

UNCLASSIFIED

**Department of Defense  
Fiscal Year (FY) 2018 Budget Amendment**

November 2017



**Office of the Secretary Of Defense**

*Defense-Wide Justification Book Volume 3 of 5*

***Research, Development, Test & Evaluation, Defense-Wide***

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Office of the Secretary Of Defense • Budget Amendment FY 2018 • RDT&E Program

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Department of Defense  
FY 2018 President's Budget Amendment  
Exhibit R-1 FY 2018 President's Budget Amendment  
Total Obligational Authority  
(Dollars in Thousands)

03 Nov 2017

Appropriation	FY 2016 Base + OCO	FY 2017 Base Enactment	FY 2017 OCO Enactment	FY 2017 Total (Base + OCO)
Research, Development, Test & Eval, DW	3,381,638	3,923,205	80,600	4,003,805
Total Research, Development, Test & Evaluation	3,381,638	3,923,205	80,600	4,003,805



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Appropriation -----	FY 2018 Base Request	FY 2018 June Amendment Base	FY 2018 Amendment Emergency	FY 2018 OCO Request	FY 2018 Amendment OCO	FY 2018 Total OCO	FY 2018 Grand Total
-----	-----	-----	-----	-----	-----	-----	-----
Research, Development, Test & Eval, DW	4,041,233		368,100	25,000		25,000	4,434,333
Total Research, Development, Test & Evaluation	4,041,233		368,100	25,000		25,000	4,434,333

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Department of Defense  
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Summary Recap of Budget Activities -----	FY 2016 Base + OCO	FY 2017 Base Enactment	FY 2017 OCO Enactment	FY 2017 Total (Base + OCO)
Basic Research	158,091	180,909		180,909
Applied Research	142,583	138,671		138,671
Advanced Technology Development	1,133,128	1,191,020		1,191,020
Advanced Component Development And Prototypes	1,005,790	1,441,421	80,600	1,522,021
System Development And Demonstration	149,113	279,752		279,752
Management Support	736,881	620,227		620,227
Operational System Development	56,052	71,205		71,205
Total Research, Development, Test & Evaluation	3,381,638	3,923,205	80,600	4,003,805
Summary Recap of FYDP Programs -----				
General Purpose Forces	1,888	2,070		2,070
Intelligence and Communications	87,820	88,813		88,813
Research and Development	3,250,195	3,802,371	80,600	3,882,971
Training Medical and Other	41,735	29,951		29,951
Total Research, Development, Test & Evaluation	3,381,638	3,923,205	80,600	4,003,805

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Basic Research	140,775						140,775
Applied Research	141,815						141,815
Advanced Technology Development	1,128,893		5,000	25,000		25,000	1,158,893
Advanced Component Development And Prototypes	1,685,375		333,100				2,018,475
System Development And Demonstration	341,821						341,821
Management Support	534,872		30,000				564,872
Operational System Development	67,682						67,682
Total Research, Development, Test & Evaluation	4,041,233		368,100	25,000		25,000	4,434,333
Summary Recap of FYDP Programs							
General Purpose Forces	2,551						2,551
Intelligence and Communications	118,990						118,990
Research and Development	3,919,692		368,100	25,000		25,000	4,312,792
Training Medical and Other							
Total Research, Development, Test & Evaluation	4,041,233		368,100	25,000		25,000	4,434,333

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Appropriation: 0400D Research, Development, Test &amp; Eval, DW

Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 Base Enactment	FY 2017 OCO Enactment	FY 2017 Total (Base + OCO)	Se c
3	0601110D8Z	Basic Research Initiatives	01	70,311	68,079		68,079	U
5	0601120D8Z	National Defense Education Program	01	52,837	79,258		79,258	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	34,943	33,572		33,572	U
		Basic Research		158,091	180,909		180,909	
8	0602000D8Z	Joint Munitions Technology	02	18,993	17,725		17,725	U
10	0602230D8Z	Defense Technology Innovation	02		9,989		9,989	U
11	0602234D8Z	Lincoln Laboratory Research Program	02	53,517	48,216		48,216	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	46,750	42,160		42,160	U
16	0602668D8Z	Cyber Security Research	02	15,378	12,170		12,170	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	7,945	8,411		8,411	U
		Applied Research		142,583	138,671		138,671	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,452	23,876		23,876	U
24	0603122D8Z	Combating Terrorism Technology Support	03	146,115	115,375		115,375	U
25	0603133D8Z	Foreign Comparative Testing	03	24,406	19,322		19,322	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,129	17,238		17,238	U
37	0603288D8Z	Analytic Assessments	03	14,145	12,036		12,036	U
38	0603289D8Z	Advanced Innovative Analysis and Concepts	03	48,873	56,957		56,957	U

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3	0601110D8Z	Basic Research Initiatives	01	40,612						40,612	U
5	0601120D8Z	National Defense Education Program	01	74,298						74,298	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	25,865						25,865	U
	Basic Research			140,775						140,775	
8	0602000D8Z	Joint Munitions Technology	02	19,111						19,111	U
10	0602230D8Z	Defense Technology Innovation	02								U
11	0602234D8Z	Lincoln Laboratory Research Program	02	49,748						49,748	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	49,226						49,226	U
16	0602668D8Z	Cyber Security Research	02	14,775						14,775	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	8,955						8,955	U
	Applied Research			141,815						141,815	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,627						25,627	U
24	0603122D8Z	Combating Terrorism Technology Support	03	76,230			25,000		25,000	101,230	U
25	0603133D8Z	Foreign Comparative Testing	03	24,199						24,199	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,662						18,662	U
37	0603288D8Z	Analytic Assessments	03	13,154						13,154	U
38	0603289D8Z	Advanced Innovative Analysis and Concepts	03	37,674						37,674	U

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39	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03					U
42	0603375D8Z	Technology Innovation	03	25,000	19,901		19,901	U
44	0603527D8Z	RETRACT LARCH	03	105,243	181,777		181,777	U
45	0603618D8Z	Joint Electronic Advanced Technology	03	28,667	22,006		22,006	U
46	0603648D8Z	Joint Capability Technology Demonstrations	03	130,829	132,039		132,039	U
47	0603662D8Z	Networked Communications Capabilities	03	5,452	9,321		9,321	U
48	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	151,999	183,224		183,224	U
50	0603699D8Z	Emerging Capabilities Technology Development	03	77,966	55,834		55,834	U
53	0603716D8Z	Strategic Environmental Research Program	03	54,261	65,006		65,006	U
55	0603727D8Z	Joint Warfighting Program	03	4,852	4,843		4,843	U
60	0603769D8Z	Distributed Learning Advanced Technology Development	03					U
62	0603781D8Z	Software Engineering Institute	03	13,687	14,248		14,248	U
63	0603826D8Z	Quick Reaction Special Projects	03	69,506	79,854		79,854	U
64	0603833D8Z	Engineering Science & Technology	03	17,904	22,633		22,633	U
65	0603941D8Z	Test & Evaluation Science & Technology	03	89,317	92,034		92,034	U
66	0604055D8Z	Operational Energy Capability Improvement	03	40,387	42,282		42,282	U

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39	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	15,000						15,000	U
42	0603375D8Z	Technology Innovation	03	59,863		5,000				64,863	U
44	0603527D8Z	RETRACT LARCH	03	171,120						171,120	U
45	0603618D8Z	Joint Electronic Advanced Technology	03	14,389						14,389	U
46	0603648D8Z	Joint Capability Technology Demonstrations	03	105,871						105,871	U
47	0603662D8Z	Networked Communications Capabilities	03	12,661						12,661	U
48	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	136,159						136,159	U
50	0603699D8Z	Emerging Capabilities Technology Development	03	57,876						57,876	U
53	0603716D8Z	Strategic Environmental Research Program	03	71,832						71,832	U
55	0603727D8Z	Joint Warfighting Program	03	6,349						6,349	U
60	0603769D8Z	Distributed Learning Advanced Technology Development	03	11,211						11,211	U
62	0603781D8Z	Software Engineering Institute	03	15,047						15,047	U
63	0603826D8Z	Quick Reaction Special Projects	03	69,203						69,203	U
64	0603833D8Z	Engineering Science & Technology	03	25,395						25,395	U
65	0603941D8Z	Test & Evaluation Science & Technology	03	89,586						89,586	U
66	0604055D8Z	Operational Energy Capability Improvement	03	38,403						38,403	U

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Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 Base Enactment	FY 2017 OCO Enactment	FY 2017 Total (Base + OCO)	Se
67	0303310D8Z	CWMD Systems	03	40,938	21,214		21,214	U
		Advanced Technology Development		1,133,128	1,191,020		1,191,020	
69	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	31,149	26,469		26,469	U
70	0603600D8Z	WALKOFF	04	88,031	89,544	8,500	98,044	U
71	0603714D8Z	Advanced Sensors Application Program	04	15,869				U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04		2,134		2,134	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	51,380	46,440		46,440	U
91	0603920D8Z	Humanitarian Demining	04	9,858	9,996		9,996	U
92	0603923D8Z	Coalition Warfare	04	10,179	10,115		10,115	U
93	0604016D8Z	Department of Defense Corrosion Program	04	7,471	13,878		13,878	U
95	0604132D8Z	Missile Defeat Project	04		44,950	70,500	115,450	U
97	0604250D8Z	Advanced Innovative Technologies	04	459,966	833,954	1,600	835,554	U
98	0604294D8Z	Trusted & Assured Microelectronics	04					U
99	0604331D8Z	Rapid Prototyping Program	04		100,000		100,000	U
100	0604342D8Z	Defense Technology Offset	04	71,500				U
101	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	7,731	7,312		7,312	U
102	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04		3,996		3,996	U
103	0604775D8Z	Defense Rapid Innovation Program	04	250,000	250,000		250,000	U

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67	0303310D8Z	CWMD Systems	03	33,382						33,382	U
		Advanced Technology Development		1,128,893		5,000	25,000		25,000	1,158,893	
69	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	32,937						32,937	U
70	0603600D8Z	WALKOFF	04	101,714						101,714	U
71	0603714D8Z	Advanced Sensors Application Program	04								U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04	2,198						2,198	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	54,583						54,583	U
91	0603920D8Z	Humanitarian Demining	04	10,837						10,837	U
92	0603923D8Z	Coalition Warfare	04	10,740						10,740	U
93	0604016D8Z	Department of Defense Corrosion Program	04	3,837						3,837	U
95	0604132D8Z	Missile Defeat Project	04	98,369		26,400				124,769	U
97	0604250D8Z	Advanced Innovative Technologies	04	1,175,832		306,700				1,482,532	U
98	0604294D8Z	Trusted & Assured Microelectronics	04	83,626						83,626	U
99	0604331D8Z	Rapid Prototyping Program	04	100,000						100,000	U
100	0604342D8Z	Defense Technology Offset	04								U
101	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	3,967						3,967	U
102	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,833						3,833	U
103	0604775D8Z	Defense Rapid Innovation Program	04								U

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114	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	2,656	2,633		2,633	U
		Advanced Component Development And Prototypes		1,005,790	1,441,421	80,600	1,522,021	
118	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	8,590	10,313		10,313	U
119	0604165D8Z	Prompt Global Strike Capability Development	05	88,660	161,126		161,126	U
122	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	13,774	16,270		16,270	U
126	0605022D8Z	Defense Exportability Program	05	3,165	2,917		2,917	U
127	0605027D8Z	OUS(D) IT Development Initiatives	05	13,457	8,831		8,831	U
129	0605075D8Z	DCMO Policy and Integration	05	2,217				U
132	0605140D8Z	Trusted Foundry	05	7,000	68,924		68,924	U
133	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	7,961	8,671		8,671	U
134	0605294D8Z	Trusted & Assured Microelectronics	05					U
136	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,289	2,700		2,700	U
137	0305310D8Z	CWMD Systems: System Development and Demonstration	05					U
		System Development And Demonstration		149,113	279,752		279,752	
138	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	5,571	4,673		4,673	U
139	0604875D8Z	Joint Systems Architecture Development	06	3,007	3,096		3,096	U

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Line	Program Element No Number	Item	Act	FY 2018 Base Request	FY 2018 June Amendment Base	FY 2018 Amendment Emergency	FY 2018 OCO Request	FY 2018 Amendment OCO	FY 2018 Total OCO	FY 2018 Grand Total	S e c
114	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	2,902						2,902	U
		Advanced Component Development And Prototypes		1,685,375		333,100				2,018,475	
118	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	12,536						12,536	U
119	0604165D8Z	Prompt Global Strike Capability Development	05	201,749						201,749	U
122	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	15,358						15,358	U
126	0605022D8Z	Defense Exportability Program	05	3,162						3,162	U
127	0605027D8Z	OUS(D) IT Development Initiatives	05	21,353						21,353	U
129	0605075D8Z	DCMO Policy and Integration	05	2,810						2,810	U
132	0605140D8Z	Trusted Foundry	05								U
133	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	11,870						11,870	U
134	0605294D8Z	Trusted & Assured Microelectronics	05	61,084						61,084	U
136	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	3,669						3,669	U
137	0305310D8Z	CWMD Systems: System Development and Demonstration	05	8,230						8,230	U
		System Development And Demonstration		341,821						341,821	
138	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	6,941						6,941	U
139	0604875D8Z	Joint Systems Architecture Development	06	4,851						4,851	U

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Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 Base Enactment	FY 2017 OCO Enactment	FY 2017 Total (Base + OCO)	Se
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140	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	209,014	218,958		218,958	U
141	0604942D8Z	Assessments and Evaluations	06	127,827	28,674		28,674	U
143	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	39,549	67,006		67,006	U
144	0605104D8Z	Technical Studies, Support and Analysis	06	24,121	21,445		21,445	U
146	0605128D8Z	Classified Program USD(P)	06	115,000	130,000		130,000	U
147	0605142D8Z	Systems Engineering	06	38,321	32,393		32,393	U
148	0605151D8Z	Studies and Analysis Support - OSD	06	2,696	2,794		2,794	U
149	0605161D8Z	Nuclear Matters-Physical Security	06	5,094	5,296		5,296	U
150	0605170D8Z	Support to Networks and Information Integration	06	5,113	7,238		7,238	U
151	0605200D8Z	General Support to USD (Intelligence)	06	1,686	1,872		1,872	U
156	0605502D8Z	Small Business Innovative Research	06	62,824				U
161	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	2,166	2,185		2,185	U
162	0605798D8Z	Defense Technology Analysis	06	15,538	25,622		25,622	U
165	0605804D8Z	Development Test and Evaluation	06	20,749	21,517		21,517	U
168	0606100D8Z	Budget and Program Assessments	06	3,973	4,010		4,010	U
169	0606225D8Z	ODNA Technology and Resource Analysis	06	3,500				U

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Line No	Program Element Number	Item	Act	FY 2018 Base Request	FY 2018 June Amendment Base	FY 2018 Amendment Emergency	FY 2018 OCO Request	FY 2018 Amendment OCO	FY 2018 Total OCO	FY 2018 Grand Total	S e c
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140	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	211,325						211,325	U
141	0604942D8Z	Assessments and Evaluations	06	30,144						30,144	U
143	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	91,057						91,057	U
144	0605104D8Z	Technical Studies, Support and Analysis	06	22,386						22,386	U
146	0605128D8Z	Classified Program USD(P)	06								U
147	0605142D8Z	Systems Engineering	06	37,622						37,622	U
148	0605151D8Z	Studies and Analysis Support - OSD	06	5,200						5,200	U
149	0605161D8Z	Nuclear Matters-Physical Security	06	5,232						5,232	U
150	0605170D8Z	Support to Networks and Information Integration	06	12,583						12,583	U
151	0605200D8Z	General Support to USD (Intelligence)	06	31,451		30,000				61,451	U
156	0605502D8Z	Small Business Innovative Research	06								U
161	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	2,372						2,372	U
162	0605798D8Z	Defense Technology Analysis	06	24,365						24,365	U
165	0605804D8Z	Development Test and Evaluation	06	20,571						20,571	U
168	0606100D8Z	Budget and Program Assessments	06	3,992						3,992	U
169	0606225D8Z	ODNA Technology and Resource Analysis	06	1,000						1,000	U

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Line	Program Element No Number	Item	Act	FY 2016 Base + OCO	FY 2017 Base Enactment	FY 2017 OCO Enactment	FY 2017 Total (Base + OCO)	S e c
170	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	1,888	2,070		2,070	U
175	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	942	916		916	U
178	0305193D8Z	Cyber Intelligence	06	6,567	10,511		10,511	U
180	0305245D8Z	Intelligence Capabilities and Innovation Investments	06					U
181	0306310D8Z	CWMD Systems: RDT&E Management Support	06					U
182	0804767D8Z	COCOM Exercise Engagement and Training Transformation (CE2T2) - MHA	06	41,735	29,951		29,951	U
		Management Support		736,881	620,227		620,227	
191	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	21,792	16,177		16,177	U
192	0607310D8Z	CWMD Systems: Operational Systems Development	07	1,832	4,189		4,189	U
208	0303140D8Z	Information Systems Security Program	07	8,649	8,866		8,866	U
227	0305186D8Z	Policy R&D Programs	07	4,131	3,200		3,200	U
228	0305199D8Z	Net Centricity	07	17,532	17,951		17,951	U
237	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,116	7,037		7,037	U
243	0307577D8Z	Intelligence Mission Data (IMD)	07		13,785		13,785	U
		Operational System Development		56,052	71,205		71,205	
		Total Research, Development, Test & Eval, DW		3,381,638	3,923,205	80,600	4,003,805	

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170	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	2,551						2,551	U
175	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	1,006						1,006	U
178	0305193D8Z	Cyber Intelligence	06								U
180	0305245D8Z	Intelligence Capabilities and Innovation Investments	06	18,992						18,992	U
181	0306310D8Z	CWMD Systems: RDT&E Management Support	06	1,231						1,231	U
182	0804767D8Z	COCOM Exercise Engagement and Training Transformation (CE2T2) - MHA	06								U
		Management Support		534,872		30,000				564,872	
191	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	10,882						10,882	U
192	0607310D8Z	CWMD Systems: Operational Systems Development	07	7,222						7,222	U
208	0303140D8Z	Information Systems Security Program	07	9,415						9,415	U
227	0305186D8Z	Policy R&D Programs	07	6,526						6,526	U
228	0305199D8Z	Net Centricity	07	18,455						18,455	U
237	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,071						2,071	U
243	0307577D8Z	Intelligence Mission Data (IMD)	07	13,111						13,111	U
		Operational System Development		67,682						67,682	
Total Research, Development, Test & Eval, DW				4,041,233		368,100	25,000		25,000	4,434,333	

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3	0601110D8Z	Basic Research Initiatives	01	70,311	68,079		68,079	U
5	0601120D8Z	National Defense Education Program	01	52,837	79,258		79,258	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	34,943	33,572		33,572	U
	Basic Research			158,091	180,909		180,909	
8	0602000D8Z	Joint Munitions Technology	02	18,993	17,725		17,725	U
10	0602230D8Z	Defense Technology Innovation	02		9,989		9,989	U
11	0602234D8Z	Lincoln Laboratory Research Program	02	53,517	48,216		48,216	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	46,750	42,160		42,160	U
16	0602668D8Z	Cyber Security Research	02	15,378	12,170		12,170	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	7,945	8,411		8,411	U
	Applied Research			142,583	138,671		138,671	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,452	23,876		23,876	U
24	0603122D8Z	Combating Terrorism Technology Support	03	146,115	115,375		115,375	U
25	0603133D8Z	Foreign Comparative Testing	03	24,406	19,322		19,322	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,129	17,238		17,238	U
37	0603288D8Z	Analytic Assessments	03	14,145	12,036		12,036	U
38	0603289D8Z	Advanced Innovative Analysis and Concepts	03	48,873	56,957		56,957	U

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3	0601110D8Z	Basic Research Initiatives	01	40,612						40,612	U
5	0601120D8Z	National Defense Education Program	01	74,298						74,298	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	25,865						25,865	U
	Basic Research			140,775						140,775	
8	0602000D8Z	Joint Munitions Technology	02	19,111						19,111	U
10	0602230D8Z	Defense Technology Innovation	02								U
11	0602234D8Z	Lincoln Laboratory Research Program	02	49,748						49,748	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	49,226						49,226	U
16	0602668D8Z	Cyber Security Research	02	14,775						14,775	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	8,955						8,955	U
	Applied Research			141,815						141,815	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,627						25,627	U
24	0603122D8Z	Combating Terrorism Technology Support	03	76,230			25,000		25,000	101,230	U
25	0603133D8Z	Foreign Comparative Testing	03	24,199						24,199	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,662						18,662	U
37	0603288D8Z	Analytic Assessments	03	13,154						13,154	U
38	0603289D8Z	Advanced Innovative Analysis and Concepts	03	37,674						37,674	U

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39	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03					U
42	0603375D8Z	Technology Innovation	03	25,000	19,901		19,901	U
44	0603527D8Z	RETRACT LARCH	03	105,243	181,777		181,777	U
45	0603618D8Z	Joint Electronic Advanced Technology	03	28,667	22,006		22,006	U
46	0603648D8Z	Joint Capability Technology Demonstrations	03	130,829	132,039		132,039	U
47	0603662D8Z	Networked Communications Capabilities	03	5,452	9,321		9,321	U
48	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	151,999	183,224		183,224	U
50	0603699D8Z	Emerging Capabilities Technology Development	03	77,966	55,834		55,834	U
53	0603716D8Z	Strategic Environmental Research Program	03	54,261	65,006		65,006	U
55	0603727D8Z	Joint Warfighting Program	03	4,852	4,843		4,843	U
60	0603769D8Z	Distributed Learning Advanced Technology Development	03					U
62	0603781D8Z	Software Engineering Institute	03	13,687	14,248		14,248	U
63	0603826D8Z	Quick Reaction Special Projects	03	69,506	79,854		79,854	U
64	0603833D8Z	Engineering Science & Technology	03	17,904	22,633		22,633	U
65	0603941D8Z	Test & Evaluation Science & Technology	03	89,317	92,034		92,034	U
66	0604055D8Z	Operational Energy Capability Improvement	03	40,387	42,282		42,282	U

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Line	Program Element No Number	Item	Act	FY 2018 Base Request	FY 2018 June Amendment Base	FY 2018 Amendment Emergency	FY 2018 OCO Request	FY 2018 Amendment OCO	FY 2018 Total OCO	FY 2018 Grand Total	S e c
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39	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	15,000						15,000	U
42	0603375D8Z	Technology Innovation	03	59,863		5,000				64,863	U
44	0603527D8Z	RETRACT LARCH	03	171,120						171,120	U
45	0603618D8Z	Joint Electronic Advanced Technology	03	14,389						14,389	U
46	0603648D8Z	Joint Capability Technology Demonstrations	03	105,871						105,871	U
47	0603662D8Z	Networked Communications Capabilities	03	12,661						12,661	U
48	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	136,159						136,159	U
50	0603699D8Z	Emerging Capabilities Technology Development	03	57,876						57,876	U
53	0603716D8Z	Strategic Environmental Research Program	03	71,832						71,832	U
55	0603727D8Z	Joint Warfighting Program	03	6,349						6,349	U
60	0603769D8Z	Distributed Learning Advanced Technology Development	03	11,211						11,211	U
62	0603781D8Z	Software Engineering Institute	03	15,047						15,047	U
63	0603826D8Z	Quick Reaction Special Projects	03	69,203						69,203	U
64	0603833D8Z	Engineering Science & Technology	03	25,395						25,395	U
65	0603941D8Z	Test & Evaluation Science & Technology	03	89,586						89,586	U
66	0604055D8Z	Operational Energy Capability Improvement	03	38,403						38,403	U

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Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 Base Enactment	FY 2017 OCO Enactment	FY 2017 Total (Base + OCO)	S e c
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67	0303310D8Z	CWMD Systems	03	40,938	21,214		21,214	U
		Advanced Technology Development		1,133,128	1,191,020		1,191,020	
69	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	31,149	26,469		26,469	U
70	0603600D8Z	WALKOFF	04	88,031	89,544	8,500	98,044	U
71	0603714D8Z	Advanced Sensors Application Program	04	15,869				U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04		2,134		2,134	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	51,380	46,440		46,440	U
91	0603920D8Z	Humanitarian Demining	04	9,858	9,996		9,996	U
92	0603923D8Z	Coalition Warfare	04	10,179	10,115		10,115	U
93	0604016D8Z	Department of Defense Corrosion Program	04	7,471	13,878		13,878	U
95	0604132D8Z	Missile Defeat Project	04		44,950	70,500	115,450	U
97	0604250D8Z	Advanced Innovative Technologies	04	459,966	833,954	1,600	835,554	U
98	0604294D8Z	Trusted & Assured Microelectronics	04					U
99	0604331D8Z	Rapid Prototyping Program	04		100,000		100,000	U
100	0604342D8Z	Defense Technology Offset	04	71,500				U
101	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	7,731	7,312		7,312	U
102	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04		3,996		3,996	U
103	0604775D8Z	Defense Rapid Innovation Program	04	250,000	250,000		250,000	U

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67	0303310D8Z	CWMD Systems	03	33,382						33,382	U
	Advanced Technology Development			1,128,893		5,000	25,000		25,000	1,158,893	
69	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	32,937						32,937	U
70	0603600D8Z	WALKOFF	04	101,714						101,714	U
71	0603714D8Z	Advanced Sensors Application Program	04								U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04	2,198						2,198	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	54,583						54,583	U
91	0603920D8Z	Humanitarian Demining	04	10,837						10,837	U
92	0603923D8Z	Coalition Warfare	04	10,740						10,740	U
93	0604016D8Z	Department of Defense Corrosion Program	04	3,837						3,837	U
95	0604132D8Z	Missile Defeat Project	04	98,369		26,400				124,769	U
97	0604250D8Z	Advanced Innovative Technologies	04	1,175,832		306,700				1,482,532	U
98	0604294D8Z	Trusted & Assured Microelectronics	04	83,626						83,626	U
99	0604331D8Z	Rapid Prototyping Program	04	100,000						100,000	U
100	0604342D8Z	Defense Technology Offset	04								U
101	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	3,967						3,967	U
102	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,833						3,833	U
103	0604775D8Z	Defense Rapid Innovation Program	04								U

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114	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	2,656	2,633		2,633	U
		Advanced Component Development And Prototypes		1,005,790	1,441,421	80,600	1,522,021	
118	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	8,590	10,313		10,313	U
119	0604165D8Z	Prompt Global Strike Capability Development	05	88,660	161,126		161,126	U
122	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	13,774	16,270		16,270	U
126	0605022D8Z	Defense Exportability Program	05	3,165	2,917		2,917	U
127	0605027D8Z	OUUSD(C) IT Development Initiatives	05	13,457	8,831		8,831	U
129	0605075D8Z	DCMO Policy and Integration	05	2,217				U
132	0605140D8Z	Trusted Foundry	05	7,000	68,924		68,924	U
133	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	7,961	8,671		8,671	U
134	0605294D8Z	Trusted & Assured Microelectronics	05					U
136	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,289	2,700		2,700	U
137	0305310D8Z	CWMD Systems: System Development and Demonstration	05					U
		System Development And Demonstration		149,113	279,752		279,752	
138	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	5,571	4,673		4,673	U
139	0604875D8Z	Joint Systems Architecture Development	06	3,007	3,096		3,096	U

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Office of the Secretary Of Defense • Budget Amendment FY 2018 • RDT&E Program

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***Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide***

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***Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide***

Line #	Budget Activity	Program Element Number	Program Element Title	Page
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***Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide***

Line #	Budget Activity	Program Element Number	Program Element Title	Page
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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB Amended 2018 Office of the Secretary Of Defense	<b>Date:</b> November 2017
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<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / BA 3: Advanced Technology Development (ATD)</i>					<b>R-1 Program Element (Number/Name)</b> PE 0603375D8Z / <i>Technology Innovation</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	10.000	25.000	19.901	64.863	-	64.863	79.749	99.191	98.856	100.934	Continuing	Continuing
P375: <i>Technology Innovation</i>	10.000	25.000	19.901	64.863	-	64.863	79.749	99.191	98.856	100.934	Continuing	Continuing

**Note**

FY 2017 MISSILE DEFEAT ENHANCEMENTS REPROGRAMMING (FY 17-26 PA): \$+5.000 million was required to address emergency warfighting requirements. Additional details are available at a higher classification level.

FY 2018 MISSILE DEFEAT AND DEFENSE ENHANCEMENTS (MDDE) BUDGET AMENDMENT: \$+5.000 million is required to address emergency warfighting requirements that continue efforts from the FY 2017 Missile Defeat Enhancements Reprogramming. Additional details are available at a higher classification level.

**A. Mission Description and Budget Item Justification**

The Department of Defense (DoD) has a long history of technological breakthroughs and innovations originating from within the Department. In order to sustain technological superiority, the Department must take advantage of the rapid evolution of emerging commercial technologies that, when integrated with military systems and novel concepts of operation, will be a source of battlefield advantage.

The primary pilot efforts conducted under this Program have been focused on developing space-based Intelligence, Surveillance, and Reconnaissance (ISR), Artificial Intelligence-driven Geospatial Intelligence (GEOINT), and Find-Fix-Finish-Exploit-Assess (F3EA) into an integrated capability for defeating threats posed by nuclear-capable, mobile missile - a problem set often plagued by sparse data. Our approach is composed of three innovative building blocks: 1) Machine learning techniques applied to commercial GEOINT for automated anomaly and change detection throughout the country of interest - crucial element for enhancing our indications and warnings required for precision strikes; 2) Machine-Human collaboration architecture to accelerate the F3EA joint forces targeting and decision-making cycle; and 3) Autonomous weaponeering demonstration - Exercise secure (C2S) cloud for timely precision strikes to hold mobile missile systems at risk. These blocks will serve to overcome the sparse data problem set and reduce the decision-making process. Continued efforts under this Program will both expand the pilot effort to a broader spectrum of Combatant Commands and continue to leverage the rapid evolution of emerging commercial technologies to pilot innovative solutions to warfighter problem sets.

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Exhibit R-2, RDT&E Budget Item Justification: PB Amended 2018 Office of the Secretary Of Defense				Date: November 2017	
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide / BA 3: Advanced Technology Development (ATD)		R-1 Program Element (Number/Name) PE 0603375D8Z / Technology Innovation			
B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	39.923	59.917	-	59.917
Current President's Budget	25.000	19.901	64.863	-	64.863
Total Adjustments	25.000	-20.022	4.946	-	4.946
• Congressional General Reductions	-	-20.000			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	25.000	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-0.022	-0.054	-	-0.054
• FY 2018 Missile Defeat and Defense Enhancements	-	-	5.000	-	5.000
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: P375: Technology Innovation Congressional Add: Technology Innovation IQT				FY 2016	FY 2017
Congressional Add Subtotals for Project: P375				25.000	0.000
Congressional Add Totals for all Projects				25.000	0.000
Change Summary Explanation					
FY 2017 Missile Defeat Enhancements Reprogramming (FY 17-26 PA): \$+5.000 million was required to address emergency warfighting requirements. Additional details are available at a higher classification level.					
FY 2018 Missile Defeat and Defense Enhancements (MDDE) Budget Amendment: \$+5.000 million is required to address emergency warfighting requirements that continue efforts from the FY 2017 Missile Defeat Enhancements Reprogramming. Additional details are available at a higher classification level.					

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB Amended 2018 Office of the Secretary Of Defense	<b>Date:</b> November 2017
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<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>					<b>R-1 Program Element (Number/Name)</b> PE 0604132D8Z / <i>Missile Defeat Project</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	0.000	0.000	115.450	124.769	-	124.769	0.000	0.000	0.000	0.000	Continuing	Continuing
P072: <i>Missile Defeat Project</i>	0.000	0.000	115.450	124.769	-	124.769	0.000	0.000	0.000	0.000	Continuing	Continuing

**Program MDAP/MAIS Code:**  
**Project MDAP/MAIS Code(s):** 000

**Note**

FY 2017 MISSILE DEFEAT ENHANCEMENTS REPROGRAMMING (FY 17-26 PA): \$+24.500 million was required to address emergency warfighting requirements to support various classified projects. Additional details are available at a higher classification level.

FY 2018 MISSILE DEFEAT AND DEFENSE ENHANCEMENTS (MDDE) BUDGET AMENDMENT: \$+26.400 million is required to address emergency warfighting requirements to support various classified projects. Additional details are available at a higher classification level.

This was a new program element in FY 2017. Previous funding was through various FY 2014, FY 2015, and FY 2016 OUSD program elements including: PE 0602234D8Z (Lincoln Laboratory), PE 0603160BR (Counter-proliferation Initiatives - DTRA), PE 0603699D8Z (Emerging Capabilities Technology Development), and a few classified program elements.

**A. Mission Description and Budget Item Justification**

The Missile Defeat Project counters the growing global advancement and proliferation of road-mobile ballistic missile threats. This effort develops and integrates new capability and architectures to optimize fielded weapon systems and C4ISR to defeat these emerging threats.

The Missile Defeat Project coordinates and integrates DoD and Intelligence Community (IC) efforts to develop counter threat capability. This effort measures the effectiveness of new architectures and revolutionary concepts against evolving threats by working with the IC, Combatant Commands, government labs, program offices, industry, and academia.

To meet this challenge the Missile Defeat Project leverages existing test and simulated environments to perform analysis of industry and government reference concepts and architectures to provide innovative technical solutions for missile defeat. We are developing virtual and physical testbeds to robustly test, evaluate, and prototype architectures and assess their ability to improve time critical targeting and defeat of road-mobile threats. The virtual testbed complements testing at physical ranges by providing an infrastructure for addressing different training, test, and evaluation needs. This effort also includes systems engineering and analysis to devolve technical requirements, identify promising solutions, and inform future investment decisions.



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<b>Exhibit R-2, RDT&amp;E Budget Item Justification: PB Amended 2018 Office of the Secretary Of Defense</b>	<b>Date: November 2017</b>
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<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604132D8Z / <i>Missile Defeat Project</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
Previous President's Budget	0.000	44.950	46.000	-	46.000
Current President's Budget	0.000	115.450	124.769	-	124.769
Total Adjustments	0.000	70.500	78.769	-	78.769
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	70.500			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-	-	52.678	-	52.678
• DTIC Offset	-	-	-0.309	-	-0.309
• FY 2018 Missile Defeat and Defense Enhancements	-	-	26.400	-	26.400

**Change Summary Explanation**

Activities within this document reflect headquarter-wide efficiency initiatives.

FY 2017 Missile Defeat Enhancements Reprogramming (FY 17-26 PA): \$+24.500 million was required to address emergency warfighting requirements in support of various classified projects. Additional details are available at a higher classification level.

FY 2018 Missile Defeat and Defense Enhancements (MDDE) Budget Amendment: \$+26.400 million is required to address emergency warfighting requirements in support of various classified projects. Additional details are available at a higher classification level.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification: PB Amended 2018 Office of the Secretary Of Defense</b>	<b>Date: November 2017</b>
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<b>Appropriation/Budget Activity</b>					<b>R-1 Program Element (Number/Name)</b>							
0400: Research, Development, Test & Evaluation, Defense-Wide / BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0604250D8Z / Advanced Innovative Technologies							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	296.683	459.966	835.554	1,482.532	-	1,482.532	958.802	620.173	89.365	103.000	Continuing	Continuing
P250: Advanced Innovative Technologies	296.683	459.966	835.554	1,482.532	-	1,482.532	958.802	620.173	89.365	103.000	Continuing	Continuing

**Note**

The FY 2018 Missile Defeat and Defense Enhancements (MDDE) Budget Amendment: \$+306.700 million is required to address emergency warfighting requirements in support of project 250 Advanced Innovative Technologies.

Details are available at a higher classification level.

**A. Mission Description and Budget Item Justification**

The Strategic Capabilities Office (SCO) identifies, analyzes, demonstrates, and transitions game-changing applications of existing and near-term technology (and other U.S. Government capabilities) to shape and counter emerging threats. The SCO combines capability innovation with concepts of operation and information management to develop novel concepts solving critical national security challenges in partnership with the Services, Defense Agencies, Combatant Commands (COCOMS), Joint Chiefs of Staff, Intelligence Community, and the Office of the Secretary of Defense (OSD).

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>
Previous President's Budget	468.881	844.870	544.547	-	544.547
Current President's Budget	459.966	835.554	1,482.532	-	1,482.532
Total Adjustments	-8.915	-9.316	937.985	-	937.985
• Congressional-General Reductions	-	-10.000			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-8.915	-			
• Other adjustments	-	1.600	631.285	-	631.285
• FY 2018 Missile Defeat and Defense Enhancement Request	-	-	306.700	-	306.700
• General Provisions (FFRDC Reduction)	-	-0.916	-	-	-

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB Amended 2018 Office of the Secretary Of Defense		<b>Date:</b> November 2017
<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / BA 4:</i> <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>		<b>R-1 Program Element (Number/Name)</b> PE 0604250D8Z / <i>Advanced Innovative Technologies</i>
<b><u>Change Summary Explanation</u></b> The FY 2018 Missile Defeat and Defense Enhancement amended budget requests an additional \$194.500 million for Sea Dragon, \$56.200 million for Hurt Locker, \$46.000 million for Hoover and \$10.000 million for Third Eye. This is in addition to the FY 2017 Reprogramming Action (PA 17-26) that provided \$33.383 million for Sea Dragon. Details are available at a higher classification level.		

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**Exhibit R-2, RDT&E Budget Item Justification:** PB Amended 2018 Office of the Secretary Of Defense **Date:** November 2017

<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> / BA 6: <i>RDT&amp;E Management Support</i>					<b>R-1 Program Element (Number/Name)</b> PE 0605200D8Z / <i>General Support to OUSD(I)</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018 Base</b>	<b>FY 2018 OCO</b>	<b>FY 2018 Total</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	2.846	1.686	1.872	61.451	-	61.451	1.693	1.705	1.746	1.776	Continuing	Continuing
001: <i>Sensitive Activities</i>	2.128	1.060	1.242	0.812	-	0.812	1.047	1.052	1.085	1.107	Continuing	Continuing
002: <i>Defense Civilian Intelligence Personnel System</i>	0.268	0.276	0.280	0.289	-	0.289	0.296	0.303	0.311	0.319	Continuing	Continuing
003: <i>Intelligence, Surveillance, Reconnaissance (ISR) Operations</i>	0.450	0.350	0.350	60.350	-	60.350	0.350	0.350	0.350	0.350	Continuing	Continuing

**Note**

The FY 2018 Missile Defeat and Defense Enhancements (MDDE) Budget Amendment: \$+30.0 million is required to address emergency warfighting requirements in support of Project MAVEN.

Additional details are available at a higher classification level.

**A. Mission Description and Budget Item Justification**

001: Sensitive Activities focuses on developing technologies and their applications on sensitive activities within the Office of the Under Secretary of Defense for Intelligence (OUSD(I)).

002: Defense Civilian Intelligence Personnel System (DCIPS) provides enhancements and updates to the Performance Appraisal Application in the Defense Civilian Personnel Data System used by Military Service Intelligence Components, the Defense Security Service and the OUSD(I) to evaluate the performance of their DCIPS employees. Funds are also used to provide enhancements and updates to the classified Global Force Management (GFM) Defense Intelligence Organizational Server (DIOS), a priority of the Vice Chairman of the Joint Chiefs of Staff, which tracks both civilian and military positions, associated grades and skill levels and hierarchical organizational relationships.

003: Intelligence, Surveillance, Reconnaissance (ISR) Operations requires expert engineering and technical assessments on a wide range of ISR operational issues. Funds will be used to support senior level discussions and decisions on ISR Operations related initiatives, platforms, and sensors. FY 2018 increase supports the DEPSECDEF directed stand up of the Algorithmic Warfare Cross-Functional Team (Project Maven) for modernizing Full Motion Video exploitation with Artificial Intelligence and Computer Vision. Funds support algorithm development, data labeling interfaces, and advanced hardware (GPUs) required for training neural nets.

AMENDED BUDGET REQUEST JUSTIFICATION: \$30 million Base is required to address emergency warfighting readiness requirements.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB Amended 2018 Office of the Secretary Of Defense	<b>Date:</b> November 2017
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<b>Appropriation/Budget Activity</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide / BA 6:</i> <i>RDT&amp;E Management Support</i>	<b>R-1 Program Element (Number/Name)</b> PE 0605200D8Z / <i>General Support to OUSD(I)</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2016</u></b>	<b><u>FY 2017</u></b>	<b><u>FY 2018 Base</u></b>	<b><u>FY 2018 OCO</u></b>	<b><u>FY 2018 Total</u></b>
Previous President's Budget	1.686	1.874	2.214	-	2.214
Current President's Budget	1.686	1.872	61.451	-	61.451
Total Adjustments	0.000	-0.002	59.237	-	59.237
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Service Requirements Review Board	-	-	-0.635	-	-0.635
Directed Decrease					
• Other Adjustments	-	-0.002	-0.128	-	-0.128
• Department Adjustments	-	-	30.000	-	30.000
• FY 2018 Missile Defeat and Defense	-	-	30.000	-	30.000
Enhancements					

**Change Summary Explanation**

The FY 2018 Missile Defeat and Defense Enhancements (MDDE) Budget Amendment: \$+30.0 million is required to address emergency warfighting requirements in support of Project MAVEN.

Additional details are available at a higher classification level.