Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy												Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*					R-1 Program Element (Number/Name) PE 0603208N *I Training System Aircraft*							
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	13.115	16.438	19.938	16.945	-	16.945	6.593	2.618	2.681	2.734	0.000	81.062
3367: *Training Aircraft Updates*	13.115	16.438	19.938	16.945	-	16.945	6.593	2.618	2.681	2.734	0.000	81.062

A. Mission Description and Budget Item Justification

This program element provides for design, development, integration and test of various pre-production platform improvements for Naval Undergraduate Flight Training Systems which include T-45, T-6, TH-57, and T-44 aircraft. Continued development engineering for improvements in reliability, maintainability, safety and meeting Federal Aviation Administration (FAA) Next Generation Air Transportation System (NextGen) flight safety requirements are required to ensure maximum benefit is achieved to provide effective cost of ownership and availability of aircraft to meet Chief of Naval Air Training (CNATRA) student training requirements. Specific efforts include, but are not limited to: T-45 Training System (TS) Required Avionics Sustainment Program (RASP) Phase I Automatic Dependent Surveillance-Broadcast (ADS-B) Out; T-6 Joint Primary Aircraft Training System (JPATS) Communication and Navigation System/Air Traffic Management (CNS/ATM); TH-57 Follow-On Training System and T-6 Rudder Binding Analysis.

This program is funded under SYSTEM DEVELOPMENT AND DEMONSTRATION because it includes those projects conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production decision.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	17.989	19.938	22.289	-	22.289
Current President's Budget	16.438	19.938	16.945	-	16.945
Total Adjustments	-1.551	0.000	-5.344	-	-5.344
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.171	0.000			
• SBIR/STTR Transfer	-0.381	0.000			
• Program Adjustments	0.000	0.000	-5.123	-	-5.123
• Rate/Misc Adjustments	0.001	0.000	-0.221	-	-0.221

Change Summary Explanation

FY 2018 adjustments include minor program adjustments:

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy	Date: May 2017
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0603208N *I Training System Aircraft*

Schedule: T-45 Training System (TS) Required Avionics Sustainment Program (RASP) updated to reflect schedule impacts resulting from adjustment in technical baseline in May 2016. This technical baseline adjusted the development efforts for the T-45's navigation source Global Positioning System (GPS) to evaluate the possibility of incorporating a common GPS utilized by other aircraft into the T-45 for compliance with Federal Aviation Administration (FAA) Next Generation Air Transportation System (NextGen) requirements. This development and evaluation is being conducted in parallel with Automatic Dependent Surveillance Broadcast (ADS-B) Out efforts, which are necessary to satisfy FAA NextGen requirements.

Schedule: T-6 A/B schedule updated to add schedule for T-6A development efforts (United States Air Force led).

Schedule: TH-57 Follow-On system updated to reflect focus on system development efforts.

Schedule: Training System Improvement schedule updated to incorporate Joint T-6 study efforts with United States Air Force.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May 2017		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0603208N / *Training System Aircraft*				Project (Number/Name) 3367 / *Training Aircraft Updates*			
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
3367: *Training Aircraft Updates*	13.115	16.438	19.938	16.945	-	16.945	6.593	2.618	2.681	2.734	0.000	81.062
Quantity of RDT&E Articles		24	-	-	-	-	-	-	-	-		

Note

The Federal Aviation Administration (FAA) has developed a plan to modernize the National Airspace System (NAS) in order to address the impact of air traffic growth in the United States. This multi-phase plan, called Next Generation Air Transportation System (NextGen) is intended to increase the air traffic capacity while at the same time improving safety and efficiency. In part, NextGen implements a capability called Performance Based Navigation (PBN) in which the aircraft's navigation performance capability will be a determining factor as to whether or not it can fly within specific airspace, certain air traffic routes or instrumental procedures. Also, NextGen transforms the NAS from a radar based system, with aircraft interrogation, to a satellite based system utilizing Automatic Dependent Surveillance-Broadcast (ADS-B) Out communication in order to transmit the aircraft's own position to the controllers and other ADS-B IN capable aircraft. PBN is an enabler for ADS-B functionality.

On May 28th, 2010 the FAA released DoT/FAA, 14 CFR Part 91: Automatic Dependent Surveillance-Broadcast (ADS-B) Out Performance Requirements to Support Air Traffic Control (ATC) Service Final Rule. This mandate stipulated that all aircraft required to have unrestricted access to operate in Classes A, B and C airspace; certain Class E airspace, and other specified airspace requiring ADS-B Out, must be in compliance with this regulation by January 1, 2020.

A. Mission Description and Budget Item Justification

The T-45 Training System (TS) Required Avionics Sustainment Program (RASP) Phase I ADS-B Out:

In order for the T-45TS to continue to have unrestricted access to the NAS through its projected end of service life, 2035, and avoid impacts to Chief of Naval Air Training (CNATRA) Strike Pilot and Naval Flight Officer (NFO) training, the T-45TS must develop, test and integrate the RASP Phase I ADS-B Out capability. This research and development effort is an ACAT III program and consists of the minimum required capability increase necessary to enable ADS-B Out in the T-45, equipping 197 aircraft and 18 simulators to meet the January 1, 2020 FAA ADS-B Out mandate. Specifically, this includes the development, integration, test and certification of the replacement for the APX-100 Transponder (with associated control panel, personality module, compliant navigation source and data bus connectivity), the replacement of the Air Data Computer (ADC), and the integration of these components with the existing aircraft antennas and Mission Display Processor (MDP) Operational Flight Program (OFP) software.

The T-6 Joint Primary Aircraft Training System (JPATS) Communication and Navigation System/Air Traffic Management (CNS/ATM):

JPATS is a joint United States Navy (USN)/United States Air Force (USAF) Acquisition Program designed to replace the aging primary aircraft (T-34/T-37) fleet. Principle JPATS mission is primary training for entry-level Navy/Air Force student pilots, associated instructor pilots, and primary/intermediate training for USN Naval Flight Officers (NFO). JPATS includes the T-6 Texan II, which is a stepped tandem seat, commercially derived aircraft powered by a single Pratt & Whitney PT6A-68 turboprop engine. It serves as the aircraft component of the JPATS integrated primary pilot training system. In order for the T-6 A&B training aircraft to continue to have unrestricted access to the national air space through its projected end of service life and avoid impacts to CNATRA primary entry-level student pilots and NFO

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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training, the T-6 program must develop, integrate, test and certify ADS-B Out capability for both the A&B models. This effort will consist of the minimum required capability increase necessary for ADS-B Out, enabling 295 aircraft and 34 simulators to meet the January 1, 2020 FAA mandate. This effort includes, but is not limited to, development, integration, test and certification.

The TH-57 Follow-On Training System:

The TH-57 Training System consists of TH-57B aircraft, TH-57C aircraft, and associated family of ground based training devices. The TH-57 Training System is experiencing obsolescence, diminishing manufacturing sources and material shortages, training capability gaps (as identified in the Capabilities based assessment Naval Aviation Undergraduate Flight Training), and increasingly expensive operating costs related to aging aircraft issues. This research and development effort will investigate alternatives for replacing the TH-57 training system and develop and validate the acquisition strategy for future procurement of the capability to continue to provide the fleet replacement squadrons with qualified and capable rotary-wing naval aviators to train on fleet platforms. This effort includes, but is not limited to, market research, requirements development, evaluation of acquisition strategies, evaluation of proposals, and testing of prototypes which are technically mature and ready for evaluation in the Engineering and Manufacturing Development phase.

Training System Improvements:

Efforts will provide for studies and analysis, design, development, integration and test of pre-production platform improvements for Naval Undergraduate Flight Training Systems, which will conduct engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production decisions.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: T45 Required Avionics Sustainment Program (RASP)	13.304	13.996	16.358	0.000	16.358
Articles:	18	-	-	-	-
Description: Funding supports development, integration, test, and certification of the Automatic Dependent Surveillance-Broadcast (ADS-B) Out capability in the T-45 Training System to comply with the January 1, 2020 Federal Aviation Administration ADS-B Out mandate.					
FY 2016 Accomplishments: Contract was awarded enabling the design and integration of the ADS-B Out solution for the T-45 to commence. It included the replacements to the transponder (with associated control panel, personality module, compliant navigation source and data bus connectivity), the Air Data Computer (ADC), and the integration of these components with the antennas and Mission Data Processor (MDP) Operational Flight Program (OFP) software. To allow for sufficient leadtime, 7 transponder kits and 7 ADC articles were purchased in FY 2016 (4 to support laboratory integration testing and 3 to support aircraft testing) for a total of 14 RDT&E,N articles.					
FY 2017 Plans:					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Continue the design and integration of the ADS-B Out solution with several Systems Engineering Technical Reviews planned such as Systems Requirements Review (SRR) in Q1 FY 2017 and a combined Preliminary / Critical Design Review (PDR/CDR) planned for Q3 FY 2017. Continuation of the Technology Maturation and Risk Reduction / Engineering Manufacturing Development (TMRR/EMD) contract for this ACAT III program supports Milestone B in FY 2017 and the certification process. ***FY 2018 Base Plans:*** Continue the ADS-B Out design and integration efforts to support Test Readiness Review (TRR) in early FY 2018 followed by laboratory integration testing. Flight Readiness Review (FRR) is planned to complete in Q4 FY 20018 followed by the commencement of on-aircraft developmental test in support of certification and a Milestone C decision in early FY 2019. ***FY 2018 OCO Plans:*** N/A					
Title: T6 A/B Communication and Navigation System/Air Traffic Management (CNS/ATM) ***Articles:*** ***Description:*** Funding supports development, integration, test, and certification of the Automatic Dependent Surveillance-Broadcast (ADS-B) Out capability in the T-6 A/B Training System to comply with the January 1, 2020 Federal Aviation Administration ADS-B Out mandate. ***FY 2016 Accomplishments:*** Continued engineering and manufacturing development efforts for T-6B Automatic Dependent Surveillance-Broadcast (ADS-B) Out capability. Conducted preliminary design review and critical design review for T-6B efforts. ***FY 2017 Plans:*** Continue T-6B efforts with completion of test and evaluation and transition to procurement. For United States Air Force (USAF) led T-6A efforts, development contract award is anticipated in 3Q FY 2017. ***FY 2018 Base Plans:*** Continue USAF led T-6A development efforts with completion of test and evaluation and transition to procurement. ***FY 2018 OCO Plans:*** N/A	3.134 6	2.990 -	0.556 -	0.000 -	0.556 -
Title: TH-57 Follow-On Training System	0.000	2.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Articles:	-	-	-	-	-
Description: The TH-57 Training System consists of TH-57B aircraft, TH-57C aircraft, and associated family of ground based training devices. The TH-57 Training System is experiencing obsolescence, diminishing manufacturing sources and material shortages, training capability gaps (as identified in the Capabilities Based Assessment Naval Aviation Undergraduate Flight Training), and increasingly expensive operating costs related to aging aircraft issues. This research and development effort will investigate alternatives for replacing the TH-57 training system and develop and validate the acquisition strategy for future procurement of the capability to continue to provide the fleet replacement squadrons with qualified and capable rotary-wing Naval Aviators. This effort includes, but is not limited to, market research, requirements development, evaluation of acquisition strategies, evaluation of proposals, and testing of prototypes. ***FY 2016 Accomplishments:*** N/A ***FY 2017 Plans:*** Activities to be conducted during FY 2017 include: analysis of alternatives and requirements development. ***FY 2018 Base Plans:*** N/A ***FY 2018 OCO Plans:*** N/A					
Title: Training System Improvements	0.000	0.952	0.031	0.000	0.031
Articles:	-	-	-	-	-
Description: Funding provides for design, development, integration and test of platform improvements for Naval Undergraduate Flight Training Systems, which include T-45, T-6, TH-57 and T-44 aircraft. ***FY 2016 Accomplishments:*** N/A ***FY 2017 Plans:*** Conduct engineering analysis and studies for reliability improvements to T-45 Data Acquisition Unit, T-35 Virtual Mission Training System (VMTS) Throttle Grip, T-44 Tail Section Fatigue Life, and Joint Study efforts for T-6 with Air Force. ***FY 2018 Base Plans:***					

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Continue studies & development efforts for platform improvements for Naval Undergraduate Flight Training Systems, including but not limited to joint efforts with Air Force for Joint Primary Aircraft Training System (T-6). ***FY 2018 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	16.438	19.938	16.945	0.000	16.945

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• APN/0569: *T45 Series*	81.652	114.887	148.071	-	148.071	171.974	174.024	178.532	182.092	757.990	2,527.971
• APN/0571: *JT Primary Acft Trnr Sys (JPATS)*	12.537	17.401	27.007	-	27.007	30.278	30.546	30.776	31.569	59.512	268.332

Remarks

D. Acquisition Strategy

T-45 Training System: Required Avionics Sustainment Program (RASP) Phase I is the first phase of an ACAT III Program of Record to equip the T-45 to operate in the Federal Aviation Administration's (FAA) Next Generation Air Transportation System (NextGen) airspace through the expected life of the T-45. The Research Development Test and Evaluation effort consists of a sole source Technology Maturation and Risk Reduction/ Engineering Manufacturing Development contract effort that awarded in FY 2016. Replacement kits for the Weapon Replaceable Assemblies (WRA) associated with the Automatic Dependent Surveillance-Broadcast (ADS-B) Out capability will be contracted through the Lead Systems Integrator for the Engineering Manufacturing Development phase through Test and Validation/Verification.

T6 Communication, Navigation, System/Air Traffic Management (CNS/ATM) and Avionics Upgrades for FAA Compliance are outside of the Joint Primary Aircraft Training System (JPATS) Major Defense Acquisition Program (MDAP) and will be established as a new Joint Acquisition Program with the United States Air Force. For the JPATS Avionics Upgrade for FAA Compliance effort, a competitive award will be the strategy for the T-6A air vehicles due to their federated design. The Navy is the lead for T-6B acquisition efforts and a sole-source strategy will be sought for the T-6B air vehicles due to proprietary hardware and software. Avionics in the T-6B are of an integrated design with proprietary hardware and software controlling input and output of navigation, communications, air data and other avionics information through an Integrated Avionics Computer (IAC). The CNS/ATM mandate requires integration into these systems in order to meet FAA Advisory Circular 20-165A Automatic Dependent Surveillance-Broadcast (ADS-B) Out system requirements and user capability requirements for flying in national airspace by 2020. Specifically, transponder and Global Positioning System (GPS) information that the ADS-B functions rely on are processed through proprietary software written to integrate with proprietary hardware designed by the same avionics manufacturer. A sole-source approach has been selected because the government does not own or have access to proprietary data to support development of hardware or software required to integrate ADS-B into the aircraft.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017
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The TH-57 Follow-On Training System effort will be established to determine and implement the most cost efficient and effective path forward for providing Rotary Wing Naval Aviators to the Fleet Replacement Squadrons. Possible acquisition paths include direct procurement of a new commercial off-the-shelf training system, some combination of procurement and services contract, or a services contract to provide aircraft, simulators, and ground instructors. This effort follows up the Office of the Chief of Naval Operations (OPNAV) N98 sponsored Capabilities Based Assessment Naval Aviation Undergraduate Flight Training Capabilities Based Assessment and follow on Initial Capabilities Document that is in work.

Training System Improvements: Efforts under this category are expected to be limited to those efforts meeting thresholds under the abbreviated acquisition category.

E. Performance Metrics

T-45 Training System: Performance of the program will be measured via the Acquisition and Systems Engineering Technical Review (SETR) Process for an ACAT III program. Milestone B is planned for 4th quarter FY 2017 with Milestone C planned for 1st quarter FY 2019.

T-6 Joint Primary Aircraft Training System (JPATS): For T-6B National Airspace Compliance is an Abbreviated Acquisition Program with Acquisition Milestones utilizing systems engineering processes.

TH-57 Follow-On Training System: The follow-on system to the TH-57 may be a new Major Defense Acquisition Program (MDAP) with Acquisition Milestones utilizing the systems engineering processes. If the procurement is determined to be services based, it will be a Category I services Acquisition.

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy			Date: May 2017
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
T45 Product Development Cost	SS/CPFF	Boeing : St. Louis, MO	2.633	9.525	Mar 2016	10.434	Sep 2017	12.126	Mar 2018	-		12.126	0.700	35.418	35.418
T6 Product Development Cost	C/CPFF	Beechcraft Defense Company, LLC/ HBC : Wichita, KS	3.716	0.154	May 2016	0.584	Nov 2016	0.290	Apr 2018	-		0.290	0.000	4.744	4.744
		Subtotal	6.349	9.679		11.018		12.416		-		12.416	0.700	40.162	40.162

Remarks

T6: FY 2018 Development Costs support United States Air Force led efforts for T-6A aircraft.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
T45 Systems Engineering Support - EMD	WR	NAWCAD : Patuxent River, MD	3.751	0.945	Jan 2016	0.958	Nov 2016	0.975	Nov 2017	-		0.975	3.580	10.209	-
T45 Integrated Logistics Support	WR	NAWCAD : Patuxent River, MD	0.650	0.598	Jan 2016	0.500	Nov 2016	0.509	Nov 2017	-		0.509	3.178	5.435	-
T45 Engineering Study	SS/BOA	JHU : Laurel, MD	0.300	0.000		0.400	Jun 2017	0.000		-		0.000	0.000	0.700	0.700
T6 Systems Engineering Support	WR	NAWCAD : Patuxent River, MD	0.229	1.441	Jan 2016	1.342	Dec 2016	0.000		-		0.000	0.000	3.012	-
T6 Systems Engineering Support	WR	NADEP : Jacksonville, FL	0.000	0.101	Jan 2016	0.102	Dec 2016	0.000		-		0.000	0.000	0.203	-
T6 Integrated Logistics Support	WR	NAWCAD : Patuxent River, MD	0.380	0.675	Jan 2016	0.157	Dec 2016	0.000		-		0.000	0.000	1.212	-
TH57 Systems Engineering Support	WR	NAWCAD : Patuxent River, MD	0.000	0.000		1.051	Oct 2016	0.000		-		0.000	0.000	1.051	-
TH57 Integrated Logistics Support	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.252	Oct 2016	0.000		-		0.000	0.000	0.252	-
TH57 Business Case/ Engineering Study	SS/BOA	JHU : Laurel, MD	0.000	0.000		0.423	Jun 2017	0.000		-		0.000	0.000	0.423	0.423
Training System Improvement Engineering	MIPR	NAWCWD : China Lake, CA	0.000	0.000		0.164	Dec 2016	0.000		-		0.000	0.000	0.164	-

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy			Date: May 2017
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Study T-6 Joint Study Efforts															
Training System Improvement T-6 Joint Study Efforts	MIPR	AFRL : Wright-Patterson AFB	0.000	0.000		0.000		0.031	Nov 2017	-		0.031	0.000	0.031	-
Training System Improvement T-45 DAU Power Engineering Analysis	C/BA	L-3 : Madison, MS	0.000	0.000		0.150	Mar 2017	0.000		-		0.000	0.000	0.150	0.150
Training System Improvement T-45 VMTS Throttle Grip Engineering Analysis.	C/BA	Boeing : St. Louis, MO	0.000	0.000		0.512	May 2017	0.000		-		0.000	0.000	0.512	0.512
Training System Improvement T-44 Tail Section Fatigue Life Extension Study	C/FFP	Beechcraft Defense : Wichita, KS	0.000	0.000		0.126	Jun 2017	0.000		-		0.000	0.000	0.126	0.126
		Subtotal	5.310	3.760		6.137		1.515		-		1.515	6.758	23.480	-

Remarks

Training System Improvement: Cost category added for T-6 Joint Study Efforts, T-45 Engineering Analysis Studies, and T-44 Tail Section Fatigue Life Extension Study.

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
T45 Test & Certification	WR	NAWCAD : Patuxent River, MD	0.000	0.800	Jan 2016	0.350	Nov 2016	0.656	Nov 2017	-		0.656	1.448	3.254	-
T6 Test and Evaluation	C/CPFF	Beechcraft Defense Corp, LLC : Wichita, KS	0.000	0.000	Mar 2016	0.125	Dec 2016	0.000		-		0.000	0.000	0.125	0.125
TH57 Test and Evaluation	WR	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
		Subtotal	0.000	0.800		0.475		0.656		-		0.656	1.448	3.379	-

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy		Date: May 2017
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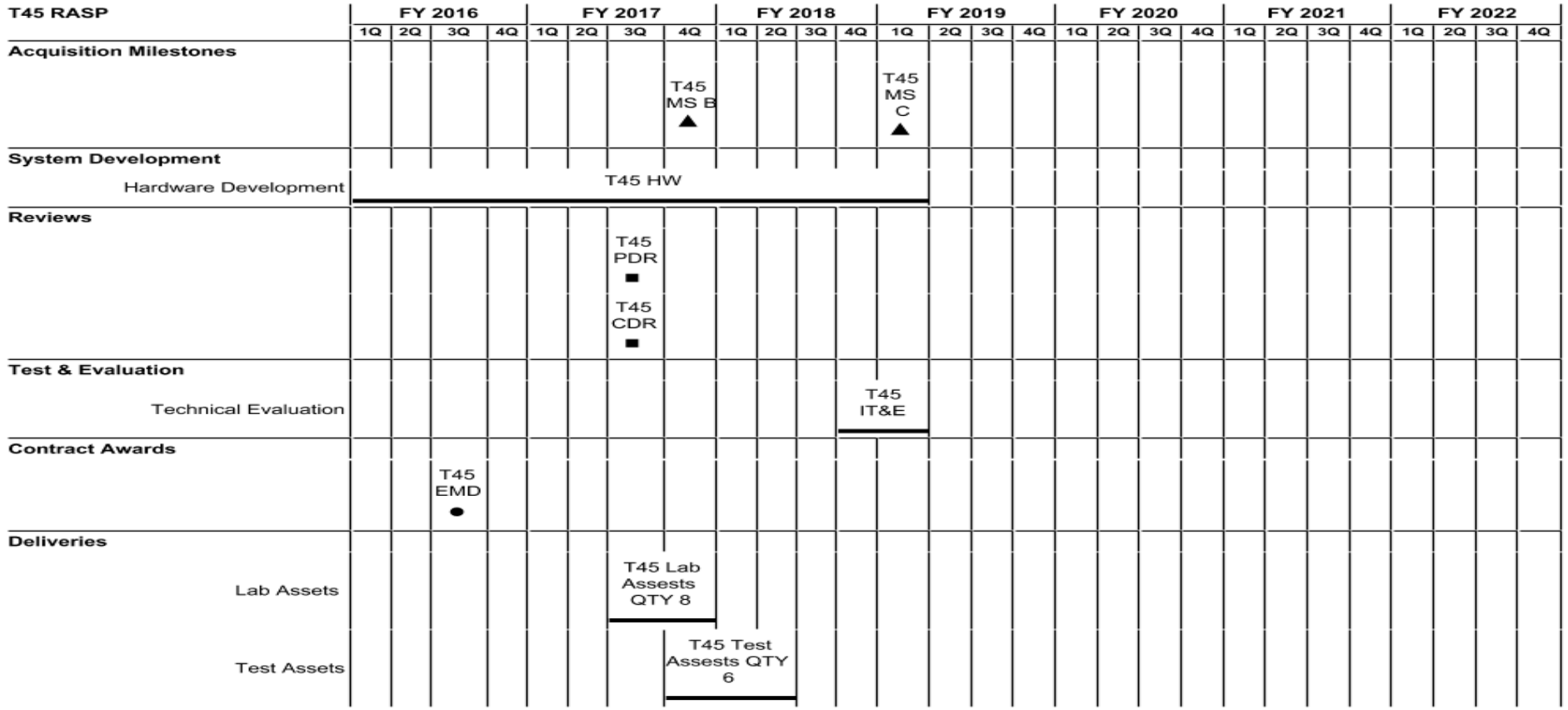
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
T45 Program Management	Various	Various : Various	0.000	0.600	Jan 2016	0.600	Nov 2016	1.324	Nov 2017	-		1.324	2.200	4.724	-
T-45 Test Wing Maintenance	C/FFP	L-3 : Patuxent River, MD	0.000	0.830	Nov 2015	0.710	Oct 2016	0.723	Oct 2017	-		0.723	1.200	3.463	3.463
T45 Travel	Various	NAVAIR : Patuxent River, MD	0.020	0.006	Oct 2015	0.044	Oct 2016	0.045	Oct 2017	-		0.045	0.142	0.257	-
T6 Program Management	Various	Various : Various	1.416	0.475	Jan 2016	0.345	Nov 2016	0.000		-		0.000	0.000	2.236	-
T6 Test Wing Maintenance Parts	C/CPFF	DYNCORP International LLC : Patuxent River, MD	0.000	0.186	Oct 2015	0.285	Oct 2016	0.266	Oct 2017	-		0.266	0.000	0.737	0.737
T6 Travel	Various	NAVAIR : Patuxent River, MD	0.020	0.102	Oct 2015	0.050	Oct 2016	0.000		-		0.000	0.000	0.172	-
TH57 Progam Management	Various	Various : Various	0.000	0.000		0.232	Oct 2016	0.000		-		0.000	0.290	0.522	-
TH57 Travel	Various	Various : Various	0.000	0.000		0.042	Oct 2016	0.000		-		0.000	0.000	0.042	-
Training System Improvement Program Management	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	1.738	1.738	-
Training System Improvement Travel	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.150	0.150	-
		Subtotal	1.456	2.199		2.308		2.358		-		2.358	5.720	14.041	-

	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	13.115	16.438		19.938		16.945		-		16.945	14.626	81.062	-

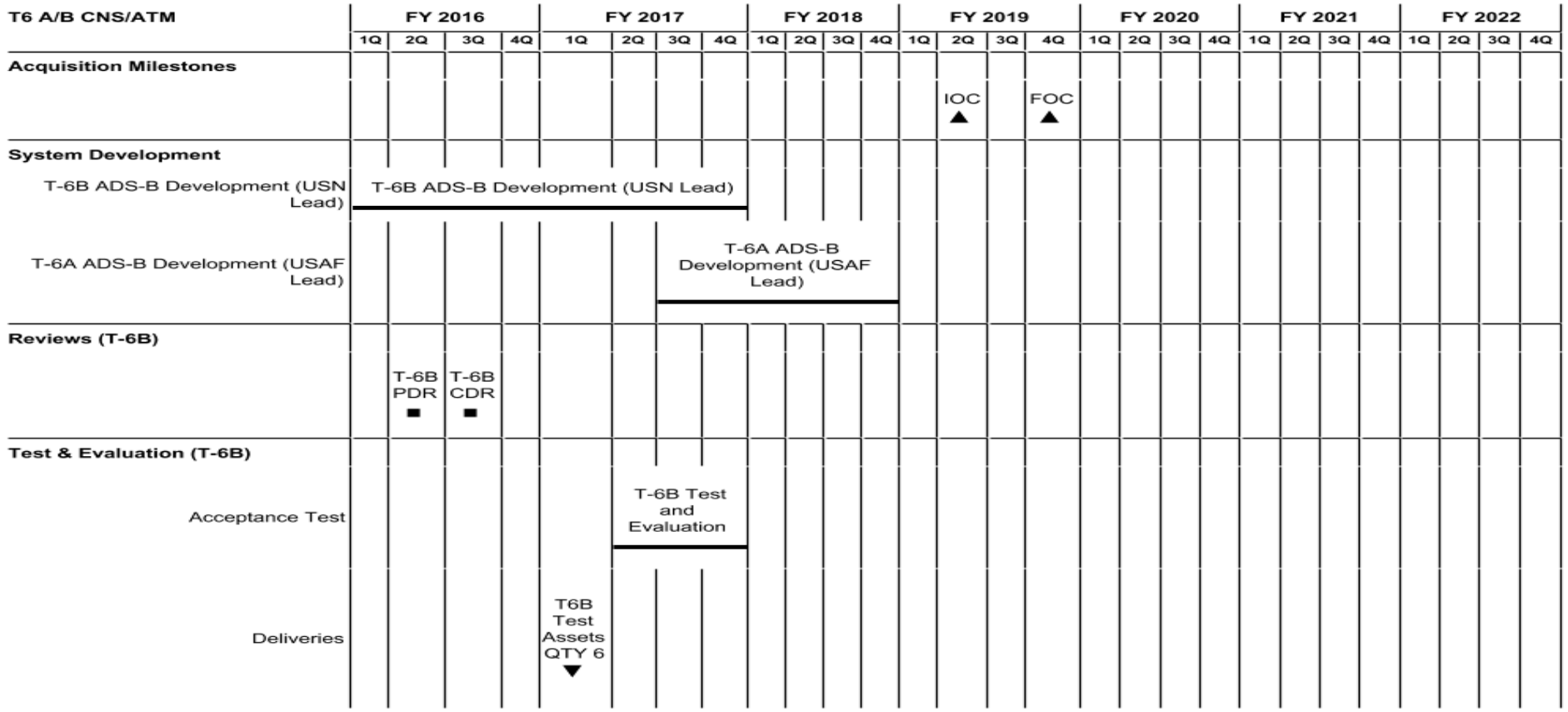
Remarks

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*



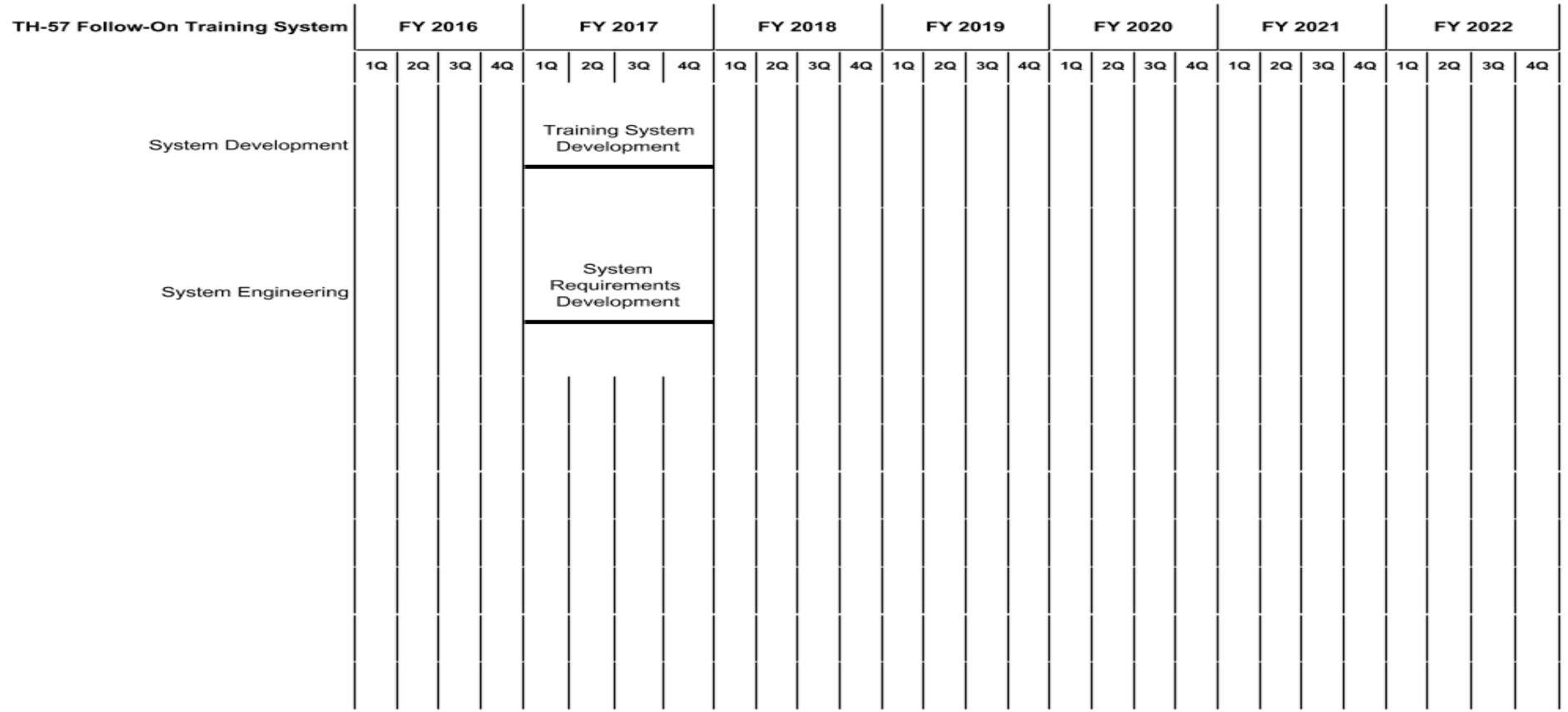
2018PB - 0603208N - 3367

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*



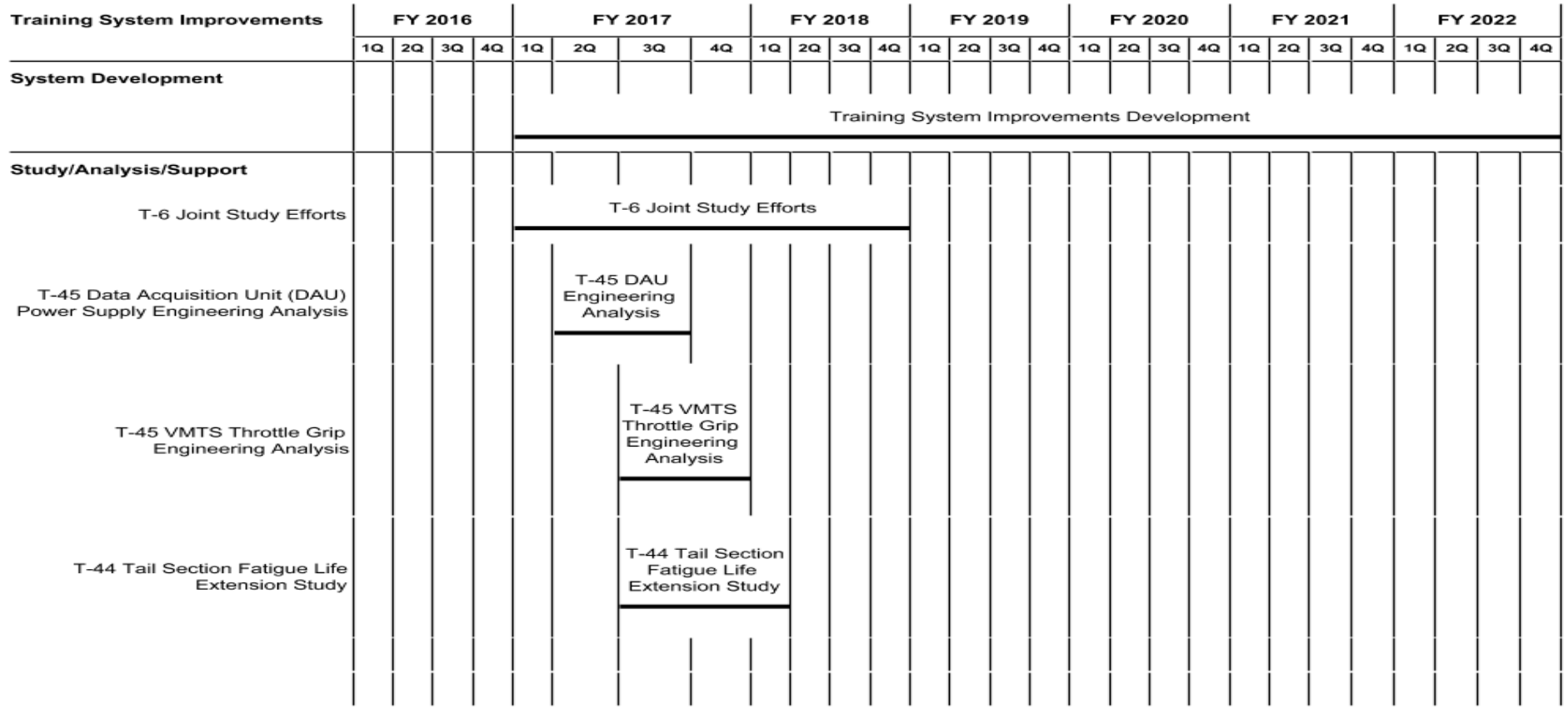
2018PB - 0603208N - 3367 Automatic Dependent Surveillance-Broadcast (ADS-B). T-6A ADS-B Development is Air Force Led. T-6B ADS-B Development is Navy led. Reviews, Test & Evaluation, and Test Assets listed reflect T-6B Development efforts.

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*



2018PB - 0603208N - 3367

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*



2018PB - 0603208N - 3367

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
T45 RASP				
Acquisition Milestones: T45 Milestone B	4	2017	4	2017
Acquisition Milestones: T45 Milestone C	1	2019	1	2019
System Development: Hardware Development: T45 Hardware Development	1	2016	1	2019
Reviews: T45 Preliminary Design Review	3	2017	3	2017
Reviews: T45 Critical Design Review	3	2017	3	2017
Test & Evaluation: Technical Evaluation: T45 Integrated Test & Evaluation	4	2018	1	2019
Contract Awards: T45 Engineering Manufacturing Development	3	2016	3	2016
Deliveries: Lab Assets: T45 Lab Assets	3	2017	4	2017
Deliveries: Test Assets: T45 Test Assets	4	2017	2	2018
T6 A/B CNS/ATM				
Acquisition Milestones: Initial Operational Capability	2	2019	2	2019
Acquisition Milestones: Full Operational Capability	4	2019	4	2019
System Development: T-6B ADS-B Development (USN Lead): T-6B ADS-B Development	1	2016	4	2017
System Development: T-6A ADS-B Development (USAF Lead): T-6A ADS-B Development	3	2017	4	2018
Reviews (T-6B): T-6B Preliminary Design Review	2	2016	2	2016
Reviews (T-6B): T-6B Critical Design Review	3	2016	3	2016
Test & Evaluation (T-6B): Acceptance Test: T-6B Acceptance Test	2	2017	4	2017
Test & Evaluation (T-6B): Deliveries: Test Assets	1	2017	1	2017
TH-57 Follow-On Training System				
System Development: Follow-On Training System Development	1	2017	4	2017

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy		Date: May 2017
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0603208N / *Training System Aircraft*	**Project (Number/Name)** 3367 / *Training Aircraft Updates*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
System Engineering: Follow-On Training System Requirements Development	1	2017	4	2017
Training System Improvements				
System Development: Training System Improvements Development	1	2017	4	2022
Study/Analysis/Support: T-6 Joint Study Efforts: T-6 Joint Study Efforts	1	2017	4	2018
Study/Analysis/Support: T-45 Data Acquisition Unit (DAU) Power Supply Engineering Analysis: T-45 DAU Engineering Analysis	2	2017	3	2017
Study/Analysis/Support: T-45 VMTS Throttle Grip Engineering Analysis: T-45 VMTS Throttle Grip Engineering Analysis	3	2017	4	2017
Study/Analysis/Support: T-44 Tail Section Fatigue Life Extension Study: T-44 Tail Section Fatigue Life Extension Study	3	2017	1	2018