Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy											Date: March 2023	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0205632N *I MK-48 ADCAP*							
COST ($ in Millions)	**Prior Years**	**FY 2022**	**FY 2023**	**FY 2024 Base**	**FY 2024 OCO**	**FY 2024 Total**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**	**Cost To Complete**	**Total Cost**
Total Program Element	200.773	98.707	155.868	213.165	-	213.165	142.815	136.071	126.673	129.181	Continuing	Continuing
0366: *MK 48 ADCAP*	200.773	98.707	155.868	213.165	-	213.165	142.815	136.071	126.673	129.181	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Office of Naval Research (ONR) Afterbody Upgrades Future Naval Capability (FNC) program started in FY 2022 with program office funding contributions beginning in FY 2023. The ONR Afterbody Upgrades FNC will develop technologies to improve torpedo effectiveness that will transition to the MK 48 MOD 7, MOD 8, and MOD 9 upgrades.

The MK 48 ADCAP (Advanced Capability) Research, Development, Test and Evaluation (RDT&E) program executes incremental development of weapon performance improvements in two development product areas: (1) Advanced Processor Builds (APBs) (operational software), and (2) Torpedo Technology Insertions (TIs) (hardware). This Program Element (0205632N/0366) is tied to development programs that leverage a joint United States/Australia Armaments Cooperative Project (ACP) and develop MK 48 ADCAP technologies developed by the ONR and SCO.

The Torpedo APB development testing and implementation process is being utilized to address shallow water as a critical operating area to counter near-peer adversaries and third world diesel electric submarines. In-water testing, in conjunction with laboratory simulation efforts, has shown that significant performance improvements can be made by implementing changes to weapon tactics and software algorithms. The TAPB program also leverages the RAN joint torpedo program and technologies developed by ONR and SCO in the areas of torpedo broadband signal processing, tactics processing, and alertment.

Torpedo Technology Insertions (TIs) will provide for significant torpedo hardware improvements and upgrades, including the transition and testing of advanced technologies from the R&D community. This approach will incorporate developmental testing of transitioning technologies from ONR and SCO for ADCAP upgrades in the areas of torpedo sensors, weapon propulsion, weapon/platform connectivity, and improved fusing. These efforts will continue torpedo development investment at a lower cost and shorter term than traditional torpedo programs.

The MK 48 MOD 8 (APB 6/TI-1) Heavyweight Torpedo (HWT) program is a significant upgrade to the MK 48 MOD 7 HWT which will consist of an operational software upgrade referred to as APB 6 and a hardware upgrade referred to as TI-1. TI-1 will include a Guidance and Control (G&C) section upgrade including a new Sonar Assembly (higher
density array, transmitter, receiver), and an Improved Post Launch Communications System (IPLCS). IPLCS will replace the existing copper guidance wire with fiber optics. These improvements are needed for increased performance in the presence of advanced countermeasures, shallow water, low Doppler targets, Very Shallow Water (VSW), improve fuzing, and Anti Surface Warfare (ASuW). TI-1 will also include features from three ONR FNC programs.

The MK 48 MOD 9 (APB 7/TI-2) represents significant improvements to the MK 48 MOD 7 and MOD 8 heavyweight torpedo (HWT) including propulsion upgrades providing extended range and advance sensing capabilities against surface and subsurface targets. MK 48 MOD 8 (APB 6/TI-1) and MK 48 MOD 9 (APB 7/TI-2) provide two distinctly different capabilities and are operationally intended for different mission sets. These improvements consist of the APB 7 software upgrades and

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0205632N *I MK-48 ADCAP*

Technology Insertion 2 (TI-2) hardware upgrades, which provides advanced sensing, processing, and propulsion technologies developed under OSD SCO, and ONR FNC research and development programs.

B. Program Change Summary ($ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	100.759	155.868	192.185	-	192.185
Current President's Budget	98.707	155.868	213.165	-	213.165
Total Adjustments	-2.052	0.000	20.980	-	20.980
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.047	0.000			
• SBIR/STTR Transfer	-2.005	0.000			
• Program Adjustments	0.000	0.000	3.530	-	3.530
• Rate/Misc Adjustments	0.000	0.000	17.450	-	17.450

Change Summary Explanation

Funding increased by $57.297M from FY 2023 to FY 2024 for:
MK 48 MOD 8 (APB 6/TI-1) funding increased by $19.977M from FY 2023 to FY 2024 to support:
- APB 6/TI-1 Material procurements by the contractor for Proof of Design (POD) and Proof-of-Manufacturing (POM) deliverables (+$16.094M).
- APB 6 product development to support software development and Torpedo Advanced Propulsion System - Combustion (TAPS-C) efforts aimed to upgrade the Otto Fuel engine to extend the range of the MK 48 MOD 7 & MOD 8 (+$3.139M).
- Engineering test events for the TI-1 Improved Post Launch Communications System (IPLCS)(+$0.744M).

MK 48 MOD 9 (APB 7/TI-2) funding increased by $22.740M from FY 2023 to FY 2024 to fund:
- Award of a new competitive manufacturing development contract with industry to develop and test TI-2 prototype hardware (+$21.467M).
- Additional funding for Modeling & Simulation (M&S) resources required for initial Verification, Validation & Accreditation (VV&A) efforts (+$1.273M).

MK 48 Afterbody Upgrade funding increased by $14.580M from FY 2023 to FY 2024 to fund:
- The development, hardware procurements, modifications, land-based and in-water tests for Afterbody Upgrades to improve torpedo effectiveness for future MK 48 MOD 7, MOD 8, and MOD 9 as part of the FNC transitions to the Program Office from ONR.

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0205632N / *MK-48 ADCAP*	Project (Number/Name) 0366 / *MK 48 ADCAP*	

COST ($ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
0366: *MK 48 ADCAP*	200.773	98.707	155.868	213.165	-	213.165	142.815	136.071	126.673	129.181	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The MK 48 ADCAP (Advanced Capability) Research, Development, Test and Evaluation (RDT&E) program executes incremental development of weapon performance improvements in two development product areas: (1) Advanced Processor Builds (APBs) (operational software), and (2) Torpedo Technology Insertions (TIs) (hardware). This Program Element (0205632N/0366) is tied to development programs that leverage a joint United States/Australia Armaments Cooperative Project (ACP) and develop MK 48 ADCAP technologies developed by the ONR and SCO.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: TORPEDO APB / TEST & EVALUATION	98.707	155.868	213.165	0.000	213.165
Articles:	-	-	-	-	-
FY 2023 Plans:					
Continue APB 6 - Software development.					
Continue TI-1 Hardware development.					
Continue APB 6 - Modeling & Simulation development.					
Conduct APB 6 on MOD 7 Preliminary Design Review (PDR).					
Conduct APB 6 Critical Design Review (CDR).					
Conduct TI-1 IPLCS Critical Design Review (CDR).					
APB 6/TI-1 - Conduct Engineering testing of G&C section and IPLCS.					
TI-1 - IPLCS Proof of Design Hardware (POD) delivery.					
Conduct in-water testing of TI-IPLCS POD hardware.					
Continue APB 7 - Software prototype development.					
Continue TI-2 - Hardware prototype development.					
APB 7/TI-2 - Conduct System Requirements Review (SRR-1).					
Continue APB 7 /TI-2 - In-water prototype testing.					
Initiate Afterbody Upgrade development.					
FY 2024 Base Plans:					
Continue APB 6 - Software development.					
Continue TI-1 Hardware development.					
Continue APB 6 - Modeling & Simulation development.					
Continue APB 6/TI-1 - Engineering testing of G&C section and IPLCS.					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0205632N / *MK-48 ADCAP*	**Project (Number/Name)** 0366 / *MK 48 ADCAP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
TI-1 - IPLCS Proof of Manufacturing Hardware (POM) delivery. TI-1 - G&C Proof of Design Hardware (POD) delivery. Conduct APB 6 on MOD 7 Critical Design Review (CDR). Conduct TI-1 IPLCS Production Readiness Review (PRR). Continue APB 7 - Software prototype development. Continue TI-2 - Hardware prototype development. Continue APB 7 /TI-2 - In-water prototype testing. APB 7/TI-2 - Modeling & Simulation Verification, Validation, and Accreditation (VV&A) TI-2 - Award TI-2 Industry hardware development contract. Continue After body Upgrade development.					
FY 2024 OCO Plans: N/A					
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increased by $57.297M from FY 2023 to FY 2024 for: MK 48 MOD 8 (APB 6/TI-1) funding increased by $19.977M from FY 2023 to FY 2024 to support: - APB 6/TI-1 Material procurements by the contractor for Proof of Design (POD) and Proof-of-Manufacturing (POM) deliverables (+$16.094M). - APB 6 product development to support software development and Torpedo Advanced Propulsion System - Combustion (TAPS-C) efforts aimed to upgrade the Otto Fuel engine to extend the range of the MK 48 MOD 7 & MOD 8 (+$3.139M). - Engineering test events for the TI-1 Improved Post Launch Communications System (IPLCS)(+$0.744M). MK 48 MOD 9 (APB 7/TI-2) funding increased by $22.740M from FY 2023 to FY 2024 to fund: - Award of a new competitive manufacturing development contract with industry to develop and test TI-2 prototype hardware (+$21.467M). - Additional funding for Modeling & Simulation (M&S) resources required for initial Verification, Validation & Accreditation (VV&A) efforts (+$1.273M). MK 48 Afterbody Upgrade funding increased by $14.580M from FY 2023 to FY 2024 to fund:					

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0205632N / *MK-48 ADCAP*	**Project (Number/Name)** 0366 / *MK 48 ADCAP*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
- The development, hardware procurements, modifications, land-based and in-water tests for Afterbody Upgrades to improve torpedo effectiveness for future MK 48 MOD 7, MOD 8, and MOD 9 as part of the FNC transitions to the Program Office from ONR.					
Accomplishments/Planned Programs Subtotals	98.707	155.868	213.165	0.000	213.165

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• WPN/3225: *MK-48 Torpedo ADCAP Mods*	27.987	18.502	20.714	-	20.714	62.005	62.579	63.579	64.799	0.000	1,680.169
• WPN/3117: *MK-48 Torpedo*	130.972	151.128	308.497	-	308.497	317.997	328.429	308.135	394.845	Continuing	Continuing

Remarks

D. Acquisition Strategy

Continue to incrementally develop technology to pace the threats to be integrated into the production baseline. A competitive contract for TI-1 hardware development was awarded in FY 2019. The development contract includes LRIP options to procure kits to be used for OT. FRP hardware will be used to upgrade the entire inventory of MK 48 MOD 7 to MOD 8.

The MK 48 MOD 9 (APB 7/TI-2) acquisition strategy is to fund the Penn State University Applied Research Laboratory to complete prototype builds and testing from the OSD SCO program and implement design refinements for industry builds. Competitive industry manufacturing contract awards are planned starting in FY 2024 for developmental and operational test units.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0205632N / *MK-48 ADCAP*	Project (Number/Name) 0366 / *MK 48 ADCAP*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development - APB 6	WR	NUWC NPT : Newport RI	71.477	18.228	Nov 2021	24.657	Nov 2022	25.860	Nov 2023	-		25.860	Continuing	Continuing	Continuing
Software Development - APB 6	WR	NUWC KPT : Keyport WA	0.505	0.400	Nov 2021	0.438	Nov 2022	0.549	Nov 2023	-		0.549	0.000	1.892	-
Software Development - APB 6	WR	ARL / PSU : State College PA	0.000	2.450	Nov 2021	2.680	Nov 2022	2.060	Nov 2023	-		2.060	0.000	7.190	-
Hardware Development - TI-1	WR	NUWC NPT : Newport RI	32.295	2.900	Nov 2021	2.750	Nov 2022	3.397	Nov 2023	-		3.397	Continuing	Continuing	Continuing
Hardware Development - TI-1	C/CPIF	Progeny : Manassas, VA	42.578	29.330	Jan 2022	29.765	Jan 2023	45.859	Jan 2024	-		45.859	Continuing	Continuing	Continuing
Hardware Development - TI-1 IPLCS	C/CPFF	Harris Corp. : Melbourne, FL	16.135	4.000	Nov 2021	4.375	Nov 2022	4.375	Nov 2023	-		4.375	Continuing	Continuing	Continuing
Hardware Development - IM	WR	Indian Head : Indian Head, MD	2.876	0.450	Nov 2021	0.450	Nov 2022	0.450	Nov 2023	-		0.450	Continuing	Continuing	Continuing
Software Development - APB 7	C/CPFF	ARL / PSU : State College PA	0.000	2.840	Nov 2021	2.897	Nov 2022	2.955	Nov 2023	-		2.955	0.000	8.692	-
Software Development - APB 7	WR	NUWC NPT : Newport RI	0.000	1.962	Nov 2021	3.600	Nov 2022	3.700	Nov 2023	-		3.700	0.000	9.262	-
Hardware Development - TI-2	C/CPFF	ARL / PSU : State College PA	8.584	18.265	Dec 2021	34.974	Dec 2022	35.673	Dec 2023	-		35.673	0.000	97.496	-
Hardware Development - TI-2	WR	NUWC NPT : Newport RI	1.170	1.670	Nov 2021	13.073	Nov 2022	13.334	Nov 2023	-		13.334	0.000	29.247	-
Hardware Development - TI-2	WR	NSWC, IH : Indian Head, MD	1.252	0.507	Nov 2021	3.223	Nov 2022	3.287	Nov 2023	-		3.287	0.000	8.269	-
Hardware Development - TI-2	C/CPIF	TBD : TBD	0.000	0.000		0.000		21.467	Jan 2024	-		21.467	0.000	21.467	-
Hardware Development - Afterbody Upgrades	WR	NUWC NPT : Newport RI	0.000	0.000		3.500	Nov 2022	18.080	Nov 2023	-		18.080	0.000	21.580	-
		Subtotal	176.872	83.002		126.382		181.046		-		181.046	Continuing	Continuing	N/A

Remarks

- Increased funding in FY 2024 for APB 6 to support software development and TAPS-C upgrades to the Otto Fuel engine to extend the range of the MK 48 MOD 7 & MOD 8
- Increased funding in FY 2024 for TI-1 to support increased material procurement requirements by the contractor in FY 2024.
- Increased funding in FY 2024 for IPLCS is due to increased material procurement requirements by the contractor in FY 2024.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0205632N / *MK-48 ADCAP*	Project (Number/Name) 0366 / *MK 48 ADCAP*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract

- Increased funding in FY 2024 for APB 7 due to increased software algorithm development.
- Increased funding in FY 2024 for TI-2 Hardware Development contract award, TI-2 Hardware Development updates to OSD SCO prototype baseline, supporting transition to industry and the fleet. This includes system engineering, hardware/software prototype design updates, material procurements, with associated land-based and in-water prototype testing.
- Increased funding in FY 2024 for Afterbody Upgrades to existing and future MK 48 MODs to support development, hardware procurements, modifications, land-based and in-water tests for improved torpedo effectiveness as part of the FNC transitions to the Program Office from ONR.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development - APB 6	WR	NUWC NPT : Newport RI	7.465	4.200	Nov 2021	5.900	Nov 2022	5.946	Nov 2023	-		5.946	Continuing	Continuing	Continuing
Software Development - APB 6	WR	NUWC KPT : Keyport WA	2.953	3.210	Nov 2021	3.210	Nov 2022	2.210	Nov 2023	-		2.210	Continuing	Continuing	Continuing
Software Development - APB 6	C/CPFF	ARL / PSU : State College PA	0.000	0.048	Dec 2021	0.048	Dec 2022	0.048	Nov 2023	-		0.048	0.000	0.144	-
Hardware Development - TI-1 IPLCS	C/CPFF	ARL / PSU : State College PA	0.600	0.600	Nov 2021	0.600	Nov 2022	0.300	Nov 2023	-		0.300	0.000	2.100	-
		Subtotal	11.018	8.058		9.758		8.504		-		8.504	Continuing	Continuing	N/A

Remarks

- Decreased funding in FY 2024 for TI-1/APB 6 as to efforts shift from to Development to Test and Evaluation for engineering test events for APB 6 on MK 48 MOD 7 and MK 48 MOD 8.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	NUWC KPT : Keyport WA - APB 6	1.373	1.350	Nov 2021	2.840	Nov 2022	4.252	Nov 2023	-		4.252	0.000	9.815	-
Developmental Test & Evaluation (DT&E)	WR	NUWC NPT : Newport RI - APB 6	1.984	0.290	Nov 2021	2.495	Nov 2022	4.281	Nov 2023	-		4.281	0.000	9.050	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy			Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0205632N / *MK-48 ADCAP*	Project (Number/Name) 0366 / *MK 48 ADCAP*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation (DT&E)	WR	OPTEVFOR : Norfolk VA - APB 6	0.000	0.546	Dec 2021	0.700	Dec 2022	0.900	Nov 2023	-		0.900	0.000	2.146	-
Developmental Test & Evaluation (DT&E)	WR	NUWC NPT : Newport RI - TI-1	0.000	0.715	Nov 2021	2.150	Nov 2022	2.276	Nov 2023	-		2.276	0.000	5.141	-
Developmental Test & Evaluation (DT&E)	WR	NUWC KPT : Keyport WA -TI-1	0.143	0.715	Nov 2021	6.390	Nov 2022	6.661	Nov 2023	-		6.661	0.000	13.909	-
Developmental Test & Evaluation (DT&E)	WR	NUWC KPT : Keyport WA - TI-2	0.484	3.440	Nov 2021	4.546	Nov 2022	4.637	Nov 2023	-		4.637	0.000	13.107	-
		Subtotal	3.984	7.056		19.121		23.007		-		23.007	0.000	53.168	N/A

Remarks

- Increased funding in FY 2024 for TI-1/APB 6 for engineering Tests and Evaluation of the G&C section, IPLCS, and APB 6 on MK 48 MOD 7 hardware.
- Increased funding in FY 2024 for TI-2 to support MK 48 MOD 9 Prototype in-water test events.

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	C/CPFF	Serco : Mclean VA	7.415	0.556	Nov 2021	0.571	Nov 2022	0.571	Nov 2023	-		0.571	0.000	9.113	-
Travel	WR	NAVSEA : Washington DC	1.484	0.035	Nov 2021	0.036	Nov 2022	0.037	Nov 2023	-		0.037	0.000	1.592	-
		Subtotal	8.899	0.591		0.607		0.608		-		0.608	0.000	10.705	N/A

	Prior Years	FY 2022 Cost	FY 2022 Award Date	FY 2023 Cost	FY 2023 Award Date	FY 2024 Base Cost	FY 2024 Base Award Date	FY 2024 OCO Cost	FY 2024 OCO Award Date	FY 2024 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	200.773	98.707		155.868		213.165		-		213.165	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0205632N / *MK-48 ADCAP*	**Project (Number/Name)** 0366 / *MK 48 ADCAP*

MK 48 APB 6/TI-1 (MOD 8) Acquisition Schedule

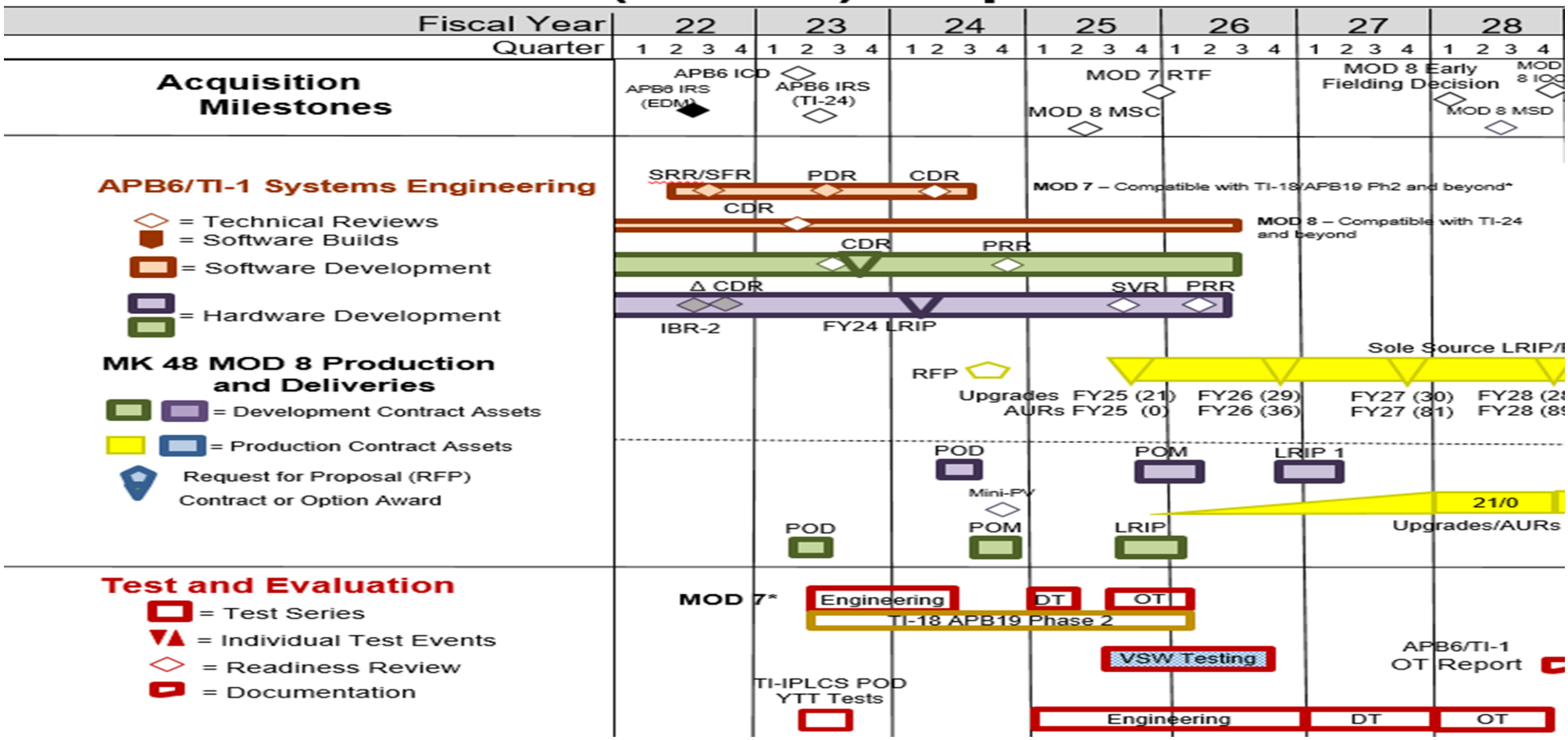

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0205632N / *MK-48 ADCAP*	**Project (Number/Name)** 0366 / *MK 48 ADCAP*

MK 48 APB 7/TI-2 (MOD 9) Acquisition Schedule

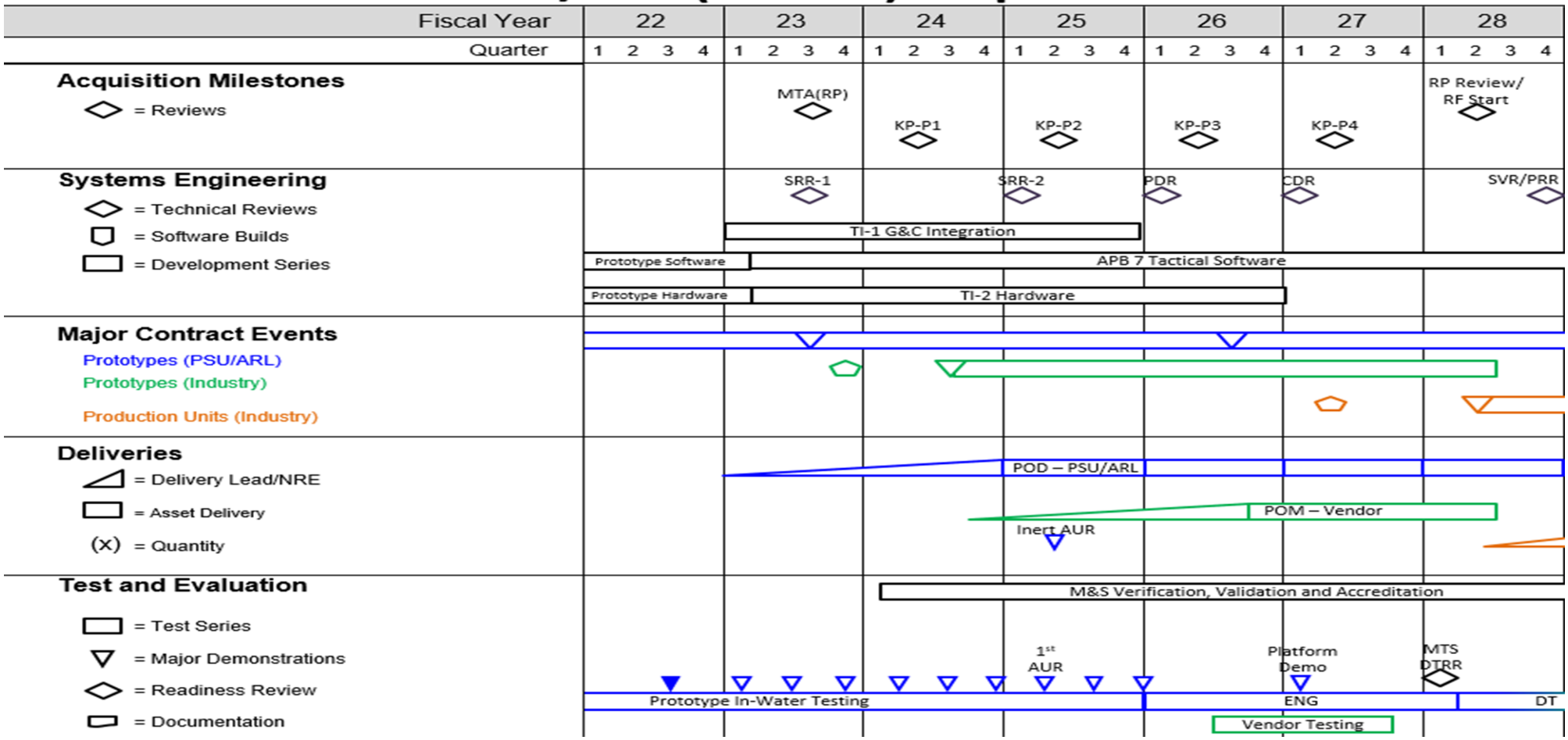

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0205632N / *MK-48 ADCAP*	**Project (Number/Name)** 0366 / *MK 48 ADCAP*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0366				
APB 6 Software / TI-1 Hardware Development: APB 6 Development	1	2022	3	2026
APB 6 Software / TI-1 Hardware Development: TI-1 Development	4	2022	2	2026
APB 6 Software / TI-1 Hardware Development: APB 6 on MK 48 MOD 7 Developmental Test (DT)	1	2025	2	2025
APB 6 Software / TI-1 Hardware Development: APB 6 on MK 48 MOD 7 Operational Test (OT)	3	2025	2	2026
APB 6 Software / TI-1 Hardware Development: APB 6/TI-1 Developmental Test (DT)	1	2027	4	2027
APB 6 Software / TI-1 Hardware Development: APB 6/TI-1 Operational Test (OT)	1	2028	4	2028
APB 7 Software / TI-2 Hardware Development: APB 7 / TI-2 Prototype Testing and Demonstration	1	2022	4	2025
APB 7 Software / TI-2 Hardware Development: APB 7 Development	1	2023	4	2027
APB 7 Software / TI-2 Hardware Development: TI-2 Development	1	2023	4	2027