Exhibit R-2, RDT&E Budget Item Justification: PB 2023 United States Special Operations Command	Date: April 2022
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	578.657	66.037	62.630	82.645	-	82.645	136.731	219.661	271.385	238.813	Continuing	Continuing
S0417: *Underwater Systems*	504.687	49.219	45.324	58.309	-	58.309	113.141	194.512	155.378	122.689	Continuing	Continuing
S1684: *Surface Craft*	73.970	16.818	17.306	24.336	-	24.336	23.590	25.149	116.007	116.124	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element provides for the Engineering and Manufacturing Development (EMD) of Special Operations Forces (SOF) Surface and Undersea Mobility platforms. This program element also provides for pre-acquisition activities to quickly respond to new requirements for SOF surface and undersea mobility, looking at multiple alternatives to include cross-platform technical solutions, service-common solutions, Commercial-Off-The-Shelf technologies, and new development efforts. These technologies will be pursued via rapid prototyping efforts when appropriate.

The Underwater Systems project provides for the EMD of combat submersibles, SOF combat diving systems, underwater support systems, and underwater equipment. This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component, prototype development, and exploitation of emerging technology opportunities to deliver enhanced capabilities) to respond to emerging requirements. These submersibles, equipment, and diving systems are used by SOF in the conduct of infiltration/extraction, personnel/material recovery, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems, diving systems, and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions.

The Surface Craft project provides for the EMD for all combatant craft, combatant craft mission equipment, pre-planned product improvement, and technology insertion to meet the unique requirements of SOF. This project element also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to quickly respond to new requirements for maritime craft and subsystems. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct operations associated with SOF maritime missions.

The total cost of the Combat Diving Middle Tier of Acquisition effort is $22.237 million (FY 2023 - FY 2027), including RDT&E and procurement of prototype units. The Combat Diving effort is fully funded across the Future Years Defense Program.

The total cost of the Maritime Precision Engagement (MPE) Middle Tier of Acquisition effort is $11.703 million (FY 2023 - FY 2027), including Research, Development, Test, and Evaluation (RDT&E) and procurement of prototype units. The MPE effort is fully funded across the Future Years Defense Program.

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 United States Special Operations Command	Date: April 2022
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*

B. Program Change Summary ($ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	68.538	58.430	0.000	-	0.000
Current President's Budget	66.037	62.630	82.645	-	82.645
Total Adjustments	-2.501	4.200	82.645	-	82.645
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	4.200			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-2.501	-			
• Adjustments to Budget Year	-	-	82.645	-	82.645

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2021	FY 2022
Project: S0417: *Underwater Systems*		
Congressional Add: *SOF Combat Diving Diver Propulsion*	8.383	4.200
Congressional Add Subtotals for Project: S0417	8.383	4.200
Congressional Add Totals for all Projects	8.383	4.200

Change Summary Explanation

Funding:

FY 2021: Net decrease of $2.501 million is due to a reprogramming of funds to the Congressionally mandated Small Business Innovative (SBIR)/Small Business Technology Transfer (STTR) programs.

FY 2022: Net increase of $4.200 million is due to a Congressional Add for diver propulsion.

FY 2023: Funding increase of $82.465 million reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

FY 2023 funding request was reduced by $1.820 million to account for the availability of prior year execution balances.

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command			Date: April 2022
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / *Maritime Systems*	Project (Number/Name) S0417 / *Underwater Systems*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
S0417: *Underwater Systems*	504.687	49.219	45.324	58.309	-	58.309	113.141	194.512	155.378	122.689	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides for the Engineering and Manufacturing Development (EMD) of combat underwater submersibles, Special Operations Forces (SOF) combat diving systems, underwater support systems, and underwater equipment. This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to respond to emerging requirements. These submersibles, equipment, and diving systems are used by SOF in the conduct of infiltration/extraction, personnel/material recovery, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems, diving systems, and unique equipment provides small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions. These technologies will be pursued via rapid prototyping efforts when appropriate.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: Sea, Air, and Land (SEAL) Delivery Vehicle (SDV MK 11)/Shallow Water Combat Submersible (SWCS)	2.110	4.348	1.070
Description: The SDV MK 11 (Acquisition program name: SWCS) provides for the design, development and test of one EDM and 10 production units to replace the legacy MK 8 MOD 1 SDV system. The SDV MK 11 is a free-flooding combat submersible mobility platform suitable for transporting and deploying SOF and their payloads for a variety of SOF missions. The SDV MK 11 will be deployable from a Dry Deck Shelter (DDS), surface ships, and land. The MK 11 system includes the MK 11 vehicle and MK 11 support equipment, comprised of Mission Support Equipment (MSE), Pack-Up Kit (PUK), and Transportation and Handling (T&H). It also includes integration efforts with the current DDS and development of product improvements accomplished throughout the lifecycle of the system. The SWCS line item transitioned to SDV beginning in FY 2022 to better align with historical terminology and material solution.			
FY 2022 Plans: Continue SDV MK 11 Pre-Planned Product Improvement (P3I). P3I enhancements include, but are not limited to: Power and Energy; Acoustic and Radio Frequency indicators and warning capabilities; Electro-Optical Infrared (EO/IR) sensor; payload improvements; and self recovery.			
FY 2023 Plans: Continues SDV MK 11 P3I. P3I enhancements include, but are not limited to: Power and Energy; Acoustic and Radio Frequency indicators and warning capabilities; EO/IR sensor, payload improvements; and self recovery.			
FY 2022 to FY 2023 Increase/Decrease Statement:			

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Decrease of $3.278 million is due to the transition of advanced sensors and propulsion enhancements from development to production.			
Title: Dry Combat Submersible (DCS) Now ***Description:*** The DCS provides for the advanced development, engineering, manufacturing, and testing efforts for a surface-launched, dry, diver lock-in/lock-out vessel capable of inserting and extracting SOF and/or payloads into denied areas of one EDM and two production units. The USSOCOM tested one submersible prototype to validate test methodologies, commercial classification, and SOCOM safety certification processes and will continue to use the prototype to evaluate capability enhancing technologies and reduce risk in the DCS program. This program includes funding for enhanced warfighter capabilities such as Mid-Water Column Lock-In/Lock-Out, depressurization pump, and submarine interoperability. ***FY 2022 Plans:*** Continue the incorporation of P3I to increase the operational capability of DCS to include Navy submarine/grey hull interoperability, efforts to address obsolescence, and the continued insertion of Undersea Craft Mission Equipment (UCME) developed technologies. Begin government acceptance testing of DCS 3. ***FY 2023 Plans:*** Continues the incorporation of P3I of DCS to include Navy submarine/grey hull interoperability, efforts to address obsolescence, and the continued insertion of UCME developed technologies. Conducts Follow On Operational Test and Evaluation (FOT&E). ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease of $2.639 million is due to reduced DCS test and evaluation as well as management services.	10.907	6.988	4.349
Title: Classified Sub-Project ***Description:*** Details provided under separate cover. ***FY 2022 Plans:*** Details provided under separate cover ***FY 2023 Plans:*** Details provided under separate cover. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase of $27.794 million. Details will be provided under separate cover.	7.455	6.055	33.849
Title: Dry Deck Shelter (DDS) Modernization ***Description:*** DDS provides for the P3I, testing, and integration of specialized underwater systems to meet the unique requirements of SOF, and compatibility with the submarine fleet. The current DDS is a certified diving system, which attaches to	1.162	1.057	3.081

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
modified host submarines that provides for insertion of SOF forces and platforms. Funding supports product improvements to the current DDS, as well as associated diver equipment for in-service submarine support systems, unmanned underwater vehicles, and follow on development efforts for future SOF payloads. ***FY 2022 Plans:*** Continue development of field changes necessary to extend the useful life of the DDS and increase capacity to carry larger payloads. ***FY 2023 Plans:*** Continues development of field changes necessary to extend the useful life of the DDS and increase capacity to carry larger payloads. Begins studies and analysis for future DDS. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase of $2.024 million is due to continued development of field changes to address equipment obsolescence and required studies to support future DDS.			
Title: SOF Combat Diving (CBDIV) ***Description:*** SOF Combat Diving provides the EMD, testing, and rapid prototyping of SOF peculiar diving equipment providing the SOF combat diver the ability to engage the enemy and conduct operations. SOF Combat Diving will support the SDV, SWCS, DCS, and surface craft with the conduct of infiltration/extraction, material recovery, underwater ship attack, beach clearance, and other missions. Technologies include, but are not limited to, commercial and developmental life support, maneuverability and propulsion, diver navigational accuracy and situational awareness, environmental protection, and communications between dive teams as well as between divers and external vessels/craft. SOF Combat Diving is designated a Middle Tier of Acquisition (MTA) program, which uses the rapid prototyping pathway. ***FY 2022 Plans:*** Continue development capabilities, prototyping, to include test and evaluation of environmental protection, navigation, communication and propulsion, and an excursion capable underwater breathing apparatus equipment material solution analysis and advanced component prototype development. ***FY 2023 Plans:*** Continues development, prototyping and advanced development to include testing and evaluation of environmental protection, navigation, communication and propulsion equipment as well as an underwater breathing apparatus equipment material solution analysis. ***FY 2022 to FY 2023 Increase/Decrease Statement:***	2.080	3.183	3.249

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Increase of $0.066 million is due to the testing of multiple diver systems.			
Title: Undersea Craft Mission Equipment (UCME) ***Description:*** The UCME provides a rapid response capability to support SOF underwater craft and diver systems, subsystems, and their emerging requirements. The UCME provides technology refresh efforts to correct system deficiencies, improve asset life, and enhance mission capability to leverage and exploit emerging technologies within the maritime SOF undersea capability portfolio. UCME focuses on spearheading specific Technology Readiness Level (TRL) 6 technology for compatibility, maturity, marinization, and successful transition to SOF undersea craft programs. ***FY 2022 Plans:*** Continue development of undersea survivability enhancements; underwater and maritime domain communications; enhanced Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance, and Reconnaissance (C5ISR) and Situational Awareness (C5ISR/SA); unique power and energy capabilities; other capability enhancements and enabling technologies for assured access and building enduring advantage, aligning to National Defense Strategy (NDS) priorities. ***FY 2023 Plans:*** Continues development of undersea survivability enhancements; underwater and maritime domain communications; enhanced C5ISR/SA; unique power and energy capabilities; other capability enhancements and enabling technologies for assured access and building enduring advantage, aligning to NDS priorities. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease of $5.814 million is due to the planned completion and transition of first increment enhanced Maritime Navigation technology projects, which provides enhanced capability to Maritime programs.	15.824	18.525	12.711
Title: MK18 Mod 1 Unmanned Underwater Vehicle (UUV) ***Description:*** MK 18 Mod 1 UUV enables access to contested/denied areas in the maritime domain, provides maritime special reconnaissance capabilities and reduces risk to personnel and manned platforms. This program develops and integrates SOF-peculiar (SOF-P) modifications to the Service Common, Service resourced, Mark 18 Mod 1 UUV. ***FY 2022 Plans:*** Continue payload development and integration to service common system for Naval Special Warfare specific (SOF-peculiar) requirements. Technology and payload development of Acoustic Intercept Receiver (AIR), Cognitive Router (CR), and Advanced Undersea Mission Autonomy (AUMA) for Beyond Line Of Sight (BLOS) capability. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Decrease of $0.968 million is to support emerging critical command requirements.	0.963	0.968	-
Title: Combatant Craft Light (CCL)	0.335	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Description: CCL is a small combatant craft that supports deployment of six combat equipped SOF operators and their payloads for selected missions in multiple threat environments. Its compact form factor provides SOF with versatile mission transportability, deployment, and utility capabilities.			
Accomplishments/Planned Programs Subtotals	40.836	41.124	58.309

	FY 2021	FY 2022
Congressional Add: SOF Combat Diving Diver Propulsion	8.383	4.200
FY 2021 Accomplishments: Continued development of SOF Diver propulsion. Specific efforts target development, testing, certification, shore based use, Submarine and Surface craft carry-on approval of multiple battery subsystems supporting Collective and Individual diver propulsion devices. Continued development of SOF Diver communication. Unique system design improvements required for SOF diver use, developmental testing, and evaluation of resulting engineering development model systems. Specific efforts target development of Command, Control, and Communications Situational Awareness diver underwater communication, diver-to-diver voice communication and the development and testing of battery certification.		
FY 2022 Plans: Continued development of SOF Diver propulsion. Specific efforts target development, testing, certification, shore based use, Submarine and Surface craft carry-on approval of multiple battery subsystems supporting Collective and Individual diver propulsion devices.		
Congressional Adds Subtotals	8.383	4.200

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• PROC/0210US: *Underwater Systems*	20.556	23.327	45.631	-	45.631	72.705	66.759	180.899	369.549	Continuing	Continuing

Remarks

D. Acquisition Strategy

• The SDV MK 11/SWCS uses full and open competition with a down select to a single contractor. The full spectrum of contracting activities are being employed for subsystem and utilized for any integration and subsystem requirements, using existing contracts where appropriate, government agencies, and new contracts as necessary. Sole source Justification and Approval (J&A) was approved and awarded to deliver final production articles to meet Full Operational Capability (FOC).

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

• The DCS Block I uses full and open competition, resulting in the selection of a single prime contractor and award of a Fixed Price Incentive Firm Target contract for three vessels.

• The DDS is currently in sustainment through a maintenance and service contract which was competitively sourced, and awarded for a five-year period. The modernization and engineering/change efforts for the six DDS in inventory are executed utilizing the existing services contract.

• SOF Combat Diving is designated an MTA program which supports rapid prototyping and is executed using existing contracts, government agencies, and new contracts competitively selected as appropriate.

• The UCME will use streamlined Federal Acquisition Regulation (FAR) contracting with existing or planned Indefinite Delivery, Indefinite Quantity, Blanket Order Agreement, University Affiliated Research Center, and Federally Funded Research and Development Center contracts and use Non-FAR Acquisition Authorities and Other Transaction Authority agreements, where appropriate.

• The UUV Program will augment a Navy service common man-portable UUV with purpose built, modular, plug-and-play sensors and payloads to meet SOF requirements.

• The CCL engineering and manufacturing development was sole source. Additional development efforts will be sole source.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 United States Special Operations Command			Date: April 2022
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / *Maritime Systems*	Project (Number/Name) S0417 / *Underwater Systems*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SEAL Delivery Vehicle (SDV)/Shallow Water Combat Submersible (SWCS) Engineering Changes	C/Various	Various : Various	1.786	1.902	Jan 2021	4.348	Jan 2022	1.070	Jan 2023	-		1.070	Continuing	Continuing	-
Dry Combat Submersible (DCS) Enhancements / Pre-Planned Product Improvement (P3I) Changes	C/Various	Various : Various	17.569	6.830	Nov 2020	3.404	Nov 2021	2.199	Nov 2022	-		2.199	Continuing	Continuing	-
Classified Sub-Project	C/TBD	TBD : TBD	-	6.355		3.755		26.900		-		26.900	Continuing	Continuing	-
Dry Deck Shelter (DDS) Field Changes/ Enhancements	C/Various	Various : Various	-	0.828	Jan 2021	0.991	Jan 2022	2.814	Jan 2023	-		2.814	Continuing	Continuing	-
Special Operation Forces (SOF) Combat Diving-Unique Diving Technologies	Various	Various : Various	8.125	1.377	Feb 2021	1.876	Nov 2021	1.914	Feb 2023	-		1.914	Continuing	Continuing	-
SOF Combat Diving (Congressional Add)	C/Various	Various : Various	3.000	8.383	Mar 2021	4.200	Apr 2021	-		-		-	0.000	15.583	-
Undersea Craft Mission Equipment (UCME) Survivability, Navigation, C5ISR/SA, Power & Energy enhancements and other assured access technologies	C/Various	Various : Various	15.965	15.233	Dec 2020	17.948	Nov 2021	11.916	Nov 2022	-		11.916	Continuing	Continuing	-
MK18 Mod 1 Unmanned Underwater Vehicle (UUV)	C/Various	Various : Various	-	0.963	Feb 2021	0.968	Mar 2022	-		-		-	Continuing	Continuing	-
Prior Year Funding	Various	Various : Various	358.311	-		-		-		-		-	0.000	358.311	-
Prior Year Funding (Congressional Add)	C/Various	Various : Various	14.100	-		-		-		-		-	0.000	14.100	-
		Subtotal	418.856	41.871		37.490		46.813		-		46.813	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 United States Special Operations Command			Date: April 2022
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / *Maritime Systems*	Project (Number/Name) S0417 / *Underwater Systems*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Year Funding	Various	Various : Various	9.094	-		-		-		-		-	0.000	9.094	-
		Subtotal	9.094	-		-		-		-		-	0.000	9.094	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SDV/SWCS	Various	PSU ARL / JHU-APL : Laurel, MD / State College, PA	3.946	0.208	Nov 2020	-		-		-		-	0.000	4.154	-
DCS	C/Various	Various : Various	27.119	3.527	Oct 2020	1.945	Oct 2021	1.250	Nov 2022	-		1.250	Continuing	Continuing	-
SOF Combat Diving	Various	Various : Various	2.151	0.520	Oct 2020	1.119	Oct 2021	1.129	Oct 2022	-		1.129	Continuing	Continuing	-
CCL	C/Various	Various : Various	-	0.335	Dec 2020	-		-		-		-	0.000	0.335	-
Prior Year Funding	Various	Various : Various	9.320	-		-		-		-		-	0.000	9.320	-
		Subtotal	42.536	4.590		3.064		2.379		-		2.379	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DCS	Various	Apogee : Tampa, FL	21.353	0.550	Feb 2021	1.639	Aug 2022	0.900	Aug 2023	-		0.900	Continuing	Continuing	-
Classified Sub-Project	Various	Various : Various	-	1.100		2.300		6.949		-		6.949	Continuing	Continuing	-
DDS	Various	NAVSEA : Washington, DC	2.472	0.334	Jan 2021	0.066	Jan 2022	0.267	Jan 2022	-		0.267	Continuing	Continuing	-
SOF Combat Diving	C/Various	Apogee : Tampa, FL	0.530	0.183	Dec 2020	0.188	Dec 2021	0.206	Dec 2022	-		0.206	Continuing	Continuing	-
UCME	C/Various	Various : Various	0.515	0.591	Dec 2020	0.577	Dec 2021	0.795	Dec 2022	-		0.795	Continuing	Continuing	-
Prior Year Funding	Various	Various : Various	9.331	-		-		-		-		-	0.000	9.331	-
		Subtotal	34.201	2.758		4.770		9.117		-		9.117	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 United States Special Operations Command			Date: April 2022
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / *Maritime Systems*	Project (Number/Name) S0417 / *Underwater Systems*	

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	504.687	49.219		45.324		58.309		-		58.309	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

SEAL Delivery Vehicle MK 11 Shallow Water Combat Submersible Schedule

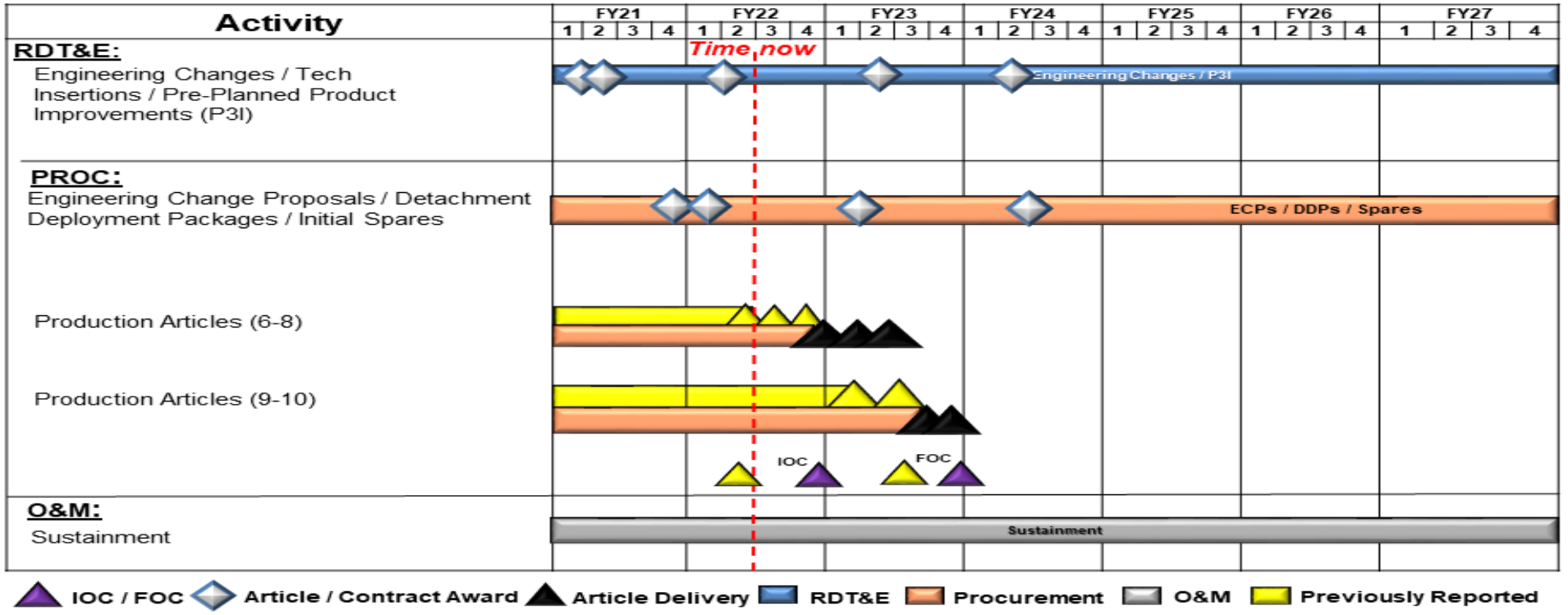


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

Dry Combat Submersible (DCS) Schedule

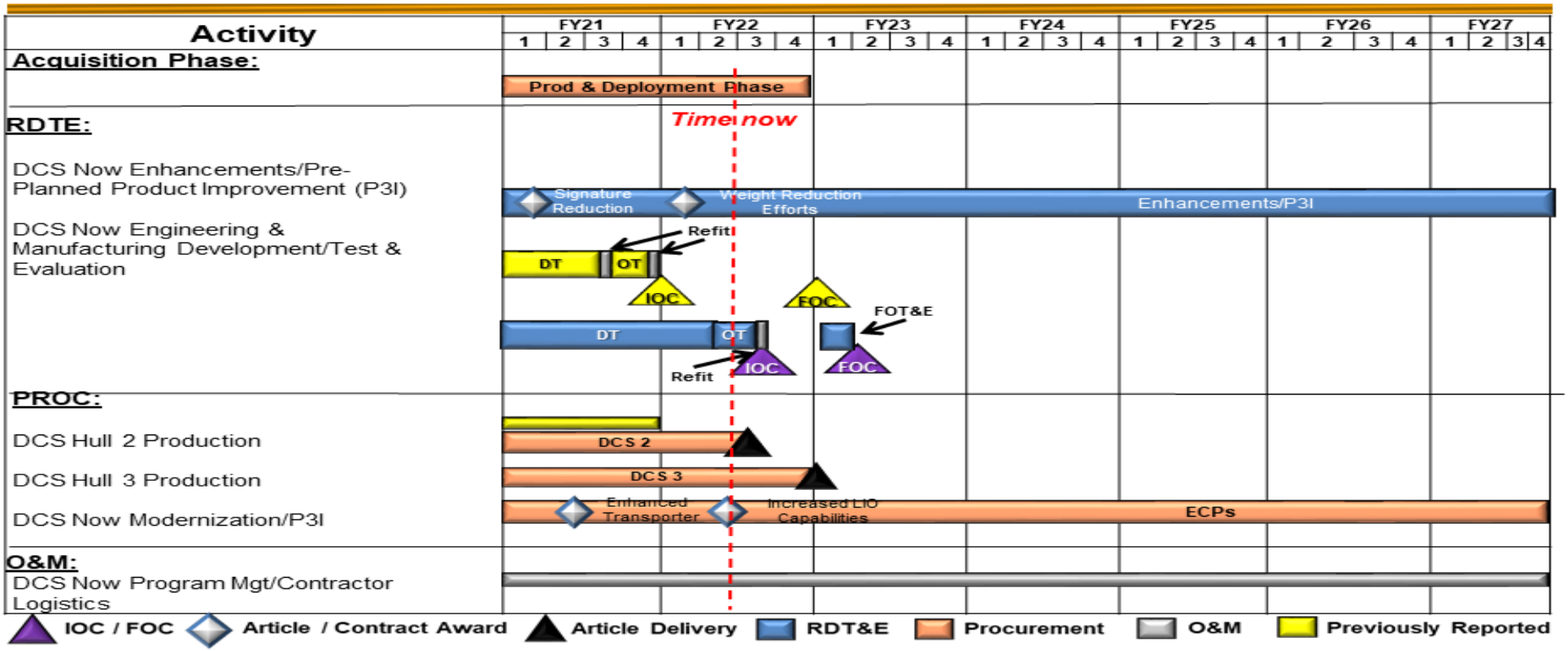


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

Dry Deck Shelter (DDS) Schedule

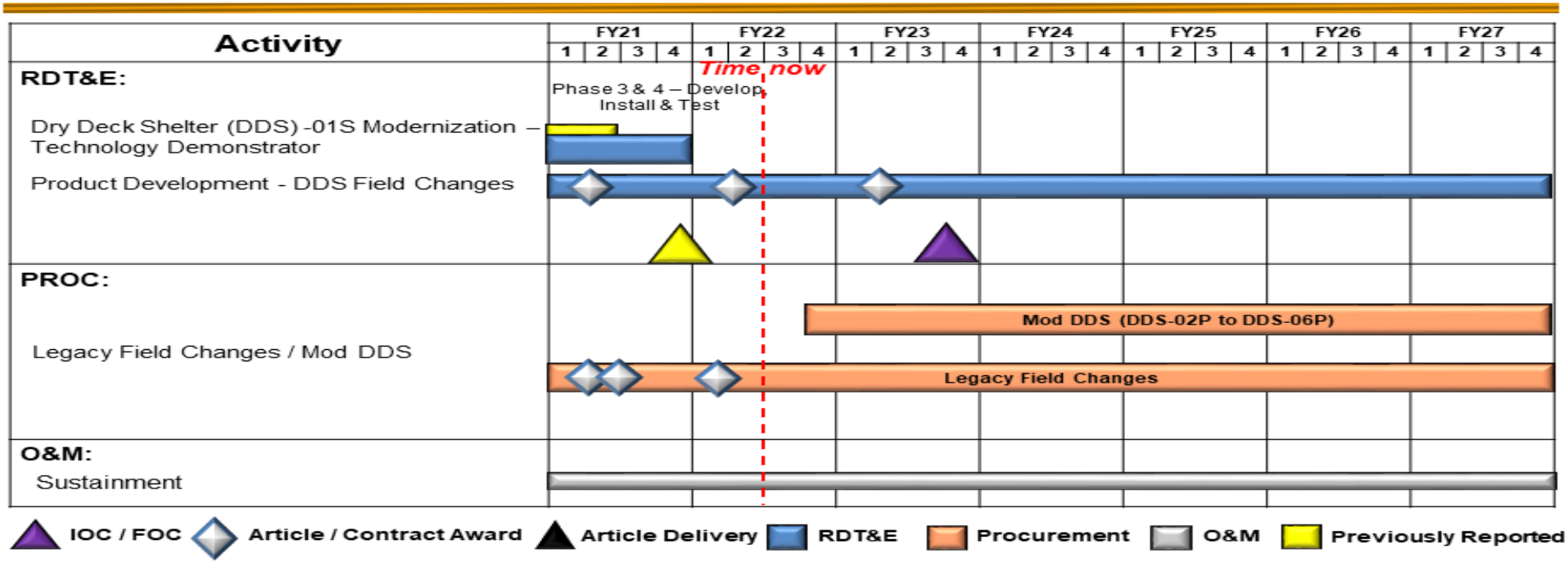
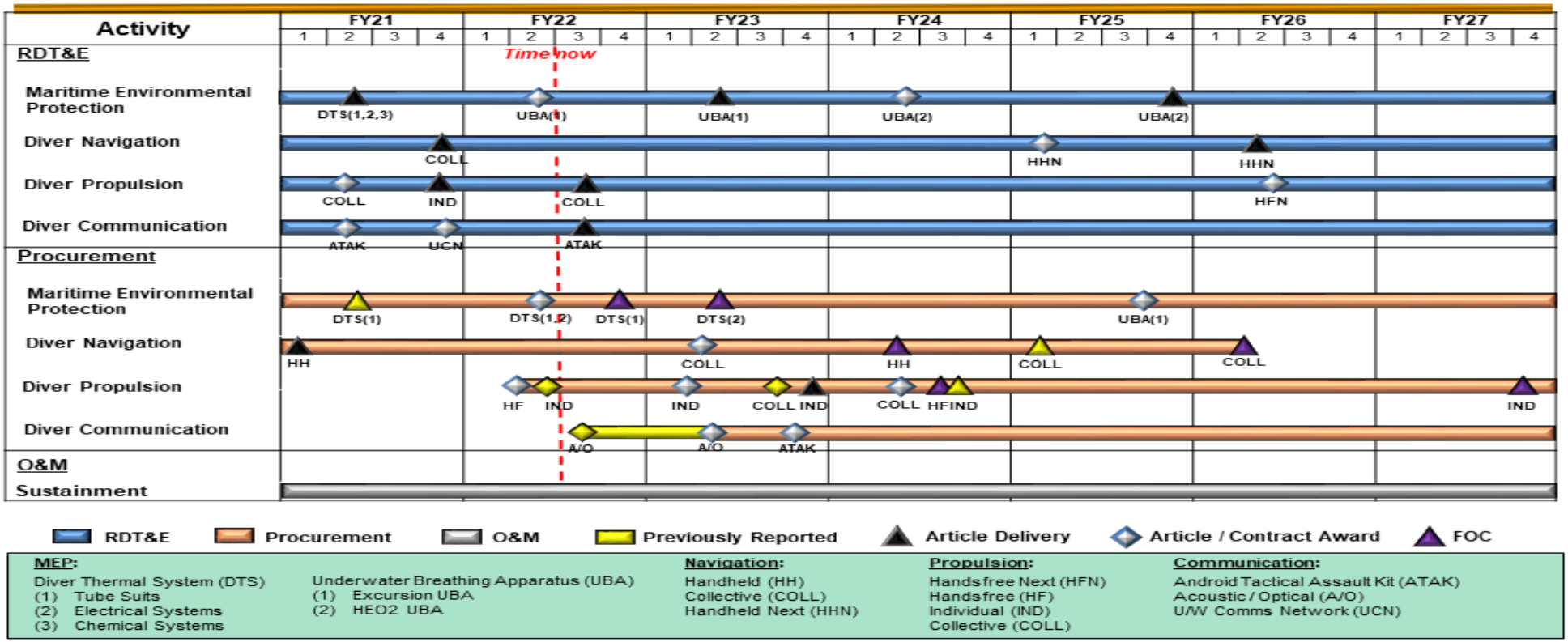


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

Special Operations Forces Combat Diving Schedule



MEP:
Diver Thermal System (DTS)
(1) Tube Suits
(2) Electrical Systems
(3) Chemical Systems

Underwater Breathing Apparatus (UBA)
(1) Excursion UBA
(2) HEO2 UBA

Navigation:
Handheld (HH)
Collective (COLL)
Handheld Next (HHN)

Propulsion:
Handsfree Next (HFN)
Handsfree (HF)
Individual (IND)
Collective (COLL)

Communication:
Android Tactical Assault Kit (ATAK)
Acoustic / Optical (A/O)
U/W Comms Network (UCN)

Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

Undersea Craft Mission Equipment Schedule

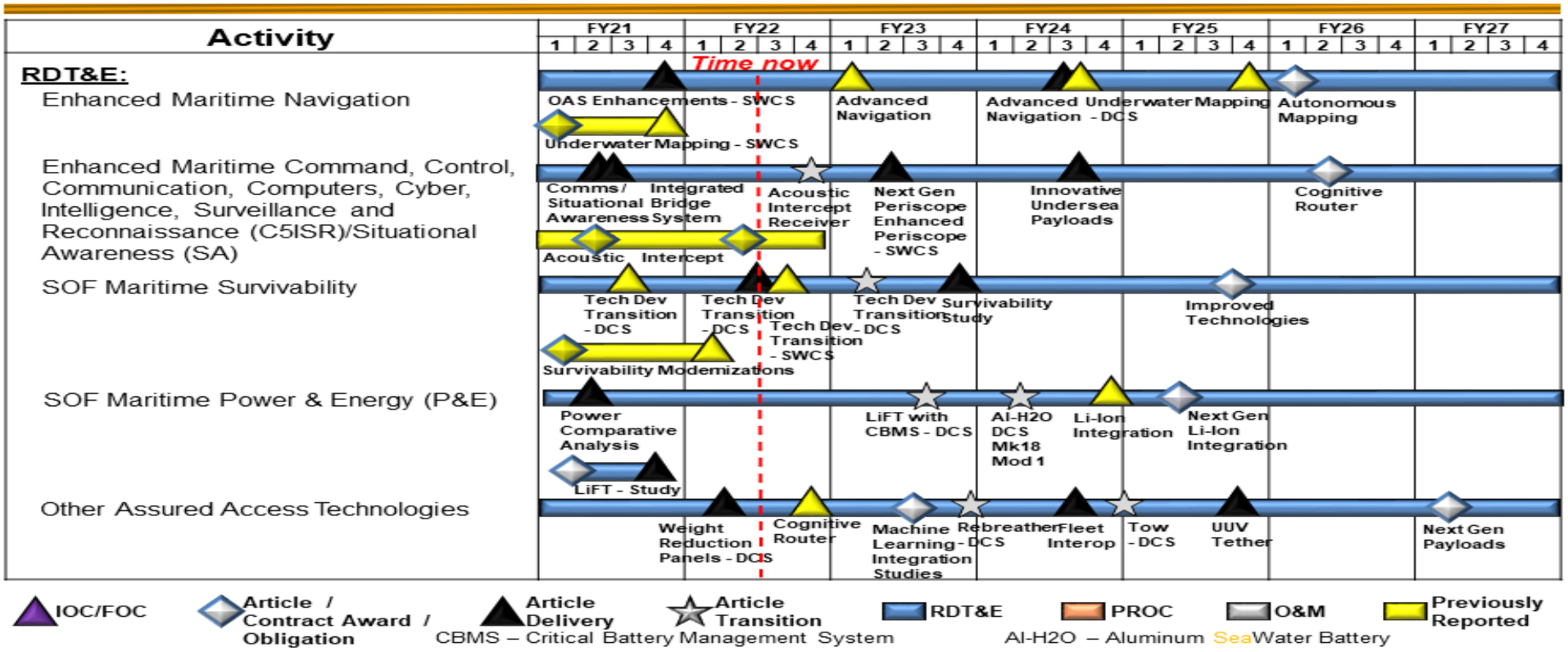


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

MK 18 Mod 1 Unmanned Underwater Vehicle Schedule

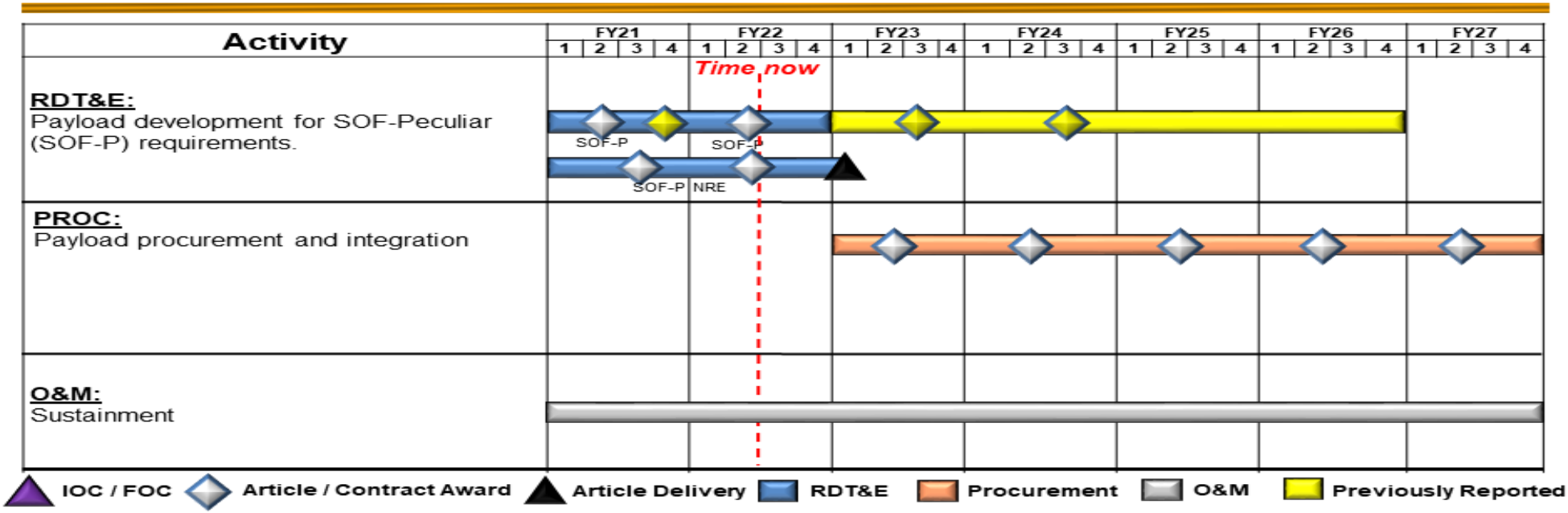


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

Combatant Craft Light Schedule

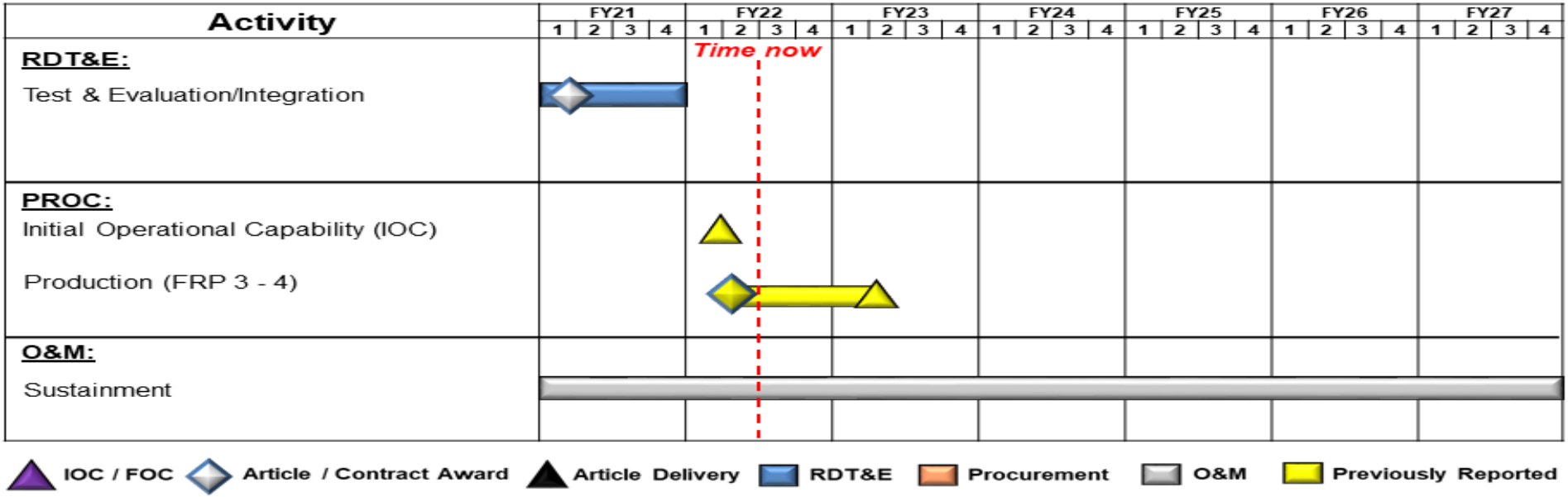


Exhibit R-4A, RDT&E Schedule Details: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SEAL Delivery Vehicle (SDV)/Shallow Water Combat Submersible (SWCS)				
Engineering Changes/Technology Insertions/Pre-planned Product Improvements (P3I)	1	2021	4	2027
Dry Combat Submersibles (DCS)				
Block I Enhancements/P3I	1	2021	4	2027
Block I Developmental Test and Evaluation	1	2021	2	2022
Block I Operational Test and Evaluation	2	2022	3	2022
Dry Deck Shelter Modernization (DDS)				
Phase 3 & 4 Development, Install, and Test - Modernization Technology Demonstrator	1	2021	4	2021
Product Development DDS Field Changes	1	2021	4	2027
Special Operation Forces (SOF) Combat Diving				
Maritime Environmental Protection Rapid Prototyping, Test, and Integration	1	2021	4	2027
Diver Navigation Rapid Prototyping, Test, and Integration	1	2021	4	2027
Diver Propulsion Rapid Prototyping, Test, and Integration	1	2021	4	2027
Diver Communication Rapid Prototyping, Test, and Integration	1	2021	4	2027
Undersea Craft Mission Equipment (UCME)				
Enhanced Maritime Navigation	1	2021	4	2027
Enhanced Maritime Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance and Reconnaissance (C5ISR)/Situational Awareness (SA)	1	2021	4	2027
Special Operations Forces (SOF) Maritime Survivability	1	2021	4	2027
SOF Maritime Power & Energy (P&E)	1	2021	4	2027
Other Assured Access Technologies	1	2021	4	2027
MK18 Mods 1 Unmanned Underwater Vehicle (UUV)				
MK18 Mods 1 UUV Pre-Planned Product Improvement - Payload Development	1	2021	4	2022

Exhibit R-4A, RDT&E Schedule Details: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S0417 / *Underwater Systems*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Combatant Craft Light (CCL)				
Test and Evaluation/Integration	1	2021	4	2021

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command			Date: April 2022
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / *Maritime Systems*	Project (Number/Name) S1684 / *Surface Craft*	

COST ($ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
S1684: *Surface Craft*	73.970	16.818	17.306	24.336	-	24.336	23.590	25.149	116.007	116.124	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides for Engineering and Manufacturing Development of combatant craft, combatant craft mission equipment, Pre-Planned Product Improvement (P3I), and technology insertion to meet the unique requirements of Special Operations Forces (SOF). This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to quickly respond to new requirements for maritime craft and subsystems. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully conduct operations associated with SOF maritime missions.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Title: Combatant Craft Medium (CCM)	2.161	0.989	3.600
Description: The CCM is a semi-enclosed multi-mission combatant craft for platoon-size maritime mobility in maritime contested environments. It is multi-mission capable, including Maritime Interdiction, Insert/Extract, and Visit, Board, Search, and Seizure (VBSS) Operations. The CCM is Naval Special Warfare's (NSW) craft-of-choice for long-range, high-payload SOF mobility operations in contested environments. The CCM has NSW's best Iron Triangle: 40 knot (kt) speed; 4 crew + 19 passengers (pax)/10,000 pound (lb) payload; and 600 nautical miles (nm) range. The CCM payload capacity enables inclusion of shock mitigating seats, which is critical for ride quality, operator tactical readiness, and operator health. At 60 feet long, CCM is C-17/ C-5 transportable and can launch/recover by well deck or shore based trailer.			
FY 2022 Plans: Begin aft enclosure craft integration and testing. Continue survivability enhancements, and Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance (C5ISR) upgrades. Complete Joint Threat Warning System (JTWS) integration.			
FY 2023 Plans: Completes aft enclosure integration and testing. Continues development and testing of craft and C5ISR upgrades. Continues focus on survivability enhancements.			
FY 2022 to FY 2023 Increase/Decrease Statement: Increase of $2.611 million due to extensive survivability testing, design of service life enhancing capabilities, and interoperability testing.			
Title: Combatant Craft Heavy (CCH)	1.228	0.933	3.953
Description: The CCH provides platoon-size maritime surface mobility. The current CCH is the Sea, Air, Land Insertion, Observation and Neutralization (SEALION) craft. The SEALION is a fully-enclosed, climate-controlled, semi-submersible craft			

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
that operates in contested environments. The SEALION is NSW's most versatile and survivable combatant craft and the craft-of-choice for sensitive maritime intelligence, surveillance, and reconnaissance missions. Iron Triangle: 40 kt speed; 7 crew + 12 pax / 3,300 lb payload; and 400 nm range. The SEALION payload capacity enables inclusion of shock mitigating seats, which is critical for ride quality, operator tactical readiness, and operator health. At 77+ feet long, the SEALION is C-17/C-5 transportable and can launch/recover by well deck, shore based mobile travel lift, or crane. ***FY 2022 Plans:*** Continue development and integration of C5ISR/SA and survivability enhancements. Complete JTWS integration. ***FY 2023 Plans:*** Continues development and integration of C5ISR/SA and survivability enhancements. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase of $3.020 million is to supports increased test range costs and support through NSW Capability Development Document, to include development for Technical Data Package for CCH-IV.			
Title: Combatant Craft Mission Equipment (CCME) ***Description:*** The CCME provides a rapid response capability to support SOF combatant craft systems, subsystems, and their emerging requirements. The CCME provides technology refresh efforts to correct system deficiencies, improve asset life, and enhance mission capability to leverage and exploit emerging technologies within the maritime SOF surface capability portfolio. CCME focuses on spearheading specific Technology Readiness Level (TRL) 6 technology for compatibility, maturity, design for the marine environment, and successful transition to SOF combatant craft programs. ***FY 2022 Plans:*** Continue evaluation and development of surface survivability enhancements; enhanced C5ISR/SA capabilities; unique power and energy capabilities such as hybrid electric propulsion; Assured Positioning, Navigation and Timing (A-PNT); and enabling technologies for assured access and against near peer threats, aligning to National Defense Strategy (NDS) priorities. ***FY 2023 Plans:*** Continues evaluation and development of surface survivability enhancements; enhanced C5ISR/SA capabilities; unique power and energy capabilities such as hybrid electric propulsion; Assured PNT; and enabling technologies for assured access and building enduring advantage, aligning to NDS priorities. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase of $0.168 million is due to increased complexity of technology focus areas.	6.574	7.788	7.956
Title: Combatant Craft Assault (CCA)	0.714	1.049	3.284

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Description: The CCA is a combatant craft for squad-size maritime mobility operations in contested environments. The CCA is NSW's best craft for Visit, Board, Search, Seizure operations. It is the craft-of-choice for maritime interdiction and boarding operations because of the open deck space, maneuverability, and interoperability with an Afloat Forward Staging Base. Iron Triangle: 40 kt speed; 5 crew + 10 pax/5,000 lb payload; and 300 nm range. At 41 feet long, CCA is air transportable by C-130/ C-17/C-5 and can launch/recover by crane, davit, well deck, or shore based trailer. ***FY 2022 Plans:*** Continue integration and testing of Combatant Craft Forward Looking Infrared 2 (CCFLIR2) mast design and Communications box/Tactical Operations Center Network (TOCNET). ***FY 2023 Plans:*** Completes integration and testing of CCFLIR2 mast design and Communications box/TOCNET. Begins integration and testing of JTWS. Begins integration of Maritime Tactical Mission Networking (MTMN). ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase of $2.235 million begins the JTWS integration and testing requirements and MTMN integration.			
Title: Maritime Precision Engagement (MPE) ***Description:*** The MPE is a family of standoff, loitering, man-in-the-loop weapons systems deployed on combatant craft and capable of targeting individuals, groups, vehicles, high value targets, and small oceangoing craft with low collateral damage. The MPE consists of combatant craft alterations, integration of the MK 50 Remote Weapon System (RWS), and munition launcher systems. Munitions for this effort are funded through PEO SOF Warrior. ***FY 2022 Plans:*** Continue development of craft modifications and operator control station to refine a fully integrated operational capability. Continue development and testing of the munition launcher B-kit to refine the EDM-2 MPE launcher and EDM-2 MK 50 RWS B-Kit. Continue development of CCM A-kit modifications and testing in preparation for transition to production. Begin planned product improvements. ***FY 2023 Plans:*** Continues development of craft modifications and operator control station to refine a fully integrated operational capability. Continues development and testing of the munition launcher B-kit to refine the EDM-2 MPE launcher and EDM-2 MK 50 RWS B-Kit. Continues development of CCM A-kit modifications and testing in preparation for transition to production. Continues planned product improvements. ***FY 2022 to FY 2023 Increase/Decrease Statement:***	6.141	6.547	4.943

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2021	FY 2022	FY 2023
Decrease of $1.604 million is due to completion of MK 50 RWS testing and transitioning to full production.			
Title: Special Operations Craft Riverine (SOCR) ***Description:*** SOCR is an aluminum-hull mobility platform for use in riverine and littoral areas for short range insertion of SOF in low to medium threat environments. ***FY 2023 Plans:*** Begins C5ISR and situational awareness system enhancements. Begins study for Next-Generation Riverine capability. ***FY 2022 to FY 2023 Increase/Decrease Statement:*** Increase of $0.600 million is due to initial technology enhancement efforts and Next-Generation Riverine Capability study.	-	-	0.600
Accomplishments/Planned Programs Subtotals	16.818	17.306	24.336

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• PROC/0204SCCS: *Combatant Craft Systems*	33.278	17.080	85.566	-	85.566	72.033	70.414	54.544	50.676	Continuing	Continuing

Remarks

N/A

D. Acquisition Strategy

• The CCM was a two-phase source selection process. Phase I involved a Small Business Set-Aside competition for two vendors to design, build and deliver test articles. Phase II selected a single vendor to provide a fully integrated baseline craft system for test and evaluation with options for production, engineering support, and contractor logistics support.

• The CCH SEALION I & II were transitioned from United States Navy advanced technology demonstrator craft to USSOCOM. Sustainment for the SEALION I & II is conducted via Special Operations Forces Support Activity (SOFSA). The SEALION III is Sole Source to the Original Equipment Manufacturer (OEM) in order to take advantage of previous Government investments in manufacturing infrastructure for the SEALION I & II.

• The CCME will use streamlined Federal Acquisition Regulation (FAR) contracting with existing or planned Indefinite Delivery, Indefinite Quantity (IDIQ), Blanket Order Agreement (BOA), University Affiliated Research Center (UARC), and Federally Funded Research and Development Center (FFRDC) contracts and use Non-FAR Acquisition Authorities and Other Transaction Authority (OTA) agreements and MIPRs, where appropriate.

Exhibit R-2A, RDT&E Project Justification: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

• The CCA will continue to develop, test, and integrate C5ISR capability enhancements required to increase the crafts performance characteristics, reliability, and survivability. Exercised ordering period one (1) of the five-year indefinite delivery - IDIQ contract supporting Capital Equipment Replacement Program (CERP).

• The MPE will employ Government engineering expertise and lessons learned to develop a common launch system for NSW combatant craft. Low inventory of production units will be procured through Naval Surface Warfare Center (DAHLGREN).

• The SOCR will conduct pre-award preliminary studies for next generation SOF riverine craft to include hybrid electric propulsion options.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 United States Special Operations Command			Date: April 2022
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / *Maritime Systems*	Project (Number/Name) S1684 / *Surface Craft*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Combatant Craft Medium (CCM)	C/Various	Various : Various	19.478	2.161	Nov 2020	0.989	Nov 2021	3.600	Nov 2022	-		3.600	Continuing	Continuing	-
Combatant Craft Heavy (CCH)	C/Various	Various : Various	10.568	1.228	Jan 2021	0.933	Jan 2022	3.953	Jan 2023	-		3.953	Continuing	Continuing	-
Combatant Craft Mission Equipment (CCME)	C/Various	Various : Various	13.948	6.574	Nov 2020	7.788	Nov 2021	7.956	Nov 2022	-		7.956	Continuing	Continuing	-
Combatant Craft Assault (CCA)	C/Various	Various : Various	3.395	0.714	Nov 2020	1.049	Nov 2021	3.284	Nov 2022	-		3.284	Continuing	Continuing	-
Maritime Precision Engagement (MPE)	C/Various	NSWC : Dahlgren, VA	15.225	5.931	Dec 2020	6.301	Dec 2021	4.685	Dec 2022	-		4.685	Continuing	Continuing	-
Special Operations Craft Riverine (SOCR)	C/Various	Various : Various	-	-		-		0.600	Mar 2023	-		0.600	Continuing	Continuing	-
Prior Year Costs	C/Various	Various : Various	4.215	-		-		-		-		-	0.000	4.215	-
		Subtotal	66.829	16.608		17.060		24.078		-		24.078	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Prior Year Costs	C/Various	Various : Various	3.646	-		-		-		-		-	0.000	3.646	-
		Subtotal	3.646	-		-		-		-		-	0.000	3.646	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2021 Cost	FY 2021 Award Date	FY 2022 Cost	FY 2022 Award Date	FY 2023 Base Cost	FY 2023 Base Award Date	FY 2023 OCO Cost	FY 2023 OCO Award Date	FY 2023 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MPE	C/Various	Various : Various	0.161	0.210	Dec 2020	0.246	Dec 2021	0.258	Dec 2022	-		0.258	Continuing	Continuing	-
Prior Year Costs	C/Various	Various : Various	3.334	-		-		-		-		-	0.000	3.334	-
		Subtotal	3.495	0.210		0.246		0.258		-		0.258	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 United States Special Operations Command			Date: April 2022
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160483BB / *Maritime Systems*	Project (Number/Name) S1684 / *Surface Craft*	

	Prior Years	FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	73.970	16.818		17.306		24.336		-		24.336	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

Combatant Craft Medium (CCM) MK1 Schedule

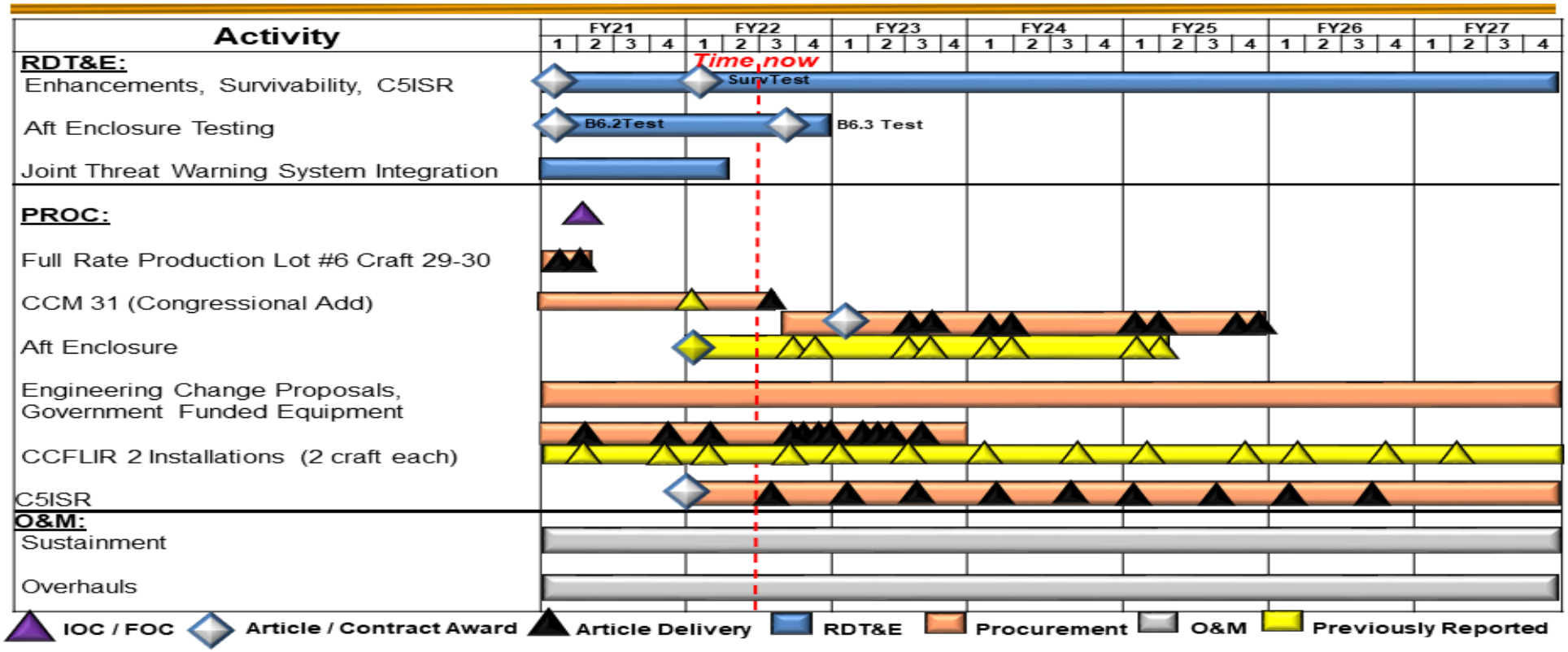


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

Combatant Craft Heavy (CCH) Schedule

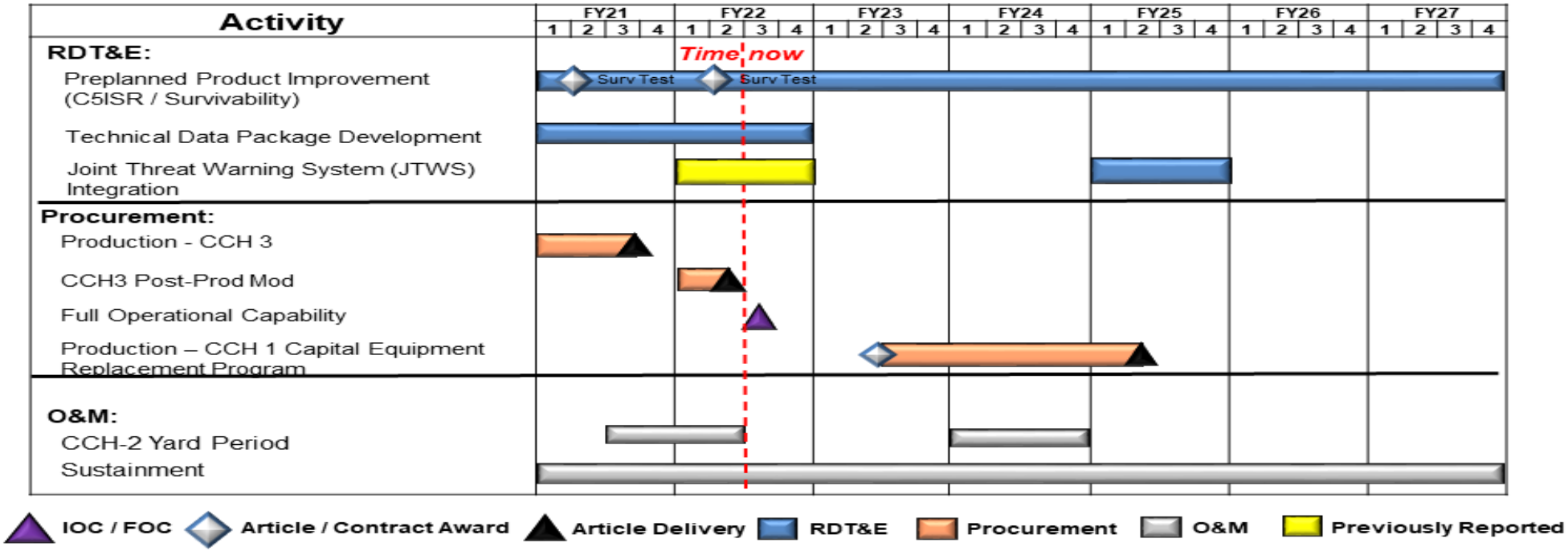


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

Combatant Craft Mission Equipment Schedule

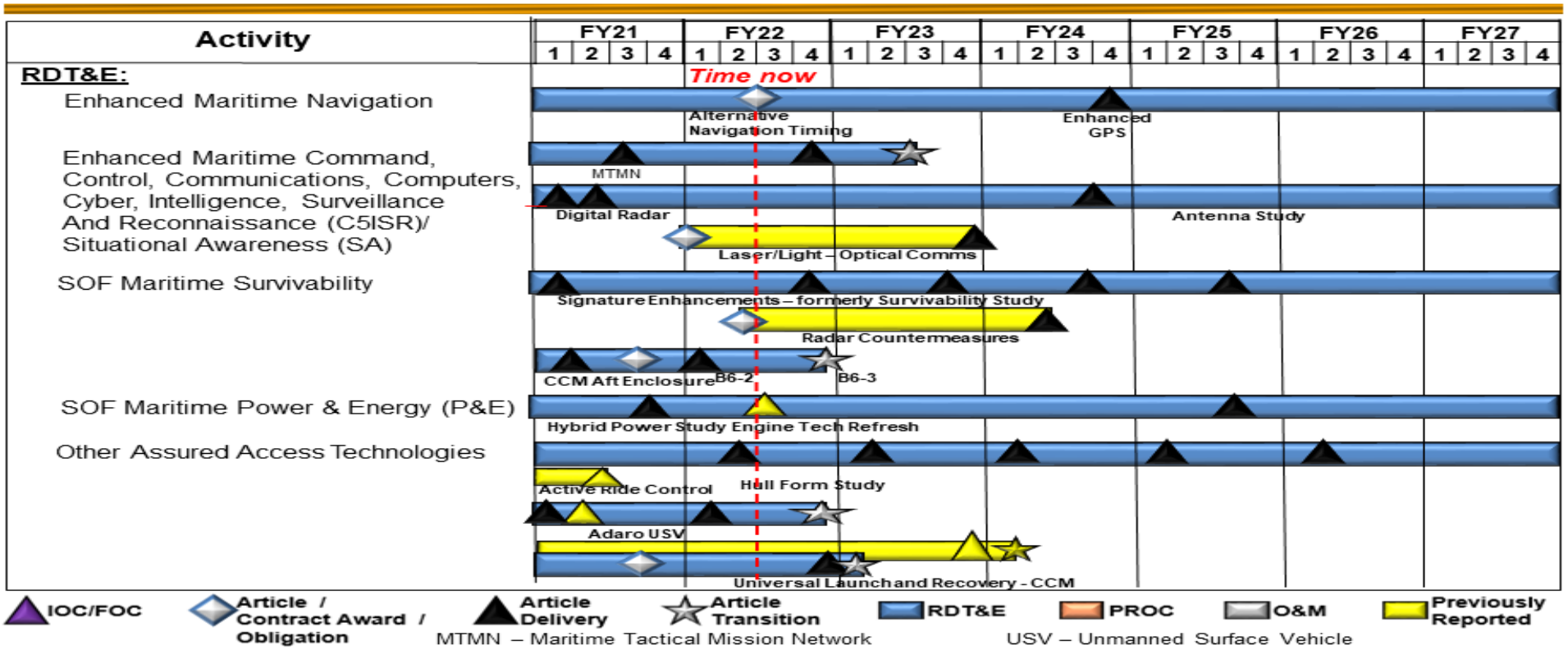


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

Combatant Craft Assault Schedule

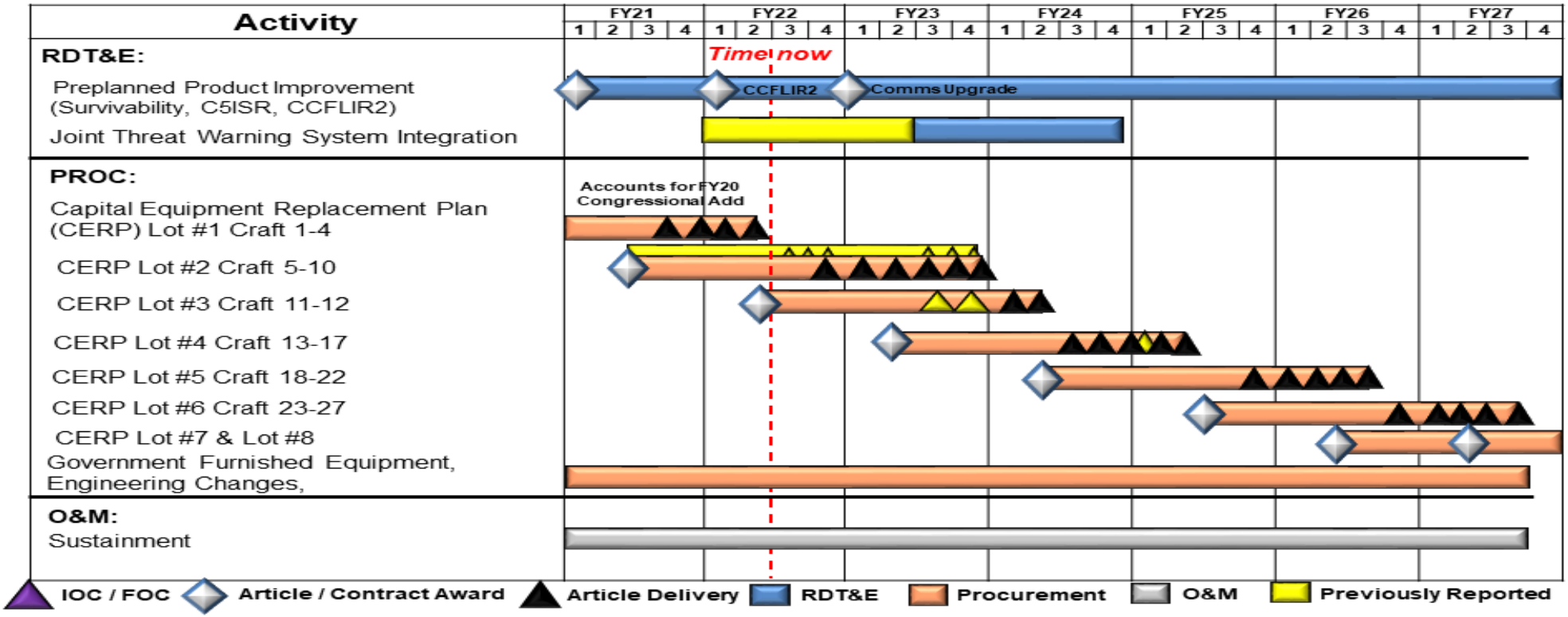
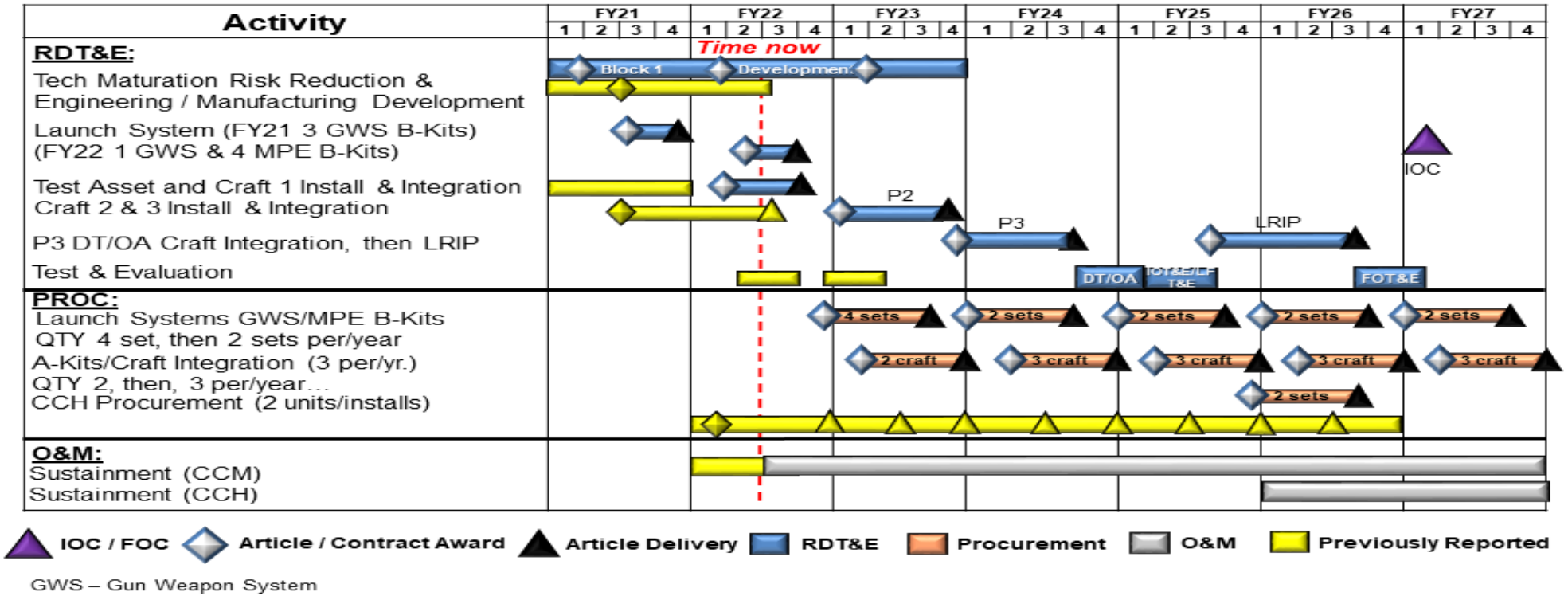


Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

Maritime Precision Engagement (MPE) Schedule



GWS – Gun Weapon System

Exhibit R-4, RDT&E Schedule Profile: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

Special Operations Craft Riverine Schedule

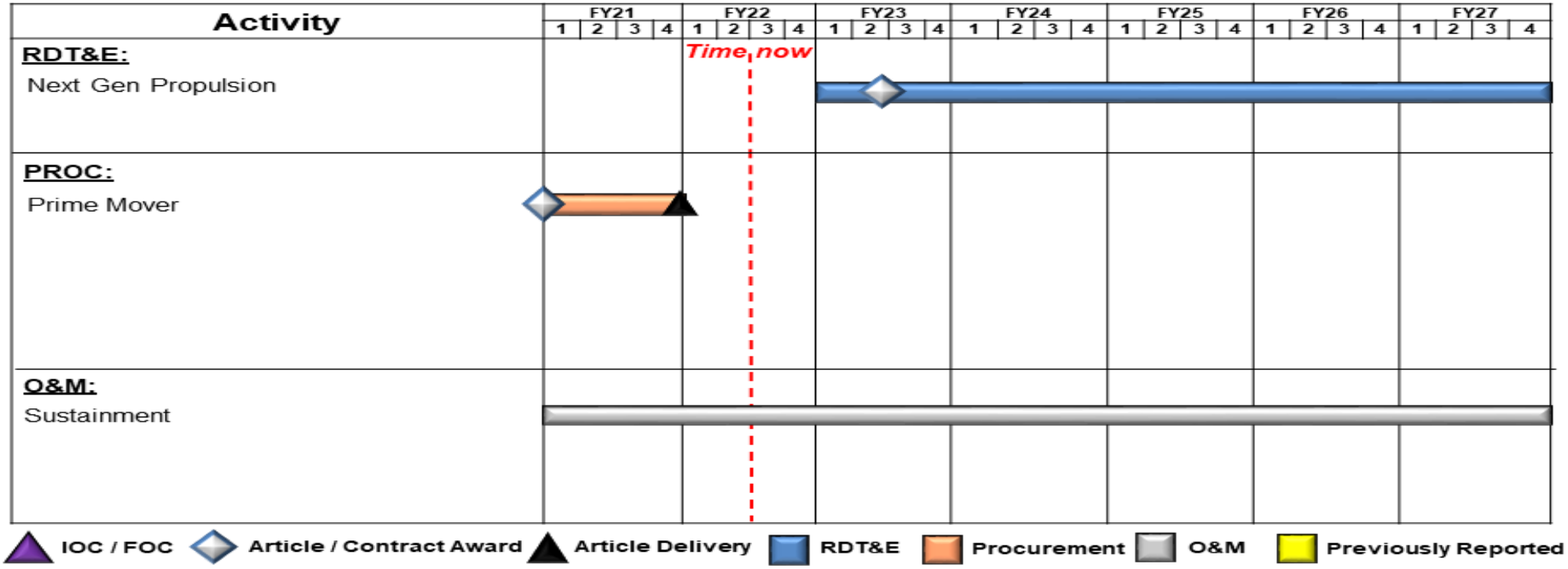


Exhibit R-4A, RDT&E Schedule Details: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Combatant Craft Medium (CCM)				
Weapons, Survivability, Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance (C5ISR) and Combatant Craft Forward Looking Infrared (CCFLIR2)	1	2021	4	2027
Aft Enclosure Testing	1	2021	4	2022
Joint Threat Warning System (JTWS) integration	1	2021	2	2022
Combatant Craft Heavy (CCH)				
Preplanned Product Improvement (Weapons / C5ISR / Survivability)	1	2021	4	2027
Technical Data Package Development	1	2021	4	2022
JTWS integration	1	2025	4	2025
Combatant Craft Mission Equipment (CCME)				
Enhanced Maritime Navigation	1	2021	4	2027
Enhanced Maritime C5ISR/Situational Awareness	1	2021	4	2027
SOF Maritime Survivability	1	2021	4	2027
SOF Maritime Power & Energy (P&E)	1	2021	4	2027
Assured Access Technologies	1	2021	4	2027
Combatant Craft Assault (CCA)				
Preplanned Product Improvement (Survivability, Weapons, C5ISR, CCFLIR2)	1	2021	4	2027
JTWS Integration	3	2023	4	2024
Maritime Precision Engagement (MPE)				
Tech Maturation risk Reduction& Engineering / Manufacturing Development	1	2021	4	2023
Launch Systems	3	2021	4	2021
Craft 1 Install & Integration	2	2022	4	2022

Exhibit R-4A, RDT&E Schedule Details: PB 2023 United States Special Operations Command		Date: April 2022
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1160483BB / *Maritime Systems*	**Project (Number/Name)** S1684 / *Surface Craft*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Craft 2 & 3 Install & Integration	1	2023	4	2023
P3 Development Test / Operational Assessment Craft Integration, then Low Rate Initial Production	4	2023	3	2026
Test & Evaluation	3	2023	3	2025
Special Operations Riverine Craft (SOCR)				
Next Gen Propulsion	1	2023	4	2027