
UK61N	Installation of Eqmt--NON FMP (RMA MK 86)																		31															
																			<b>9,427</b>															
	<b>EQUIPMENT</b>	A																																
UK040	AN/SPQ-9B Radar	A							3	4,462	13,386																							
UK040	GFM--APG-68 Radar Transmitter	A																																
UK042	Engineering Change Proposals (ECPs)																		1,300															
UK830	AN/SPQ-9B Production Support																		7,937															
UK900	AN/SPQ-9B Consulting Services																		0															
	<b>INSTALL</b>																																	
UK51N	Installation of Eqmt.-- FMP (AN/SPQ-9B)																																	
UK51N	Installation of LW Antenna ECP - FMP																																	
UK61N	Installation of Eqmt -- NON FMP (AN/SPQ-9B)																																	
UK61N	Installation of LW Antenna ECP -- NON FMP (AN/SPQ-9B)																																	
																			<b>22,622</b>															
<b>*FY02 UK042 is Congressional Plus-up</b>																																		
																																		<b>32,049</b>

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CLASSIFICATION:

UNCLASSIFIED

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**UNCLASSIFIED**

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				A. DATE	
Other Procurement, Navy BA-4 Ordnance Support Equipment					GUN FIRE CONTROL EQUIPMENT (GFCE) - 5110				FEBRUARY 2004	
									SUBHEAD	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<b>FISCAL YEAR (03)</b> UK040 SPQ-9B Radar	3	4,462	NAVSEA	Apr-02	SS/FFP	NORTHROP GRUMMAN NORDEN SYSTEMS, INC. MELVILLE, NY	Feb-03	JUL 04	YES	
D. REMARKS *FY03 is an option to FY02 Contract. *FY05 is an option to FY 04 Contract.										

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/SPQ-9B Radar TYPE MODIFICATION: N/A MODIFICATION TITLE: AN/SPQ-9B Radar

DESCRIPTION/JUSTIFICATION:  
 Adds Anti-Ship Missile Defense mode: detects and tracks low-flying, extremely small radar cross-section targets in clutter.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 10/94; CA 10/94; CDR 7/95; LBTS DT 10/98; DT/OT FY03; FRP DR FY04

	FY 2001 & Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY2009		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																					
<u>RDT&amp;E</u>					0	4.0														0	4.0
<u>PROCUREMENT</u>																					
INSTALLATION KITS																					
INSTALLATION KITS - UNIT COST																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT					3	13.4														3	13.4
EQUIPMENT NONRECURRING																					0.0
ENGINEERING CHANGE ORDERS						1.3															12.5
DATA																					
TRAINING EQUIPMENT																				0	0.0
SUPPORT EQUIPMENT																					0.0
OTHER (PRODUCTION SUPPORT)						7.9															7.9
OTHER (CSS)						0.0															0.0
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
INSTALL COST						0.0															0.0
TOTAL PROCUREMENT						22.6															33.8

P3A (Continued)

MODELS OF SYSTEMS AFFECTED: AN/SPQ-9B      MODIFICATION TITLE: AN/SPQ-9B

INSTALLATION INFORMATION: **ALTERATION INSTALLATION TEAM (AIT)**

METHOD OF IMPLEMENTATION: \_\_\_\_\_

ADMINISTRATIVE LEADTIME: \_\_\_\_\_      PRODUCTION LEADTIME: 18 Months

CONTRACT DATES:      FY 2C N/A      FY 2002: Aug 02      FY 2003: Aug 02

DELIVERY DATE:      FY 2C N/A      FY 2002: Jan 04      FY 2003: Jan 04

(\$ in Millions)

Cost:	FY2002 & Prior Years				FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		Total			
	Qty	\$		Qty	\$	Qty	\$	Qty	\$													
PRIOR YEARS																				0	0.0	
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																				0	0.0	
FY 2005 EQUIPMENT																				0	0.0	
FY 2006 EQUIPMENT																				0	0.0	
FY 2007 EQUIPMENT																				0	0.0	
FY 2008 EQUIPMENT																				0	0.0	
FY 2009 EQUIPMENT																				0	0.0	
TO COMPLETE																				0	0.0	

INSTALLATION SCHEDULE:

	FY 2001 & Prior				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009		TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2						
In	4				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Out	4				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: GFCs MK 86 TYPE MODIFICATION: Mods 9, 10, 12 MODIFICATION TITLE: MK86; Gun Fire Control Equipment ORDALTs

DESCRIPTION/JUSTIFICATION:  
 Provides Product Capability, Safety, and Survivability with RMA Improvements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Continuous Improvements to GFCs MK 86

	<u>FY 2001 &amp; Prior</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>FY 2008</u>		<u>IC</u>		<u>TOTAL</u>		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																					
<u>RDT&amp;E</u>																					0.0
<u>PROCUREMENT</u>																					
INSTALLATION KITS					10	0.7															0.7
INSTALLATION KITS - UNIT COST						0.0															0.0
INSTALLATION KITS NONRECURRING						0.5															0.5
EQUIPMENT						8.1															8.1
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
PRODUCTION SUPPORT																					
OTHER (ILS/TEST SUPPORT)																					
OTHER (CSS)																					
INTERIM CONTRACTOR SUPPORT																					
INSTALL COST					10	0.2														10	0.2
TOTAL PROCUREMENT						9.5															9.5

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: GFCS MK 86 MODIFICATION TITLE: MK86; Gun Fire Control Equipment ORDALTs

INSTALLATION INFORMATION: ALTERATION INSTALLATION TEAM (AIT)

METHOD OF IMPLEMENTATION: \_\_\_\_\_

ADMINISTRATIVE LEADTIME: \_\_\_\_\_ PRODUCTION LEADTIME: \_\_\_\_\_ Months

CONTRACT DATES: FY 2001: N/A FY 2002: N/A FY 2003: N/A

DELIVERY DATE: FY 2001: N/A FY 2002: N/A FY 2003: N/A

(\$ in Millions)

Cost:	FY 02 and Prior Years		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																			1315	0.0
FY 2002 EQUIPMENT																			0	0.0
FY 2003 EQUIPMENT					5	0.2													5	0.2
FY 2004 EQUIPMENT																				
FY 2005 EQUIPMENT																				
FY 2006 EQUIPMENT																				
FY 2007 EQUIPMENT																				
FY 2008 EQUIPMENT																				
FY 2009 EQUIPMENT																				
TO COMPLETE																				

INSTALLATION SCHEDULE:

	FY 2000 & Prior	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				TC	TOTAL
		1	2	3	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Note: Prior years quantities above reflect total number of ORDALT kits installed. Beginning in FY95, ORDALTs have been procured, packaged, and installed in sets to lower overall ship unit costs.

- MK86 BASELINE ORDALTS: 13 (FY94 & Prior)
- MK86 BLOCK 1 UPGRADE ORDALTS: 4 (FY95)
- MK86 BLOCK 2 UPGRADE ORDALTS: 5 (FY96)
- MK86 RMA-1 UPGRADE ORDALTS: 3 (FY97 - FY00)
- MK86 RMA-2 UPGRADE ORDALTS: 5 (FY01- FY07)