	BUDGET I		DATE FEE	BRUARY 1999					
APPROPRIATION / BUDGE PROCUREMENT, DEFENSE					NOMENCLA OVANCE PRO				
	Prior Years	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05
QUANTITY									
COST (In Millions \$)	4.400	.352	.288	17.286	22.439		19.449		19.411

MISSION AND DESCRIPTION: The Advanced Sea, Air, Land (SEAL) Delivery System (ASDS) is a manned combatant submersible used for the clandestine delivery of SEAL personnel and weapons. The ASDS will provide the requisite range, endurance, payload, and other capabilities for operations in a wide-range of threat scenarios.

FY 2000 PROGRAM JUSTIFICATION: Order material for major subcomponents of the ASDS, such as hull material, sonar system components, displays, communication and propulsion equipment for follow on vehicles.

FY 2001 PROGRAM JUSTIFICATION: Order material for major subcomponents of the ASDS.

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in Thousands)

BUDGET YEAR 1 FOR FISCAL YEAR PROGRAM 2000

DATE:

FEBRUARY 1999

Weapon System Type (Model/Series No.)			WARD DATE	FIRST SYSTEM COM	PLETION DATE	Interval Between System Completions (Months)
ADVANCED SEA, AIR LAND (SEAL) D SYSTEM	ELIVERY			·		
Advance Procurement/Advance Funding Items	Quantity	Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Admin/Prod) - Total	Unit Cost	Total Cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)
HULL	(1)	03/00	07/01	16 Months		
FORGINGS & PLATE	1 Ship Set	03/00	07/00	4 Months		
HATCHES	1 Ship Set	09/00	03/01	6 Months		-
BATTERY	(1)	05/00	04/01	11 Months		
VALVES & CONNECTORS	1 Ship Set	08/00	03/01	7 Months		
FLASKS	1 Ship Set	09/00	07/01	10 Months		
MAST & ANTENNAS	(2)	09/00	05/01	8 Months		
PUMPS & MOTORS	1 Ship Set	09/00	06/01	9 Months		
FAIRINGS	1 Ship Set	07/00	01/01	6 Months		
INTEGRATED COMMUNICATION &	(1)	03/00	01/01	10 Months		
DISPLAY						, , , , , , , , ,

NARRATIVE DESCRIPTION

Funding is required to procure long lead time material in support of the Advanced SEAL Delivery System (ASDS). This material is required in order to meet delivery schedules established in support of the Special Operations Forces ASDS #2.

P-1 SHOPPING LIST, ITEM NO. 47

Page 1 of 1 Pages
EXHIBIT P-10, Weapon System Advance Procurement Analysis/Justification

	BUDGET I	TEM JUSTIF	ICATION SHE	ЕТ			DATE FEI	BRUARY 1999		
APPROPRIATION / BUDGE PROCUREMENT, DEFENSE					M NOMENCLA DD1 SEAL DE	ATURE LIVERY VEHI	HCLE			
	Prior Years	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	
QUANTITY										
COST (In Millions \$)	35.885	4.594	.580	.000	.000	1.100	1.690	1.733	1.776	

MISSION AND DESCRIPTION: The mission of the MK 8 Mod 1 Sea Air Land (SEAL) Delivery Vehicle (SDV) is clandestine infiltration/exfiltration of SEAL combat swimmers into hostile/denied shore areas and harbor/port facilities for the conduct of special operations. The MK 8 Mod 1 SDV program is a Service Life Extension Program (SLEP) of the in-service MK 8 Mod 0 SDV to extend the life of this mobility platform by 15 years. The SLEP effort focuses on correcting identified and projected sustainability and maintainability problems within selected subsystems and will continue during FY 1999 with the purchase of spares and logistics support. In FY 2002-2005 the MK8 Mod 1 SDV program will consist of upgrading obsolete commercial-off-the-shelf electronics and pre-planned product improvement efforts.

COST ANALYSIS			Activity Title/			n Nomenclatu					
EXHIBIT (P-5) -Shipbuilding	Procurement,	Defense-Wie	le/Proc. Just./2				ELIVERY VEI				
Work Breakdown Structure		FY			1998	FY		FY:		FY:	
Cost Elements (\$thousands)		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1. MK8 MOD 1 SDV SYSTEM											
A. Dopplar Navigation Sonar (DNS)			136		1,895						
B. Integrated Logistics Support			2,082		550		580				
C. Install of Modifications			5,927		1,700						
D. Production Support			1,773		449						
Subtotal			9,918		4,594		580				
				-					· · · · · · · · · · · · · · · · · · ·		
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- V											
LINE ITEM TOTAL			9,918		4,594		580		0	<u> </u>	0

	BUDGET I		DATE FE	BRUARY 1999					
APPROPRIATION / BUDGE PROCUREMENT, DEFENSE					I NOMENCLA		•		
	Prior Years	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05
QUANTITY	·								
COST (In Millions \$)	69.829	16.544	5.900	3.284	1.569		5.591	11.519	

MISSION AND DESCRIPTION: This conversion will provide SSN 688 class submarines as Dry Deck Shelter (DDS) host submarines to replace the decommissioning SSN 637/640 class submarines. All current DDS host submarines (SSN 637/640 class) are scheduled for inactivation soon. These modifications will ensure the continued capability for clandestine, underwater Sea, Air, Land (SEAL) and SEAL Delivery Vehicle (SDV) infiltration/exfiltration operations. The program modifies a total of five SSN 688 class submarines (first SSN 688 conversion funded in FY 1996). The Seawolf class submarine (SSN 23) will be the sixth single DDS host sub (funded by the Navy's Seawolf program).

FY 2000 PROGRAM JUSTIFICATION: Completes modification of one SSN-688 Class Sub and updates logistics support.

FY 2001 PROGRAM JUSTIFICATION: Completes fitup of one SSN-688 Class Sub and updates logistics support.

COST ANALYSIS			Activity Title/			n Nomenclatu			C. DATE: FEBRUARY 1999			
EXHIBIT (P-5) - Shipbuilding	Procurement		de/Proc. Just./2			NE CONVER				FY 2001		
Work Breakdown Structure		FY			1998		1999		2000			
Cost Elements (\$thousands)		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	
1. SUBMARINE CONVERSION												
A. Dry Deck Shelter Host Conversion												
(1) Ship Alt/Detail Design/Install					13,711		4,784		1,984		97	
(2) Fabrication of Ship Alt Kits			2,814		2,000							
(3) Logistics Support			1,413		833		1,116		1,300		59:	
(4) Certification and Trials			1,713									
Subtotal			5,940		16,544		5,900		3,284		1,56	
										· · · · · · · · · · · · · · · · · · ·		
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LINE ITEM TOTAL			5,940		16,544		5,900		3,284		1,56	

	BUDGET ITEM JUSTIFICATION SHEET									
APPROPRIATION / BUDGE PROCUREMENT, DEFENSE				ŀ	P-1 ITEM NOMENCLATURE MKV SPECIAL OPERATIONS CRAFT					
	Prior Years	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	
QUANTITY	14	6								
COST (In Millions \$)	102.991	35.622								

MISSION AND DESCRIPTION: The MK V Special Operations Craft (SOC) conducts medium range insertion / extraction of Special Operations Forces (SOF). It has the inherent ability to support limited coastal patrol and interdiction taskings. The MK V SOC is a high performance combatant craft capable of being transported over land and on-board C-5 aircraft on its own transporter system. The need for this type of combatant craft was validated during operation Desert Shield and Desert Storm in the Persian Gulf and is further justified by potential maritime SOF employments in all unified areas of responsibility. The program is structured to procure, sustain and man operational systems (i.e. detachments) annually, vice individual items of equipment.

P-1 SHOPPING LIST, ITEM NO. 50

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	BUDGET I		DATE FE	BRUARY 1999					
APPROPRIATION / BUDGE PROCUREMENT, DEFENSE					I NOMENCLA				
	Prior Years	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05
QUANTITY									
COST (In Millions \$)	118.750	28.012	26.342	37.876	36.869	32.732	33.392	35.113	35.966

MISSION AND DESCRIPTION: This program provides ammunition for Special Operations Forces (SOF) components for required training and war reserve stock. The required funding will allow SOF components to accomplish the required annual training and maintain the building of the Defense Planning Guidance required combat reserve quantities.

Weapon System Cost Element Change. Starting in FY00 the Weapon System Cost elements formerly called "Small Arms/Landing Party Ammunition, Other Ship Gun Munitions and Navy Pyrotechnics and Demolition Material (Pyro/Demo)" have been combined into a single Cost Element titled "NSW Munitions" which is sub-divided into the following categories: 25MM cartridges (all types), 40MM cartridges (all types), Lightweight Anti-Tank Weapon (LAW) Rocket (tactical/sub-caliber trainer and cartridges), STINGER missile training support equipment, shotgun cartridges (all types), handgun cartridges (all types), rifle/machine gun cartridges (all types), grenades (offensive and smoke), signals, training devices, explosives, firing devices and accessories, detonating cord and time fuze, blasting caps and initiators, and underwater mines and components.

- 1. Small Arms/Landing Party Ammunition. Provides SOF small arms replenishment ammunition (12 gauge up to .50 CAL) and grenades (offensive and smoke) to support Naval SOF resupply of peacetime expenditures, specified combat reserve requirements and provide production support. The Naval SOF are comprised of the following subordinate elements: Special Warfare Groups, Special Warfare Units, Sea Air Land (SEAL) Teams, SEAL Delivery Vehicle Teams, Special Boat Squadrons, Special Boat Units and Naval Special Warfare Patrol Coastal Ships.
- 2. Other Ship Gun Munitions. Provides medium caliber (25MM and above) ammunition and rockets to support Naval SOF resupply of peacetime expenditures, specified combat reserve requirements and provide production support. The Naval SOF are comprised of the following subordinate elements: Special Warfare Groups, Special Warfare Units, Sea, Air, Land (SEAL) Teams, SEAL Delivery Vehicle Teams, Special Boat Squadrons, Special Boat Units and Naval Special Warfare Patrol Coastal Ships.

P-1 SHOPPING LIST, ITEM NO. 51

Page 1 of 3

BUDGET ITEM JUSTIFICATION SHEET	DATE FEBRUARY 1999
APPROPRIATION / BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
PROCUREMENT, DEFENSE - WIDE / 2	SOF ORDNANCE REPLENISHMENT

- 3. MK V Special Operations Craft (SOC) Ammunition. Provides ammunition in support of the weapons Pre-Planned Product Improvement (P3I) for the MK V SOC. The P3I weapons suite includes 25MM, 7.62MM, GAU-17, and twin .50 caliber machine guns. In addition, the MK V SOC will employ STINGER missiles in a manpack configuration utilizing beltpack identification friend or foe (IFF) system and AN-PAS-18 Night Sight during night operations.
- 4. Navy Pyro/Demo. Provides a variety of pyrotechnic items consisting of illumination, signaling, identification, and location devices using flare or smoke as the primary signaling agent, as well as demolition material consisting of explosive devices, initiators, and accessories to support the Naval SOF. The Naval SOF are comprised of the following subordinate elements: Special Warfare Groups, Special Warfare Units, Sea, Air, Land (SEAL) Teams, SEAL Delivery Vehicle Teams, Special Boat Squadrons, Special Boat Units and Naval Special Warfare Patrol Coastal Ships.
- 5. NSW Munitions. Provides replenishment munitions to support Naval SOF resupply of peacetime expenditures, specified combat reserve requirements and provide production support. The Naval SOF is comprised of the following subordinate elements: Special Warfare Groups, Special Warfare Units, Sea, Air, Land (SEAL) teams, SEAL Delivery Vehicle teams, Special Boat Squadrons, Special Boat Units, and patrol Coastal Ships. This single cost element was formerly called Small Arms and Landing Party Ammunition, Other Ship Gun Munitions, MK V Special Operations Craft Ammunition, and Navy Pyro/Demo.

FY 2000 PROGRAM JUSTIFICATION: Funds are required to procure the following munitions to support Naval SOF peacetime expenditures, combat reserve quantities and provide Navy and Single Manager for Conventional Ammunition annualized production support: 25MM Cartridges (all types), 40MM Cartridges (all types), LAW System (includes 21MM LAW sub-caliber trainer and cartridges), STINGER Missile Training Support Equipment, Shotgun Cartridges (all types), Handgun Cartridges (all types of 9MM. .45Caliber, .357 Magnum), Rifle/Machine Gun Cartridges (all types of 5.56MM, 7.62MM and .50 Caliber), Grenades (offensive and smoke), and a variety of pyrotechnic signaling devices and demolition material consisting of signals, training devices, explosives, firing devices and accessories, detonating cord and time fuze, blasting caps and initiators, and underwater mines and components. Actual quantities vary depending on training requirements.

P-1 SHOPPING LIST, ITEM NO. 51

Page 2 of 3

BUDGET ITEM JUSTIFICATION SHEET	DATE FEBRUARY 1999
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSE - WIDE / 2	P-1 ITEM NOMENCLATURE SOF ORDNANCE REPLENISHMENT

FY 2001 PROGRAM JUSTIFICATION: Funds are required to procure the following munitions to support Naval SOF peacetime expenditures, combat reserve quantities and provide Navy and Single Manager for Conventional Ammunition annualized production support: 25MM Cartridges (all types), 40MM Cartridges (all types), LAW System (includes 21MM LAW sub-caliber trainer and cartridges), STINGER Missile Training Support Equipment, Shotgun Cartridges (all types), Handgun Cartridges (all types of 9MM. .45Caliber, .357 Magnum), Rifle/Machine Gun Cartridges (all types of 5.56MM, 7.62MM and .50 Caliber), Grenades (offensive and smoke), and a variety of pyrotechnic signaling devices and demolition material consisting of signals, training devices, explosives, firing devices and accessories, detonating cord and time fuze, blasting caps and initiators, and underwater mines and components. Actual quantities vary depending on training requirements.

6. Air Force Special Operations Command Training Munitions. Provides training ammunition required to maintain AC-130 Gunship crew mission related readiness skills. Quantities vary depending upon training requirements.

FY 2000 PROGRAM JUSTIFICATION: Funding is required to procure ammunition in support of crew training for the AC-130 Gunship.

FY 2001 PROGRAM JUSTIFICATION: Funds are required to continue support of replenishment ammunition for training.

COST ANALYSIS		iation/Budget				n Nomenclatu						
EXHIBIT (P-5) - Amnunition	Procurement	, Defense-Wic	ie/Proc. Just./2			-	ENISHMENT		C. DATE: F			
Work Breakdown Structure		FY 1997			1998		1999	FY	2000	FY	2001	
Cost Elements (\$thousands)		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	
1. SMALL ARMS/LANDING PARTY AMMO	:						<u> </u>					
A. 5.56mm Cartridges (All types)			1,795		2,649		1,395					
B. 7.62mm Cartridges (All types)			1,220		2,623		2,952				<u> </u>	
C. 9mm Cartridges (All types)			571		1,167		1,024					
D45 Cal Cartridges (All types)					300		660					
E50 Cal Cartridges (All types)			127		897		2,323					
F. Grenades (All types)							652					
PRODUCTION SUPPORT												
PRODUCTION ENGINEERING			304		466		459					
PRODUCTION ENGINEERING (SMCA) 1_/							277					
PRODUCT IMPROVEMENT							25	,			<u> </u>	
NON STANDARD ITEMS					100		118			Ī	1	
Subtotal			4,017		8,202		9,885			1		
2. OTHER SHIPGUN MUNITIONS HARDWARE						· · ·				1		
A. 25mm Cartridges (All types)			1,339		1,377		2,204			1		
B. 40mm Cartridges (All types)					2,242		5,247	·	i	1		
C. 84mm Cartridges (All types)					5,118		-,					
PRODUCTION SUPPORT					-,		561					
PRODUCTION ENGINEERING					513		244		<u> </u>			
PRODUCT IMPROVEMENT			655		278		52					
Subtotal			1,994		9,528		8,308			<u> </u>		
Gubtotal			1,221		7,520		0,500					
3. MK V SPECIAL OPERATIONS CRAFT MUNITIONS						<u> </u>					 	
A. 25mm/30mm Cartridges (All types)	······································				4,087	<u> </u>	2,542					
PRODUCTION ENGINEERING			141		124	· · · · · · · · · · · · · · · · · · ·	152					
Subtotal			141		4,211		2,694					
o do total					,				<u> </u>			
4. NAVY PYRO/DEMO									· · · · · · · · · · · · · · · · · · ·			
A. Signals			1.055		357		469			1		
B. Training Devices					172		182				-	
C. Explosive Charges							438					
D. Det Cord and Time Fuze					1						<u> </u>	
E. Blast Caps and Initiators		<u> </u>	756		2,041	L	924	····	<u></u>	 		
F. Cutters/Cartridges		†	, 50	*	601		124				-	
G. Anti Ship Mines & Components				<u> </u>	931		817		<u> </u>			
H. Other Pyro/Demo Items		†			411		J					
I. RAMS					965							
PRODUCTION SUPPORT		 			703				· · · · · · · · · · · · · · · · · · ·	<u> </u>		
PRODUCTION SUPPORT PRODUCTION ENGINEERING		 	663		591		739				 	

¹_/ Prod Eng (SMCA) beginning in FY99

COST ANALYSIS	1	_	Activity Title/			m Nomenclatu					
EXHIBIT (P-5) - Amnunition	Procurement		de/Proc. Just./2				ENISHMENT				
Work Breakdown Structure		FY 1997			1998		1999		2000		2001
Cost Elements (\$thousands)		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost		Unit Cost	Total Cost	Unit Cost	Total Cost
PRODUCTION ENGINEERING (SMCA) 1_/							14				
PRODUCT IMPROVEMENT					347		520				<u> </u>
RENOVATION COMPONENTS			5				20				
GAUGE REQUIREMENTS			250		15		10				
NON STANDARD			918				200				
Subtotal			3,647		5,501		4,333				
5. NSW MUNITIONS											
A. 40MM Cartridges (All types)									4,240		3,546
B. LAW Rocket (Tact/Sub-Cal Trainer/Cart)									5,076		
C. Stinger Training Suport Equipment									99		98
D. Shotgun Cartridges (All types)				,					55		102
E. Handgun Cartridges (All types)									1,748		2,084
F. Rifle/Machine Gun Cartridges (All types)									11,309		14,902
G. Grenades Offensive/Smoke	•								335		598
H. Signals									341		111
I. Training Devices	• •								1,639		
J. Explosives, Firing Devices, and Accessories									533		1,581
K. Detonating Cord/time Fuze									161		
L. Blasting Caps and Initiators											1,062
M. Underwater Mines and Components									1,598		1,575
MUNITIONS PRODUCTION SUPPORT								·			
PRODUCTION ENGINEERING									1,753		1,750
PRODUCTION ENGINEERING (SMCA) 1_/									1,589		1,093
PRODUCT IMPROVEMENT									354		365
RENOVATION COMPONENTS									20		20
GAUGE REQUIREMENTS									10		10
Subtotal									30,860		28,897
6. AFSOC TRAINING MUNITIONS							-				
A. 105MM Containers			1,500		570		500		600		600
B. 105MM Conversion			1,500		370	-	330		5,204		6,101
C. 25MM HEI			4,440						3,204		0,101
D. 25MM Straps/Tubes			7,770				622		100		100
E. 7.62MM Dim Tracer						l	022		125		128
F. Fuze Proximity			754			-			446		464
G50 Cal Dim Tracer			, 54			 			541		579
Subtotal		-	6,694		570		1.122		7.016		7,972
Sucioial			0,094		370		1,122		7,010		1,912
LINE ITEM TOTAL			16,493		28,012		26,342		37,876		36,869

1_/ Prod Eng (SMCA) beginning in FY99

BUD	GET PROC	UREMEN	T HISTORY AND P	ANNING			A. DATE: F	EBRUAR'	Y 1999		
B. APPROPRIATION/BUDGET ACTIVI				C. P-1 ITEM NOMENCLATURE							
PROCUREMENT, DEFENSE-WIDE/2				SOF ORDNANCE REPLENISHMENT							
				CONTRACT			DATE OF	SPECS	DATE		
LINE ITEM/	QTY	UNIT	LOCATION	METHOD	CONTRACTOR	AWARD	FIRST	AVAIL	REVIS		
FISCAL YEAR		COST	OF PCO	TYPE	AND LOCATION	DATE	DELIVERY	NOW?	AVAII		
The majority of items listed on the P-5 for this P-1 are purchased through the Single Managers for Conventional Ammunition (SMCA). The information required on this form is not available at the unit level.											

	BUDGET ITEM JUSTIFICATION SHEET								
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSE - WIDE / 2					M NOMENCLA DNANCE ACC				
	Prior Years	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05
QUANTITY									
COST (In Millions \$)	151.655	18.130	17.915	15.992	33.159	8.584	8.098	8.597	8.975

MISSION AND DESCRIPTION: The items included within the P-1 line are ordnance items that have acquisition requirements. This program provides a variety of items developed and modified for Special Operations Forces (SOF).

1. Selectable Lightweight Attack Munition (SLAM). SLAM is a 2.2-pound hand emplaced munition of various detonation methods capable of defeating tracked/wheeled vehicles, POL/ammunition storage sites and parked aircraft at a standoff distance. SLAM replaces heavier and bulkier munitions that are often not suitable to meet SOF mission requirements.

FY 2000 PROGRAM JUSTIFICATION: Procures items to meet the inventory objectives for war reserve and training; this effort includes updating the technical data package to replace obsolete electronic components and to improve safety and reliability.

FY 2001 PROGRAM JUSTIFICATION: Procures items to meet the inventory objectives for war reserve and training; this effort includes updating the technical data package to replace obsolete electronic components and to improve safety and reliability.

2. SOF Demolition Kit. This kit consists of inert hardware sets for Explosively Formed Penetrators, conical shape charges, and linear shaped charges along with tools, equipment, and attaching devices for constructing and emplacing a variety of demolition charges. The kit allows the SOF operator to tailor the demolition charges to the target providing greater lethality and mission flexibility.

FY 2000 PROGRAM JUSTIFICATION: This is a continuing effort to procure demolition kit items to meet the inventory objective for war reserve and training.

FY 2001 PROGRAM JUSTIFICATION: This is a continuing effort to procure demolition kit items to meet the inventory objective for war

P-1 SHOPPING LIST, ITEM NO. 52

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BUDGET ITEM JUSTIFICATION SHEET	DATE	FEBRUARY 1999	
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSE - WIDE / 2	P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION		

reserve and training.

- 3. Time Delay Firing Device (TDFD). The TDFD is an improved firing device which replaces the outdated six versions of the M1 firing device.
- 4. 40mm Refuze. This program provides more effective 40mm rounds of ammunition to successfully engage and defeat personnel and lightly armored targets. Moreover, this 40mm round satisfies an urgent safety requirement to replace the current MK-27 fuze which has been prone to failure over the past 40 years, and when attached to improved, more lethal projectiles, becomes a safety hazard to the gunship and its crew.

FY 2000 PROGRAM JUSTIFICATION: This effort continues the refuzing of 40mm rounds with safe fuzes and provides 40mm armor piercing rounds with spotting charge for war reserve and training.

FY 2001 PROGRAM JUSTIFICATION: This effort continues the refuzing of 40mm rounds with safe fuzes and provides 40mm armor piercing rounds with spotting charge for war reserve and training.

5. Remote Activated Munitions System (RAMS). RAMS provides a capability to remotely control detonation of demolition charges or the remote operation of other items of equipment such as beacons, laser markers, radios, and weapons.

FY 2000 PROGRAM JUSTIFICATION: This procurement continues the effort to acquire systems to meet the inventory objective.

FY 2001 PROGRAM JUSTIFICATION: This procurement continues the effort to acquire systems to meet the inventory objective.

6. Penetration Augmented Munition (PAM). Presently Special Operations Forces (SOF) has a limited capability to significantly damage large heavily reinforced concrete structures assigned as targets. PAM is a man-portable, one step set-up, hand emplaced munition system with increased penetration capability and greater warhead explosiveness than heavier and bulkier munitions that can not meet SOF mission requirements. For specified targets a 35-pound PAM replaces 200 pounds of C4 explosive and greatly reduces time on target. PAM represents

P-1 SHOPPING LIST, ITEM NO. 52

Page 2 of 4

BUDGET ITEM JUSTIFICATION SHEET	DATE	FEBRUARY 1999	
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSE - WIDE / 2	P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION		

new capability for Special Operations Forces (SOF) by being the first hand emplaced munition to use tandem explosively formed penetrators and in-line electronic fuzing.

7. IMP 105. The 105mm high fragmentation round is designed to optimize fragments for personnel and light material targets while minimizing collateral damage and danger close distances.

FY 2000 PROGRAM JUSTIFICATION: Procures high fragmentation rounds to meet the inventory objectives for war reserve and training.

FY 2001 PROGRAM JUSTIFICATION: Procures high fragmentation rounds to meet the inventory objectives for war reserve and training.

8. Multi-Purpose Anti-Armor/Anti-Personnel Weapons System (MAAWS) Ammunition. MAAWS is a multi-purpose, man-portable, line-of sight, reloadable, salt water submersible, jumpable, and recoilless, day/night, anti-armor and anti-personnel weapon system which includes a family of munitions providing obscuration, illumination, personnel denial, armored vehicle denial and penetration, bunker and hardened facility penetration, and soft target destruction capabilities.

FY 2000 PROGRAM JUSTIFICATION: This procurement continues efforts to meet the ammunition inventory objectives for war reserve and training.

FY 2001 PROGRAM JUSTIFICATION: This procurement continues efforts to meet the ammunition inventory objectives for war reserve and training.

9. Improved Limpet Mine (ILM). The ILM is required for SEAL delivery vehicle attacks against ships, submarines, nested patrol craft, submerged harbor facilities and various other maritime targets. The ILM will allow greater explosive weight to be delivered to the target, decreased time on target by improving handling procedures, and result in an enhanced probability of mission success.

P-1 SHOPPING LIST, ITEM NO. 52

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BUDGET ITEM JUSTIFICATION SHEET		DATE FEBRUARY 1999
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSE - WIDE / 2	P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION	
FY 2001 PROGRAM JUSTIFICATION: This procurement, which program, will procure ILM's to meet the inventory objective for war		pecial Operations Forces development

P-1 SHOPPING LIST, ITEM NO. 52

UNCLASSIFIED

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EXHIBIT P-40 Budget Item Justification Sheet

COST ANALYSIS	A. Appropria	-	•				n Nomenclatu				
EXHIBIT (P-5) - Ammunition	Procurement,		e/Proc. Just./2				ANCE ACQU			FEBRUARY 1999	
Work Breakdown Structure	L	FY 1997		FY			1999	FY		FY	
Cost Elements (\$thousands)		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1. SELECTABLE LT WT ATTACK MUNITION											
A. Product Improvement Engineering								-	2,980		1,927
B. Hardware		0.800	3,300							1.000	1,000
Subtotal			3,300						2,980		2,927
2. SOF DEMOLITION KIT											
A. Kits		VAR	1,292	15.060	1,506	12.000	1,200	10.000	1,200	10.000	1,859
B. Small Explosively Formed Penetrators (EFP)						0.500	350	0.500	350	0.400	1,100
C. Medium EFPs						0.700	436	0.700	490	0.600	1,100
D. Large EFPs				·				2.110	211	1.000	2,100
Subtotal			1,292		1,506		1,986		2,251		6,159
3. TIME DELAY FIRING DEVICE											
A. Tactical Units		0.800	4,000	0.796	2,389						
4. 40MM PGU9 A/B REFUZE											
A. Fuzes		0.027	3,128	0.025	3,633						
B. Refuzing Cost									1,979		
C. Spotting Charge Rounds						0.030	942	0.030	1,200	0.025	3,805
Subtotal			3,128		3,633		942		3,179		3,805
5. REMOTE ACTIVATED MUNITIONS SYSTEM											
A. Transmitters/Receiver - Type A Kits		25.130	1,156	25.931	4,538	20.006	6,080	20.000	1,320	20.000	2,260
B. Receivers - Type B						2.666	1,333	2.449	857	2.415	9,057
Subtotal			1,156		4,538		7,413		2,177		11,317
6. PENETRATION AUGMENTED											
MUNITION		-									
A. Hardware				30,000	900						
B. Initial Production Engineering Test					2,614				•		
Subtotal					3,514						
7. 105MM HIGH FRAGMENTATION						-84					
ROUND			-							 	
A. Rounds		VAR	1.163	0.309	2,550	0.300	1,605				
A. Rounds B. Fuzes		YAN	1,103	0.307	2,330	0.300	1,003	0.398	1,195	0.358	3,707
C. Initial Product Testing							1,499	0.370	1,587	0.550	3,707
Subtotal			1,163		2,550		3,104		2,782		3,707
Subloat			1,105		2,330		3,104		2,702		5,707

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COST ANALYSIS		ropriation/Budget Activity Title/No.					n Nomenclatu					
EXHIBIT (P-5) - Ammunition	Procurement		le/Proc. Just./			SOF ORDNANCE ACQUISITION			C. DATE: FEBRUARY 1999			
Work Breakdown Structure			FY 1997 FY 1998 Unit Cost Total Cost Unit Cost Total C				1999	FY 2000		FY 2001		
Cost Elements (\$thousands)		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	
8. MULTI-PUPPOSE ANTI-ARMOR/ANTI												
PERSONNEL WEAPONS SYSTEM												
A. TPT141		0.188	1,790			0.213	604					
B. 502IM						1.179	902					
C. Heat 551C IM						1.604	600					
D. 441C IM						0.825	2,364	0.825	640			
E. High Impulse Thermal Round								1.800	1,983	1.800	1,274	
F. 20MM Training System										16.888	710	
Subtotal			1,790				4,470		2,623		1,984	
9. IMPROVED LIMPET MINE SYSTEM												
A. Hardware										44.547	3,260	
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LINE ITEM TOTAL			15,829	<u> </u>	18,130	<u> </u>	17,915	L	15,992		33,159	

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