

RDT&E PROGRAMS (R-1)



*Department of Defense Budget
Fiscal Year 2020
Mar 2019
Office of the Under Secretary of Defense (Comptroller)*

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Preface

The RDT&E Programs (R-1) is derived from and consistent with the Comptroller Information System database.

The R-1 is provided annually to the DoD oversight committees of the Congress coincident with the transmittal of the President's Budget. This document is also provided to Office of Assistance Secretary of Defense (Public Affairs) for use by non-DoD activities, and is available to the public on the Internet at <http://comptroller.defense.gov/>.

Office of the Under Secretary of Defense (Comptroller)

Preparation of the R-1 cost the Department of Defense a total of approximately \$38,000 in FY 2019.

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<u>Appropriation</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
Research, Development, Test & Eval, Army	11,633,461	11,074,556	300,604	11,375,160
Research, Development, Test & Eval, Navy	18,465,332	18,490,002	167,812	18,657,814
Research, Development, Test & Eval, AF	38,077,597	41,166,683	321,934	41,488,617
Research, Development, Test & Eval, DW	23,774,016	23,659,448	402,514	24,061,962
Operational Test & Eval, Defense	208,587	377,001		377,001
Total Research, Development, Test & Evaluation	92,158,993	94,767,690	1,192,864	95,960,554
 <u>Other RDT&E Budget Activities Not Included in the Research, Development, Test and Evaluation Title</u>				
Office of the Inspector General	2,800	3,977		3,977
Defense Health Program	2,038,555	2,179,621		2,179,621
Chem Agents & Munitions Destruction	839,414	886,728		886,728
National Defense Sealift Fund	3,503			
Total Not in Research, Development, Test & Evaluation	2,884,272	3,070,326		3,070,326

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<u>Appropriation</u>	FY 2020 <u>Base</u>	FY 2020 OCO for Base <u>Requirements</u>	FY 2020 OCO for Direct War and Enduring <u>Costs</u>	FY 2020 Total <u>OCO</u>	FY 2020 Total <u>(Base + OCO)</u>
Research, Development, Test & Eval, Army	12,192,771		204,124	204,124	12,396,895
Research, Development, Test & Eval, Navy	20,270,499		164,410	164,410	20,434,909
Research, Development, Test & Eval, AF	45,616,122	322,000	128,248	450,248	46,066,370
Research, Development, Test & Eval, DW	24,346,953	426,000	401,950	827,950	25,174,903
Operational Test & Eval, Defense	221,200				221,200
Total Research, Development, Test & Evaluation	102,647,545	748,000	898,732	1,646,732	104,294,277
 <u>Other RDT&E Budget Activities Not Included in the Research, Development, Test and Evaluation Title</u>					
Office of the Inspector General	2,965				2,965
Defense Health Program	732,273				732,273
Chem Agents & Munitions Destruction	875,930				875,930
National Defense Sealift Fund					
Total Not in Research, Development, Test & Evaluation	1,611,168				1,611,168

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<u>Summary Recap of Budget Activities</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
Basic Research	2,264,945	2,528,429		2,528,429
Applied Research	5,546,878	6,025,099		6,025,099
Advanced Technology Development	6,773,875	7,091,962	13,648	7,105,610
Advanced Component Development & Prototypes	20,733,791	21,784,570	220,433	22,005,003
System Development & Demonstration	14,734,821	15,339,198	237,963	15,577,161
RDT&E Management Support	8,322,839	7,152,025		7,152,025
Operational Systems Development	33,781,844	34,846,407	720,820	35,567,227
Total Research, Development, Test & Evaluation	92,158,993	94,767,690	1,192,864	95,960,554
 <u>Summary Recap of FYDP Programs</u>				
Strategic Forces	977,737	1,259,233	34,000	1,293,233
General Purpose Forces	5,172,010	5,750,734	79,179	5,829,913
Intelligence and Communications	3,526,571	3,078,124	95,213	3,173,337
Mobility Forces	550,926	898,833		898,833
Research and Development	54,394,619	55,011,466	467,677	55,479,143
Central Supply and Maintenance	260,509	284,127		284,127
Training Medical and Other	39,892	45,231		45,231
Administration and Associated Activities	156,296	157,564		157,564
Support of Other Nations	4,418	3,998		3,998
Special Operations Forces	710,874	579,337	27,097	606,434

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	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
<u>Summary Recap of Budget Activities</u>					
Basic Research	2,320,019				2,320,019
Applied Research	5,315,527		1,677	1,677	5,317,204
Advanced Technology Development	6,423,015		74,758	74,758	6,497,773
Advanced Component Development & Prototypes	26,722,189		215,045	215,045	26,937,234
System Development & Demonstration	17,652,296		113,039	113,039	17,765,335
RDT&E Management Support	6,769,488		1,875	1,875	6,771,363
Operational Systems Development	37,445,011	748,000	492,338	1,240,338	38,685,349
Total Research, Development, Test & Evaluation	102,647,545	748,000	898,732	1,646,732	104,294,277
<u>Summary Recap of FYDP Programs</u>					
Strategic Forces	1,118,996				1,118,996
General Purpose Forces	6,272,229		20,200	20,200	6,292,429
Intelligence and Communications	3,350,658		76,418	76,418	3,427,076
Mobility Forces	979,221				979,221
Research and Development	59,164,979		385,309	385,309	59,550,288
Central Supply and Maintenance	149,124				149,124
Training Medical and Other	43,715				43,715
Administration and Associated Activities	122,345				122,345
Support of Other Nations	4,071				4,071
Special Operations Forces	802,236		11,726	11,726	813,962

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	<u>FY 2018</u> <u>(Base + OCO)</u>	<u>FY 2019</u> <u>Base Enacted</u>	<u>FY 2019</u> <u>OCO Enacted</u>	<u>FY 2019</u> <u>Total Enacted</u>
Space	3,753,015	5,233,133	18,495	5,251,628
Classified Programs	22,612,126	22,465,910	471,203	22,937,113
Total Research, Development, Test & Evaluation	92,158,993	94,767,690	1,192,864	95,960,554
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>				
Mobility Forces	3,503			
Research and Development	2,038,555	2,179,621		2,179,621
Central Supply and Maintenance	839,414	886,728		886,728
Administration and Associated Activities	2,800	3,977		3,977
Total Research, Development, Test & Evaluation	2,884,272	3,070,326		3,070,326

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	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
Space	6,821,944		17,885	17,885	6,839,829
Classified Programs	23,818,027	748,000	387,194	1,135,194	24,953,221
Total Research, Development, Test & Evaluation	102,647,545	748,000	898,732	1,646,732	104,294,277
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>					
Mobility Forces					
Research and Development	732,273				732,273
Central Supply and Maintenance	875,930				875,930
Administration and Associated Activities	2,965				2,965
Total Research, Development, Test & Evaluation	1,611,168				1,611,168

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<u>Summary Recap of Budget Activities</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
Basic Research	464,187	506,444		506,444
Applied Research	1,342,832	1,578,725		1,578,725
Advanced Technology Development	1,503,959	1,585,778		1,585,778
Advanced Component Development & Prototypes	1,563,615	1,264,647	4,000	1,268,647
System Development & Demonstration	3,349,488	2,965,361	236,863	3,202,224
RDT&E Management Support	1,579,102	1,438,536		1,438,536
Operational Systems Development	1,830,278	1,735,065	59,741	1,794,806
Total Research, Development, Test & Evaluation	11,633,461	11,074,556	300,604	11,375,160
<u>Summary Recap of FYDP Programs</u>				
General Purpose Forces	668,082	666,757	10,000	676,757
Intelligence and Communications	401,118	252,771	40,613	293,384
Research and Development	10,369,821	9,830,755	249,991	10,080,746
Central Supply and Maintenance	118,410	108,696		108,696
Administration and Associated Activities	654			
Space	68,222	209,622		209,622
Classified Programs	7,154	5,955		5,955
Total Research, Development, Test & Evaluation	11,633,461	11,074,556	300,604	11,375,160

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	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
<u>Summary Recap of Budget Activities</u>					
Basic Research	454,980				454,980
Applied Research	893,990				893,990
Advanced Technology Development	1,099,564				1,099,564
Advanced Component Development & Prototypes	2,929,355		17,114	17,114	2,946,469
System Development & Demonstration	3,549,431		111,917	111,917	3,661,348
RDT&E Management Support	1,286,625		1,875	1,875	1,288,500
Operational Systems Development	1,978,826		73,218	73,218	2,052,044
Total Research, Development, Test & Evaluation	12,192,771		204,124	204,124	12,396,895
<u>Summary Recap of FYDP Programs</u>					
General Purpose Forces	866,366				866,366
Intelligence and Communications	257,681		76,418	76,418	334,099
Research and Development	10,659,601		127,706	127,706	10,787,307
Central Supply and Maintenance	59,848				59,848
Administration and Associated Activities					
Space	342,002				342,002
Classified Programs	7,273				7,273
Total Research, Development, Test & Evaluation	12,192,771		204,124	204,124	12,396,895

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Appropriation: 2040A Research, Development, Test & Eval, Army

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
1	0601101A	In-House Laboratory Independent Research	01	11,783	11,579		11,579	U
2	0601102A	Defense Research Sciences	01	274,098	315,660		315,660	U
3	0601103A	University Research Initiatives	01	74,349	65,202		65,202	U
4	0601104A	University and Industry Research Centers	01	103,957	114,003		114,003	U
5	0601121A	Cyber Collaborative Research Alliance	01					U
		Basic Research		464,187	506,444		506,444	
6	0602105A	Materials Technology	02	73,136	83,586		83,586	U
7	0602120A	Sensors and Electronic Survivability	02	83,581	80,849		80,849	U
8	0602122A	TRACTOR HIP	02	8,627	8,674		8,674	U
9	0602126A	TRACTOR JACK	02		400		400	U
10	0602141A	Lethality Technology	02					U
11	0602142A	Army Applied Research	02					U
12	0602143A	Soldier Lethality Technology	02					U
13	0602144A	Ground Technology	02					U
14	0602145A	Next Generation Combat Vehicle Technology	02					U
15	0602146A	Network C3I Technology	02					U
16	0602147A	Long Range Precision Fires Technology	02					U
17	0602148A	Future Verticle Lift Technology	02					U
18	0602150A	Air and Missile Defense Technology	02					U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
1	0601101A	In-House Laboratory Research	01						U
2	0601102A	Defense Research Sciences	01	297,976				297,976	U
3	0601103A	University Research Initiatives	01	65,858				65,858	U
4	0601104A	University and Industry Research Centers	01	86,164				86,164	U
5	0601121A	Cyber Collaborative Research Alliance	01	4,982				4,982	U
Basic Research				454,980				454,980	
6	0602105A	Materials Technology	02						U
7	0602120A	Sensors and Electronic Survivability	02						U
8	0602122A	TRACTOR HIP	02						U
9	0602126A	TRACTOR JACK	02						U
10	0602141A	Lethality Technology	02	26,961				26,961	U
11	0602142A	Army Applied Research	02	25,319				25,319	U
12	0602143A	Soldier Lethality Technology	02	115,274				115,274	U
13	0602144A	Ground Technology	02	35,199				35,199	U
14	0602145A	Next Generation Combat Vehicle Technology	02	219,047				219,047	U
15	0602146A	Network C3I Technology	02	114,516				114,516	U
16	0602147A	Long Range Precision Fires Technology	02	74,327				74,327	U
17	0602148A	Future Verticle Lift Technology	02	93,601				93,601	U
18	0602150A	Air and Missile Defense Technology	02	50,771				50,771	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
19	0602211A	Aviation Technology	02	72,170	81,805		81,805	U
20	0602213A	C3I Applied Cyber	02					U
21	0602270A	Electronic Warfare Technology	02	33,683	25,558		25,558	U
22	0602303A	Missile Technology	02	52,858	91,647		91,647	U
23	0602307A	Advanced Weapons Technology	02	36,959	44,468		44,468	U
24	0602308A	Advanced Concepts and Simulation	02	27,662	28,470		28,470	U
25	0602601A	Combat Vehicle and Automotive Technology	02	78,759	104,404		104,404	U
26	0602618A	Ballistics Technology	02	83,299	85,491		85,491	U
27	0602622A	Chemical, Smoke and Equipment Defeating Technology	02	3,895	5,027		5,027	U
28	0602623A	Joint Service Small Arms Program	02	6,473	12,380		12,380	U
29	0602624A	Weapons and Munitions Technology	02	241,344	383,410		383,410	U
30	0602705A	Electronics and Electronic Devices	02	90,613	96,760		96,760	U
31	0602709A	Night Vision Technology	02	38,243	33,573		33,573	U
32	0602712A	Countermine Systems	02	25,329	27,223		27,223	U
33	0602716A	Human Factors Engineering Technology	02	23,813	24,121		24,121	U
34	0602720A	Environmental Quality Technology	02	34,118	19,469		19,469	U
35	0602782A	Command, Control, Communications Technology	02	32,458	54,956		54,956	U
36	0602783A	Computer and Software Technology	02	13,707	14,948		14,948	U
37	0602784A	Military Engineering Technology	02	114,947	101,124		101,124	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
19	0602211A	Aviation Technology	02						U
20	0602213A	C3I Applied Cyber	02	18,947				18,947	U
21	0602270A	Electronic Warfare Technology	02						U
22	0602303A	Missile Technology	02						U
23	0602307A	Advanced Weapons Technology	02						U
24	0602308A	Advanced Concepts and Simulation	02						U
25	0602601A	Combat Vehicle and Automotive Technology	02						U
26	0602618A	Ballistics Technology	02						U
27	0602622A	Chemical, Smoke and Equipment Defeating Technology	02						U
28	0602623A	Joint Service Small Arms Program	02						U
29	0602624A	Weapons and Munitions Technology	02						U
30	0602705A	Electronics and Electronic Devices	02						U
31	0602709A	Night Vision Technology	02						U
32	0602712A	Countermine Systems	02						U
33	0602716A	Human Factors Engineering Technology	02						U
34	0602720A	Environmental Quality Technology	02						U
35	0602782A	Command, Control, Communications Technology	02						U
36	0602783A	Computer and Software Technology	02						U
37	0602784A	Military Engineering Technology	02						U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
38	0602785A	Manpower/Personnel/Training Technology	02	19,791	21,847		21,847	U
39	0602786A	Warfighter Technology	02	58,476	56,532		56,532	U
40	0602787A	Medical Technology	02	88,891	92,003		92,003	U
Applied Research				1,342,832	1,578,725		1,578,725	
41	0603001A	Warfighter Advanced Technology	03	53,763	41,795		41,795	U
42	0603002A	Medical Advanced Technology	03	103,908	101,442		101,442	U
43	0603003A	Aviation Advanced Technology	03	172,545	169,411		169,411	U
44	0603004A	Weapons and Munitions Advanced Technology	03	195,345	241,581		241,581	U
45	0603005A	Combat Vehicle and Automotive Advanced Technology	03	154,084	176,622		176,622	U
46	0603006A	Space Application Advanced Technology	03	39,277	48,985		48,985	U
47	0603007A	Manpower, Personnel and Training Advanced Technology	03	5,063	8,038		8,038	U
48	0603009A	TRACTOR HIKE	03	39,302	22,631		22,631	U
49	0603015A	Next Generation Training & Simulation Systems	03	15,778	28,650		28,650	U
50	0603117A	Army Advanced Technology Development	03					U
51	0603118A	Soldier Lethality Advanced Technology	03					U
52	0603119A	Ground Advanced Technology	03					U
53	0603125A	Combating Terrorism - Technology Development	03	44,088	36,757		36,757	U

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38	0602785A	Manpower/Personnel/Training Technology	02	20,873				20,873	U
39	0602786A	Warfighter Technology	02						U
40	0602787A	Medical Technology	02	99,155				99,155	U
Applied Research				893,990				893,990	
41	0603001A	Warfighter Advanced Technology	03						U
42	0603002A	Medical Advanced Technology	03	42,030				42,030	U
43	0603003A	Aviation Advanced Technology	03						U
44	0603004A	Weapons and Munitions Advanced Technology	03						U
45	0603005A	Combat Vehicle and Automotive Advanced Technology	03						U
46	0603006A	Space Application Advanced Technology	03						U
47	0603007A	Manpower, Personnel and Training Advanced Technology	03	11,038				11,038	U
48	0603009A	TRACTOR HIKE	03						U
49	0603015A	Next Generation Training & Simulation Systems	03						U
50	0603117A	Army Advanced Technology Development	03	63,338				63,338	U
51	0603118A	Soldier Lethality Advanced Technology	03	118,468				118,468	U
52	0603119A	Ground Advanced Technology	03	12,593				12,593	U
53	0603125A	Combating Terrorism - Technology Development	03						U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
54	0603130A	TRACTOR NAIL	03	4,880	4,896		4,896	U
55	0603131A	TRACTOR EGGS	03	4,326	6,041		6,041	U
56	0603270A	Electronic Warfare Technology	03	33,249	41,458		41,458	U
57	0603313A	Missile and Rocket Advanced Technology	03	133,433	94,561		94,561	U
58	0603322A	TRACTOR CAGE	03	12,323	16,845		16,845	U
59	0603457A	C3I Cyber Advanced Development	03					U
60	0603461A	High Performance Computing Modernization Program	03	214,100	218,098		218,098	U
61	0603462A	Next Generation Combat Vehicle Advanced Technology	03					U
62	0603463A	Network C3I Advanced Technology	03					U
63	0603464A	Long Range Precision Fires Advanced Technology	03					U
64	0603465A	Future Vertical Lift Advanced Technology	03					U
65	0603466A	Air and Missile Defense Advanced Technology	03					U
66	0603606A	Landmine Warfare and Barrier Advanced Technology	03	18,473	17,097		17,097	U
67	0603607A	Joint Service Small Arms Program	03	5,628	22,799		22,799	U
68	0603710A	Night Vision Advanced Technology	03	45,617	61,313		61,313	U
69	0603728A	Environmental Quality Technology Demonstrations	03	29,150	29,132		29,132	U
70	0603734A	Military Engineering Advanced Technology	03	96,586	101,438		101,438	U

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54	0603130A	TRACTOR NAIL	03						U
55	0603131A	TRACTOR EGGS	03						U
56	0603270A	Electronic Warfare Technology	03						U
57	0603313A	Missile and Rocket Advanced Technology	03						U
58	0603322A	TRACTOR CAGE	03						U
59	0603457A	C3I Cyber Advanced Development	03	13,769				13,769	U
60	0603461A	High Performance Computing Modernization Program	03	184,755				184,755	U
61	0603462A	Next Generation Combat Vehicle Advanced Technology	03	160,035				160,035	U
62	0603463A	Network C3I Advanced Technology	03	106,899				106,899	U
63	0603464A	Long Range Precision Fires Advanced Technology	03	174,386				174,386	U
64	0603465A	Future Vertical Lift Advanced Technology	03	151,640				151,640	U
65	0603466A	Air and Missile Defense Advanced Technology	03	60,613				60,613	U
66	0603606A	Landmine Warfare and Barrier Advanced Technology	03						U
67	0603607A	Joint Service Small Arms Program	03						U
68	0603710A	Night Vision Advanced Technology	03						U
69	0603728A	Environmental Quality Technology Demonstrations	03						U
70	0603734A	Military Engineering Advanced Technology	03						U

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71	0603772A	Advanced Tactical Computer Science and Sensor Technology	03	50,637	43,856		43,856	U
72	0603794A	C3 Advanced Technology	03	32,404	52,332		52,332	U
		Advanced Technology Development		1,503,959	1,585,778		1,585,778	
73	0603305A	Army Missile Defense Systems Integration	04	23,558	60,472		60,472	U
74	0603327A	Air and Missile Defense Systems Engineering	04	58,812	45,231	1,000	46,231	U
75	0603619A	Landmine Warfare and Barrier - Adv Dev	04	69,237	45,198		45,198	U
76	0603627A	Smoke, Obscurant and Target Defeating Sys-Adv Dev	04	8,920	20,674		20,674	U
77	0603639A	Tank and Medium Caliber Ammunition	04	45,448	41,921		41,921	U
78	0603645A	Armored System Modernization - Adv Dev	04	41,431	84,297		84,297	U
79	0603747A	Soldier Support and Survivability	04	15,759	8,735	3,000	11,735	U
80	0603766A	Tactical Electronic Surveillance System - Adv Dev	04	27,733	35,667		35,667	U
81	0603774A	Night Vision Systems Advanced Development	04	501,816	7,341		7,341	U
82	0603779A	Environmental Quality Technology - Dem/Val	04	15,039	14,731		14,731	U
83	0603790A	NATO Research and Development	04	2,485	3,682		3,682	U
84	0603801A	Aviation - Adv Dev	04	9,653	86,180		86,180	U
85	0603804A	Logistics and Engineer Equipment - Adv Dev	04	29,619	17,230		17,230	U

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71	0603772A	Advanced Tactical Computer Science and Sensor Technology	03						U
72	0603794A	C3 Advanced Technology	03						U
		Advanced Technology Development		1,099,564				1,099,564	
73	0603305A	Army Missile Defense Systems Integration	04	10,987				10,987	U
74	0603327A	Air and Missile Defense Systems Engineering	04	15,148		500	500	15,648	U
75	0603619A	Landmine Warfare and Barrier - Adv Dev	04	92,915				92,915	U
76	0603627A	Smoke, Obscurant and Target Defeating Sys-Adv Dev	04						U
77	0603639A	Tank and Medium Caliber Ammunition	04	82,146				82,146	U
78	0603645A	Armored System Modernization - Adv Dev	04	157,656				157,656	U
79	0603747A	Soldier Support and Survivability	04	6,514		3,000	3,000	9,514	U
80	0603766A	Tactical Electronic Surveillance System - Adv Dev	04	34,890				34,890	U
81	0603774A	Night Vision Systems Advanced Development	04	251,011				251,011	U
82	0603779A	Environmental Quality Technology - Dem/Val	04	15,132				15,132	U
83	0603790A	NATO Research and Development	04	5,406				5,406	U
84	0603801A	Aviation - Adv Dev	04	459,290				459,290	U
85	0603804A	Logistics and Engineer Equipment - Adv Dev	04	6,254		1,085	1,085	7,339	U

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86	0603807A	Medical Systems - Adv Dev	04	36,279	39,244		39,244	U
87	0603827A	Soldier Systems - Advanced Development	04	60,774	31,022		31,022	U
88	0604017A	Robotics Development	04	38,051	74,368		74,368	U
89	0604020A	Cross Functional Team (CFT) Advanced Development & Prototyping	04		9,488		9,488	U
90	0604021A	Electronic Warfare Technology Maturation (MIP)	04					U
91	0604100A	Analysis Of Alternatives	04	7,307	9,753		9,753	U
92	0604113A	Future Tactical Unmanned Aircraft System (FTUAS)	04		12,393		12,393	U
93	0604114A	Lower Tier Air Missile Defense (LTAMD) Sensor	04	57,437	89,248		89,248	U
94	0604115A	Technology Maturation Initiatives	04	145,618	95,229		95,229	U
95	0604117A	Maneuver - Short Range Air Defense (M-SHORAD)	04	19,201	79,016		79,016	U
96	0604118A	TRACTOR BEAM	04	10,400	52,894		52,894	U
97	0604119A	Army Advanced Component Development & Prototyping	04					U
98	0604120A	Assured Positioning, Navigation and Timing (PNT)	04	132,810				U
99	0604121A	Synthetic Training Environment Refinement & Prototyping	04	109,165	39,890		39,890	U
100	0604182A	Hypersonics	04					U
101	0604319A	Indirect Fire Protection Capability Increment 2-Intercept (IFPC2)	04	10,871	40,979		40,979	U

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86	0603807A	Medical Systems - Adv Dev	04	31,175				31,175	U
87	0603827A	Soldier Systems - Advanced Development	04	22,113				22,113	U
88	0604017A	Robotics Development	04	115,222				115,222	U
89	0604020A	Cross Functional Team (CFT) Advanced Development & Prototyping	04						U
90	0604021A	Electronic Warfare Technology Maturation (MIP)	04	18,043				18,043	U
91	0604100A	Analysis Of Alternatives	04	10,023				10,023	U
92	0604113A	Future Tactical Unmanned Aircraft System (FTUAS)	04	40,745				40,745	U
93	0604114A	Lower Tier Air Missile Defense (LTAMD) Sensor	04	427,772				427,772	U
94	0604115A	Technology Maturation Initiatives	04	196,676				196,676	U
95	0604117A	Maneuver - Short Range Air Defense (M-SHORAD)	04	33,100		6,000	6,000	39,100	U
96	0604118A	TRACTOR BEAM	04						U
97	0604119A	Army Advanced Component Development & Prototyping	04	115,116		4,529	4,529	119,645	U
98	0604120A	Assured Positioning, Navigation and Timing (PNT)	04						U
99	0604121A	Synthetic Training Environment Refinement & Prototyping	04	136,761				136,761	U
100	0604182A	Hypersonics	04	228,000				228,000	U
101	0604319A	Indirect Fire Protection Capability Increment 2-Intercept (IFPC2)	04						U

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102	0604403A	Future Interceptor	04					U
103	0604541A	Unified Network Transport	04					U
104	0604644A	Mobile Medium Range Missile	04					U
105	0604785A	Integrated Base Defense (Budget Activity 4)	04					U
106	0305251A	Cyberspace Operations Forces and Force Support	04	56,071	52,817		52,817	U
107	1206120A	Assured Positioning, Navigation and Timing (PNT)	04		128,640		128,640	U
108	1206308A	Army Space Systems Integration	04	30,121	38,307		38,307	U
		Advanced Component Development & Prototypes		1,563,615	1,264,647	4,000	1,268,647	
109	0604201A	Aircraft Avionics	05	30,812	32,253		32,253	U
110	0604270A	Electronic Warfare Development	05	68,935	58,627		58,627	U
111	0604321A	All Source Analysis System	05	4,774				U
112	0604328A	TRACTOR CAGE	05	30,252	17,050	12,000	29,050	U
113	0604601A	Infantry Support Weapons	05	99,145	63,793		63,793	U
114	0604604A	Medium Tactical Vehicles	05	5,798	3,699		3,699	U
115	0604611A	JAVELIN	05	20,252	5,616		5,616	U
116	0604622A	Family of Heavy Tactical Vehicles	05	10,086	11,935		11,935	U
117	0604633A	Air Traffic Control	05	3,433	12,332		12,332	U
118	0604642A	Light Tactical Wheeled Vehicles	05	3,619	1,276		1,276	U
119	0604645A	Armored Systems Modernization (ASM) - Eng Dev	05	34,794	373,337		373,337	U

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102	0604403A	Future Interceptor	04	8,000				8,000	U
103	0604541A	Unified Network Transport	04	39,600				39,600	U
104	0604644A	Mobile Medium Range Missile	04	20,000				20,000	U
105	0604785A	Integrated Base Defense (Budget Activity 4)	04			2,000	2,000	2,000	U
106	0305251A	Cyberspace Operations Forces and Force Support	04	52,102				52,102	U
107	1206120A	Assured Positioning, Navigation and Timing (PNT)	04	192,562				192,562	U
108	1206308A	Army Space Systems Integration	04	104,996				104,996	U
	Advanced Component Development & Prototypes			2,929,355		17,114	17,114	2,946,469	
109	0604201A	Aircraft Avionics	05	29,164				29,164	U
110	0604270A	Electronic Warfare Development	05	70,539				70,539	U
111	0604321A	All Source Analysis System	05						U
112	0604328A	TRACTOR CAGE	05						U
113	0604601A	Infantry Support Weapons	05	106,121				106,121	U
114	0604604A	Medium Tactical Vehicles	05	2,152				2,152	U
115	0604611A	JAVELIN	05	17,897				17,897	U
116	0604622A	Family of Heavy Tactical Vehicles	05	16,745				16,745	U
117	0604633A	Air Traffic Control	05	6,989				6,989	U
118	0604642A	Light Tactical Wheeled Vehicles	05	10,465				10,465	U
119	0604645A	Armored Systems Modernization (ASM) - Eng Dev	05	310,152				310,152	U

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120	0604710A	Night Vision Systems - Eng Dev	05	184,389	144,442		144,442	U
121	0604713A	Combat Feeding, Clothing, and Equipment	05	8,561	4,502		4,502	U
122	0604715A	Non-System Training Devices - Eng Dev	05	51,900	44,381		44,381	U
123	0604741A	Air Defense Command, Control and Intelligence - Eng Dev	05	190,385	93,073	119,300	212,373	U
124	0604742A	Constructive Simulation Systems Development	05	17,921	22,600		22,600	U
125	0604746A	Automatic Test Equipment Development	05	7,054	11,782		11,782	U
126	0604760A	Distributive Interactive Simulations (DIS) - Eng Dev	05	10,890	9,134		9,134	U
127	0604768A	Brilliant Anti-Armor Submunition (BAT)	05	7,886	6,886		6,886	U
128	0604780A	Combined Arms Tactical Trainer (CATT) Core	05	17,855	21,936		21,936	U
129	0604798A	Brigade Analysis, Integration and Evaluation	05	139,386	49,250		49,250	U
130	0604802A	Weapons and Munitions - Eng Dev	05	144,389	172,744		172,744	U
131	0604804A	Logistics and Engineer Equipment - Eng Dev	05	76,030	76,388		76,388	U
132	0604805A	Command, Control, Communications Systems - Eng Dev	05	9,559	15,950		15,950	U
133	0604807A	Medical Materiel/Medical Biological Defense Equipment - Eng Dev	05	36,685	44,495		44,495	U
134	0604808A	Landmine Warfare/Barrier - Eng Dev	05	26,188	43,064		43,064	U

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120	0604710A	Night Vision Systems - Eng Dev	05	181,732				181,732	U
121	0604713A	Combat Feeding, Clothing, and Equipment	05	2,393				2,393	U
122	0604715A	Non-System Training Devices - Eng Dev	05	27,412				27,412	U
123	0604741A	Air Defense Command, Control and Intelligence - Eng Dev	05	43,502				43,502	U
124	0604742A	Constructive Simulation Systems Development	05	11,636				11,636	U
125	0604746A	Automatic Test Equipment Development	05	10,915				10,915	U
126	0604760A	Distributive Interactive Simulations (DIS) - Eng Dev	05	7,801				7,801	U
127	0604768A	Brilliant Anti-Armor Submunition (BAT)	05	25,000				25,000	U
128	0604780A	Combined Arms Tactical Trainer (CATT) Core	05	9,241				9,241	U
129	0604798A	Brigade Analysis, Integration and Evaluation	05	42,634				42,634	U
130	0604802A	Weapons and Munitions - Eng Dev	05	181,023				181,023	U
131	0604804A	Logistics and Engineer Equipment - Eng Dev	05	103,226				103,226	U
132	0604805A	Command, Control, Communications Systems - Eng Dev	05	12,595				12,595	U
133	0604807A	Medical Materiel/Medical Biological Defense Equipment - Eng Dev	05	48,264				48,264	U
134	0604808A	Landmine Warfare/Barrier - Eng Dev	05	39,208				39,208	U

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135	0604818A	Army Tactical Command & Control Hardware & Software	05	157,852	169,607		169,607	U
136	0604820A	Radar Development	05	31,651	39,289		39,289	U
137	0604822A	General Fund Enterprise Business System (GFEBBS)	05	47,575	36,810		36,810	U
138	0604823A	Firefinder	05	43,762	27,439		27,439	U
139	0604827A	Soldier Systems - Warrior Dem/Val	05	15,490	10,382		10,382	U
140	0604852A	Suite of Survivability Enhancement Systems - EMD	05	90,187	52,839		52,839	U
141	0604854A	Artillery Systems - EMD	05	3,892	1,779		1,779	U
142	0605013A	Information Technology Development	05	62,613	77,686		77,686	U
143	0605018A	Integrated Personnel and Pay System-Army (IPPS-A)	05	188,637	164,899		164,899	U
144	0605028A	Armored Multi-Purpose Vehicle (AMPV)	05	184,300	111,821		111,821	U
145	0605029A	Integrated Ground Security Surveillance Response Capability (IGSSR-C)	05	4,241	3,207		3,207	U
146	0605030A	Joint Tactical Network Center (JTNC)	05	15,242	15,869		15,869	U
147	0605031A	Joint Tactical Network (JTN)	05	46,051	41,920		41,920	U
148	0605032A	TRACTOR TIRE	05	118,570	41,166	66,760	107,926	U
149	0605033A	Ground-Based Operational Surveillance System - Expeditionary (GBOSS-E)	05	20,661	5,169		5,169	U
150	0605034A	Tactical Security System (TSS)	05	3,998	4,490		4,490	U
151	0605035A	Common Infrared Countermeasures (CIRCM)	05	97,746	31,139	2,670	33,809	U

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135	0604818A	Army Tactical Command & Control Hardware & Software	05	140,637				140,637	U
136	0604820A	Radar Development	05	105,243				105,243	U
137	0604822A	General Fund Enterprise Business System (GFEBS)	05	46,683				46,683	U
138	0604823A	Firefinder	05	17,294				17,294	U
139	0604827A	Soldier Systems - Warrior Dem/Val	05	5,803				5,803	U
140	0604852A	Suite of Survivability Enhancement Systems - EMD	05	98,698				98,698	U
141	0604854A	Artillery Systems - EMD	05	15,832				15,832	U
142	0605013A	Information Technology Development	05	126,537				126,537	U
143	0605018A	Integrated Personnel and Pay System-Army (IPPS-A)	05	142,773				142,773	U
144	0605028A	Armored Multi-Purpose Vehicle (AMPV)	05	96,730				96,730	U
145	0605029A	Integrated Ground Security Surveillance Response Capability (IGSSR-C)	05	6,699				6,699	U
146	0605030A	Joint Tactical Network Center (JTNC)	05	15,882				15,882	U
147	0605031A	Joint Tactical Network (JTN)	05	40,808				40,808	U
148	0605032A	TRACTOR TIRE	05						U
149	0605033A	Ground-Based Operational Surveillance System - Expeditionary (GBOSS-E)	05	3,847				3,847	U
150	0605034A	Tactical Security System (TSS)	05	6,928				6,928	U
151	0605035A	Common Infrared Countermeasures (CIRCM)	05	34,488		11,770	11,770	46,258	U

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152	0605036A	Combating Weapons of Mass Destruction (CWMD)	05	6,650	11,297		11,297	U
153	0605037A	Evidence Collection and Detainee Processing	05	206				U
154	0605038A	Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	05	15,481	15,135		15,135	U
155	0605041A	Defensive CYBER Tool Development	05	41,441	33,796		33,796	U
156	0605042A	Tactical Network Radio Systems (Low-Tier)	05	8,845	3,825		3,825	U
157	0605047A	Contract Writing System	05	19,574	41,876		41,876	U
158	0605049A	Missile Warning System Modernization (MWSM)	05	12,480	8,266		8,266	U
159	0605051A	Aircraft Survivability Development	05	169,752	21,938	34,933	56,871	U
160	0605052A	Indirect Fire Protection Capability Inc 2 - Block 1	05	156,361	132,283		132,283	U
161	0605053A	Ground Robotics	05	60,530	71,435		71,435	U
162	0605054A	Emerging Technology Initiatives	05		42,813		42,813	U
163	0605203A	Army System Development & Demonstration	05					U
164	0605380A	AMF Joint Tactical Radio System (JTRS)	05	18,639	15,964		15,964	U
165	0605450A	Joint Air-to-Ground Missile (JAGM)	05	28,539	11,758		11,758	U
166	0605457A	Army Integrated Air and Missile Defense (AIAMD)	05	339,051	322,263		322,263	U
167	0605625A	Manned Ground Vehicle	05					U

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152	0605036A	Combating Weapons of Mass Destruction (CWMD)	05	10,000				10,000	U
153	0605037A	Evidence Collection and Detainee Processing	05						U
154	0605038A	Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	05	6,054				6,054	U
155	0605041A	Defensive CYBER Tool Development	05	62,262				62,262	U
156	0605042A	Tactical Network Radio Systems (Low-Tier)	05	35,654				35,654	U
157	0605047A	Contract Writing System	05	19,682				19,682	U
158	0605049A	Missile Warning System Modernization (MWSM)	05	1,539				1,539	U
159	0605051A	Aircraft Survivability Development	05	64,557		77,420	77,420	141,977	U
160	0605052A	Indirect Fire Protection Capability Inc 2 - Block 1	05	243,228				243,228	U
161	0605053A	Ground Robotics	05	41,308				41,308	U
162	0605054A	Emerging Technology Initiatives	05	45,896				45,896	U
163	0605203A	Army System Development & Demonstration	05	164,883		19,527	19,527	184,410	U
164	0605380A	AMF Joint Tactical Radio System (JTRS)	05						U
165	0605450A	Joint Air-to-Ground Missile (JAGM)	05	9,500				9,500	U
166	0605457A	Army Integrated Air and Missile Defense (AIAMD)	05	208,938				208,938	U
167	0605625A	Manned Ground Vehicle	05	378,400				378,400	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se c
168	0605766A	National Capabilities Integration (MIP)	05	9,382	12,340		12,340	U
169	0605812A	Joint Light Tactical Vehicle (JLTV) Engineering and Manufacturing Development Ph	05	22,530				U
170	0605830A	Aviation Ground Support Equipment	05	6,653	7,703		7,703	U
171	0210609A	Paladin Integrated Management (PIM)	05	5,868				U
172	0303032A	TROJAN - RH12	05	5,631	4,521	1,200	5,721	U
173	0303267A	Auctioned Spectrum Relocation Fund	05	15,885				U
174	0304270A	Electronic Warfare Development	05	14,616	8,922		8,922	U
175	1205117A	Tractor Bears	05	17,928	23,170		23,170	U
System Development & Demonstration				3,349,488	2,965,361	236,863	3,202,224	
176	0604256A	Threat Simulator Development	06	31,401	47,322		47,322	U
177	0604258A	Target Systems Development	06	13,467	32,120		32,120	U
178	0604759A	Major T&E Investment	06	113,516	82,893		82,893	U
179	0605103A	Rand Arroyo Center	06	19,336	19,796		19,796	U
180	0605301A	Army Kwajalein Atoll	06	234,010	246,275		246,275	U
181	0605326A	Concepts Experimentation Program	06	28,701	30,394		30,394	U
182	0605502A	Small Business Innovative Research	06	284,080				U
183	0605601A	Army Test Ranges and Facilities	06	313,589	315,634		315,634	U
184	0605602A	Army Technical Test Instrumentation and Targets	06	57,395	84,805		84,805	U
185	0605604A	Survivability/Lethality Analysis	06	41,296	40,480		40,480	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
168	0605766A	National Capabilities Integration (MIP)	05	7,835				7,835	U
169	0605812A	Joint Light Tactical Vehicle (JLTV) Engineering and Manufacturing Development Ph	05	2,732				2,732	U
170	0605830A	Aviation Ground Support Equipment	05	1,664				1,664	U
171	0210609A	Paladin Integrated Management (PIM)	05						U
172	0303032A	TROJAN - RH12	05	3,936				3,936	U
173	0303267A	Auctioned Spectrum Relocation Fund	05						U
174	0304270A	Electronic Warfare Development	05	19,675		3,200	3,200	22,875	U
175	1205117A	Tractor Bears	05						U
System Development & Demonstration				3,549,431		111,917	111,917	3,661,348	
176	0604256A	Threat Simulator Development	06	14,117				14,117	U
177	0604258A	Target Systems Development	06	8,327				8,327	U
178	0604759A	Major T&E Investment	06	136,565				136,565	U
179	0605103A	Rand Arroyo Center	06	13,113				13,113	U
180	0605301A	Army Kwajalein Atoll	06	238,691				238,691	U
181	0605326A	Concepts Experimentation Program	06	42,922				42,922	U
182	0605502A	Small Business Innovative Research	06						U
183	0605601A	Army Test Ranges and Facilities	06	334,468				334,468	U
184	0605602A	Army Technical Test Instrumentation and Targets	06	46,974				46,974	U
185	0605604A	Survivability/Lethality Analysis	06	35,075				35,075	U

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186	0605606A	Aircraft Certification	06	4,612	3,936		3,936	U
187	0605702A	Meteorological Support to RDT&E Activities	06	7,070	9,759		9,759	U
188	0605706A	Materiel Systems Analysis	06	21,694	21,223		21,223	U
189	0605709A	Exploitation of Foreign Items	06	12,684	13,026		13,026	U
190	0605712A	Support of Operational Testing	06	50,723	52,705		52,705	U
191	0605716A	Army Evaluation Center	06	56,003	57,039		57,039	U
192	0605718A	Army Modeling & Sim X-Cmd Collaboration & Integ	06	1,756	2,798		2,798	U
193	0605801A	Programwide Activities	06	54,383	60,921		60,921	U
194	0605803A	Technical Information Activities	06	39,613	29,024		29,024	U
195	0605805A	Munitions Standardization, Effectiveness and Safety	06	65,709	72,279		72,279	U
196	0605857A	Environmental Quality Technology Mgmt Support	06	4,883	3,211		3,211	U
197	0605898A	Army Direct Report Headquarters - R&D - MHA	06	54,177	54,130		54,130	U
198	0606001A	Military Ground-Based CREW Technology	06	7,600	4,890		4,890	U
199	0606002A	Ronald Reagan Ballistic Missile Defense Test Site	06	59,042	62,940		62,940	U
200	0606003A	CounterIntel and Human Intel Modernization	06		2,636		2,636	U
201	0606942A	Assessments and Evaluations Cyber Vulnerabilities	06		88,300		88,300	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
186	0605606A	Aircraft Certification	06	3,461				3,461	U
187	0605702A	Meteorological Support to RDT&E Activities	06	6,233				6,233	U
188	0605706A	Materiel Systems Analysis	06	21,342				21,342	U
189	0605709A	Exploitation of Foreign Items	06	11,168				11,168	U
190	0605712A	Support of Operational Testing	06	52,723				52,723	U
191	0605716A	Army Evaluation Center	06	60,815				60,815	U
192	0605718A	Army Modeling & Sim X-Cmd Collaboration & Integ	06	2,527				2,527	U
193	0605801A	Programwide Activities	06	58,175				58,175	U
194	0605803A	Technical Information Activities	06	25,060				25,060	U
195	0605805A	Munitions Standardization, Effectiveness and Safety	06	44,458				44,458	U
196	0605857A	Environmental Quality Technology Mgmt Support	06	4,681				4,681	U
197	0605898A	Army Direct Report Headquarters - R&D - MHA	06	53,820				53,820	U
198	0606001A	Military Ground-Based CREW Technology	06	4,291				4,291	U
199	0606002A	Ronald Reagan Ballistic Missile Defense Test Site	06	62,069				62,069	U
200	0606003A	CounterIntel and Human Intel Modernization	06	1,050		1,875	1,875	2,925	U
201	0606942A	Assessments and Evaluations Cyber Vulnerabilities	06	4,500				4,500	U

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202	0303260A	Defense Military Deception Initiative	06	1,708				U
203	0909999A	Financing for Cancelled Account Adjustments	06	654				U
RDT&E Management Support				1,579,102	1,438,536		1,438,536	
204	0603778A	MLRS Product Improvement Program	07	10,286	6,877		6,877	U
205	0603813A	TRACTOR PULL	07	4,014	4,067		4,067	U
206	0605024A	Anti-Tamper Technology Support	07	4,009	7,251		7,251	U
207	0607131A	Weapons and Munitions Product Improvement Programs	07	16,302	16,003	2,548	18,551	U
208	0607133A	TRACTOR SMOKE	07	12,143	4,577	7,780	12,357	U
209	0607134A	Long Range Precision Fires (LRPF)	07	80,690	159,278		159,278	U
210	0607135A	Apache Product Improvement Program	07	55,565	24,019		24,019	U
211	0607136A	Blackhawk Product Improvement Program	07	48,241	35,196		35,196	U
212	0607137A	Chinook Product Improvement Program	07	155,433	144,722		144,722	U
213	0607138A	Fixed Wing Product Improvement Program	07	7,782	2,280		2,280	U
214	0607139A	Improved Turbine Engine Program	07	167,532	188,903		188,903	U
215	0607140A	Emerging Technologies from NIE	07	26,112				U
216	0607142A	Aviation Rocket System Product Improvement and Development	07	9,662	38,452		38,452	U
217	0607143A	Unmanned Aircraft System Universal Products	07	36,926	38,331		38,331	U
218	0607145A	Apache Future Development	07					U

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202	0303260A	Defense Military Deception Initiative	06						U
203	0909999A	Financing for Cancelled Account Adjustments	06						U
RDT&E Management Support				1,286,625		1,875	1,875	1,288,500	
204	0603778A	MLRS Product Improvement Program	07	22,877				22,877	U
205	0603813A	TRACTOR PULL	07						U
206	0605024A	Anti-Tamper Technology Support	07	8,491				8,491	U
207	0607131A	Weapons and Munitions Product Improvement Programs	07	15,645				15,645	U
208	0607133A	TRACTOR SMOKE	07						U
209	0607134A	Long Range Precision Fires (LRPF)	07	164,182				164,182	U
210	0607135A	Apache Product Improvement Program	07						U
211	0607136A	Blackhawk Product Improvement Program	07	13,039				13,039	U
212	0607137A	Chinook Product Improvement Program	07	174,371				174,371	U
213	0607138A	Fixed Wing Product Improvement Program	07	4,545				4,545	U
214	0607139A	Improved Turbine Engine Program	07	206,434				206,434	U
215	0607140A	Emerging Technologies from NIE	07						U
216	0607142A	Aviation Rocket System Product Improvement and Development	07	24,221				24,221	U
217	0607143A	Unmanned Aircraft System Universal Products	07	32,016				32,016	U
218	0607145A	Apache Future Development	07	5,448				5,448	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
219	0607312A	Army Operational Systems Development	07					U
220	0607665A	Family of Biometrics	07	3,032	2,397		2,397	U
221	0607865A	Patriot Product Improvement	07	77,391	75,288		75,288	U
222	0203728A	Joint Automated Deep Operation Coordination System (JADOCS)	07	32,256	30,915		30,915	U
223	0203735A	Combat Vehicle Improvement Programs	07	293,921	336,063		336,063	U
224	0203740A	Maneuver Control System	07	6,443				U
225	0203743A	155mm Self-Propelled Howitzer Improvements	07	39,154	37,155		37,155	U
226	0203744A	Aircraft Modifications/Product Improvement Programs	07	34,228	17,684		17,684	U
227	0203752A	Aircraft Engine Component Improvement Program	07	139	146		146	U
228	0203758A	Digitization	07	4,611	6,308		6,308	U
229	0203801A	Missile/Air Defense Product Improvement Program	07	43,615	1,641	2,000	3,641	U
230	0203802A	Other Missile Product Improvement Programs	07	4,800	4,941		4,941	U
231	0203808A	TRACTOR CARD	07	37,883	34,050		34,050	U
232	0205402A	Integrated Base Defense - Operational System Dev	07			8,000	8,000	U
233	0205410A	Materials Handling Equipment	07	1,519	1,462		1,462	U
234	0205412A	Environmental Quality Technology - Operational System Dev	07	187	249		249	U
235	0205456A	Lower Tier Air and Missile Defense (AMD) System	07	69,558	77,188		77,188	U

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219	0607312A	Army Operational Systems Development	07	49,526				49,526	U
220	0607665A	Family of Biometrics	07	1,702				1,702	U
221	0607865A	Patriot Product Improvement	07	96,430				96,430	U
222	0203728A	Joint Automated Deep Operation Coordination System (JADOCS)	07	47,398				47,398	U
223	0203735A	Combat Vehicle Improvement Programs	07	334,463				334,463	U
224	0203740A	Maneuver Control System	07						U
225	0203743A	155mm Self-Propelled Howitzer Improvements	07	214,246				214,246	U
226	0203744A	Aircraft Modifications/Product Improvement Programs	07	16,486				16,486	U
227	0203752A	Aircraft Engine Component Improvement Program	07	144				144	U
228	0203758A	Digitization	07	5,270				5,270	U
229	0203801A	Missile/Air Defense Product Improvement Program	07	1,287				1,287	U
230	0203802A	Other Missile Product Improvement Programs	07						U
231	0203808A	TRACTOR CARD	07						U
232	0205402A	Integrated Base Defense - Operational System Dev	07						U
233	0205410A	Materials Handling Equipment	07						U
234	0205412A	Environmental Quality Technology - Operational System Dev	07	732				732	U
235	0205456A	Lower Tier Air and Missile Defense (AMD) System	07	107,746				107,746	U

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236	0205778A	Guided Multiple-Launch Rocket System (GMLRS)	07	93,900	118,955		118,955	U
238	0303028A	Security and Intelligence Activities	07	35,652	12,277	23,199	35,476	U
239	0303140A	Information Systems Security Program	07	108,755	42,520		42,520	U
240	0303141A	Global Combat Support System	07	45,372	53,855		53,855	U
241	0303150A	WWMCCS/Global Command and Control System	07	10,055	2,031		2,031	U
244	0305172A	Combined Advanced Applications	07	1,100	1,500		1,500	U
245	0305179A	Integrated Broadcast Service (IBS)	07		450		450	U
246	0305204A	Tactical Unmanned Aerial Vehicles	07	16,925	6,000		6,000	U
247	0305206A	Airborne Reconnaissance Systems	07	20,080	12,416	14,000	26,416	U
248	0305208A	Distributed Common Ground/Surface Systems	07	24,700	27,109		27,109	U
249	0305219A	MQ-1C Gray Eagle UAS	07	10,531				U
250	0305232A	RQ-11 UAV	07	12,691	6,180		6,180	U
251	0305233A	RQ-7 UAV	07	12,773	17,863		17,863	U
252	0307665A	Biometrics Enabled Intelligence	07	8,573	4,310	2,214	6,524	U
253	0708045A	End Item Industrial Preparedness Activities	07	118,410	108,696		108,696	U
254	1203142A	SATCOM Ground Environment (SPACE)	07	9,945	12,105		12,105	U
255	1208053A	Joint Tactical Ground System	07	10,228	7,400		7,400	U
9999	9999999999	Classified Programs		7,154	5,955		5,955	U
		Operational Systems Development		1,830,278	1,735,065	59,741	1,794,806	

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
236	0205778A	Guided Multiple-Launch Rocket System (GMLRS)	07	138,594				138,594	U
238	0303028A	Security and Intelligence Activities	07	13,845		22,904	22,904	36,749	U
239	0303140A	Information Systems Security Program	07	29,185				29,185	U
240	0303141A	Global Combat Support System	07	68,976				68,976	U
241	0303150A	WWMCCS/Global Command and Control System	07	2,073				2,073	U
244	0305172A	Combined Advanced Applications	07						U
245	0305179A	Integrated Broadcast Service (IBS)	07	459				459	U
246	0305204A	Tactical Unmanned Aerial Vehicles	07	5,097		34,100	34,100	39,197	U
247	0305206A	Airborne Reconnaissance Systems	07	11,177		14,000	14,000	25,177	U
248	0305208A	Distributed Common Ground/Surface Systems	07	38,121				38,121	U
249	0305219A	MQ-1C Gray Eagle UAS	07						U
250	0305232A	RQ-11 UAV	07	3,218				3,218	U
251	0305233A	RQ-7 UAV	07	7,817				7,817	U
252	0307665A	Biometrics Enabled Intelligence	07	2,000		2,214	2,214	4,214	U
253	0708045A	End Item Industrial Preparedness Activities	07	59,848				59,848	U
254	1203142A	SATCOM Ground Environment (SPACE)	07	34,169				34,169	U
255	1208053A	Joint Tactical Ground System	07	10,275				10,275	U
9999	9999999999	Classified Programs		7,273				7,273	U
Operational Systems Development				1,978,826		73,218	73,218	2,052,044	

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Line	Program Element		FY 2018	FY 2019	FY 2019	FY 2019	S
<u>No</u>	<u>Number</u>	<u>Item</u>	<u>Act</u>	<u>Base Enacted</u>	<u>OCO Enacted</u>	<u>Total Enacted</u>	<u>e</u>
			(Base + OCO)				<u>c</u>
			-----	-----	-----	-----	
Total	Research, Development, Test & Eval, Army		11,633,461	11,074,556	300,604	11,375,160	

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Line	Program Element <u>No</u> <u>Number</u>	<u>Item</u>	<u>Act</u>	FY 2020 <u>Base</u>	FY 2020 OCO for Base <u>Requirements</u>	FY 2020 OCO for Direct War and Enduring <u>Costs</u>	FY 2020 Total <u>OCO</u>	FY 2020 Total <u>(Base + OCO)</u>	<u>S</u> <u>e</u> <u>c</u>
				-----	-----	-----	-----	-----	
		Total Research, Development, Test & Eval, Army		12,192,771		204,124	204,124	12,396,895	

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<u>Summary Recap of Budget Activities</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
Basic Research	604,634	679,772		679,772
Applied Research	975,419	1,018,795		1,018,795
Advanced Technology Development	900,071	851,710		851,710
Advanced Component Development & Prototypes	4,210,640	4,139,479	33,300	4,172,779
System Development & Demonstration	6,037,909	5,863,466	1,100	5,864,566
Management Support	1,388,936	1,023,070		1,023,070
Operational Systems Development	4,347,723	4,913,710	133,412	5,047,122
Total Research, Development, Test & Evaluation	18,465,332	18,490,002	167,812	18,657,814
 <u>Summary Recap of FYDP Programs</u>				
Strategic Forces	192,820	240,310		240,310
General Purpose Forces	1,514,837	1,914,231	16,130	1,930,361
Intelligence and Communications	816,404	608,772		608,772
Research and Development	13,991,927	13,937,905	34,400	13,972,305
Central Supply and Maintenance	40,084	73,844		73,844
Administration and Associated Activities	1,820	1,579		1,579
Space	49,738	42,858		42,858
Classified Programs	1,857,702	1,670,503	117,282	1,787,785
Total Research, Development, Test & Evaluation	18,465,332	18,490,002	167,812	18,657,814

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<u>Summary Recap of Budget Activities</u>	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
Basic Research	605,978				605,978
Applied Research	936,453				936,453
Advanced Technology Development	742,210				742,210
Advanced Component Development & Prototypes	5,559,062		40,006	40,006	5,599,068
System Development & Demonstration	6,332,033		1,122	1,122	6,333,155
Management Support	990,464				990,464
Operational Systems Development	5,104,299		123,282	123,282	5,227,581
Total Research, Development, Test & Evaluation	20,270,499		164,410	164,410	20,434,909
 <u>Summary Recap of FYDP Programs</u>					
Strategic Forces	239,019				239,019
General Purpose Forces	1,835,959		15,000	15,000	1,850,959
Intelligence and Communications	692,089				692,089
Research and Development	15,828,006		41,128	41,128	15,869,134
Central Supply and Maintenance	44,961				44,961
Administration and Associated Activities	1,460				1,460
Space	15,868				15,868
Classified Programs	1,613,137		108,282	108,282	1,721,419
Total Research, Development, Test & Evaluation	20,270,499		164,410	164,410	20,434,909

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
1	0601103N	University Research Initiatives	01	137,515	161,433		161,433	U
2	0601152N	In-House Laboratory Independent Research	01	19,035	19,237		19,237	U
3	0601153N	Defense Research Sciences	01	448,084	499,102		499,102	U
		Basic Research		604,634	679,772		679,772	
4	0602114N	Power Projection Applied Research	02	23,028	27,643		27,643	U
5	0602123N	Force Protection Applied Research	02	182,614	180,549		180,549	U
6	0602131M	Marine Corps Landing Force Technology	02	54,526	63,212		63,212	U
7	0602235N	Common Picture Applied Research	02	35,846	36,348		36,348	U
8	0602236N	Warfighter Sustainment Applied Research	02	48,606	65,782		65,782	U
9	0602271N	Electromagnetic Systems Applied Research	02	83,640	76,497		76,497	U
10	0602435N	Ocean Warfighting Environment Applied Research	02	72,530	89,998		89,998	U
11	0602651M	Joint Non-Lethal Weapons Applied Research	02	6,230	6,299		6,299	U
12	0602747N	Undersea Warfare Applied Research	02	59,644	78,049		78,049	U
13	0602750N	Future Naval Capabilities Applied Research	02	147,219	137,701		137,701	U
14	0602782N	Mine and Expeditionary Warfare Applied Research	02	35,430	38,214		38,214	U
15	0602792N	Innovative Naval Prototypes (INP) Applied Research	02	160,884	154,085		154,085	U

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1	0601103N	University Research Initiatives	01	116,850				116,850	U
2	0601152N	In-House Laboratory Independent Research	01	19,121				19,121	U
3	0601153N	Defense Research Sciences	01	470,007				470,007	U
		Basic Research		605,978				605,978	
4	0602114N	Power Projection Applied Research	02	18,546				18,546	U
5	0602123N	Force Protection Applied Research	02	119,517				119,517	U
6	0602131M	Marine Corps Landing Force Technology	02	56,604				56,604	U
7	0602235N	Common Picture Applied Research	02	49,297				49,297	U
8	0602236N	Warfighter Sustainment Applied Research	02	63,825				63,825	U
9	0602271N	Electromagnetic Systems Applied Research	02	83,497				83,497	U
10	0602435N	Ocean Warfighting Environment Applied Research	02	63,894				63,894	U
11	0602651M	Joint Non-Lethal Weapons Applied Research	02	6,346				6,346	U
12	0602747N	Undersea Warfare Applied Research	02	57,075				57,075	U
13	0602750N	Future Naval Capabilities Applied Research	02	154,755				154,755	U
14	0602782N	Mine and Expeditionary Warfare Applied Research	02	36,074				36,074	U
15	0602792N	Innovative Naval Prototypes (INP) Applied Research	02	153,062				153,062	U

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16	0602861N	Science and Technology Management - ONR Field Activities	02	65,222	64,418		64,418	U
		Applied Research		975,419	1,018,795		1,018,795	
17	0603123N	Force Protection Advanced Technology	03	52,785	32,615		32,615	U
18	0603271N	Electromagnetic Systems Advanced Technology	03	9,231	8,804		8,804	U
19	0603640M	USMC Advanced Technology Demonstration (ATD)	03	164,992	174,809		174,809	U
20	0603651M	Joint Non-Lethal Weapons Technology Development	03	13,090	13,313		13,313	U
21	0603673N	Future Naval Capabilities Advanced Technology Development	03	215,946	214,184		214,184	U
22	0603680N	Manufacturing Technology Program	03	66,173	58,657		58,657	U
23	0603729N	Warfighter Protection Advanced Technology	03	42,895	41,377		41,377	U
24	0603747N	Undersea Warfare Advanced Technology	03	9,657				U
25	0603758N	Navy Warfighting Experiments and Demonstrations	03	63,867	65,885		65,885	U
26	0603782N	Mine and Expeditionary Warfare Advanced Technology	03	14,826	39,672		39,672	U
27	0603801N	Innovative Naval Prototypes (INP) Advanced Technology Development	03	246,609	202,394		202,394	U
		Advanced Technology Development		900,071	851,710		851,710	
28	0603207N	Air/Ocean Tactical Applications	04	47,422	29,747		29,747	U
29	0603216N	Aviation Survivability	04	5,450	7,050		7,050	U
30	0603251N	Aircraft Systems	04	693	793		793	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
16	0602861N	Science and Technology Management - ONR Field Activities	02	73,961				73,961	U
		Applied Research		936,453				936,453	
17	0603123N	Force Protection Advanced Technology	03	35,286				35,286	U
18	0603271N	Electromagnetic Systems Advanced Technology	03	9,499				9,499	U
19	0603640M	USMC Advanced Technology Demonstration (ATD)	03	172,847				172,847	U
20	0603651M	Joint Non-Lethal Weapons Technology Development	03	13,307				13,307	U
21	0603673N	Future Naval Capabilities Advanced Technology Development	03	231,907				231,907	U
22	0603680N	Manufacturing Technology Program	03	60,138				60,138	U
23	0603729N	Warfighter Protection Advanced Technology	03	4,849				4,849	U
24	0603747N	Undersea Warfare Advanced Technology	03						U
25	0603758N	Navy Warfighting Experiments and Demonstrations	03	67,739				67,739	U
26	0603782N	Mine and Expeditionary Warfare Advanced Technology	03	13,335				13,335	U
27	0603801N	Innovative Naval Prototypes (INP) Advanced Technology Development	03	133,303				133,303	U
		Advanced Technology Development		742,210				742,210	
28	0603207N	Air/Ocean Tactical Applications	04	32,643		2,400	2,400	35,043	U
29	0603216N	Aviation Survivability	04	11,919				11,919	U
30	0603251N	Aircraft Systems	04	1,473				1,473	U

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31	0603254N	ASW Systems Development	04	7,466	7,044		7,044	U
32	0603261N	Tactical Airborne Reconnaissance	04	3,692	3,540		3,540	U
33	0603382N	Advanced Combat Systems Technology	04	4,450	39,240		39,240	U
34	0603502N	Surface and Shallow Water Mine Countermeasures	04	69,906	120,348		120,348	U
35	0603506N	Surface Ship Torpedo Defense	04	24,174	7,100		7,100	U
36	0603512N	Carrier Systems Development	04	9,184	5,440		5,440	U
37	0603525N	PILOT FISH	04	111,278	136,533		136,533	U
38	0603527N	RETRACT LARCH	04	32,608	11,745	18,000	29,745	U
39	0603536N	RETRACT JUNIPER	04	126,210	113,679		113,679	U
40	0603542N	Radiological Control	04	716	740		740	U
41	0603553N	Surface ASW	04	1,092	1,122		1,122	U
42	0603561N	Advanced Submarine System Development	04	91,927	105,809		105,809	U
43	0603562N	Submarine Tactical Warfare Systems	04	13,597	12,374		12,374	U
44	0603563N	Ship Concept Advanced Design	04	23,856	74,603		74,603	U
45	0603564N	Ship Preliminary Design & Feasibility Studies	04	18,369	13,348		13,348	U
46	0603570N	Advanced Nuclear Power Systems	04	329,500	256,137		256,137	U
47	0603573N	Advanced Surface Machinery Systems	04	22,406	27,109		27,109	U
48	0603576N	CHALK EAGLE	04	188,927	29,353		29,353	U
49	0603581N	Littoral Combat Ship (LCS)	04	49,308	37,997		37,997	U
50	0603582N	Combat System Integration	04	15,471	16,351		16,351	U

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31	0603254N	ASW Systems Development	04	7,172				7,172	U
32	0603261N	Tactical Airborne Reconnaissance	04	3,419				3,419	U
33	0603382N	Advanced Combat Systems Technology	04	64,694				64,694	U
34	0603502N	Surface and Shallow Water Mine Countermeasures	04	507,000				507,000	U
35	0603506N	Surface Ship Torpedo Defense	04	15,800				15,800	U
36	0603512N	Carrier Systems Development	04	4,997				4,997	U
37	0603525N	PILOT FISH	04	291,148				291,148	U
38	0603527N	RETRACT LARCH	04	11,980		22,000	22,000	33,980	U
39	0603536N	RETRACT JUNIPER	04	129,163				129,163	U
40	0603542N	Radiological Control	04	689				689	U
41	0603553N	Surface ASW	04	1,137				1,137	U
42	0603561N	Advanced Submarine System Development	04	148,756				148,756	U
43	0603562N	Submarine Tactical Warfare Systems	04	11,192				11,192	U
44	0603563N	Ship Concept Advanced Design	04	81,846				81,846	U
45	0603564N	Ship Preliminary Design & Feasibility Studies	04	69,084				69,084	U
46	0603570N	Advanced Nuclear Power Systems	04	181,652				181,652	U
47	0603573N	Advanced Surface Machinery Systems	04	25,408				25,408	U
48	0603576N	CHALK EAGLE	04	64,877				64,877	U
49	0603581N	Littoral Combat Ship (LCS)	04	9,934				9,934	U
50	0603582N	Combat System Integration	04	17,251				17,251	U

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51	0603595N	Ohio Replacement	04	775,624	542,846		542,846	U
52	0603596N	LCS Mission Modules	04	100,470	103,559		103,559	U
53	0603597N	Automated Test and Analysis	04	24,145	37,931		37,931	U
54	0603599N	Frigate Development	04	137,655	132,775		132,775	U
55	0603609N	Conventional Munitions	04	13,699	9,307		9,307	U
56	0603635M	Marine Corps Ground Combat/Support System	04	771				U
57	0603654N	Joint Service Explosive Ordnance Development	04	77,409	47,857	13,900	61,757	U
58	0603713N	Ocean Engineering Technology Development	04	8,853	5,915		5,915	U
59	0603721N	Environmental Protection	04	23,237	19,811		19,811	U
60	0603724N	Navy Energy Program	04	42,425	32,656		32,656	U
61	0603725N	Facilities Improvement	04	2,794	5,301		5,301	U
62	0603734N	CHALK CORAL	04	237,402	267,477		267,477	U
63	0603739N	Navy Logistic Productivity	04	2,882	2,913		2,913	U
64	0603746N	RETRACT MAPLE	04	287,865	318,878		318,878	U
65	0603748N	LINK PLUMERIA	04	375,595	381,268		381,268	U
66	0603751N	RETRACT ELM	04	52,080	58,192		58,192	U
67	0603764N	LINK EVERGREEN	04	47,115				U
68	0603790N	NATO Research and Development	04	8,752	9,652		9,652	U
69	0603795N	Land Attack Technology	04	16,684	5,700	1,400	7,100	U
70	0603851M	Joint Non-Lethal Weapons Testing	04	23,934	27,581		27,581	U

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51	0603595N	Ohio Replacement	04	419,051				419,051	U
52	0603596N	LCS Mission Modules	04	108,505				108,505	U
53	0603597N	Automated Test and Analysis	04	7,653				7,653	U
54	0603599N	Frigate Development	04	59,007				59,007	U
55	0603609N	Conventional Munitions	04	9,988				9,988	U
56	0603635M	Marine Corps Ground Combat/Support System	04	86,464				86,464	U
57	0603654N	Joint Service Explosive Ordnance Development	04	33,478		14,178	14,178	47,656	U
58	0603713N	Ocean Engineering Technology Development	04	5,619				5,619	U
59	0603721N	Environmental Protection	04	20,564				20,564	U
60	0603724N	Navy Energy Program	04	26,514				26,514	U
61	0603725N	Facilities Improvement	04	3,440				3,440	U
62	0603734N	CHALK CORAL	04	346,800				346,800	U
63	0603739N	Navy Logistic Productivity	04	3,857				3,857	U
64	0603746N	RETRACT MAPLE	04	258,519				258,519	U
65	0603748N	LINK PLUMERIA	04	403,909				403,909	U
66	0603751N	RETRACT ELM	04	63,434				63,434	U
67	0603764N	LINK EVERGREEN	04	184,110				184,110	U
68	0603790N	NATO Research and Development	04	7,697				7,697	U
69	0603795N	Land Attack Technology	04	9,086		1,428	1,428	10,514	U
70	0603851M	Joint Non-Lethal Weapons Testing	04	28,466				28,466	U

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71	0603860N	Joint Precision Approach and Landing Systems - Dem/Val	04	103,984	101,566		101,566	U
72	0603925N	Directed Energy and Electric Weapon Systems	04	92,856	142,814		142,814	U
73	0604014N	F/A -18 Infrared Search and Track (IRST)	04		108,689		108,689	U
74	0604027N	Digital Warfare Office	04	14,476	20,000		20,000	U
75	0604028N	Small and Medium Unmanned Undersea Vehicles	04		16,717		16,717	U
76	0604029N	Unmanned Undersea Vehicle Core Technologies	04		27,483		27,483	U
77	0604030N	Rapid Prototyping, Experimentation and Demonstration.	04	25,225	28,596		28,596	U
78	0604031N	Large Unmanned Undersea Vehicles	04	23,886	60,304		60,304	U
79	0604112N	Gerald R. Ford Class Nuclear Aircraft Carrier (CVN 78 - 80)	04	82,549	83,121		83,121	U
80	0604126N	Littoral Airborne MCM	04	11,314	14,625		14,625	U
81	0604127N	Surface Mine Countermeasures	04	12,525	15,527		15,527	U
82	0604272N	Tactical Air Directional Infrared Countermeasures (TADIRCM)	04	51,311	47,278		47,278	U
83	0604286M	Marine Corps Additive Manufacturing Technology Development	04	6,168				U
84	0604289M	Next Generation Logistics	04		6,073		6,073	U
85	0604320M	Rapid Technology Capability Prototype	04	16,443	7,107		7,107	U
86	0604454N	LX (R)	04	9,431	5,549		5,549	U

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71	0603860N	Joint Precision Approach and Landing Systems - Dem/Val	04	51,341				51,341	U
72	0603925N	Directed Energy and Electric Weapon Systems	04	118,169				118,169	U
73	0604014N	F/A -18 Infrared Search and Track (IRST)	04	113,456				113,456	U
74	0604027N	Digital Warfare Office	04	50,120				50,120	U
75	0604028N	Small and Medium Unmanned Undersea Vehicles	04	32,527				32,527	U
76	0604029N	Unmanned Undersea Vehicle Core Technologies	04	54,376				54,376	U
77	0604030N	Rapid Prototyping, Experimentation and Demonstration.	04	36,197				36,197	U
78	0604031N	Large Unmanned Undersea Vehicles	04	68,310				68,310	U
79	0604112N	Gerald R. Ford Class Nuclear Aircraft Carrier (CVN 78 - 80)	04	121,310				121,310	U
80	0604126N	Littoral Airborne MCM	04	17,248				17,248	U
81	0604127N	Surface Mine Countermeasures	04	18,735				18,735	U
82	0604272N	Tactical Air Directional Infrared Countermeasures (TADIRCM)	04	68,346				68,346	U
83	0604286M	Marine Corps Additive Manufacturing Technology Development	04						U
84	0604289M	Next Generation Logistics	04	4,420				4,420	U
85	0604320M	Rapid Technology Capability Prototype	04	4,558				4,558	U
86	0604454N	LX (R)	04	12,500				12,500	U

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87	0604536N	Advanced Undersea Prototyping	04	64,038	112,669		112,669	U
88	0604636N	Counter Unmanned Aircraft Systems (C-UAS)	04					U
89	0604659N	Precision Strike Weapons Development Program	04	20,279	91,833		91,833	U
90	0604707N	Space and Electronic Warfare (SEW) Architecture/Engineering Support	04	41,214	7,230		7,230	U
91	0604786N	Offensive Anti-Surface Warfare Weapon Development	04	163,843	139,261		139,261	U
92	0303354N	ASW Systems Development - MIP	04	8,278	8,889		8,889	U
93	0304240M	Advanced Tactical Unmanned Aircraft System	04	5,200	17,561		17,561	U
94	0304240N	Advanced Tactical Unmanned Aircraft System	04		9,300		9,300	U
95	0304270N	Electronic Warfare Development - MIP	04	527	466		466	U
Advanced Component Development & Prototypes				4,210,640	4,139,479	33,300	4,172,779	
96	0603208N	Training System Aircraft	05	16,343	12,798		12,798	U
97	0604212N	Other Helo Development	05	26,423	23,579		23,579	U
98	0604214M	AV-8B Aircraft - Eng Dev	05		46,363		46,363	U
99	0604214N	AV-8B Aircraft - Eng Dev	05	41,261				U
100	0604215N	Standards Development	05	2,711	3,771		3,771	U
101	0604216N	Multi-Mission Helicopter Upgrade Development	05	5,313	16,611		16,611	U
102	0604218N	Air/Ocean Equipment Engineering	05	5,583	15,582		15,582	U
103	0604221N	P-3 Modernization Program	05	1,331	2,134		2,134	U

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87	0604536N	Advanced Undersea Prototyping	04	181,967				181,967	U
88	0604636N	Counter Unmanned Aircraft Systems (C-UAS)	04	5,500				5,500	U
89	0604659N	Precision Strike Weapons Development Program	04	718,148				718,148	U
90	0604707N	Space and Electronic Warfare (SEW) Architecture/Engineering Support	04	5,263				5,263	U
91	0604786N	Offensive Anti-Surface Warfare Weapon Development	04	65,419				65,419	U
92	0303354N	ASW Systems Development - MIP	04	9,991				9,991	U
93	0304240M	Advanced Tactical Unmanned Aircraft System	04	21,157				21,157	U
94	0304240N	Advanced Tactical Unmanned Aircraft System	04						U
95	0304270N	Electronic Warfare Development - MIP	04	609				609	U
Advanced Component Development & Prototypes				5,559,062		40,006	40,006	5,599,068	
96	0603208N	Training System Aircraft	05	15,514				15,514	U
97	0604212N	Other Helo Development	05	28,835				28,835	U
98	0604214M	AV-8B Aircraft - Eng Dev	05	27,441				27,441	U
99	0604214N	AV-8B Aircraft - Eng Dev	05						U
100	0604215N	Standards Development	05	3,642				3,642	U
101	0604216N	Multi-Mission Helicopter Upgrade Development	05	19,196				19,196	U
102	0604218N	Air/Ocean Equipment Engineering	05						U
103	0604221N	P-3 Modernization Program	05						U

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104	0604230N	Warfare Support System	05	19,004	9,729		9,729	U
105	0604231N	Tactical Command System	05	37,609	54,300		54,300	U
106	0604234N	Advanced Hawkeye	05	283,497	210,565		210,565	U
107	0604245M	H-1 Upgrades	05		54,320		54,320	U
108	0604245N	H-1 Upgrades	05	59,806				U
109	0604261N	Acoustic Search Sensors	05	36,310	42,485		42,485	U
110	0604262N	V-22A	05	176,804	135,504		135,504	U
111	0604264N	Air Crew Systems Development	05	7,174	30,980		30,980	U
112	0604269N	EA-18	05	137,029	242,719		242,719	U
113	0604270N	Electronic Warfare Development	05	50,613	83,624		83,624	U
114	0604273M	Executive Helo Development	05		245,064		245,064	U
115	0604273N	Executive Helo Development	05	430,647				U
116	0604274N	Next Generation Jammer (NGJ)	05	584,538	449,429		449,429	U
117	0604280N	Joint Tactical Radio System - Navy (JTRS-Navy)	05	5,172	3,272		3,272	U
118	0604282N	Next Generation Jammer (NGJ) Increment II	05	55,194	93,482		93,482	U
119	0604307N	Surface Combatant Combat System Engineering	05	340,760	379,116		379,116	U
120	0604311N	LPD-17 Class Systems Integration	05	665	939		939	U
121	0604329N	Small Diameter Bomb (SDB)	05	99,286	96,980		96,980	U
122	0604366N	Standard Missile Improvements	05	114,802	190,881		190,881	U
123	0604373N	Airborne MCM	05	15,203	8,351		8,351	U

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104	0604230N	Warfare Support System	05	8,601				8,601	U
105	0604231N	Tactical Command System	05	77,232				77,232	U
106	0604234N	Advanced Hawkeye	05	232,752				232,752	U
107	0604245M	H-1 Upgrades	05	65,359				65,359	U
108	0604245N	H-1 Upgrades	05						U
109	0604261N	Acoustic Search Sensors	05	47,013				47,013	U
110	0604262N	V-22A	05	185,105				185,105	U
111	0604264N	Air Crew Systems Development	05	21,172				21,172	U
112	0604269N	EA-18	05	143,585				143,585	U
113	0604270N	Electronic Warfare Development	05	116,811				116,811	U
114	0604273M	Executive Helo Development	05	187,436				187,436	U
115	0604273N	Executive Helo Development	05						U
116	0604274N	Next Generation Jammer (NGJ)	05	524,261				524,261	U
117	0604280N	Joint Tactical Radio System - Navy (JTRS-Navy)	05	192,345				192,345	U
118	0604282N	Next Generation Jammer (NGJ) Increment II	05	111,068				111,068	U
119	0604307N	Surface Combatant Combat System Engineering	05	415,625				415,625	U
120	0604311N	LPD-17 Class Systems Integration	05	640				640	U
121	0604329N	Small Diameter Bomb (SDB)	05	50,096				50,096	U
122	0604366N	Standard Missile Improvements	05	232,391				232,391	U
123	0604373N	Airborne MCM	05	10,916				10,916	U

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124	0604378N	Naval Integrated Fire Control - Counter Air Systems Engineering	05	24,801	33,429		33,429	U
125	0604501N	Advanced Above Water Sensors	05	84,507	33,884		33,884	U
126	0604503N	SSN-688 and Trident Modernization	05	142,167	126,932		126,932	U
127	0604504N	Air Control	05	68,012	61,498		61,498	U
128	0604512N	Shipboard Aviation Systems	05	174,034	13,710		13,710	U
129	0604518N	Combat Information Center Conversion	05	4,294	19,263		19,263	U
130	0604522N	Air and Missile Defense Radar (AMDR) System	05	49,643	27,008		27,008	U
131	0604530N	Advanced Arresting Gear (AAG)	05		172,173		172,173	U
132	0604558N	New Design SSN	05	117,887	180,233		180,233	U
133	0604562N	Submarine Tactical Warfare System	05	44,703	80,324		80,324	U
134	0604567N	Ship Contract Design/ Live Fire T&E	05	65,857	71,062		71,062	U
135	0604574N	Navy Tactical Computer Resources	05	4,745	4,642		4,642	U
136	0604580N	Virginia Payload Module (VPM)	05	70,579				U
137	0604601N	Mine Development	05	24,640	21,747		21,747	U
138	0604610N	Lightweight Torpedo Development	05	21,057	63,147		63,147	U
139	0604654N	Joint Service Explosive Ordnance Development	05	7,449	7,107		7,107	U
140	0604657M	USMC Ground Combat/Supporting Arms Systems - Eng Dev	05					U
141	0604703N	Personnel, Training, Simulation, and Human Factors	05	24,229	6,539		6,539	U
142	0604727N	Joint Standoff Weapon Systems	05	418	441		441	U

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124	0604378N	Naval Integrated Fire Control - Counter Air Systems Engineering	05	33,379				33,379	U
125	0604501N	Advanced Above Water Sensors	05	34,554				34,554	U
126	0604503N	SSN-688 and Trident Modernization	05	84,663				84,663	U
127	0604504N	Air Control	05	44,923				44,923	U
128	0604512N	Shipboard Aviation Systems	05	10,632				10,632	U
129	0604518N	Combat Information Center Conversion	05	16,094				16,094	U
130	0604522N	Air and Missile Defense Radar (AMDR) System	05	55,349				55,349	U
131	0604530N	Advanced Arresting Gear (AAG)	05	123,490				123,490	U
132	0604558N	New Design SSN	05	121,010				121,010	U
133	0604562N	Submarine Tactical Warfare System	05	62,426				62,426	U
134	0604567N	Ship Contract Design/ Live Fire T&E	05	46,809				46,809	U
135	0604574N	Navy Tactical Computer Resources	05	3,692				3,692	U
136	0604580N	Virginia Payload Module (VPM)	05						U
137	0604601N	Mine Development	05	28,964				28,964	U
138	0604610N	Lightweight Torpedo Development	05	148,349				148,349	U
139	0604654N	Joint Service Explosive Ordnance Development	05	8,237				8,237	U
140	0604657M	USMC Ground Combat/Supporting Arms Systems - Eng Dev	05	22,000				22,000	U
141	0604703N	Personnel, Training, Simulation, and Human Factors	05	5,500				5,500	U
142	0604727N	Joint Standoff Weapon Systems	05	18,725				18,725	U

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143	0604755N	Ship Self Defense (Detect & Control)	05	160,475	180,391	1,100	181,491	U
144	0604756N	Ship Self Defense (Engage: Hard Kill)	05	214,132	193,244		193,244	U
145	0604757N	Ship Self Defense (Engage: Soft Kill/EW)	05	126,037	120,210		120,210	U
146	0604761N	Intelligence Engineering	05	44,855	25,965		25,965	U
147	0604771N	Medical Development	05	36,392	38,095		38,095	U
148	0604777N	Navigation/ID System	05	74,984	126,026		126,026	U
149	0604800M	Joint Strike Fighter (JSF) - EMD	05	157,162	66,566		66,566	U
150	0604800N	Joint Strike Fighter (JSF) - EMD	05	105,648	65,494		65,494	U
151	0604810M	Joint Strike Fighter Follow On Modernization (FoM) - Marine Corps	05	139,369				U
152	0604810N	Joint Strike Fighter Follow On Modernization (FoM) - Navy	05	138,308				U
153	0605013M	Information Technology Development	05	14,497	11,030		11,030	U
154	0605013N	Information Technology Development	05	120,387	242,110		242,110	U
155	0605024N	Anti-Tamper Technology Support	05	3,900	5,618		5,618	U
156	0605212M	CH-53K RDTE	05		336,945		336,945	U
157	0605212N	CH-53K RDTE	05	329,367				U
158	0605215N	Mission Planning	05	36,108	32,714		32,714	U
159	0605217N	Common Avionics	05	47,338	51,486		51,486	U
160	0605220N	Ship to Shore Connector (SSC)	05	31,583	1,444		1,444	U
161	0605327N	T-AO 205 Class	05	1,895	1,298		1,298	U

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143	0604755N	Ship Self Defense (Detect & Control)	05	192,603		1,122	1,122	193,725	U
144	0604756N	Ship Self Defense (Engage: Hard Kill)	05	137,268				137,268	U
145	0604757N	Ship Self Defense (Engage: Soft Kill/EW)	05	97,363				97,363	U
146	0604761N	Intelligence Engineering	05	26,710				26,710	U
147	0604771N	Medical Development	05	8,181				8,181	U
148	0604777N	Navigation/ID System	05	40,755				40,755	U
149	0604800M	Joint Strike Fighter (JSF) - EMD	05	1,710				1,710	U
150	0604800N	Joint Strike Fighter (JSF) - EMD	05	1,490				1,490	U
151	0604810M	Joint Strike Fighter Follow On Modernization (FoM) - Marine Corps	05						U
152	0604810N	Joint Strike Fighter Follow On Modernization (FoM) - Navy	05						U
153	0605013M	Information Technology Development	05	1,494				1,494	U
154	0605013N	Information Technology Development	05	384,162				384,162	U
155	0605024N	Anti-Tamper Technology Support	05	4,882				4,882	U
156	0605212M	CH-53K RDTE	05	516,955				516,955	U
157	0605212N	CH-53K RDTE	05						U
158	0605215N	Mission Planning	05	75,886				75,886	U
159	0605217N	Common Avionics	05	43,187				43,187	U
160	0605220N	Ship to Shore Connector (SSC)	05	4,909				4,909	U
161	0605327N	T-AO 205 Class	05	1,682				1,682	U

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162	0605414N	Unmanned Carrier Aviation (UCA)	05	194,176	518,942		518,942	U
163	0605450M	Joint Air-to-Ground Missile (JAGM)	05		16,559		16,559	U
164	0605450N	Joint Air-to-Ground Missile (JAGM)	05	14,457				U
165	0605500N	Multi-mission Maritime Aircraft (MMA)	05	11,422	34,196		34,196	U
166	0605504N	Multi-Mission Maritime (MMA) Increment III	05	123,752	163,809		163,809	U
167	0605611M	Marine Corps Assault Vehicles System Development & Demonstration	05	150,381	66,137		66,137	U
168	0605813M	Joint Light Tactical Vehicle (JLTV) System Development & Demonstration	05	19,467				U
169	0204202N	DDG-1000	05	134,664	140,264		140,264	U
170	0303267N	Auctioned Spectrum Relocation Fund	05	97,558				U
171	0303467N	SENSR Spectrum Pipeline SRF	05	1,773				U
172	0304785N	Tactical Cryptologic Systems	05	22,762	42,398		42,398	U
173	0306250M	Cyber Operations Technology Development	05	2,960	6,808		6,808	U
		System Development & Demonstration		6,037,909	5,863,466	1,100	5,864,566	
174	0604256N	Threat Simulator Development	06	89,491	94,576		94,576	U
175	0604258N	Target Systems Development	06	18,737	10,981		10,981	U
176	0604759N	Major T&E Investment	06	68,977	90,514		90,514	U
177	0605126N	Joint Theater Air and Missile Defense Organization	06	140	48		48	U
178	0605152N	Studies and Analysis Support - Navy	06	4,438	3,942		3,942	U

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162	0605414N	Unmanned Carrier Aviation (UCA)	05	671,258				671,258	U
163	0605450M	Joint Air-to-Ground Missile (JAGM)	05	18,393				18,393	U
164	0605450N	Joint Air-to-Ground Missile (JAGM)	05						U
165	0605500N	Multi-mission Maritime Aircraft (MMA)	05	21,472				21,472	U
166	0605504N	Multi-Mission Maritime (MMA) Increment III	05	177,234				177,234	U
167	0605611M	Marine Corps Assault Vehicles System Development & Demonstration	05	77,322				77,322	U
168	0605813M	Joint Light Tactical Vehicle (JLTV) System Development & Demonstration	05	2,105				2,105	U
169	0204202N	DDG-1000	05	111,435				111,435	U
170	0303267N	Auctioned Spectrum Relocation Fund	05						U
171	0303467N	SENSR Spectrum Pipeline SRF	05						U
172	0304785N	Tactical Cryptologic Systems	05	101,339				101,339	U
173	0306250M	Cyber Operations Technology Development	05	26,406				26,406	U
		System Development & Demonstration		6,332,033		1,122	1,122	6,333,155	
174	0604256N	Threat Simulator Development	06	66,678				66,678	U
175	0604258N	Target Systems Development	06	12,027				12,027	U
176	0604759N	Major T&E Investment	06	85,348				85,348	U
177	0605126N	Joint Theater Air and Missile Defense Organization	06						U
178	0605152N	Studies and Analysis Support - Navy	06	3,908				3,908	U

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179	0605154N	Center for Naval Analyses	06	44,302	42,693		42,693	U
180	0605285N	Next Generation Fighter	06		5,000		5,000	U
181	0605502N	Small Business Innovative Research	06	407,133				U
182	0605804N	Technical Information Services	06	1,280	1,029		1,029	U
183	0605853N	Management, Technical & International Support	06	135,102	86,932		86,932	U
184	0605856N	Strategic Technical Support	06	3,909	4,231		4,231	U
185	0605861N	RDT&E Science and Technology Management	06	1,104	1,072		1,072	U
186	0605863N	RDT&E Ship and Aircraft Support	06	105,019	97,471		97,471	U
187	0605864N	Test and Evaluation Support	06	369,056	373,834		373,834	U
188	0605865N	Operational Test and Evaluation Capability	06	20,298	21,554		21,554	U
189	0605866N	Navy Space and Electronic Warfare (SEW) Support	06	16,274	16,227		16,227	U
190	0605867N	SEW Surveillance/Reconnaissance Support	06					U
191	0605873M	Marine Corps Program Wide Support	06	21,423	21,538		21,538	U
192	0605898N	Management HQ - R&D	06	43,266	41,765		41,765	U
193	0606355N	Warfare Innovation Management	06	27,759	41,918		41,918	U
194	0606942M	Assessments and Evaluations Cyber Vulnerabilities	06		7,000		7,000	U
195	0606942N	Assessments and Evaluations Cyber Vulnerabilities	06		48,800		48,800	U
196	0305327N	Insider Threat	06		1,682		1,682	U

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179	0605154N	Center for Naval Analyses	06	47,669				47,669	U
180	0605285N	Next Generation Fighter	06	20,698				20,698	U
181	0605502N	Small Business Innovative Research	06						U
182	0605804N	Technical Information Services	06	988				988	U
183	0605853N	Management, Technical & International Support	06	102,401				102,401	U
184	0605856N	Strategic Technical Support	06	3,742				3,742	U
185	0605861N	RDT&E Science and Technology Management	06						U
186	0605863N	RDT&E Ship and Aircraft Support	06	93,872				93,872	U
187	0605864N	Test and Evaluation Support	06	394,020				394,020	U
188	0605865N	Operational Test and Evaluation Capability	06	25,145				25,145	U
189	0605866N	Navy Space and Electronic Warfare (SEW) Support	06	15,773				15,773	U
190	0605867N	SEW Surveillance/Reconnaissance Support	06	8,402				8,402	U
191	0605873M	Marine Corps Program Wide Support	06	37,265				37,265	U
192	0605898N	Management HQ - R&D	06	39,673				39,673	U
193	0606355N	Warfare Innovation Management	06	28,750				28,750	U
194	0606942M	Assessments and Evaluations Cyber Vulnerabilities	06						U
195	0606942N	Assessments and Evaluations Cyber Vulnerabilities	06						U
196	0305327N	Insider Threat	06	2,645				2,645	U

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197	0902498N	Management Headquarters (Departmental Support Activities)	06	1,749	1,579		1,579	U
198	0909999N	Financing for Cancelled Account Adjustments	06	71				U
199	1206867N	SEW Surveillance/Reconnaissance Support	06	9,408	8,684		8,684	U
Management Support				1,388,936	1,023,070		1,023,070	
201	0604014N	F/A -18 Infrared Search and Track (IRST)	07	68,087				U
202	0604227N	HARPOON Modifications	07		5,197		5,197	U
203	0604840M	F-35 C2D2	07		234,107		234,107	U
204	0604840N	F-35 C2D2	07		227,998		227,998	U
205	0607658N	Cooperative Engagement Capability (CEC)	07	88,088	128,815		128,815	U
206	0607700N	Deployable Joint Command and Control	07	3,093	3,127		3,127	U
207	0101221N	Strategic Sub & Weapons System Support	07	130,652	148,379		148,379	U
208	0101224N	SSBN Security Technology Program	07	35,105	41,959		41,959	U
209	0101226N	Submarine Acoustic Warfare Development	07	9,439	11,311		11,311	U
210	0101402N	Navy Strategic Communications	07	17,624	38,661		38,661	U
211	0204136N	F/A-18 Squadrons	07	133,544	204,886		204,886	U
212	0204163N	Fleet Telecommunications (Tactical)	07	8,465	1,344		1,344	U
213	0204228N	Surface Support	07	20,587	9,708		9,708	U

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197	0902498N	Management Headquarters (Departmental Support Activities)	06	1,460				1,460	U
198	0909999N	Financing for Cancelled Account Adjustments	06						U
199	1206867N	SEW Surveillance/Reconnaissance Support	06						U
Management Support				990,464				990,464	
201	0604014N	F/A -18 Infrared Search and Track (IRST)	07						U
202	0604227N	HARPOON Modifications	07	2,302				2,302	U
203	0604840M	F-35 C2D2	07	422,881				422,881	U
204	0604840N	F-35 C2D2	07	383,741				383,741	U
205	0607658N	Cooperative Engagement Capability (CEC)	07	127,924				127,924	U
206	0607700N	Deployable Joint Command and Control	07						U
207	0101221N	Strategic Sub & Weapons System Support	07	157,676				157,676	U
208	0101224N	SSBN Security Technology Program	07	43,354				43,354	U
209	0101226N	Submarine Acoustic Warfare Development	07	6,815				6,815	U
210	0101402N	Navy Strategic Communications	07	31,174				31,174	U
211	0204136N	F/A-18 Squadrons	07	213,715				213,715	U
212	0204163N	Fleet Telecommunications (Tactical)	07						U
213	0204228N	Surface Support	07	36,389				36,389	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
214	0204229N	Tomahawk and Tomahawk Mission Planning Center (TMPC)	07	100,011	252,395		252,395	U
215	0204311N	Integrated Surveillance System	07	55,164	71,959		71,959	U
216	0204313N	Ship-Towed Array Surveillance Systems	07		15,454		15,454	U
217	0204413N	Amphibious Tactical Support Units (Displacement Craft)	07	2,346	6,073		6,073	U
218	0204460M	Ground/Air Task Oriented Radar (G/ATOR)	07	53,605	44,579		44,579	U
219	0204571N	Consolidated Training Systems Development	07	64,585	104,903		104,903	U
220	0204574N	Cryptologic Direct Support	07	2,355	4,544		4,544	U
221	0204575N	Electronic Warfare (EW) Readiness Support	07	49,094	66,889		66,889	U
222	0205601N	HARM Improvement	07	70,415	120,762		120,762	U
223	0205604N	Tactical Data Links	07	75,523	88,979		88,979	U
224	0205620N	Surface ASW Combat System Integration	07	28,410	26,321		26,321	U
225	0205632N	MK-48 ADCAP	07	48,740	68,255		68,255	U
226	0205633N	Aviation Improvements	07	120,940	134,823		134,823	U
227	0205675N	Operational Nuclear Power Systems	07	127,445	117,028		117,028	U
228	0206313M	Marine Corps Communications Systems	07	170,529	172,683	16,130	188,813	U
229	0206335M	Common Aviation Command and Control System (CAC2S)	07	6,976	4,760		4,760	U
230	0206623M	Marine Corps Ground Combat/Supporting Arms Systems	07	68,941	100,850		100,850	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
214	0204229N	Tomahawk and Tomahawk Mission Planning Center (TMPC)	07	320,134				320,134	U
215	0204311N	Integrated Surveillance System	07	88,382				88,382	U
216	0204313N	Ship-Towed Array Surveillance Systems	07	14,449				14,449	U
217	0204413N	Amphibious Tactical Support Units (Displacement Craft)	07	6,931				6,931	U
218	0204460M	Ground/Air Task Oriented Radar (G/ATOR)	07	23,891				23,891	U
219	0204571N	Consolidated Training Systems Development	07	129,873				129,873	U
220	0204574N	Cryptologic Direct Support	07						U
221	0204575N	Electronic Warfare (EW) Readiness Support	07	82,325				82,325	U
222	0205601N	HARM Improvement	07	138,431				138,431	U
223	0205604N	Tactical Data Links	07						U
224	0205620N	Surface ASW Combat System Integration	07	29,572				29,572	U
225	0205632N	MK-48 ADCAP	07	85,973				85,973	U
226	0205633N	Aviation Improvements	07	125,461				125,461	U
227	0205675N	Operational Nuclear Power Systems	07	106,192				106,192	U
228	0206313M	Marine Corps Communications Systems	07	143,317		15,000	15,000	158,317	U
229	0206335M	Common Aviation Command and Control System (CAC2S)	07	4,489				4,489	U
230	0206623M	Marine Corps Ground Combat/Supporting Arms Systems	07	51,788				51,788	U

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231	0206624M	Marine Corps Combat Services Support	07	24,915	29,905		29,905	U
232	0206625M	USMC Intelligence/Electronic Warfare Systems (MIP)	07	30,630	37,821		37,821	U
233	0206629M	Amphibious Assault Vehicle	07	53,404	20,690		20,690	U
234	0207161N	Tactical AIM Missiles	07	34,063	40,121		40,121	U
235	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	29,486	28,235		28,235	U
239	0303109N	Satellite Communications (SPACE)	07					U
240	0303138N	Consolidated Afloat Network Enterprise Services (CANES)	07	24,197	23,697		23,697	U
241	0303140N	Information Systems Security Program	07	49,310	44,228		44,228	U
243	0305192N	Military Intelligence Program (MIP) Activities	07	6,934	6,081		6,081	U
244	0305204N	Tactical Unmanned Aerial Vehicles	07	7,770	8,529		8,529	U
245	0305205N	UAS Integration and Interoperability	07	20,848	24,663		24,663	U
246	0305208M	Distributed Common Ground/Surface Systems	07	13,338	7,610		7,610	U
247	0305208N	Distributed Common Ground/Surface Systems	07	40,150	42,846		42,846	U
248	0305220N	MQ-4C Triton	07	94,115	14,395		14,395	U
249	0305231N	MQ-8 UAV	07	62,656	24,143		24,143	U
250	0305232M	RQ-11 UAV	07	2,002	524		524	U
251	0305234N	Small (Level 0) Tactical UAS (STUASL0)	07	4,827	5,265		5,265	U
252	0305239M	RQ-21A	07	10,500	6,000		6,000	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
231	0206624M	Marine Corps Combat Services Support	07	37,761				37,761	U
232	0206625M	USMC Intelligence/Electronic Warfare Systems (MIP)	07	21,458				21,458	U
233	0206629M	Amphibious Assault Vehicle	07	5,476				5,476	U
234	0207161N	Tactical AIM Missiles	07	19,488				19,488	U
235	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	39,029				39,029	U
239	0303109N	Satellite Communications (SPACE)	07	34,344				34,344	U
240	0303138N	Consolidated Afloat Network Enterprise Services (CANES)	07	22,873				22,873	U
241	0303140N	Information Systems Security Program	07	41,853				41,853	U
243	0305192N	Military Intelligence Program (MIP) Activities	07	8,913				8,913	U
244	0305204N	Tactical Unmanned Aerial Vehicles	07	9,451				9,451	U
245	0305205N	UAS Integration and Interoperability	07	42,315				42,315	U
246	0305208M	Distributed Common Ground/Surface Systems	07	22,042				22,042	U
247	0305208N	Distributed Common Ground/Surface Systems	07						U
248	0305220N	MQ-4C Triton	07	11,784				11,784	U
249	0305231N	MQ-8 UAV	07	29,618				29,618	U
250	0305232M	RQ-11 UAV	07	509				509	U
251	0305234N	Small (Level 0) Tactical UAS (STUASL0)	07	11,545				11,545	U
252	0305239M	RQ-21A	07	10,914				10,914	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
253	0305241N	Multi-Intelligence Sensor Development	07	93,020	81,231		81,231	U
254	0305242M	Unmanned Aerial Systems (UAS) Payloads (MIP)	07	18,392	5,956		5,956	U
255	0305421N	RQ-4 Modernization	07	224,249	219,403		219,403	U
256	0308601N	Modeling and Simulation Support	07	5,038	7,097		7,097	U
257	0702207N	Depot Maintenance (Non-IF)	07	35,463	46,560		46,560	U
258	0708730N	Maritime Technology (MARITECH)	07	4,621	27,284		27,284	U
259	1203109N	Satellite Communications (SPACE)	07	40,330	34,174		34,174	U
9999	9999999999	Classified Programs		1,857,702	1,670,503	117,282	1,787,785	U
		Operational Systems Development		4,347,723	4,913,710	133,412	5,047,122	
		Total Research, Development, Test & Eval, Navy		18,465,332	18,490,002	167,812	18,657,814	

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
253	0305241N	Multi-Intelligence Sensor Development	07	70,612				70,612	U
254	0305242M	Unmanned Aerial Systems (UAS) Payloads (MIP)	07	3,704				3,704	U
255	0305421N	RQ-4 Modernization	07	202,346				202,346	U
256	0308601N	Modeling and Simulation Support	07	7,119				7,119	U
257	0702207N	Depot Maintenance (Non-IF)	07	38,182				38,182	U
258	0708730N	Maritime Technology (MARITECH)	07	6,779				6,779	U
259	1203109N	Satellite Communications (SPACE)	07	15,868				15,868	U
9999	9999999999	Classified Programs		1,613,137		108,282	108,282	1,721,419	U
		Operational Systems Development		5,104,299		123,282	123,282	5,227,581	
		Total Research, Development, Test & Eval, Navy		20,270,499		164,410	164,410	20,434,909	

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<u>Summary Recap of Budget Activities</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
Basic Research	491,502	561,329		561,329
Applied Research	1,454,070	1,480,573		1,480,573
Advanced Technology Development	829,525	928,747		928,747
Advanced Component Development & Prototypes	4,962,068	6,625,697	13,495	6,639,192
System Development & Demonstration	4,407,341	5,453,523		5,453,523
Management Support	3,490,712	2,963,117		2,963,117
Operational Systems Development	22,442,379	23,153,697	308,439	23,462,136
Total Research, Development, Test & Evaluation	38,077,597	41,166,683	321,934	41,488,617
 <u>Summary Recap of FYDP Programs</u>				
Strategic Forces	784,917	1,018,923	34,000	1,052,923
General Purpose Forces	2,899,628	3,077,252	53,049	3,130,301
Intelligence and Communications	1,609,415	1,438,024	54,600	1,492,624
Mobility Forces	550,926	898,833		898,833
Research and Development	11,665,345	12,799,979		12,799,979
Central Supply and Maintenance	97,493	96,826		96,826
Training Medical and Other	2,558	2,578		2,578
Administration and Associated Activities	118,914	122,255		122,255
Support of Other Nations	4,418	3,998		3,998
Space	3,554,350	4,848,491	18,495	4,866,986
Classified Programs	16,789,633	16,859,524	161,790	17,021,314
Total Research, Development, Test & Evaluation	38,077,597	41,166,683	321,934	41,488,617

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	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
<u>Summary Recap of Budget Activities</u>					
Basic Research	529,761				529,761
Applied Research	1,435,626				1,435,626
Advanced Technology Development	839,153				839,153
Advanced Component Development & Prototypes	8,436,279		44,335	44,335	8,480,614
System Development & Demonstration	6,929,244				6,929,244
Management Support	2,916,571				2,916,571
Operational Systems Development	24,529,488	322,000	83,913	405,913	24,935,401
Total Research, Development, Test & Evaluation	45,616,122	322,000	128,248	450,248	46,066,370
<u>Summary Recap of FYDP Programs</u>					
Strategic Forces	879,977				879,977
General Purpose Forces	3,488,992		5,200	5,200	3,494,192
Intelligence and Communications	1,393,298				1,393,298
Mobility Forces	979,221				979,221
Research and Development	14,419,778		26,450	26,450	14,446,228
Central Supply and Maintenance	37,505				37,505
Training Medical and Other	3,542				3,542
Administration and Associated Activities	90,730				90,730
Support of Other Nations	4,071				4,071
Space	6,289,502		17,885	17,885	6,307,387
Classified Programs	18,029,506	322,000	78,713	400,713	18,430,219
Total Research, Development, Test & Evaluation	45,616,122	322,000	128,248	450,248	46,066,370

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1	0601102F	Defense Research Sciences	01	320,961	383,322		383,322	U
2	0601103F	University Research Initiatives	01	157,079	164,991		164,991	U
3	0601108F	High Energy Laser Research Initiatives	01	13,462	13,016		13,016	U
Basic Research				491,502	561,329		561,329	
4	0602102F	Materials	02	143,900	181,373		181,373	U
5	0602201F	Aerospace Vehicle Technologies	02	151,637	160,461		160,461	U
6	0602202F	Human Effectiveness Applied Research	02	126,542	119,018		119,018	U
7	0602203F	Aerospace Propulsion	02	192,846	218,419		218,419	U
8	0602204F	Aerospace Sensors	02	157,078	171,307		171,307	U
9	0602212F	Defense Laboratories R&D Projects (10 U.S.C, Sec 2358)	02	74,760				U
10	0602298F	Science and Technology Management - Major Headquarters Activities	02	8,353	8,288		8,288	U
11	0602601F	Space Technology	02	145,921				U
12	0602602F	Conventional Munitions	02	99,543	112,841		112,841	U
13	0602605F	Directed Energy Technology	02	121,610	141,800		141,800	U
14	0602788F	Dominant Information Sciences and Methods	02	191,724	185,276		185,276	U
15	0602890F	High Energy Laser Research	02	40,156	43,192		43,192	U
16	1206601F	Space Technology	02		138,598		138,598	U
Applied Research				1,454,070	1,480,573		1,480,573	
17	0603112F	Advanced Materials for Weapon Systems	03	34,694	47,426		47,426	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
1	0601102F	Defense Research Sciences	01	356,107				356,107	U
2	0601103F	University Research Initiatives	01	158,859				158,859	U
3	0601108F	High Energy Laser Research Initiatives	01	14,795				14,795	U
Basic Research				529,761				529,761	
4	0602102F	Materials	02	128,851				128,851	U
5	0602201F	Aerospace Vehicle Technologies	02	147,724				147,724	U
6	0602202F	Human Effectiveness Applied Research	02	131,795				131,795	U
7	0602203F	Aerospace Propulsion	02	198,775				198,775	U
8	0602204F	Aerospace Sensors	02	202,912				202,912	U
9	0602212F	Defense Laboratories R&D Projects (10 U.S.C, Sec 2358)	02						U
10	0602298F	Science and Technology Management - Major Headquarters Activities	02	7,968				7,968	U
11	0602601F	Space Technology	02						U
12	0602602F	Conventional Munitions	02	142,772				142,772	U
13	0602605F	Directed Energy Technology	02	124,379				124,379	U
14	0602788F	Dominant Information Sciences and Methods	02	181,562				181,562	U
15	0602890F	High Energy Laser Research	02	44,221				44,221	U
16	1206601F	Space Technology	02	124,667				124,667	U
Applied Research				1,435,626				1,435,626	
17	0603112F	Advanced Materials for Weapon Systems	03	36,586				36,586	U

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18	0603199F	Sustainment Science and Technology (S&T)	03	20,724	15,150		15,150	U
19	0603203F	Advanced Aerospace Sensors	03	46,784	44,968		44,968	U
20	0603211F	Aerospace Technology Dev/Demo	03	103,123	126,002		126,002	U
21	0603216F	Aerospace Propulsion and Power Technology	03	122,217	148,418		148,418	U
22	0603270F	Electronic Combat Technology	03	56,238	55,054		55,054	U
23	0603401F	Advanced Spacecraft Technology	03	94,946	70,734		70,734	U
24	0603444F	Maui Space Surveillance System (MSSS)	03	9,755	10,674		10,674	U
25	0603456F	Human Effectiveness Advanced Technology Development	03	30,153	36,420		36,420	U
26	0603601F	Conventional Weapons Technology	03	157,676	204,756		204,756	U
27	0603605F	Advanced Weapons Technology	03	42,322	43,368		43,368	U
28	0603680F	Manufacturing Technology Program	03	63,224	65,760		65,760	U
29	0603788F	Battlespace Knowledge Development and Demonstration	03	45,481	60,017		60,017	U
30	0303467F	SENSR Spectrum Pipeline SRF	03	2,188				U
		Advanced Technology Development		829,525	928,747		928,747	
31	0603260F	Intelligence Advanced Development	04	7,652	5,568		5,568	U
32	0603742F	Combat Identification Technology	04	23,578	18,194		18,194	U
33	0603790F	NATO Research and Development	04	3,710	2,305		2,305	U
34	0603851F	Intercontinental Ballistic Missile - Dem/Val	04	27,424	32,356		32,356	U

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18	0603199F	Sustainment Science and Technology (S&T)	03	16,249				16,249	U
19	0603203F	Advanced Aerospace Sensors	03	38,292				38,292	U
20	0603211F	Aerospace Technology Dev/Demo	03	102,949				102,949	U
21	0603216F	Aerospace Propulsion and Power Technology	03	113,973				113,973	U
22	0603270F	Electronic Combat Technology	03	48,408				48,408	U
23	0603401F	Advanced Spacecraft Technology	03	70,525				70,525	U
24	0603444F	Maui Space Surveillance System (MSSS)	03	11,878				11,878	U
25	0603456F	Human Effectiveness Advanced Technology Development	03	37,542				37,542	U
26	0603601F	Conventional Weapons Technology	03	225,817				225,817	U
27	0603605F	Advanced Weapons Technology	03	37,404				37,404	U
28	0603680F	Manufacturing Technology Program	03	43,116				43,116	U
29	0603788F	Battlespace Knowledge Development and Demonstration	03	56,414				56,414	U
30	0303467F	SENSR Spectrum Pipeline SRF	03						U
		Advanced Technology Development		839,153				839,153	
31	0603260F	Intelligence Advanced Development	04	5,672				5,672	U
32	0603742F	Combat Identification Technology	04	27,085				27,085	U
33	0603790F	NATO Research and Development	04	4,955				4,955	U
34	0603851F	Intercontinental Ballistic Missile - Dem/Val	04	44,109				44,109	U

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35	0603859F	Pollution Prevention - Dem/Val	04	2	200		200	U
36	0604002F	Air Force Weather Services Research	04					U
37	0604004F	Advanced Engine Development	04		720,355		720,355	U
38	0604015F	Long Range Strike - Bomber	04	1,914,611	2,279,196		2,279,196	U
39	0604032F	Directed Energy Prototyping	04		50,000		50,000	U
40	0604033F	Hypersonics Prototyping	04		508,858		508,858	U
41	0604201F	PNT Resiliency, Mods, and Improvements	04	63,302	81,271		81,271	U
42	0604257F	Advanced Technology and Sensors	04	78,122	34,585		34,585	U
43	0604288F	National Airborne Ops Center (NAOC) Recap	04	6,141	7,440		7,440	U
44	0604317F	Technology Transfer	04	17,644	16,924		16,924	U
45	0604327F	Hard and Deeply Buried Target Defeat System (HDBTDS) Program	04	39,682	36,701		36,701	U
46	0604414F	Cyber Resiliency of Weapon Systems-ACS	04	41,055	62,618		62,618	U
47	0604776F	Deployment & Distribution Enterprise R&D	04	25,597	27,964		27,964	U
48	0604858F	Tech Transition Program	04	1,079,458	167,277		167,277	U
49	0605230F	Ground Based Strategic Deterrent	04	221,536	414,441		414,441	U
50	0207100F	Light Attack Armed Reconnaissance (LAAR) Squadrons	04					U
51	0207110F	Next Generation Air Dominance	04	283,964	429,610		429,610	U
52	0207455F	Three Dimensional Long-Range Radar (3DELRR)	04	12,122	24,856		24,856	U

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35	0603859F	Pollution Prevention - Dem/Val	04						U
36	0604002F	Air Force Weather Services Research	04	772				772	U
37	0604004F	Advanced Engine Development	04	878,442				878,442	U
38	0604015F	Long Range Strike - Bomber	04	3,003,899				3,003,899	U
39	0604032F	Directed Energy Prototyping	04	10,000				10,000	U
40	0604033F	Hypersonics Prototyping	04	576,000				576,000	U
41	0604201F	PNT Resiliency, Mods, and Improvements	04	92,600				92,600	U
42	0604257F	Advanced Technology and Sensors	04	23,145				23,145	U
43	0604288F	National Airborne Ops Center (NAOC) Recap	04	16,669				16,669	U
44	0604317F	Technology Transfer	04	23,614				23,614	U
45	0604327F	Hard and Deeply Buried Target Defeat System (HDBTDS) Program	04	113,121				113,121	U
46	0604414F	Cyber Resiliency of Weapon Systems-ACS	04	56,325				56,325	U
47	0604776F	Deployment & Distribution Enterprise R&D	04	28,034				28,034	U
48	0604858F	Tech Transition Program	04	128,476		26,450	26,450	154,926	U
49	0605230F	Ground Based Strategic Deterrent	04	570,373				570,373	U
50	0207100F	Light Attack Armed Reconnaissance (LAAR) Squadrons	04	35,000				35,000	U
51	0207110F	Next Generation Air Dominance	04	1,000,000				1,000,000	U
52	0207455F	Three Dimensional Long-Range Radar (3DELRR)	04	37,290				37,290	U

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53	0208099F	Unified Platform (UP)	04		29,800		29,800	U
54	0305236F	Common Data Link Executive Agent (CDL EA)	04	40,838	41,880		41,880	U
55	0305251F	Cyberspace Operations Forces and Force Support	04					U
56	0305601F	Mission Partner Environments	04		10,074		10,074	U
57	0306250F	Cyber Operations Technology Development	04	278,521	246,502		246,502	U
58	0306415F	Enabled Cyber Activities	04	16,687	16,325		16,325	U
59	0408011F	Special Tactics / Combat Control	04	4,266				U
60	0901410F	Contracting Information Technology System	04	18,973	17,577		17,577	U
61	1203164F	NAVSTAR Global Positioning System (User Equipment) (SPACE)	04	321,186	252,834		252,834	U
62	1203710F	EO/IR Weather Systems	04	8,000	7,940		7,940	U
63	1206422F	Weather System Follow-on	04	98,396	138,052		138,052	U
64	1206425F	Space Situation Awareness Systems	04	43,290	33,469		33,469	U
65	1206427F	Space Systems Prototype Transitions (SSPT)	04					U
66	1206434F	Midterm Polar MILSATCOM System	04	60,123	383,113		383,113	U
67	1206438F	Space Control Technology	04	44,139	90,546	1,100	91,646	U
68	1206730F	Space Security and Defense Program	04	41,385	45,542		45,542	U
69	1206760F	Protected Tactical Enterprise Service (PTES)	04	17,552	46,419		46,419	U
70	1206761F	Protected Tactical Service (PTS)	04	23,404	29,626		29,626	U

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53	0208099F	Unified Platform (UP)	04	10,000				10,000	U
54	0305236F	Common Data Link Executive Agent (CDL EA)	04	36,910				36,910	U
55	0305251F	Cyberspace Operations Forces and Force Support	04	35,000				35,000	U
56	0305601F	Mission Partner Environments	04	8,550				8,550	U
57	0306250F	Cyber Operations Technology Development	04	198,864				198,864	U
58	0306415F	Enabled Cyber Activities	04	16,632				16,632	U
59	0408011F	Special Tactics / Combat Control	04						U
60	0901410F	Contracting Information Technology System	04	20,830				20,830	U
61	1203164F	NAVSTAR Global Positioning System (User Equipment) (SPACE)	04	329,948				329,948	U
62	1203710F	EO/IR Weather Systems	04	101,222				101,222	U
63	1206422F	Weather System Follow-on	04	225,660				225,660	U
64	1206425F	Space Situation Awareness Systems	04	29,776				29,776	U
65	1206427F	Space Systems Prototype Transitions (SSPT)	04	142,045				142,045	U
66	1206434F	Midterm Polar MILSATCOM System	04						U
67	1206438F	Space Control Technology	04	64,231				64,231	U
68	1206730F	Space Security and Defense Program	04	56,385				56,385	U
69	1206760F	Protected Tactical Enterprise Service (PTES)	04	105,003				105,003	U
70	1206761F	Protected Tactical Service (PTS)	04	173,694				173,694	U

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71	1206855F	Evolved Strategic SATCOM (ESS)	04	15,473	29,229		29,229	U
72	1206857F	Space Rapid Capabilities Office	04	84,235	286,050	12,395	298,445	U
Advanced Component Development & Prototypes				4,962,068	6,625,697	13,495	6,639,192	
73	0604200F	Future Advanced Weapon Analysis & Programs	05	5,108	39,602		39,602	U
74	0604201F	PNT Resiliency, Mods, and Improvements	05	97,943	46,731		46,731	U
75	0604222F	Nuclear Weapons Support	05	2,910	4,468		4,468	U
76	0604270F	Electronic Warfare Development	05	2,159	1,909		1,909	U
77	0604281F	Tactical Data Networks Enterprise	05	42,128	270,015		270,015	U
78	0604287F	Physical Security Equipment	05	39,639	14,421		14,421	U
79	0604329F	Small Diameter Bomb (SDB) - EMD	05	37,667	78,091		78,091	U
80	0604429F	Airborne Electronic Attack	05	4,910	6,153		6,153	U
81	0604602F	Armament/Ordnance Development	05	16,765	49,590		49,590	U
82	0604604F	Submunitions	05	2,697	2,990		2,990	U
83	0604617F	Agile Combat Support	05	36,351	23,489		23,489	U
84	0604706F	Life Support Systems	05	10,342	8,919		8,919	U
85	0604735F	Combat Training Ranges	05	75,981	43,895		43,895	U
86	0604800F	F-35 - EMD	05	282,126	69,001		69,001	U
87	0604932F	Long Range Standoff Weapon	05	437,521	664,920		664,920	U
88	0604933F	ICBM Fuze Modernization	05	166,571	167,659		167,659	U
89	0605030F	Joint Tactical Network Center (JTNC)	05	404				U

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71	1206855F	Evolved Strategic SATCOM (ESS)	04	172,206				172,206	U
72	1206857F	Space Rapid Capabilities Office	04	33,742		17,885	17,885	51,627	U
		Advanced Component Development & Prototypes		8,436,279		44,335	44,335	8,480,614	
73	0604200F	Future Advanced Weapon Analysis & Programs	05	246,200				246,200	U
74	0604201F	PNT Resiliency, Mods, and Improvements	05	67,782				67,782	U
75	0604222F	Nuclear Weapons Support	05	4,406				4,406	U
76	0604270F	Electronic Warfare Development	05	2,066				2,066	U
77	0604281F	Tactical Data Networks Enterprise	05	229,631				229,631	U
78	0604287F	Physical Security Equipment	05	9,700				9,700	U
79	0604329F	Small Diameter Bomb (SDB) - EMD	05	31,241				31,241	U
80	0604429F	Airborne Electronic Attack	05	2				2	U
81	0604602F	Armament/Ordnance Development	05	28,043				28,043	U
82	0604604F	Submunitions	05	3,045				3,045	U
83	0604617F	Agile Combat Support	05	19,944				19,944	U
84	0604706F	Life Support Systems	05	8,624				8,624	U
85	0604735F	Combat Training Ranges	05	37,365				37,365	U
86	0604800F	F-35 - EMD	05	7,628				7,628	U
87	0604932F	Long Range Standoff Weapon	05	712,539				712,539	U
88	0604933F	ICBM Fuze Modernization	05	161,199				161,199	U
89	0605030F	Joint Tactical Network Center (JTNC)	05	2,414				2,414	U

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90	0605031F	Joint Tactical Network (JTN)	05	1,331				U
91	0605056F	Open Architecture Management	05					U
92	0605213F	F-22 Modernization Increment 3.2B	05	10,482				U
93	0605221F	KC-46	05	75,598	80,170		80,170	U
94	0605223F	Advanced Pilot Training	05	82,628	245,465		245,465	U
95	0605229F	Combat Rescue Helicopter	05	342,030	445,652		445,652	U
96	0605458F	Air & Space Ops Center 10.2 RDT&E	05	4,666				U
97	0605830F	Acq Workforce- Global Battle Mgmt	05		3,617		3,617	U
98	0605931F	B-2 Defensive Management System	05	148,946	253,258		253,258	U
99	0101125F	Nuclear Weapons Modernization	05	81,631	81,592		81,592	U
100	0101213F	Minuteman Squadrons	05					U
101	0207171F	F-15 EPAWSS	05	202,167	137,095		137,095	U
102	0207328F	Stand In Attack Weapon	05	3,288	14,975		14,975	U
103	0207701F	Full Combat Mission Training	05	8,427	1,015		1,015	U
104	0303267F	Auctioned Spectrum Relocation Fund	05	60,546				U
105	0307581F	JSTARS Recap	05	390,713				U
106	0401310F	C-32 Executive Transport Recapitalization	05	2,918	7,943		7,943	U
107	0401319F	VC-25B	05	418,500	657,932		657,932	U
108	0701212F	Automated Test Systems	05	17,850	13,653		13,653	U
109	1203176F	Combat Survivor Evader Locator	05	24,099	939		939	U
110	1203269F	GPS III Follow-On (GPS IIIF)	05		426,889		426,889	U

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90	0605031F	Joint Tactical Network (JTN)	05						U
91	0605056F	Open Architecture Management	05	30,000				30,000	U
92	0605213F	F-22 Modernization Increment 3.2B	05						U
93	0605221F	KC-46	05	59,561				59,561	U
94	0605223F	Advanced Pilot Training	05	348,473				348,473	U
95	0605229F	Combat Rescue Helicopter	05	247,047				247,047	U
96	0605458F	Air & Space Ops Center 10.2 RDT&E	05						U
97	0605830F	Acq Workforce- Global Battle Mgmt	05						U
98	0605931F	B-2 Defensive Management System	05	294,400				294,400	U
99	0101125F	Nuclear Weapons Modernization	05	27,564				27,564	U
100	0101213F	Minuteman Squadrons	05	1				1	U
101	0207171F	F-15 EPAWSS	05	47,322				47,322	U
102	0207328F	Stand In Attack Weapon	05	162,840				162,840	U
103	0207701F	Full Combat Mission Training	05	9,797				9,797	U
104	0303267F	Auctioned Spectrum Relocation Fund	05						U
105	0307581F	JSTARS Recap	05						U
106	0401310F	C-32 Executive Transport Recapitalization	05	9,930				9,930	U
107	0401319F	VC-25B	05	757,923				757,923	U
108	0701212F	Automated Test Systems	05	2,787				2,787	U
109	1203176F	Combat Survivor Evader Locator	05	2,000				2,000	U
110	1203269F	GPS III Follow-On (GPS IIIF)	05	462,875				462,875	U

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111	1203940F	Space Situation Awareness Operations	05	9,684	46,015		46,015	U
112	1206421F	Counterspace Systems	05	64,208	20,242		20,242	U
113	1206422F	Weather System Follow-on	05					U
114	1206425F	Space Situation Awareness Systems	05	47,580	134,464		134,464	U
115	1206426F	Space Fence	05	34,022	19,425		19,425	U
116	1206431F	Advanced EHF MILSATCOM (SPACE)	05	134,775	144,753		144,753	U
117	1206432F	Polar MILSATCOM (SPACE)	05	32,536	26,380		26,380	U
118	1206433F	Wideband Global SATCOM (SPACE)	05	6,535	3,970		3,970	U
119	1206441F	Space Based Infrared System (SBIRS) High EMD	05	119,585	60,565		60,565	U
120	1206442F	Next Generation OPIR	05	439,497	643,126		643,126	U
121	1206445F	Commercial SATCOM (COMSATCOM) Integration	05		49,500		49,500	U
122	1206853F	National Security Space Launch Program (SPACE) - EMD	05	381,877	443,035		443,035	U
		System Development & Demonstration		4,407,341	5,453,523		5,453,523	
123	0604256F	Threat Simulator Development	06	34,777	34,206		34,206	U
124	0604759F	Major T&E Investment	06	111,138	216,844		216,844	U
125	0605101F	RAND Project Air Force	06	33,089	34,614		34,614	U
126	0605502F	Small Business Innovation Research	06	663,657				U
127	0605712F	Initial Operational Test & Evaluation	06	15,523	18,043		18,043	U
128	0605807F	Test and Evaluation Support	06	735,688	692,784		692,784	U

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111	1203940F	Space Situation Awareness Operations	05	76,829				76,829	U
112	1206421F	Counterspace Systems	05	29,037				29,037	U
113	1206422F	Weather System Follow-on	05	2,237				2,237	U
114	1206425F	Space Situation Awareness Systems	05	412,894				412,894	U
115	1206426F	Space Fence	05						U
116	1206431F	Advanced EHF MILSATCOM (SPACE)	05	117,290				117,290	U
117	1206432F	Polar MILSATCOM (SPACE)	05	427,400				427,400	U
118	1206433F	Wideband Global SATCOM (SPACE)	05	1,920				1,920	U
119	1206441F	Space Based Infrared System (SBIRS) High EMD	05	1				1	U
120	1206442F	Next Generation OPIR	05	1,395,278				1,395,278	U
121	1206445F	Commercial SATCOM (COMSATCOM) Integration	05						U
122	1206853F	National Security Space Launch Program (SPACE) - EMD	05	432,009				432,009	U
System Development & Demonstration				6,929,244				6,929,244	
123	0604256F	Threat Simulator Development	06	59,693				59,693	U
124	0604759F	Major T&E Investment	06	181,663				181,663	U
125	0605101F	RAND Project Air Force	06	35,258				35,258	U
126	0605502F	Small Business Innovation Research	06						U
127	0605712F	Initial Operational Test & Evaluation	06	13,793				13,793	U
128	0605807F	Test and Evaluation Support	06	717,895				717,895	U

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129	0605826F	Acq Workforce- Global Power	06	216,144	227,824		227,824	U
130	0605827F	Acq Workforce- Global Vig & Combat Sys	06	225,854	256,617		256,617	U
131	0605828F	Acq Workforce- Global Reach	06	138,491	149,586		149,586	U
132	0605829F	Acq Workforce- Cyber, Network, & Bus Sys	06	205,643	226,257		226,257	U
133	0605830F	Acq Workforce- Global Battle Mgmt	06	146,852	165,438		165,438	U
134	0605831F	Acq Workforce- Capability Integration	06	221,676	220,320		220,320	U
135	0605832F	Acq Workforce- Advanced Prgm Technology	06	27,997	37,399		37,399	U
136	0605833F	Acq Workforce- Nuclear Systems	06	124,111	122,481		122,481	U
137	0605898F	Management HQ - R&D	06	9,394	10,364		10,364	U
138	0605976F	Facilities Restoration and Modernization - Test and Evaluation Support	06	135,507	187,216		187,216	U
139	0605978F	Facilities Sustainment - Test and Evaluation Support	06	28,720	28,888		28,888	U
140	0606017F	Requirements Analysis and Maturation	06	106,646	48,070		48,070	U
141	0606398F	Management HQ - T&E	06					U
142	0308602F	ENTEPRISE INFORMATION SERVICES (EIS)	06	18,980	20,435		20,435	U
143	0702806F	Acquisition and Management Support	06	14,706	12,367		12,367	U
144	0804731F	General Skill Training	06	457	448		448	U
145	0909999F	Financing for Cancelled Account Adjustments	06	391				U

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129	0605826F	Acq Workforce- Global Power	06	258,667				258,667	U
130	0605827F	Acq Workforce- Global Vig & Combat Sys	06	251,992				251,992	U
131	0605828F	Acq Workforce- Global Reach	06	149,191				149,191	U
132	0605829F	Acq Workforce- Cyber, Network, & Bus Sys	06	235,360				235,360	U
133	0605830F	Acq Workforce- Global Battle Mgmt	06	160,196				160,196	U
134	0605831F	Acq Workforce- Capability Integration	06	220,255				220,255	U
135	0605832F	Acq Workforce- Advanced Prgm Technology	06	42,392				42,392	U
136	0605833F	Acq Workforce- Nuclear Systems	06	133,231				133,231	U
137	0605898F	Management HQ - R&D	06	5,590				5,590	U
138	0605976F	Facilities Restoration and Modernization - Test and Evaluation Support	06	88,445				88,445	U
139	0605978F	Facilities Sustainment - Test and Evaluation Support	06	29,424				29,424	U
140	0606017F	Requirements Analysis and Maturation	06	62,715				62,715	U
141	0606398F	Management HQ - T&E	06	5,013				5,013	U
142	0308602F	ENTEPRISE INFORMATION SERVICES (EIS)	06	17,128				17,128	U
143	0702806F	Acquisition and Management Support	06	5,913				5,913	U
144	0804731F	General Skill Training	06	1,475				1,475	U
145	0909999F	Financing for Cancelled Account Adjustments	06						U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
146	1001004F	International Activities	06	4,418	3,998		3,998	U
147	1206116F	Space Test and Training Range Development	06	24,886	23,157		23,157	U
148	1206392F	Space and Missile Center (SMC) Civilian Workforce	06	175,247	169,912		169,912	U
149	1206398F	Space & Missile Systems Center - MHA	06	8,681	10,508		10,508	U
150	1206860F	Rocket Systems Launch Program (SPACE)	06	33,023	19,721		19,721	U
151	1206864F	Space Test Program (STP)	06	29,016	25,620		25,620	U
Management Support				3,490,712	2,963,117		2,963,117	
152	0604003F	Advanced Battle Management System (ABMS)	07		27,883		27,883	U
153	0604222F	Nuclear Weapons Support	07	26,672				U
154	0604233F	Specialized Undergraduate Flight Training	07	6,269	11,344		11,344	U
155	0604445F	Wide Area Surveillance	07	37,750				U
156	0604776F	Deployment & Distribution Enterprise R&D	07					U
157	0604840F	F-35 C2D2	07					U
158	0605018F	AF Integrated Personnel and Pay System (AF-IPPS)	07	17,298	41,058		41,058	U
159	0605024F	Anti-Tamper Technology Executive Agency	07	37,304	32,770		32,770	U
160	0605117F	Foreign Materiel Acquisition and Exploitation	07	66,653	68,368		68,368	U
161	0605278F	HC/MC-130 Recap RDT&E	07	30,784	16,174		16,174	U

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146	1001004F	International Activities	06	4,071				4,071	U
147	1206116F	Space Test and Training Range Development	06	19,942				19,942	U
148	1206392F	Space and Missile Center (SMC) Civilian Workforce	06	167,810				167,810	U
149	1206398F	Space & Missile Systems Center - MHA	06	10,170				10,170	U
150	1206860F	Rocket Systems Launch Program (SPACE)	06	13,192				13,192	U
151	1206864F	Space Test Program (STP)	06	26,097				26,097	U
Management Support				2,916,571				2,916,571	
152	0604003F	Advanced Battle Management System (ABMS)	07	35,611				35,611	U
153	0604222F	Nuclear Weapons Support	07						U
154	0604233F	Specialized Undergraduate Flight Training	07	2,584				2,584	U
155	0604445F	Wide Area Surveillance	07						U
156	0604776F	Deployment & Distribution Enterprise R&D	07	903				903	U
157	0604840F	F-35 C2D2	07	694,455				694,455	U
158	0605018F	AF Integrated Personnel and Pay System (AF-IPPS)	07	40,567				40,567	U
159	0605024F	Anti-Tamper Technology Executive Agency	07	47,193				47,193	U
160	0605117F	Foreign Materiel Acquisition and Exploitation	07	70,083				70,083	U
161	0605278F	HC/MC-130 Recap RDT&E	07	17,218				17,218	U

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162	0606018F	NC3 Integration	07	12,382	19,312		19,312	U
163	0606942F	Assessments and Evaluations Cyber Vulnerabilities	07		87,800		87,800	U
164	0101113F	B-52 Squadrons	07	107,936	291,264	34,000	325,264	U
165	0101122F	Air-Launched Cruise Missile (ALCM)	07	446	5,955		5,955	U
166	0101126F	B-1B Squadrons	07	60,367	60,295		60,295	U
167	0101127F	B-2 Squadrons	07	89,781	105,508		105,508	U
168	0101213F	Minuteman Squadrons	07	204,208	154,733		154,733	U
169	0101313F	Integrated Strategic Planning and Analysis Network (ISPAN) - USSTRATCOM	07	24,898				U
170	0101316F	Worldwide Joint Strategic Communications	07	12,868	18,442		18,442	U
171	0101324F	Integrated Strategic Planning & Analysis Network	07	10,757	22,833		22,833	U
172	0101328F	ICBM Reentry Vehicles	07		14,167		14,167	U
174	0102110F	UH-1N Replacement Program	07	188,259	258,022		258,022	U
175	0102326F	Region/Sector Operation Control Center Modernization Program	07	3,766	6,112		6,112	U
176	0205219F	MQ-9 UAV	07	184,353	104,345	4,500	108,845	U
177	0205671F	Joint Counter RCIED Electronic Warfare	07			4,000	4,000	U
178	0207131F	A-10 Squadrons	07	17,459	26,738	1,000	27,738	U
179	0207133F	F-16 Squadrons	07	250,264	185,864		185,864	U
180	0207134F	F-15E Squadrons	07	308,218	203,183		203,183	U

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162	0606018F	NC3 Integration	07	25,917				25,917	U
163	0606942F	Assessments and Evaluations Cyber Vulnerabilities	07						U
164	0101113F	B-52 Squadrons	07	325,974				325,974	U
165	0101122F	Air-Launched Cruise Missile (ALCM)	07	10,217				10,217	U
166	0101126F	B-1B Squadrons	07	1,000				1,000	U
167	0101127F	B-2 Squadrons	07	97,276				97,276	U
168	0101213F	Minuteman Squadrons	07	128,961				128,961	U
169	0101313F	Integrated Strategic Planning and Analysis Network (ISPAN) - USSTRATCOM	07						U
170	0101316F	Worldwide Joint Strategic Communications	07	18,177				18,177	U
171	0101324F	Integrated Strategic Planning & Analysis Network	07	24,261				24,261	U
172	0101328F	ICBM Reentry Vehicles	07	75,571				75,571	U
174	0102110F	UH-1N Replacement Program	07	170,975				170,975	U
175	0102326F	Region/Sector Operation Control Center Modernization Program	07						U
176	0205219F	MQ-9 UAV	07	154,996				154,996	U
177	0205671F	Joint Counter RCIED Electronic Warfare	07			4,000	4,000	4,000	U
178	0207131F	A-10 Squadrons	07	36,816				36,816	U
179	0207133F	F-16 Squadrons	07	193,013				193,013	U
180	0207134F	F-15E Squadrons	07	336,079				336,079	U

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181	0207136F	Manned Destructive Suppression	07	11,735	15,238		15,238	U
182	0207138F	F-22A Squadrons	07	584,004	584,743		584,743	U
183	0207142F	F-35 Squadrons	07	325,224	503,928		503,928	U
184	0207161F	Tactical AIM Missiles	07	36,303	37,230		37,230	U
185	0207163F	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	51,374	57,293		57,293	U
186	0207227F	Combat Rescue - Pararescue	07	685	647		647	U
187	0207247F	AF TENCAP	07					U
188	0207249F	Precision Attack Systems Procurement	07	1,651	14,891		14,891	U
189	0207253F	Compass Call	07	34,240	43,901		43,901	U
190	0207268F	Aircraft Engine Component Improvement Program	07	105,664	121,203		121,203	U
191	0207325F	Joint Air-to-Surface Standoff Missile (JASSM)	07	29,436	42,472		42,472	U
192	0207410F	Air & Space Operations Center (AOC)	07	86,456	104,954		104,954	U
193	0207412F	Control and Reporting Center (CRC)	07	2,374	6,413		6,413	U
194	0207417F	Airborne Warning and Control System (AWACS)	07	118,702	112,280		112,280	U
195	0207418F	Tactical Airborne Control Systems	07	3,522	2,659		2,659	U
197	0207431F	Combat Air Intelligence System Activities	07	15,821	10,316		10,316	U
198	0207444F	Tactical Air Control Party-Mod	07	10,623	6,149		6,149	U
199	0207448F	C2ISR Tactical Data Link	07	1,754	538		538	U
200	0207452F	DCAPES	07	12,423	13,248		13,248	U

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181	0207136F	Manned Destructive Suppression	07	15,521				15,521	U
182	0207138F	F-22A Squadrons	07	496,298				496,298	U
183	0207142F	F-35 Squadrons	07	99,943				99,943	U
184	0207161F	Tactical AIM Missiles	07	10,314				10,314	U
185	0207163F	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	55,384				55,384	U
186	0207227F	Combat Rescue - Pararescue	07	281				281	U
187	0207247F	AF TENCAP	07	21,365				21,365	U
188	0207249F	Precision Attack Systems Procurement	07	10,696				10,696	U
189	0207253F	Compass Call	07	15,888				15,888	U
190	0207268F	Aircraft Engine Component Improvement Program	07	112,505				112,505	U
191	0207325F	Joint Air-to-Surface Standoff Missile (JASSM)	07	78,498				78,498	U
192	0207410F	Air & Space Operations Center (AOC)	07	114,864				114,864	U
193	0207412F	Control and Reporting Center (CRC)	07	8,109				8,109	U
194	0207417F	Airborne Warning and Control System (AWACS)	07	67,996				67,996	U
195	0207418F	Tactical Airborne Control Systems	07	2,462				2,462	U
197	0207431F	Combat Air Intelligence System Activities	07	13,668				13,668	U
198	0207444F	Tactical Air Control Party-Mod	07	6,217				6,217	U
199	0207448F	C2ISR Tactical Data Link	07						U
200	0207452F	DCAPES	07	19,910				19,910	U

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201	0207573F	National Technical Nuclear Forensics	07	2,307	1,788		1,788	U
202	0207590F	Seek Eagle	07	25,304	24,699		24,699	U
203	0207601F	USAF Modeling and Simulation	07	9,803	17,078		17,078	U
204	0207605F	Wargaming and Simulation Centers	07	12,369	6,141		6,141	U
205	0207610F	Battlefield Abn Comm Node (BACN)	07			42,349	42,349	U
206	0207697F	Distributed Training and Exercises	07	4,046	3,825		3,825	U
207	0208006F	Mission Planning Systems	07	82,054	63,074		63,074	U
208	0208007F	Tactical Deception	07	3,623	6,949		6,949	U
209	0208064F	OPERATIONAL HQ - CYBER	07					U
210	0208087F	Distributed Cyber Warfare Operations	07	38,241	40,168		40,168	U
211	0208088F	AF Defensive Cyberspace Operations	07	19,628	38,387		38,387	U
212	0208097F	Joint Cyber Command and Control (JCC2)	07		13,000		13,000	U
213	0208099F	Unified Platform (UP)	07		26,559		26,559	U
217	0208288F	Intel Data Applications	07			1,200	1,200	U
218	0301017F	Global Sensor Integrated on Network (GSIN)	07	3,439	3,579		3,579	U
219	0301025F	GeoBase	07					U
220	0301112F	Nuclear Planning and Execution System (NPES)	07	5,056	29,620		29,620	U
226	0301401F	Air Force Space and Cyber Non-Traditional ISR for Battlespace Awareness	07	3,721	6,633		6,633	U

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201	0207573F	National Technical Nuclear Forensics	07	1,788				1,788	U
202	0207590F	Seek Eagle	07	28,237				28,237	U
203	0207601F	USAF Modeling and Simulation	07	15,725				15,725	U
204	0207605F	Wargaming and Simulation Centers	07	4,316				4,316	U
205	0207610F	Battlefield Abn Comm Node (BACN)	07	26,946				26,946	U
206	0207697F	Distributed Training and Exercises	07	4,303				4,303	U
207	0208006F	Mission Planning Systems	07	71,465				71,465	U
208	0208007F	Tactical Deception	07	7,446				7,446	U
209	0208064F	OPERATIONAL HQ - CYBER	07	7,602				7,602	U
210	0208087F	Distributed Cyber Warfare Operations	07	35,178				35,178	U
211	0208088F	AF Defensive Cyberspace Operations	07	16,609				16,609	U
212	0208097F	Joint Cyber Command and Control (JCC2)	07	11,603				11,603	U
213	0208099F	Unified Platform (UP)	07	84,702				84,702	U
217	0208288F	Intel Data Applications	07			1,200	1,200	1,200	U
218	0301017F	Global Sensor Integrated on Network (GSIN)	07						U
219	0301025F	GeoBase	07	2,723				2,723	U
220	0301112F	Nuclear Planning and Execution System (NPES)	07	44,190				44,190	U
226	0301401F	Air Force Space and Cyber Non-Traditional ISR for Battlespace Awareness	07	3,575				3,575	U

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227	0302015F	E-4B National Airborne Operations Center (NAOC)	07	37,481	57,758		57,758	U
228	0303131F	Minimum Essential Emergency Communications Network (MEECN)	07	34,466	64,543		64,543	U
229	0303133F	High Frequency Radio Systems	07		51,612		51,612	U
230	0303140F	Information Systems Security Program	07	41,067	33,979		33,979	U
231	0303141F	Global Combat Support System	07	101				U
232	0303142F	Global Force Management - Data Initiative	07	1,944	2,170		2,170	U
234	0304115F	Multi Domain Command and Control (MDC2)	07					U
235	0304260F	Airborne SIGINT Enterprise	07	116,186	109,873		109,873	U
236	0304310F	Commercial Economic Analysis	07	3,544	3,472		3,472	U
239	0305015F	C2 Air Operations Suite - C2 Info Services	07		8,608		8,608	U
240	0305020F	CCMD Intelligence Information Technology	07	1,542	1,586		1,586	U
241	0305022F	ISR Modernization & Automation Dvmt (IMAD)	07					U
242	0305099F	Global Air Traffic Management (GATM)	07	4,887	4,106		4,106	U
243	0305111F	Weather Service	07	35,689	31,615	3,000	34,615	U
244	0305114F	Air Traffic Control, Approach, and Landing System (ATCALs)	07	5,791	13,271		13,271	U
245	0305116F	Aerial Targets	07	20,944	6,683		6,683	U
248	0305128F	Security and Investigative Activities	07	400	418		418	U

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227	0302015F	E-4B National Airborne Operations Center (NAOC)	07	70,173				70,173	U
228	0303131F	Minimum Essential Emergency Communications Network (MEECN)	07	13,543				13,543	U
229	0303133F	High Frequency Radio Systems	07	15,881				15,881	U
230	0303140F	Information Systems Security Program	07	27,726				27,726	U
231	0303141F	Global Combat Support System	07						U
232	0303142F	Global Force Management - Data Initiative	07	2,210				2,210	U
234	0304115F	Multi Domain Command and Control (MDC2)	07	150,880				150,880	U
235	0304260F	Airborne SIGINT Enterprise	07	102,667				102,667	U
236	0304310F	Commercial Economic Analysis	07	3,431				3,431	U
239	0305015F	C2 Air Operations Suite - C2 Info Services	07	9,313				9,313	U
240	0305020F	CCMD Intelligence Information Technology	07	1,121				1,121	U
241	0305022F	ISR Modernization & Automation Dvmt (IMAD)	07	19,000				19,000	U
242	0305099F	Global Air Traffic Management (GATM)	07	4,544				4,544	U
243	0305111F	Weather Service	07	25,461				25,461	U
244	0305114F	Air Traffic Control, Approach, and Landing System (ATCALs)	07	5,651				5,651	U
245	0305116F	Aerial Targets	07	7,448				7,448	U
248	0305128F	Security and Investigative Activities	07	425				425	U

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249	0305145F	Arms Control Implementation	07		21,374		21,374	U
250	0305146F	Defense Joint Counterintelligence Activities	07	4,520	3,845		3,845	U
252	0305179F	Integrated Broadcast Service (IBS)	07					U
253	0305202F	Dragon U-2	07	34,486	65,518	22,100	87,618	U
254	0305205F	Endurance Unmanned Aerial Vehicles	07	40,000	15,000		15,000	U
255	0305206F	Airborne Reconnaissance Systems	07	19,450	195,334		195,334	U
256	0305207F	Manned Reconnaissance Systems	07	14,297	14,223		14,223	U
257	0305208F	Distributed Common Ground/Surface Systems	07	38,064	24,554	29,500	54,054	U
258	0305220F	RQ-4 UAV	07	222,693	221,690		221,690	U
259	0305221F	Network-Centric Collaborative Targeting	07	14,837	14,288		14,288	U
260	0305238F	NATO AGS	07	44,729	51,527		51,527	U
261	0305240F	Support to DCGS Enterprise	07	26,349	26,579		26,579	U
262	0305600F	International Intelligence Technology and Architectures	07	9,491	8,464		8,464	U
263	0305881F	Rapid Cyber Acquisition	07	4,720	4,303		4,303	U
264	0305984F	Personnel Recovery Command & Ctrl (PRC2)	07	2,364	2,466		2,466	U
265	0307577F	Intelligence Mission Data (IMD)	07	8,684	4,117		4,117	U
266	0401115F	C-130 Airlift Squadron	07	10,219	105,988		105,988	U
267	0401119F	C-5 Airlift Squadrons (IF)	07	11,433	25,071		25,071	U
268	0401130F	C-17 Aircraft (IF)	07	21,701	48,299		48,299	U

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249	0305145F	Arms Control Implementation	07	54,546				54,546	U
250	0305146F	Defense Joint Counterintelligence Activities	07	6,858				6,858	U
252	0305179F	Integrated Broadcast Service (IBS)	07	8,728				8,728	U
253	0305202F	Dragon U-2	07	38,939				38,939	U
254	0305205F	Endurance Unmanned Aerial Vehicles	07						U
255	0305206F	Airborne Reconnaissance Systems	07	122,909				122,909	U
256	0305207F	Manned Reconnaissance Systems	07	11,787				11,787	U
257	0305208F	Distributed Common Ground/Surface Systems	07	25,009				25,009	U
258	0305220F	RQ-4 UAV	07	191,733				191,733	U
259	0305221F	Network-Centric Collaborative Targeting	07	10,757				10,757	U
260	0305238F	NATO AGS	07	32,567				32,567	U
261	0305240F	Support to DCGS Enterprise	07	37,774				37,774	U
262	0305600F	International Intelligence Technology and Architectures	07	13,515				13,515	U
263	0305881F	Rapid Cyber Acquisition	07	4,383				4,383	U
264	0305984F	Personnel Recovery Command & Ctrl (PRC2)	07	2,133				2,133	U
265	0307577F	Intelligence Mission Data (IMD)	07	8,614				8,614	U
266	0401115F	C-130 Airlift Squadron	07	140,425				140,425	U
267	0401119F	C-5 Airlift Squadrons (IF)	07	10,223				10,223	U
268	0401130F	C-17 Aircraft (IF)	07	25,101				25,101	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
269	0401132F	C-130J Program	07	24,908	15,409		15,409	U
270	0401134F	Large Aircraft IR Countermeasures (LAIRCM)	07	5,095	4,334		4,334	U
271	0401218F	KC-135s	07	8,645	3,493		3,493	U
272	0401219F	KC-10s	07	9,181	6,569		6,569	U
273	0401314F	Operational Support Airlift	07	5,196	3,172		3,172	U
274	0401318F	CV-22	07	17,744	16,502		16,502	U
275	0401840F	AMC Command and Control System	07	3,394	1,688		1,688	U
276	0408011F	Special Tactics / Combat Control	07	7,726	2,433		2,433	U
277	0702207F	Depot Maintenance (Non-IF)	07	1,517	1,897		1,897	U
278	0708055F	Maintenance, Repair & Overhaul System	07	28,726	50,933		50,933	U
279	0708610F	Logistics Information Technology (LOGIT)	07	23,332	13,479		13,479	U
280	0708611F	Support Systems Development	07	11,362	4,497		4,497	U
281	0804743F	Other Flight Training	07	1,998	2,022		2,022	U
282	0808716F	Other Personnel Activities	07	103	108		108	U
283	0901202F	Joint Personnel Recovery Agency	07	1,933	2,023		2,023	U
284	0901218F	Civilian Compensation Program	07	2,905	3,561		3,561	U
285	0901220F	Personnel Administration	07	5,404	4,258		4,258	U
286	0901226F	Air Force Studies and Analysis Agency	07	1,506	1,418		1,418	U
287	0901538F	Financial Management Information Systems Development	07	87,802	93,418		93,418	U

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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
269	0401132F	C-130J Program	07	8,640				8,640	U
270	0401134F	Large Aircraft IR Countermeasures (LAIRCM)	07	5,424				5,424	U
271	0401218F	KC-135s	07						U
272	0401219F	KC-10s	07	20				20	U
273	0401314F	Operational Support Airlift	07						U
274	0401318F	CV-22	07	17,906				17,906	U
275	0401840F	AMC Command and Control System	07						U
276	0408011F	Special Tactics / Combat Control	07	3,629				3,629	U
277	0702207F	Depot Maintenance (Non-IF)	07	1,890				1,890	U
278	0708055F	Maintenance, Repair & Overhaul System	07	10,311				10,311	U
279	0708610F	Logistics Information Technology (LOGIT)	07	16,065				16,065	U
280	0708611F	Support Systems Development	07	539				539	U
281	0804743F	Other Flight Training	07	2,057				2,057	U
282	0808716F	Other Personnel Activities	07	10				10	U
283	0901202F	Joint Personnel Recovery Agency	07	2,060				2,060	U
284	0901218F	Civilian Compensation Program	07	3,809				3,809	U
285	0901220F	Personnel Administration	07	6,476				6,476	U
286	0901226F	Air Force Studies and Analysis Agency	07	1,443				1,443	U
287	0901538F	Financial Management Information Systems Development	07	9,323				9,323	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
288	0901554F	Defense Enterprise Acntng and Mgt Sys (DEAMS)	07					U
289	1201017F	Global Sensor Integrated on Network (GSIN)	07					U
290	1201921F	Service Support to STRATCOM - Space Activities	07	13,769	14,161		14,161	U
291	1202140F	Service Support to SPACECOM Activities	07					U
292	1202247F	AF TENCAP	07	80,726	26,986	5,000	31,986	U
293	1203001F	Family of Advanced BLoS Terminals (FAB-T)	07	26,262	60,168		60,168	U
294	1203110F	Satellite Control Network (SPACE)	07	18,133	26,440		26,440	U
296	1203165F	NAVSTAR Global Positioning System (Space and Control Segments)	07	7,681	8,937		8,937	U
297	1203173F	Space and Missile Test and Evaluation Center	07	43,715	79,935		79,935	U
298	1203174F	Space Innovation, Integration and Rapid Technology Development	07	9,081	21,019		21,019	U
299	1203179F	Integrated Broadcast Service (IBS)	07	8,747	8,568		8,568	U
300	1203182F	Spacelift Range System (SPACE)	07	20,035	20,168		20,168	U
301	1203265F	GPS III Space Segment	07	233,043	141,892		141,892	U
302	1203400F	Space Superiority Intelligence	07	10,691	16,278		16,278	U
303	1203614F	JSpOC Mission System	07	125,191	70,383		70,383	U
304	1203620F	National Space Defense Center	07	18,052	55,309		55,309	U
305	1203699F	Shared Early Warning (SEW)	07	1,327				U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
288	0901554F	Defense Enterprise Acntng and Mgt Sys (DEAMS)	07	46,789				46,789	U
289	1201017F	Global Sensor Integrated on Network (GSIN)	07	3,647				3,647	U
290	1201921F	Service Support to STRATCOM - Space Activities	07	988				988	U
291	1202140F	Service Support to SPACECOM Activities	07	11,863				11,863	U
292	1202247F	AF TENCAP	07						U
293	1203001F	Family of Advanced BLoS Terminals (FAB-T)	07	197,388				197,388	U
294	1203110F	Satellite Control Network (SPACE)	07	61,891				61,891	U
296	1203165F	NAVSTAR Global Positioning System (Space and Control Segments)	07						U
297	1203173F	Space and Missile Test and Evaluation Center	07	4,566				4,566	U
298	1203174F	Space Innovation, Integration and Rapid Technology Development	07	43,292				43,292	U
299	1203179F	Integrated Broadcast Service (IBS)	07						U
300	1203182F	Spacelift Range System (SPACE)	07	10,837				10,837	U
301	1203265F	GPS III Space Segment	07	42,440				42,440	U
302	1203400F	Space Superiority Intelligence	07	14,428				14,428	U
303	1203614F	JSpOC Mission System	07	72,762				72,762	U
304	1203620F	National Space Defense Center	07	2,653				2,653	U
305	1203699F	Shared Early Warning (SEW)	07						U

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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
306	1203873F	Ballistic Missile Defense Radars	07					U
307	1203906F	NCMC - TW/AA System	07	5,000				U
308	1203913F	NUDET Detection System (SPACE)	07	31,304	19,778		19,778	U
309	1203940F	Space Situation Awareness Operations	07	86,173	19,572		19,572	U
310	1206423F	Global Positioning System III - Operational Control Segment	07	492,986	509,258		509,258	U
311	1206770F	Enterprise Ground Services	07					U
9999	9999999999	Classified Programs		16,789,633	16,859,524	161,790	17,021,314	U
		Operational Systems Development		22,442,379	23,153,697	308,439	23,462,136	
		Total Research, Development, Test & Eval, AF		38,077,597	41,166,683	321,934	41,488,617	

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Appropriation: 3600F Research, Development, Test & Eval, AF

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
306	1203873F	Ballistic Missile Defense Radars	07	15,881				15,881	U
307	1203906F	NCMC - TW/AA System	07						U
308	1203913F	NUDET Detection System (SPACE)	07	49,300				49,300	U
309	1203940F	Space Situation Awareness Operations	07	17,834				17,834	U
310	1206423F	Global Positioning System III - Operational Control Segment	07	445,302				445,302	U
311	1206770F	Enterprise Ground Services	07	138,870				138,870	U
9999	9999999999	Classified Programs		18,029,506	322,000	78,713	400,713	18,430,219	U
		Operational Systems Development		24,529,488		83,913	405,913	24,935,401	
Total Research, Development, Test & Eval, AF				45,616,122		128,248	450,248	46,066,370	

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<u>Summary Recap of Budget Activities</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
Basic Research	704,622	780,884		780,884
Applied Research	1,774,557	1,947,006		1,947,006
Advanced Technology Development	3,540,320	3,725,727	13,648	3,739,375
Advanced Component Development And Prototypes	9,997,468	9,754,747	169,638	9,924,385
System Development And Demonstration	940,083	1,056,848		1,056,848
Management Support	1,655,502	1,350,301		1,350,301
Operational System Development	5,161,464	5,043,935	219,228	5,263,163
Total Research, Development, Test & Evaluation	23,774,016	23,659,448	402,514	24,061,962
 <u>Summary Recap of FYDP Programs</u>				
General Purpose Forces	89,463	92,494		92,494
Intelligence and Communications	699,634	778,557		778,557
Research and Development	18,158,939	18,065,826	183,286	18,249,112
Central Supply and Maintenance	4,522	4,761		4,761
Training Medical and Other	37,334	42,653		42,653
Administration and Associated Activities	34,908	33,730		33,730
Special Operations Forces	710,874	579,337	27,097	606,434
Space	80,705	132,162		132,162
Classified Programs	3,957,637	3,929,928	192,131	4,122,059
Total Research, Development, Test & Evaluation	23,774,016	23,659,448	402,514	24,061,962

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<u>Summary Recap of Budget Activities</u>	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
Basic Research	729,300				729,300
Applied Research	2,049,458		1,677	1,677	2,051,135
Advanced Technology Development	3,742,088		74,758	74,758	3,816,846
Advanced Component Development And Prototypes	9,797,493		113,590	113,590	9,911,083
System Development And Demonstration	841,588				841,588
Management Support	1,354,628				1,354,628
Operational System Development	5,832,398	426,000	211,925	637,925	6,470,323
Total Research, Development, Test & Evaluation	24,346,953	426,000	401,950	827,950	25,174,903
 <u>Summary Recap of FYDP Programs</u>					
General Purpose Forces	80,912				80,912
Intelligence and Communications	1,007,590				1,007,590
Research and Development	18,036,394		190,025	190,025	18,226,419
Central Supply and Maintenance	6,810				6,810
Training Medical and Other	40,173				40,173
Administration and Associated Activities	30,155				30,155
Special Operations Forces	802,236		11,726	11,726	813,962
Space	174,572				174,572
Classified Programs	4,168,111	426,000	200,199	626,199	4,794,310
Total Research, Development, Test & Evaluation	24,346,953	426,000	401,950	827,950	25,174,903

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<u>Appropriation</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
Chemical and Biological Defense Program	1,056,761	998,721		998,721
Defense Advanced Research Projects Agency	3,088,620	3,427,049		3,427,049
Defense Contract Audit Agency		2,600		2,600
Defense Contract Management Agency	8,947	11,988		11,988
Defense Human Resources Activity	27,749	25,210		25,210
Defense Intelligence Agency				
Defense Information Systems Agency	272,639	282,171		282,171
Defense Logistics Agency	355,779	324,981		324,981
Defense Security Cooperative Agency	16,619	8,028		8,028
Defense Security Service				
Defense Technical Information Center	59,301	60,977		60,977
Defense Threat Reduction Agency	667,569	479,968	183,286	663,254
Missile Defense Agency	7,749,461	7,248,720		7,248,720
National Geospatial Intelligence Agency				
National Security Agency				
Office of Secretary of Defense	5,364,060	5,829,463		5,829,463
Space Development Agency				
U.S., Special Operations Command	716,362	585,623	27,097	612,720
The Joint Staff	123,975	138,000		138,000
Washington Headquarters Services	23,498	30,198		30,198
Total Research, Development, Test & Evaluation	23,774,016	23,659,448	402,514	24,061,962

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<u>Appropriation</u>	<u>FY 2020 Base</u>	<u>FY 2020 OCO for Base Requirements</u>	<u>FY 2020 OCO for Direct War and Enduring Costs</u>	<u>FY 2020 Total OCO</u>	<u>FY 2020 Total (Base + OCO)</u>
Chemical and Biological Defense Program	1,052,406				1,052,406
Defense Advanced Research Projects Agency	3,556,221				3,556,221
Defense Contract Audit Agency	1,600				1,600
Defense Contract Management Agency	3,495				3,495
Defense Human Resources Activity	41,843				41,843
Defense Intelligence Agency					
Defense Information Systems Agency	542,928				542,928
Defense Logistics Agency	267,802				267,802
Defense Security Cooperative Agency	17,057				17,057
Defense Security Service					
Defense Technical Information Center	60,743				60,743
Defense Threat Reduction Agency	572,282		164,795	164,795	737,077
Missile Defense Agency	7,369,585				7,369,585
National Geospatial Intelligence Agency					
National Security Agency					
Office of Secretary of Defense	5,264,901		25,230	25,230	5,290,131
Space Development Agency	105,000				105,000
U.S., Special Operations Command	808,595		11,726	11,726	820,321
The Joint Staff	157,479				157,479
Washington Headquarters Services	1,000				1,000
Total Research, Development, Test & Evaluation	24,346,953		401,950	827,950	25,174,903

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
1	0601000BR	DTRA Basic Research	01	36,369	37,023		37,023	U
2	0601101E	Defense Research Sciences	01	403,448	422,680		422,680	U
3	0601110D8Z	Basic Research Initiatives	01	39,051	56,573		56,573	U
4	0601117E	Basic Operational Medical Research Science	01	42,129	46,575		46,575	U
5	0601120D8Z	National Defense Education Program	01	100,850	135,610		135,610	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	39,006	40,320		40,320	U
7	0601384BP	Chemical and Biological Defense Program	01	43,769	42,103		42,103	U
		Basic Research		704,622	780,884		780,884	
8	0602000D8Z	Joint Munitions Technology	02	19,053	19,126		19,126	U
9	0602115E	Biomedical Technology	02	88,962	101,300		101,300	U
10	0602134BR	Counter Improvised-Threat Advanced Studies	02					U
11	0602234D8Z	Lincoln Laboratory Research Program	02	47,891	51,479		51,479	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	47,550	60,550		60,550	U
13	0602303E	Information & Communications Technology	02	379,578	404,967		404,967	U
14	0602383E	Biological Warfare Defense	02	15,078	33,640		33,640	U
15	0602384BP	Chemical and Biological Defense Program	02	199,466	192,674		192,674	U
16	0602668D8Z	Cyber Security Research	02	14,429	14,935		14,935	U
17	0602702E	Tactical Technology	02	292,957	309,466		309,466	U

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
1	0601000BR	DTRA Basic Research	01	26,000				26,000	U
2	0601101E	Defense Research Sciences	01	432,284				432,284	U
3	0601110D8Z	Basic Research Initiatives	01	48,874				48,874	U
4	0601117E	Basic Operational Medical Research Science	01	54,122				54,122	U
5	0601120D8Z	National Defense Education Program	01	92,074				92,074	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	30,708				30,708	U
7	0601384BP	Chemical and Biological Defense Program	01	45,238				45,238	U
		Basic Research		729,300				729,300	
8	0602000D8Z	Joint Munitions Technology	02	19,306				19,306	U
9	0602115E	Biomedical Technology	02	97,771				97,771	U
10	0602134BR	Counter Improvised-Threat Advanced Studies	02			1,677	1,677	1,677	U
11	0602234D8Z	Lincoln Laboratory Research Program	02	52,317				52,317	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	62,200				62,200	U
13	0602303E	Information & Communications Technology	02	442,556				442,556	U
14	0602383E	Biological Warfare Defense	02	34,588				34,588	U
15	0602384BP	Chemical and Biological Defense Program	02	202,587				202,587	U
16	0602668D8Z	Cyber Security Research	02	15,118				15,118	U
17	0602702E	Tactical Technology	02	337,602				337,602	U

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
18	0602715E	Materials and Biological Technology	02	191,880	208,898		208,898	U
19	0602716E	Electronics Technology	02	283,180	348,847		348,847	U
20	0602718BR	Counter Weapons of Mass Destruction Applied Research	02	152,544	155,924		155,924	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	8,614	9,279		9,279	U
22	1160401BB	SOF Technology Development	02	33,375	35,921		35,921	U
		Applied Research		1,774,557	1,947,006		1,947,006	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,550	25,540		25,540	U
24	0603121D8Z	SO/LIC Advanced Development	03					U
25	0603122D8Z	Combating Terrorism Technology Support	03	149,541	171,321		171,321	U
26	0603133D8Z	Foreign Comparative Testing	03	21,715	24,277		24,277	U
27	0603134BR	Counter Improvised-Threat Simulation	03	23,366		13,648	13,648	U
28	0603160BR	Counter Weapons of Mass Destruction Advanced Technology Development	03	292,846	280,858		280,858	U
29	0603176C	Advanced Concepts and Performance Assessment	03	17,683	13,017		13,017	U
30	0603178C	Weapons Technology	03	28,894	13,400		13,400	U
31	0603180C	Advanced Research	03	23,765	42,565		42,565	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	17,959	18,602		18,602	U
33	0603286E	Advanced Aerospace Systems	03	176,200	302,463		302,463	U
34	0603287E	Space Programs and Technology	03	226,988	254,671		254,671	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
18	0602715E	Materials and Biological Technology	02	223,976				223,976	U
19	0602716E	Electronics Technology	02	332,192				332,192	U
20	0602718BR	Counter Weapons of Mass Destruction Applied Research	02	179,096				179,096	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	9,580				9,580	U
22	1160401BB	SOF Technology Development	02	40,569				40,569	U
		Applied Research		2,049,458		1,677	1,677	2,051,135	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,779				25,779	U
24	0603121D8Z	SO/LIC Advanced Development	03	5,000				5,000	U
25	0603122D8Z	Combating Terrorism Technology Support	03	70,517		25,230	25,230	95,747	U
26	0603133D8Z	Foreign Comparative Testing	03	24,970				24,970	U
27	0603134BR	Counter Improvised-Threat Simulation	03			49,528	49,528	49,528	U
28	0603160BR	Counter Weapons of Mass Destruction Advanced Technology Development	03	340,065				340,065	U
29	0603176C	Advanced Concepts and Performance Assessment	03	14,208				14,208	U
30	0603178C	Weapons Technology	03	10,000				10,000	U
31	0603180C	Advanced Research	03	20,674				20,674	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,773				18,773	U
33	0603286E	Advanced Aerospace Systems	03	279,741				279,741	U
34	0603287E	Space Programs and Technology	03	202,606				202,606	U

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35	0603288D8Z	Analytic Assessments	03	12,658	18,430		18,430	U
36	0603289D8Z	Advanced Innovative Analysis and Concepts	03	36,763	37,178		37,178	U
37	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	14,971	13,590		13,590	U
38	0603294C	Common Kill Vehicle Technology	03	55,562	56,753		56,753	U
39	0603342D8W	Defense Innovation Unit Experimental (DIUx)	03	23,498	29,198		29,198	U
40	0603342D8Z	Defense Innovation Unit (DIU)	03					U
41	0603375D8Z	Technology Innovation	03	24,825	33,068		33,068	U
42	0603384BP	Chemical and Biological Defense Program - Advanced Development	03	141,242	142,826		142,826	U
43	0603527D8Z	RETRACT LARCH	03	164,544	160,762		160,762	U
44	0603618D8Z	Joint Electronic Advanced Technology	03	14,020	12,889		12,889	U
45	0603648D8Z	Joint Capability Technology Demonstrations	03	102,769	105,808		105,808	U
46	0603662D8Z	Networked Communications Capabilities	03	12,369	12,667		12,667	U
47	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	206,257	174,489		174,489	U
48	0603680S	Manufacturing Technology Program	03	39,090	62,396		62,396	U
49	0603699D8Z	Emerging Capabilities Technology Development	03	79,469	60,700		60,700	U
50	0603712S	Generic Logistics R&D Technology Demonstrations	03	16,105	18,127		18,127	U

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35	0603288D8Z	Analytic Assessments	03	19,429				19,429	U
36	0603289D8Z	Advanced Innovative Analysis and Concepts	03	37,645				37,645	U
37	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	14,668				14,668	U
38	0603294C	Common Kill Vehicle Technology	03	13,600				13,600	U
39	0603342D8W	Defense Innovation Unit Experimental (DIUx)	03						U
40	0603342D8Z	Defense Innovation Unit (DIU)	03	29,398				29,398	U
41	0603375D8Z	Technology Innovation	03	60,000				60,000	U
42	0603384BP	Chemical and Biological Defense Program - Advanced Development	03	172,486				172,486	U
43	0603527D8Z	RETRACT LARCH	03	159,688				159,688	U
44	0603618D8Z	Joint Electronic Advanced Technology	03	12,063				12,063	U
45	0603648D8Z	Joint Capability Technology Demonstrations	03	107,359				107,359	U
46	0603662D8Z	Networked Communications Capabilities	03	2,858				2,858	U
47	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	96,397				96,397	U
48	0603680S	Manufacturing Technology Program	03	42,834				42,834	U
49	0603699D8Z	Emerging Capabilities Technology Development	03	80,911				80,911	U
50	0603712S	Generic Logistics R&D Technology Demonstrations	03	10,817				10,817	U

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51	0603716D8Z	Strategic Environmental Research Program	03	63,055	76,340		76,340	U
52	0603720S	Microelectronics Technology Development and Support	03	241,867	192,926		192,926	U
53	0603727D8Z	Joint Warfighting Program	03	3,236	5,978		5,978	U
54	0603739E	Advanced Electronics Technologies	03	73,673	111,099		111,099	U
55	0603760E	Command, Control and Communications Systems	03	103,577	185,984		185,984	U
56	0603766E	Network-Centric Warfare Technology	03	429,691	434,069		434,069	U
57	0603767E	Sensor Technology	03	202,189	183,101		183,101	U
58	0603769D8Z	Distributed Learning Advanced Technology Development	03	11,053	13,564		13,564	U
59	0603781D8Z	Software Engineering Institute	03	14,468	15,016		15,016	U
60	0603826D8Z	Quick Reaction Special Projects	03	64,775	59,490		59,490	U
61	0603833D8Z	Engineering Science & Technology	03	24,447	19,371		19,371	U
62	0603924D8Z	High Energy Laser Advanced Technology Program	03		74,364		74,364	U
63	0603941D8Z	Test & Evaluation Science & Technology	03	108,958	117,389		117,389	U
64	0603950D8Z	National Security Innovation Network	03					U
65	0604055D8Z	Operational Energy Capability Improvement	03	39,788	45,478		45,478	U
66	0303310D8Z	CWMD Systems	03	32,111	26,583		26,583	U
67	0303367D8Z	Spectrum Access Research and Development	03	86,472				U

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51	0603716D8Z	Strategic Environmental Research Program	03	66,157				66,157	U
52	0603720S	Microelectronics Technology Development and Support	03	171,771				171,771	U
53	0603727D8Z	Joint Warfighting Program	03	4,846				4,846	U
54	0603739E	Advanced Electronics Technologies	03	128,616				128,616	U
55	0603760E	Command, Control and Communications Systems	03	232,134				232,134	U
56	0603766E	Network-Centric Warfare Technology	03	512,424				512,424	U
57	0603767E	Sensor Technology	03	163,903				163,903	U
58	0603769D8Z	Distributed Learning Advanced Technology Development	03	13,723				13,723	U
59	0603781D8Z	Software Engineering Institute	03	15,111				15,111	U
60	0603826D8Z	Quick Reaction Special Projects	03	47,147				47,147	U
61	0603833D8Z	Engineering Science & Technology	03	19,376				19,376	U
62	0603924D8Z	High Energy Laser Advanced Technology Program	03	85,223				85,223	U
63	0603941D8Z	Test & Evaluation Science & Technology	03	175,574				175,574	U
64	0603950D8Z	National Security Innovation Network	03	25,000				25,000	U
65	0604055D8Z	Operational Energy Capability Improvement	03	70,536				70,536	U
66	0303310D8Z	CWMD Systems	03	28,907				28,907	U
67	0303367D8Z	Spectrum Access Research and Development	03						U

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68	1160402BB	SOF Advanced Technology Development	03	92,311	79,380		79,380	U
69	1206310SDA	Space Science and Technology Research and Development	03					U
		Advanced Technology Development		3,540,320	3,725,727	13,648	3,739,375	
70	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	32,165	28,076		28,076	U
71	0603600D8Z	WALKOFF	04	98,920	92,012		92,012	U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04	2,194	2,500		2,500	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	53,342	41,925		41,925	U
74	0603881C	Ballistic Missile Defense Terminal Defense Segment	04	454,147	388,273		388,273	U
75	0603882C	Ballistic Missile Defense Midcourse Defense Segment	04	1,153,263	803,359		803,359	U
76	0603884BP	Chemical and Biological Defense Program - Dem/Val	04	135,322	115,886		115,886	U
77	0603884C	Ballistic Missile Defense Sensors	04	290,289	385,375		385,375	U
78	0603890C	BMD Enabling Programs	04	533,993	620,831		620,831	U
79	0603891C	Special Programs - MDA	04	356,560	422,348		422,348	U
80	0603892C	AEGIS BMD	04	798,395	741,076		741,076	U
81	0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communicati	04	449,985	507,817		507,817	U
82	0603898C	Ballistic Missile Defense Joint Warfighter Support	04	48,574	48,767		48,767	U

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68	1160402BB	SOF Advanced Technology Development	03	89,154				89,154	U
69	1206310SDA	Space Science and Technology Research and Development	03	20,000				20,000	U
		Advanced Technology Development		3,742,088		74,758	74,758	3,816,846	
70	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	42,695				42,695	U
71	0603600D8Z	WALKOFF	04	92,791				92,791	U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04	5,659				5,659	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	66,572				66,572	U
74	0603881C	Ballistic Missile Defense Terminal Defense Segment	04	302,761				302,761	U
75	0603882C	Ballistic Missile Defense Midcourse Defense Segment	04	1,156,506				1,156,506	U
76	0603884BP	Chemical and Biological Defense Program - Dem/Val	04	83,662				83,662	U
77	0603884C	Ballistic Missile Defense Sensors	04	283,487				283,487	U
78	0603890C	BMD Enabling Programs	04	571,507				571,507	U
79	0603891C	Special Programs - MDA	04	377,098				377,098	U
80	0603892C	AEGIS BMD	04	727,479				727,479	U
81	0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communicati	04	564,206				564,206	U
82	0603898C	Ballistic Missile Defense Joint Warfighter Support	04	51,532				51,532	U

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83	0603904C	Missile Defense Integration & Operations Center (MDIOC)	04	51,905	58,125		58,125	U
84	0603906C	Regarding Trench	04	8,898	16,916		16,916	U
85	0603907C	Sea Based X-Band Radar (SBX)	04	173,988	136,715		136,715	U
86	0603913C	Israeli Cooperative Programs	04	373,800	300,000		300,000	U
87	0603914C	Ballistic Missile Defense Test	04	406,806	515,897		515,897	U
88	0603915C	Ballistic Missile Defense Targets	04	512,838	561,352		561,352	U
89	0603920D8Z	Humanitarian Demining	04	10,519	11,262		11,262	U
90	0603923D8Z	Coalition Warfare	04	10,515	8,509		8,509	U
91	0604016D8Z	Department of Defense Corrosion Program	04	4,503	8,458		8,458	U
92	0604115C	Technology Maturation Initiatives	04	163,947	316,822		316,822	U
93	0604132D8Z	Missile Defeat Project	04	121,025	43,508		43,508	U
94	0604134BR	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04	144,934		169,638	169,638	U
95	0604181C	Hypersonic Defense	04	63,032	130,944		130,944	U
96	0604250D8Z	Advanced Innovative Technologies	04	1,423,173	1,387,539		1,387,539	U
97	0604294D8Z	Trusted & Assured Microelectronics	04	147,481	522,950		522,950	U
98	0604331D8Z	Rapid Prototyping Program	04	46,984	99,107		99,107	U
99	0604341D8Z	Defense Innovation Unit (DIU) Prototyping	04					U
100	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	7,839	7,763		7,763	U

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83	0603904C	Missile Defense Integration & Operations Center (MDIOC)	04	56,161				56,161	U
84	0603906C	Regarding Trench	04	22,424				22,424	U
85	0603907C	Sea Based X-Band Radar (SBX)	04	128,156				128,156	U
86	0603913C	Israeli Cooperative Programs	04	300,000				300,000	U
87	0603914C	Ballistic Missile Defense Test	04	395,924				395,924	U
88	0603915C	Ballistic Missile Defense Targets	04	554,171				554,171	U
89	0603920D8Z	Humanitarian Demining	04	10,820				10,820	U
90	0603923D8Z	Coalition Warfare	04	11,316				11,316	U
91	0604016D8Z	Department of Defense Corrosion Program	04	3,365				3,365	U
92	0604115C	Technology Maturation Initiatives	04	303,458				303,458	U
93	0604132D8Z	Missile Defeat Project	04	17,816				17,816	U
94	0604134BR	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04			113,590	113,590	113,590	U
95	0604181C	Hypersonic Defense	04	157,425				157,425	U
96	0604250D8Z	Advanced Innovative Technologies	04	1,312,735				1,312,735	U
97	0604294D8Z	Trusted & Assured Microelectronics	04	542,421				542,421	U
98	0604331D8Z	Rapid Prototyping Program	04	100,957				100,957	U
99	0604341D8Z	Defense Innovation Unit (DIU) Prototyping	04	92,000				92,000	U
100	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	3,021				3,021	U

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101	0604532D8Z	Joint Artificial Intelligence	04		12,970		12,970	U
102	0604672C	Homeland Defense Radar - Hawaii (HDR-H)	04		62,221		62,221	U
103	0604673C	Pacific Discriminating Radar	04	59,564	15,926		15,926	U
104	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,686	3,759		3,759	U
105	0604775BR	Defense Rapid Innovation Program	04					U
106	0604775D8Z	Defense Rapid Innovation Program	04	250,000	249,432		249,432	U
107	0604826J	Joint C5 Capability Development, Integration and interoperability Assessments	04	23,638	22,435		22,435	U
108	0604873C	Long Range Discrimination Radar (LRDR)	04	370,516	166,543		166,543	U
109	0604874C	Improved Homeland Defense Interceptors	04	742,842	421,820		421,820	U
110	0604876C	Ballistic Missile Defense Terminal Defense Segment Test	04	35,738	61,017		61,017	U
111	0604878C	Aegis BMD Test	04	128,757	92,160		92,160	U
112	0604879C	Ballistic Missile Defense Sensor Test	04	88,840	77,405		77,405	U
113	0604880C	Land-Based SM-3 (LBSM3)	04	29,652	27,692		27,692	U
114	0604881C	AEGIS SM-3 Block IIA Co-Development	04	9,531				U
115	0604887C	Ballistic Missile Defense Midcourse Segment Test	04	85,030	72,634		72,634	U
116	0604894C	Multi-Object Kill Vehicle	04	6,347	6,500		6,500	U

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101	0604532D8Z	Joint Artificial Intelligence	04						U
102	0604672C	Homeland Defense Radar - Hawaii (HDR-H)	04	274,714				274,714	U
103	0604673C	Pacific Discriminating Radar	04	6,711				6,711	U
104	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,751				3,751	U
105	0604775BR	Defense Rapid Innovation Program	04	14,021				14,021	U
106	0604775D8Z	Defense Rapid Innovation Program	04						U
107	0604826J	Joint C5 Capability Development, Integration and interoperability Assessments	04	20,062				20,062	U
108	0604873C	Long Range Discrimination Radar (LRDR)	04	136,423				136,423	U
109	0604874C	Improved Homeland Defense Interceptors	04	412,363				412,363	U
110	0604876C	Ballistic Missile Defense Terminal Defense Segment Test	04	25,137				25,137	U
111	0604878C	Aegis BMD Test	04	169,822				169,822	U
112	0604879C	Ballistic Missile Defense Sensor Test	04	105,530				105,530	U
113	0604880C	Land-Based SM-3 (LBSM3)	04	38,352				38,352	U
114	0604881C	AEGIS SM-3 Block IIA Co-Development	04						U
115	0604887C	Ballistic Missile Defense Midcourse Segment Test	04	98,139				98,139	U
116	0604894C	Multi-Object Kill Vehicle	04						U

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117	0300206R	Enterprise Information Technology Systems	04		2,600		2,600	U
118	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	2,896	3,097		3,097	U
119	0305103C	Cyber Security Initiative	04	964	985		985	U
120	1206410SDA	Space Technology Development and Prototyping	04					U
121	1206893C	Space Tracking & Surveillance System	04	35,008	36,955		36,955	U
122	1206895C	Ballistic Missile Defense System Space Programs	04	45,123	94,484		94,484	U
Advanced Component Development And Prototypes				9,997,468	9,754,747	169,638	9,924,385	
123	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	12,320	8,314		8,314	U
124	0604165D8Z	Prompt Global Strike Capability Development	05	360,860	465,852		465,852	U
125	0604384BP	Chemical and Biological Defense Program - EMD	05	368,151	358,608		358,608	U
126	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	24,268	34,425		34,425	U
127	0605000BR	Counter Weapons of Mass Destruction Systems Development	05	6,199	6,163		6,163	U
128	0605013BL	Information Technology Development	05	8,947	11,988		11,988	U
129	0605021SE	Homeland Personnel Security Initiative	05	4,893	296		296	U
130	0605022D8Z	Defense Exportability Program	05	2,088	1,486		1,486	U
131	0605027D8Z	OUSD(C) IT Development Initiatives	05	21,312	9,568		9,568	U

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117	0300206R	Enterprise Information Technology Systems	04	1,600				1,600	U
118	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	3,191				3,191	U
119	0305103C	Cyber Security Initiative	04	1,138				1,138	U
120	1206410SDA	Space Technology Development and Prototyping	04	85,000				85,000	U
121	1206893C	Space Tracking & Surveillance System	04	35,849				35,849	U
122	1206895C	Ballistic Missile Defense System Space Programs	04	27,565				27,565	U
Advanced Component Development And Prototypes				9,797,493		113,590	113,590	9,911,083	
123	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	11,276				11,276	U
124	0604165D8Z	Prompt Global Strike Capability Development	05	107,000				107,000	U
125	0604384BP	Chemical and Biological Defense Program - EMD	05	384,047				384,047	U
126	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	40,102				40,102	U
127	0605000BR	Counter Weapons of Mass Destruction Systems Development	05	13,100				13,100	U
128	0605013BL	Information Technology Development	05	3,070				3,070	U
129	0605021SE	Homeland Personnel Security Initiative	05	7,295				7,295	U
130	0605022D8Z	Defense Exportability Program	05	17,615				17,615	U
131	0605027D8Z	OUSD(C) IT Development Initiatives	05	15,653				15,653	U

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132	0605070S	DOD Enterprise Systems Development and Demonstration	05	6,037	3,057		3,057	U
133	0605075D8Z	CMO Policy and Integration	05	2,805	2,100		2,100	U
134	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	23,544	20,384		20,384	U
135	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	12,983	10,339		10,339	U
136	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	11,414	6,359		6,359	U
137	0605294D8Z	Trusted & Assured Microelectronics	05	59,516	95,959		95,959	U
138	0303140BL	Information Systems Security Program	05					U
139	0303141K	Global Combat Support System	05	2,500	2,512		2,512	U
140	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,032	2,429		2,429	U
141	0305310D8Z	CWMD Systems: System Development and Demonstration	05	8,214	17,009		17,009	U
		System Development And Demonstration		940,083	1,056,848		1,056,848	
142	0603829J	Joint Capability Experimentation	06					U
143	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	6,941	6,607		6,607	U
144	0604875D8Z	Joint Systems Architecture Development	06	4,695	4,079		4,079	U
145	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	204,268	270,013		270,013	U
146	0604942D8Z	Assessments and Evaluations	06	48,985	31,285		31,285	U
147	0605001E	Mission Support	06	64,269	65,646		65,646	U

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132	0605070S	DOD Enterprise Systems Development and Demonstration	05	2,378				2,378	U
133	0605075D8Z	CMO Policy and Integration	05	1,618				1,618	U
134	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	27,944				27,944	U
135	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	6,609				6,609	U
136	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	9,619				9,619	U
137	0605294D8Z	Trusted & Assured Microelectronics	05	175,032				175,032	U
138	0303140BL	Information Systems Security Program	05	425				425	U
139	0303141K	Global Combat Support System	05	1,578				1,578	U
140	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,373				4,373	U
141	0305310D8Z	CWMD Systems: System Development and Demonstration	05	12,854				12,854	U
		System Development And Demonstration		841,588				841,588	
142	0603829J	Joint Capability Experimentation	06	13,000				13,000	U
143	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	9,724				9,724	U
144	0604875D8Z	Joint Systems Architecture Development	06	9,593				9,593	U
145	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	260,267				260,267	U
146	0604942D8Z	Assessments and Evaluations	06	30,834				30,834	U
147	0605001E	Mission Support	06	68,498				68,498	U

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148	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	90,326	88,184		88,184	U
149	0605104D8Z	Technical Studies, Support and Analysis	06	21,575	22,525		22,525	U
150	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	36,581	52,565		52,565	U
151	0605128D8Z	Classified Program USD(P)	06	138,494	103,000		103,000	U
152	0605142D8Z	Systems Engineering	06	36,313	38,784		38,784	U
153	0605151D8Z	Studies and Analysis Support - OSD	06	5,029	3,534		3,534	U
154	0605161D8Z	Nuclear Matters-Physical Security	06	5,031	5,039		5,039	U
155	0605170D8Z	Support to Networks and Information Integration	06	12,141	11,424		11,424	U
156	0605200D8Z	General Support to USD (Intelligence)	06	165,090	5,693		5,693	U
157	0605384BP	Chemical and Biological Defense Program	06	105,122	102,883		102,883	U
158	0605502BP	Small Business Innovative Research - Chemical Biological Def	06	20,057				U
159	0605502BR	Small Business Innovation Research	06	11,311				U
160	0605502C	Small Business Innovation Research - MDA	06	115,278				U
161	0605502D8Z	Small Business Innovative Research	06	97,227				U
162	0605502E	Small Business Innovative Research	06	100,804				U
163	0605502K	Small Business Innovative Research	06	6,500				U
164	0605502S	Small Business Innovative Research	06	11,631	10,454		10,454	U

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148	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	83,091				83,091	U
149	0605104D8Z	Technical Studies, Support and Analysis	06	18,079				18,079	U
150	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	70,038				70,038	U
151	0605128D8Z	Classified Program USD(P)	06						U
152	0605142D8Z	Systems Engineering	06	37,140				37,140	U
153	0605151D8Z	Studies and Analysis Support - OSD	06	4,759				4,759	U
154	0605161D8Z	Nuclear Matters-Physical Security	06	8,307				8,307	U
155	0605170D8Z	Support to Networks and Information Integration	06	9,441				9,441	U
156	0605200D8Z	General Support to USD (Intelligence)	06	1,700				1,700	U
157	0605384BP	Chemical and Biological Defense Program	06	110,363				110,363	U
158	0605502BP	Small Business Innovative Research - Chemical Biological Def	06						U
159	0605502BR	Small Business Innovation Research	06						U
160	0605502C	Small Business Innovation Research - MDA	06						U
161	0605502D8Z	Small Business Innovative Research	06						U
162	0605502E	Small Business Innovative Research	06						U
163	0605502K	Small Business Innovative Research	06						U
164	0605502S	Small Business Innovative Research	06						U

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165	0605502T	Small Business Innovative Research	06	607				U
166	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	2,367	2,539		2,539	U
167	0605797D8Z	Maintaining Technology Advantage	06					U
168	0605798D8Z	Defense Technology Analysis	06	25,815	27,425		27,425	U
169	0605801KA	Defense Technical Information Center (DTIC)	06	55,114	56,853		56,853	U
170	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	22,856	24,914		24,914	U
171	0605804D8Z	Development Test and Evaluation	06	19,810	20,133		20,133	U
172	0605898E	Management HQ - R&D	06	14,017	13,643		13,643	U
173	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	4,187	4,124		4,124	U
174	0606100D8Z	Budget and Program Assessments	06	3,838	5,755		5,755	U
175	0606225D8Z	ODNA Technology and Resource Analysis	06	998	1,028		1,028	U
176	0606589D8W	Defense Digital Service (DDS) Development Support	06		1,000		1,000	U
177	0606942C	Assessments and Evaluations Cyber Vulnerabilities	06		3,400		3,400	U
178	0606942S	Assessments and Evaluations Cyber Vulnerabilities	06		3,854		3,854	U
179	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	5,479	9,985		9,985	U
180	0204571J	Joint Staff Analytical Support	06	22,712	16,658		16,658	U

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165	0605502T	Small Business Innovative Research	06						U
166	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	3,568				3,568	U
167	0605797D8Z	Maintaining Technology Advantage	06	19,936				19,936	U
168	0605798D8Z	Defense Technology Analysis	06	16,875				16,875	U
169	0605801KA	Defense Technical Information Center (DTIC)	06	57,716				57,716	U
170	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	34,448				34,448	U
171	0605804D8Z	Development Test and Evaluation	06	22,203				22,203	U
172	0605898E	Management HQ - R&D	06	13,208				13,208	U
173	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	3,027				3,027	U
174	0606100D8Z	Budget and Program Assessments	06	8,017				8,017	U
175	0606225D8Z	ODNA Technology and Resource Analysis	06	3,194				3,194	U
176	0606589D8W	Defense Digital Service (DDS) Development Support	06	1,000				1,000	U
177	0606942C	Assessments and Evaluations Cyber Vulnerabilities	06						U
178	0606942S	Assessments and Evaluations Cyber Vulnerabilities	06						U
179	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	3,037				3,037	U
180	0204571J	Joint Staff Analytical Support	06	9,216				9,216	U

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183	0303166J	Support to Information Operations (IO) Capabilities	06	673	652		652	U
184	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	977	1,003		1,003	U
185	0305172K	Combined Advanced Applications	06	16,998	21,363		21,363	U
187	0305245D8Z	Intelligence Capabilities and Innovation Investments	06	15,255	189,529		189,529	U
188	0306310D8Z	CWMD Systems: RDT&E Management Support	06	1,229	1,241		1,241	U
189	0307588D8Z	Algorithmic Warfare Cross Functional Teams	06					U
190	0804767J	COCOM Exercise Engagement and Training Transformation (CE2T2) - MHA	06	37,334				U
191	0804768J	COCOM Exercise Engagement and Training Transformation (CE2T2) - non-MHA	06		42,653		42,653	U
192	0808709SE	Defense Equal Opportunity Management Institute (DEOMI)	06					U
193	0901598C	Management HQ - MDA	06	29,947	28,626		28,626	U
194	0903235K	Joint Service Provider (JSP)	06	4,309	5,104		5,104	U
9999	9999999999	Classified Programs		63,312	47,104		47,104	U
		Management Support		1,655,502	1,350,301		1,350,301	
195	0604130V	Enterprise Security System (ESS)	07	4,565	9,750		9,750	U
196	0604532K	Joint Artificial Intelligence	07					U

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183	0303166J	Support to Information Operations (IO) Capabilities	06	553				553	U
184	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	1,014				1,014	U
185	0305172K	Combined Advanced Applications	06	58,667				58,667	U
187	0305245D8Z	Intelligence Capabilities and Innovation Investments	06	21,081				21,081	U
188	0306310D8Z	CWMD Systems: RDT&E Management Support	06						U
189	0307588D8Z	Algorithmic Warfare Cross Functional Teams	06	221,235				221,235	U
190	0804767J	COCOM Exercise Engagement and Training Transformation (CE2T2) - MHA	06						U
191	0804768J	COCOM Exercise Engagement and Training Transformation (CE2T2) - non-MHA	06	40,073				40,073	U
192	0808709SE	Defense Equal Opportunity Management Institute (DEOMI)	06	100				100	U
193	0901598C	Management HQ - MDA	06	27,065				27,065	U
194	0903235K	Joint Service Provider (JSP)	06	3,090				3,090	U
9999	9999999999	Classified Programs		51,471				51,471	U
		Management Support		1,354,628				1,354,628	
195	0604130V	Enterprise Security System (ESS)	07	7,945				7,945	U
196	0604532K	Joint Artificial Intelligence	07	208,834				208,834	U

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197	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	1,792	1,855		1,855	U
198	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	287	304		304	U
199	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	16,464	48,765		48,765	U
200	0607310D8Z	CWMD Systems: Operational Systems Development	07	6,945	5,902		5,902	U
201	0607327T	Global Theater Security Cooperation Management Information Systems (G-TSCMIS)	07	13,933	5,869		5,869	U
202	0607384BP	Chemical and Biological Defense (Operational Systems Development)	07	43,632	43,741		43,741	U
203	0208043J	Planning and Decision Aid System (PDAS)	07	3,037	3,037		3,037	U
204	0208045K	C4I Interoperability	07	58,235	62,814		62,814	U
206	0301144K	Joint/Allied Coalition Information Sharing	07	5,801				U
209	0302016K	National Military Command System-Wide Support	07	1,863				U
210	0302019K	Defense Info Infrastructure Engineering and Integration	07	20,059	16,121		16,121	U
211	0303126K	Long-Haul Communications - DCS	07	23,090	14,353		14,353	U
212	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	15,855	17,579		17,579	U
213	0303135G	Public Key Infrastructure (PKI)	07	4,811				U
214	0303136G	Key Management Infrastructure (KMI)	07	33,746	31,737		31,737	U

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197	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	1,947				1,947	U
198	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	310				310	U
199	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	10,051				10,051	U
200	0607310D8Z	CWMD Systems: Operational Systems Development	07	12,734				12,734	U
201	0607327T	Global Theater Security Cooperation Management Information Systems (G-TSCMIS)	07	14,800				14,800	U
202	0607384BP	Chemical and Biological Defense (Operational Systems Development)	07	54,023				54,023	U
203	0208043J	Planning and Decision Aid System (PDAS)	07	4,537				4,537	U
204	0208045K	C4I Interoperability	07	64,122				64,122	U
206	0301144K	Joint/Allied Coalition Information Sharing	07						U
209	0302016K	National Military Command System-Wide Support	07						U
210	0302019K	Defense Info Infrastructure Engineering and Integration	07	15,798				15,798	U
211	0303126K	Long-Haul Communications - DCS	07	11,166				11,166	U
212	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	17,383				17,383	U
213	0303135G	Public Key Infrastructure (PKI)	07						U
214	0303136G	Key Management Infrastructure (KMI)	07	54,516				54,516	U

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215	0303140D8Z	Information Systems Security Program	07	19,074	17,899		17,899	U
216	0303140G	Information Systems Security Program	07	234,652	228,382		228,382	U
217	0303140K	Information Systems Security Program	07		19,611		19,611	U
218	0303150K	Global Command and Control System	07	41,126	46,900		46,900	U
219	0303153K	Defense Spectrum Organization	07	8,377	7,457		7,457	U
220	0303228K	Joint Regional Security Stacks (JRSS)	07	4,550	7,947		7,947	U
221	0303267K	Auctioned Spectrum Relocation Fund	07	15,804				U
222	0303430K	Federal Investigative Services Information Technology	07	41,743	55,400		55,400	U
225	0305103K	Cyber Security Initiative	07	1,644				U
228	0305128V	Security and Investigative Activities	07					U
232	0305186D8Z	Policy R&D Programs	07	6,441	6,190		6,190	U
233	0305199D8Z	Net Centricity	07	17,812	16,742		16,742	U
235	0305208BB	Distributed Common Ground/Surface Systems	07	5,488	6,286		6,286	U
238	0305208K	Distributed Common Ground/Surface Systems	07	2,959	2,970		2,970	U
241	0305327V	Insider Threat	07	7,265	5,954		5,954	U
242	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,067	1,137		1,137	U
249	0307577D8Z	Intelligence Mission Data (IMD)	07	13,086	6,889		6,889	U
250	0708012K	Logistics Support Activities	07		1,317		1,317	U

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215	0303140D8Z	Information Systems Security Program	07	67,631				67,631	U
216	0303140G	Information Systems Security Program	07	289,080				289,080	U
217	0303140K	Information Systems Security Program	07	42,796				42,796	U
218	0303150K	Global Command and Control System	07	25,218				25,218	U
219	0303153K	Defense Spectrum Organization	07	21,698				21,698	U
220	0303228K	Joint Regional Security Stacks (JRSS)	07	18,077				18,077	U
221	0303267K	Auctioned Spectrum Relocation Fund	07						U
222	0303430K	Federal Investigative Services Information Technology	07	44,001				44,001	U
225	0305103K	Cyber Security Initiative	07						U
228	0305128V	Security and Investigative Activities	07	2,400				2,400	U
232	0305186D8Z	Policy R&D Programs	07	6,301				6,301	U
233	0305199D8Z	Net Centricity	07	21,384				21,384	U
235	0305208BB	Distributed Common Ground/Surface Systems	07	6,359				6,359	U
238	0305208K	Distributed Common Ground/Surface Systems	07	2,981				2,981	U
241	0305327V	Insider Threat	07	1,964				1,964	U
242	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,221				2,221	U
249	0307577D8Z	Intelligence Mission Data (IMD)	07						U
250	0708012K	Logistics Support Activities	07	1,361				1,361	U

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251	0708012S	Pacific Disaster Centers	07	1,705	1,705		1,705	U
252	0708047S	Defense Property Accountability System	07	2,817	1,739		1,739	U
253	0903235K	Joint Service Provider (JSP)	07	652				U
254	1105219BB	MQ-9 UAV	07	33,106	18,403		18,403	U
255	1160279BB	Small Business Innovative Research/ Small Bus Tech Transfer Pilot Prog	07	23,371				U
256	1160403BB	Aviation Systems	07	250,604	175,862		175,862	U
257	1160405BB	Intelligence Systems Development	07	8,837	10,625		10,625	U
258	1160408BB	Operational Enhancements	07	73,734	99,307	3,632	102,939	U
259	1160431BB	Warrior Systems	07	74,169	63,542	11,040	74,582	U
260	1160432BB	Special Programs	07	2,300	2,479		2,479	U
261	1160434BB	Unmanned ISR	07	33,576	33,270	11,700	44,970	U
262	1160480BB	SOF Tactical Vehicles	07	2,483	1,121	725	1,846	U
263	1160483BB	Maritime Systems	07	66,280	42,471		42,471	U
264	1160489BB	Global Video Surveillance Activities	07	4,661	4,780		4,780	U
265	1160490BB	Operational Enhancements Intelligence	07	12,067	12,176		12,176	U
266	1203610K	Teleport Program	07	574	723		723	U
9999	9999999999	Classified Programs		3,894,325	3,882,824	192,131	4,074,955	U
		Operational System Development		5,161,464	5,043,935	219,228	5,263,163	
		Total Research, Development, Test & Eval, DW		23,774,016	23,659,448	402,514	24,061,962	

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
251	0708012S	Pacific Disaster Centers	07	1,770				1,770	U
252	0708047S	Defense Property Accountability System	07	3,679				3,679	U
253	0903235K	Joint Service Provider (JSP)	07						U
254	1105219BB	MQ-9 UAV	07	20,697				20,697	U
255	1160279BB	Small Business Innovative Research/ Small Bus Tech Transfer Pilot Prog	07						U
256	1160403BB	Aviation Systems	07	245,795				245,795	U
257	1160405BB	Intelligence Systems Development	07	15,484				15,484	U
258	1160408BB	Operational Enhancements	07	166,922		726	726	167,648	U
259	1160431BB	Warrior Systems	07	62,332		6,000	6,000	68,332	U
260	1160432BB	Special Programs	07	21,805				21,805	U
261	1160434BB	Unmanned ISR	07	37,377		5,000	5,000	42,377	U
262	1160480BB	SOF Tactical Vehicles	07	11,150				11,150	U
263	1160483BB	Maritime Systems	07	72,626				72,626	U
264	1160489BB	Global Video Surveillance Activities	07	5,363				5,363	U
265	1160490BB	Operational Enhancements Intelligence	07	12,962				12,962	U
266	1203610K	Teleport Program	07	6,158				6,158	U
9999	9999999999	Classified Programs		4,116,640	426,000	200,199	626,199	4,742,839	U
		Operational System Development		5,832,398		211,925	637,925	6,470,323	
		Total Research, Development, Test & Eval, DW		24,346,953		401,950	827,950	25,174,903	

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Defense-Wide
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
<u>Summary Recap of Budget Activities</u>				
Management Support	208,587	377,001		377,001
Total Research, Development, Test & Evaluation	208,587	377,001		377,001
<u>Summary Recap of FYDP Programs</u>				
Research and Development	208,587	377,001		377,001
Total Research, Development, Test & Evaluation	208,587	377,001		377,001

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Defense-Wide
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)
<u>Summary Recap of Budget Activities</u>					
Management Support	221,200				221,200
Total Research, Development, Test & Evaluation	221,200				221,200
<u>Summary Recap of FYDP Programs</u>					
Research and Development	221,200				221,200
Total Research, Development, Test & Evaluation	221,200				221,200

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Defense-Wide
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

Appropriation: 0460D Operational Test & Eval, Defense

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
1	06051180TE	Operational Test and Evaluation	06	83,190	85,685		85,685	U
2	06051310TE	Live Fire Test and Evaluation	06	58,950	64,332		64,332	U
3	06058140TE	Operational Test Activities and Analyses	06	66,447	226,984		226,984	U
		Management Support		208,587	377,001		377,001	
Total Operational Test & Eval, Defense				208,587	377,001		377,001	

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Defense-Wide
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

Appropriation: 0460D Operational Test & Eval, Defense

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
1	06051180TE	Operational Test and Evaluation	06	93,291				93,291	U
2	06051310TE	Live Fire Test and Evaluation	06	69,172				69,172	U
3	06058140TE	Operational Test Activities and Analyses	06	58,737				58,737	U
		Management Support		221,200				221,200	
Total Operational Test & Eval, Defense				221,200				221,200	

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Chemical and Biological Defense Program
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
7	0601384BP	Chemical and Biological Defense Program	01	43,769	42,103		42,103	U
	Basic Research			43,769	42,103		42,103	
15	0602384BP	Chemical and Biological Defense Program	02	199,466	192,674		192,674	U
	Applied Research			199,466	192,674		192,674	
42	0603384BP	Chemical and Biological Defense Program - Advanced Development	03	141,242	142,826		142,826	U
	Advanced Technology Development			141,242	142,826		142,826	
76	0603884BP	Chemical and Biological Defense Program - Dem/Val	04	135,322	115,886		115,886	U
	Advanced Component Development And Prototypes			135,322	115,886		115,886	
125	0604384BP	Chemical and Biological Defense Program - EMD	05	368,151	358,608		358,608	U
	System Development And Demonstration			368,151	358,608		358,608	
157	0605384BP	Chemical and Biological Defense Program	06	105,122	102,883		102,883	U
158	0605502BP	Small Business Innovative Research - Chemical Biological Def	06	20,057				U
	Management Support			125,179	102,883		102,883	
202	0607384BP	Chemical and Biological Defense (Operational Systems Development)	07	43,632	43,741		43,741	U
	Operational System Development			43,632	43,741		43,741	
Total Chemical and Biological Defense Program				1,056,761	998,721		998,721	

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Chemical and Biological Defense Program
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
7	0601384BP	Chemical and Biological Defense Program	01	45,238				45,238	U
	Basic Research			45,238				45,238	
15	0602384BP	Chemical and Biological Defense Program	02	202,587				202,587	U
	Applied Research			202,587				202,587	
42	0603384BP	Chemical and Biological Defense Program - Advanced Development	03	172,486				172,486	U
	Advanced Technology Development			172,486				172,486	
76	0603884BP	Chemical and Biological Defense Program - Dem/Val	04	83,662				83,662	U
	Advanced Component Development And Prototypes			83,662				83,662	
125	0604384BP	Chemical and Biological Defense Program - EMD	05	384,047				384,047	U
	System Development And Demonstration			384,047				384,047	
157	0605384BP	Chemical and Biological Defense Program	06	110,363				110,363	U
158	0605502BP	Small Business Innovative Research - Chemical Biological Def	06						U
	Management Support			110,363				110,363	
202	0607384BP	Chemical and Biological Defense (Operational Systems Development)	07	54,023				54,023	U
	Operational System Development			54,023				54,023	
Total Chemical and Biological Defense Program				1,052,406				1,052,406	

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Defense Advanced Research Projects Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
2	0601101E	Defense Research Sciences	01	403,448	422,680		422,680	U
4	0601117E	Basic Operational Medical Research Science	01	42,129	46,575		46,575	U
Basic Research				445,577	469,255		469,255	
9	0602115E	Biomedical Technology	02	88,962	101,300		101,300	U
13	0602303E	Information & Communications Technology	02	379,578	404,967		404,967	U
14	0602383E	Biological Warfare Defense	02	15,078	33,640		33,640	U
17	0602702E	Tactical Technology	02	292,957	309,466		309,466	U
18	0602715E	Materials and Biological Technology	02	191,880	208,898		208,898	U
19	0602716E	Electronics Technology	02	283,180	348,847		348,847	U
Applied Research				1,251,635	1,407,118		1,407,118	
33	0603286E	Advanced Aerospace Systems	03	176,200	302,463		302,463	U
34	0603287E	Space Programs and Technology	03	226,988	254,671		254,671	U
54	0603739E	Advanced Electronics Technologies	03	73,673	111,099		111,099	U
55	0603760E	Command, Control and Communications Systems	03	103,577	185,984		185,984	U
56	0603766E	Network-Centric Warfare Technology	03	429,691	434,069		434,069	U
57	0603767E	Sensor Technology	03	202,189	183,101		183,101	U
Advanced Technology Development				1,212,318	1,471,387		1,471,387	
147	0605001E	Mission Support	06	64,269	65,646		65,646	U
162	0605502E	Small Business Innovative Research	06	100,804				U
172	0605898E	Management HQ - R&D	06	14,017	13,643		13,643	U

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Defense Advanced Research Projects Agency
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 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
2	0601101E	Defense Research Sciences	01	432,284				432,284	U
4	0601117E	Basic Operational Medical Research Science	01	54,122				54,122	U
Basic Research				486,406				486,406	
9	0602115E	Biomedical Technology	02	97,771				97,771	U
13	0602303E	Information & Communications Technology	02	442,556				442,556	U
14	0602383E	Biological Warfare Defense	02	34,588				34,588	U
17	0602702E	Tactical Technology	02	337,602				337,602	U
18	0602715E	Materials and Biological Technology	02	223,976				223,976	U
19	0602716E	Electronics Technology	02	332,192				332,192	U
Applied Research				1,468,685				1,468,685	
33	0603286E	Advanced Aerospace Systems	03	279,741				279,741	U
34	0603287E	Space Programs and Technology	03	202,606				202,606	U
54	0603739E	Advanced Electronics Technologies	03	128,616				128,616	U
55	0603760E	Command, Control and Communications Systems	03	232,134				232,134	U
56	0603766E	Network-Centric Warfare Technology	03	512,424				512,424	U
57	0603767E	Sensor Technology	03	163,903				163,903	U
Advanced Technology Development				1,519,424				1,519,424	
147	0605001E	Mission Support	06	68,498				68,498	U
162	0605502E	Small Business Innovative Research	06						U
172	0605898E	Management HQ - R&D	06	13,208				13,208	U

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Defense Advanced Research Projects Agency
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 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Element Number	Program Item	FY 2018 Act	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
		Management Support	179,090	79,289		79,289	
Total Defense Advanced Research Projects Agency			3,088,620	3,427,049		3,427,049	

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Defense Advanced Research Projects Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line	Program Element No	Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	S e c
			Management Support		81,706				81,706	
			Total Defense Advanced Research Projects Agency		3,556,221				3,556,221	

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Defense Contract Audit Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Element Number	Program Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se c
117	0300206R	Enterprise Information Technology Systems	04		2,600		2,600	U
		Advanced Component Development And Prototypes		-----	2,600	-----	2,600	
				-----	2,600	-----	2,600	
Total Defense Contract Audit Agency					2,600		2,600	

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Defense Contract Audit Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
117	0300206R	Enterprise Information Technology Systems	04	1,600				1,600	U
		Advanced Component Development And Prototypes		1,600				1,600	
Total Defense Contract Audit Agency				1,600				1,600	

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Defense Contract Management Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Element Number	Program Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se c
128	0605013BL	Information Technology Development	05	8,947	11,988		11,988	U
138	0303140BL	Information Systems Security Program	05					U
		System Development And Demonstration		8,947	11,988		11,988	
Total Defense Contract Management Agency				8,947	11,988		11,988	

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Defense Contract Management Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
128	0605013BL	Information Technology Development	05	3,070				3,070	U
138	0303140BL	Information Systems Security Program	05	425				425	U
		System Development And Demonstration		3,495				3,495	
		Total Defense Contract Management Agency		3,495				3,495	

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Defense Human Resources Activity
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
129	0605021SE	Homeland Personnel Security Initiative	05	4,893	296		296	U
		System Development And Demonstration		4,893	296		296	
170	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	22,856	24,914		24,914	U
192	0808709SE	Defense Equal Opportunity Management Institute (DEOMI)	06					U
		Management Support		22,856	24,914		24,914	
Total Defense Human Resources Activity				27,749	25,210		25,210	

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Defense Human Resources Activity
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 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
129	0605021SE	Homeland Personnel Security Initiative	05	7,295				7,295	U
		System Development And Demonstration		7,295				7,295	
170	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	34,448				34,448	U
192	0808709SE	Defense Equal Opportunity Management Institute (DEOMI)	06	100				100	U
		Management Support		34,548				34,548	
Total Defense Human Resources Activity				41,843				41,843	

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Defense Information Systems Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
139	0303141K	Global Combat Support System	05	2,500	2,512		2,512	U
		System Development And Demonstration		2,500	2,512		2,512	
163	0605502K	Small Business Innovative Research	06	6,500				U
185	0305172K	Combined Advanced Applications	06	16,998	21,363		21,363	U
194	0903235K	Joint Service Provider (JSP)	06	4,309	5,104		5,104	U
		Management Support		27,807	26,467		26,467	
196	0604532K	Joint Artificial Intelligence	07					U
204	0208045K	C4I Interoperability	07	58,235	62,814		62,814	U
206	0301144K	Joint/Allied Coalition Information Sharing	07	5,801				U
209	0302016K	National Military Command System-Wide Support	07	1,863				U
210	0302019K	Defense Info Infrastructure Engineering and Integration	07	20,059	16,121		16,121	U
211	0303126K	Long-Haul Communications - DCS	07	23,090	14,353		14,353	U
212	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	15,855	17,579		17,579	U
217	0303140K	Information Systems Security Program	07		19,611		19,611	U
218	0303150K	Global Command and Control System	07	41,126	46,900		46,900	U
219	0303153K	Defense Spectrum Organization	07	8,377	7,457		7,457	U
220	0303228K	Joint Regional Security Stacks (JRSS)	07	4,550	7,947		7,947	U
221	0303267K	Auctioned Spectrum Relocation Fund	07	15,804				U

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Defense Information Systems Agency
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 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
139	0303141K	Global Combat Support System	05	1,578				1,578	U
		System Development And Demonstration		1,578				1,578	
163	0605502K	Small Business Innovative Research	06						U
185	0305172K	Combined Advanced Applications	06	58,667				58,667	U
194	0903235K	Joint Service Provider (JSP)	06	3,090				3,090	U
		Management Support		61,757				61,757	
196	0604532K	Joint Artificial Intelligence	07	208,834				208,834	U
204	0208045K	C4I Interoperability	07	64,122				64,122	U
206	0301144K	Joint/Allied Coalition Information Sharing	07						U
209	0302016K	National Military Command System-Wide Support	07						U
210	0302019K	Defense Info Infrastructure Engineering and Integration	07	15,798				15,798	U
211	0303126K	Long-Haul Communications - DCS	07	11,166				11,166	U
212	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	17,383				17,383	U
217	0303140K	Information Systems Security Program	07	42,796				42,796	U
218	0303150K	Global Command and Control System	07	25,218				25,218	U
219	0303153K	Defense Spectrum Organization	07	21,698				21,698	U
220	0303228K	Joint Regional Security Stacks (JRSS)	07	18,077				18,077	U
221	0303267K	Auctioned Spectrum Relocation Fund	07						U

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Defense Information Systems Agency
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 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
222	0303430K	Federal Investigative Services Information Technology	07	41,743	55,400		55,400	U
225	0305103K	Cyber Security Initiative	07	1,644				U
238	0305208K	Distributed Common Ground/Surface Systems	07	2,959	2,970		2,970	U
250	0708012K	Logistics Support Activities	07		1,317		1,317	U
253	0903235K	Joint Service Provider (JSP)	07	652				U
266	1203610K	Teleport Program	07	574	723		723	U
Operational System Development				242,332	253,192		253,192	
Total Defense Information Systems Agency				272,639	282,171		282,171	

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Defense Information Systems Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
222	0303430K	Federal Investigative Services Information Technology	07	44,001				44,001	U
225	0305103K	Cyber Security Initiative	07						U
238	0305208K	Distributed Common Ground/Surface Systems	07	2,981				2,981	U
250	0708012K	Logistics Support Activities	07	1,361				1,361	U
253	0903235K	Joint Service Provider (JSP)	07						U
266	1203610K	Teleport Program	07	6,158				6,158	U
Operational System Development				479,593				479,593	
Total Defense Information Systems Agency				542,928				542,928	

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Defense Logistics Agency
 FY 2020 President's Budget
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 Total Obligational Authority
 (Dollars in Thousands)

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
48	0603680S	Manufacturing Technology Program	03	39,090	62,396		62,396	U
50	0603712S	Generic Logistics R&D Technology Demonstrations	03	16,105	18,127		18,127	U
52	0603720S	Microelectronics Technology Development and Support	03	241,867	192,926		192,926	U
Advanced Technology Development				297,062	273,449		273,449	
132	0605070S	DOD Enterprise Systems Development and Demonstration	05	6,037	3,057		3,057	U
134	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	23,544	20,384		20,384	U
135	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	12,983	10,339		10,339	U
System Development And Demonstration				42,564	33,780		33,780	
164	0605502S	Small Business Innovative Research	06	11,631	10,454		10,454	U
178	0606942S	Assessments and Evaluations Cyber Vulnerabilities	06		3,854		3,854	U
Management Support				11,631	14,308		14,308	
251	0708012S	Pacific Disaster Centers	07	1,705	1,705		1,705	U
252	0708047S	Defense Property Accountability System	07	2,817	1,739		1,739	U
Operational System Development				4,522	3,444		3,444	
Total Defense Logistics Agency				355,779	324,981		324,981	

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Defense Logistics Agency
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 Total Obligational Authority
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Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
48	0603680S	Manufacturing Technology Program	03	42,834				42,834	U
50	0603712S	Generic Logistics R&D Technology Demonstrations	03	10,817				10,817	U
52	0603720S	Microelectronics Technology Development and Support	03	171,771				171,771	U
Advanced Technology Development				225,422				225,422	
132	0605070S	DOD Enterprise Systems Development and Demonstration	05	2,378				2,378	U
134	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	27,944				27,944	U
135	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	6,609				6,609	U
System Development And Demonstration				36,931				36,931	
164	0605502S	Small Business Innovative Research	06						U
178	0606942S	Assessments and Evaluations Cyber Vulnerabilities	06						U
Management Support									
251	0708012S	Pacific Disaster Centers	07	1,770				1,770	U
252	0708047S	Defense Property Accountability System	07	3,679				3,679	U
Operational System Development				5,449				5,449	
Total Defense Logistics Agency				267,802				267,802	

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Defense Security Cooperative Agency
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165	0605502T	Small Business Innovative Research	06	607				U
		Management Support		607				
197	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	1,792	1,855		1,855	U
198	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	287	304		304	U
201	0607327T	Global Theater Security Cooperation Management Information Systems (G-TSCMIS)	07	13,933	5,869		5,869	U
		Operational System Development		16,012	8,028		8,028	
Total Defense Security Cooperative Agency				16,619	8,028		8,028	

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Defense Security Cooperative Agency
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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	See
165	0605502T	Small Business Innovative Research	06	-----	-----	-----	-----	-----	U
Management Support									
197	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	1,947				1,947	U
198	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	310				310	U
201	0607327T	Global Theater Security Cooperation Management Information Systems (G-TSCMIS)	07	14,800				14,800	U
Operational System Development				17,057				17,057	
Total Defense Security Cooperative Agency				17,057				17,057	

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Defense Security Service
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195	0604130V	Enterprise Security System (ESS)	07	4,565	9,750		9,750	U
228	0305128V	Security and Investigative Activities	07					U
241	0305327V	Insider Threat	07	7,265	5,954		5,954	U
		Operational System Development		11,830	15,704		15,704	
Total Defense Security Service				11,830	15,704		15,704	

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Defense Security Service
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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
195	0604130V	Enterprise Security System (ESS)	07	7,945				7,945	U
228	0305128V	Security and Investigative Activities	07	2,400				2,400	U
241	0305327V	Insider Threat	07	1,964				1,964	U
		Operational System Development		12,309				12,309	
		Total Defense Security Service		12,309				12,309	

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Defense Technical Information Center
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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
169	0605801KA	Defense Technical Information Center (DTIC)	06	55,114	56,853		56,853	U
173	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	4,187	4,124		4,124	U
		Management Support		59,301	60,977		60,977	
		Total Defense Technical Information Center		59,301	60,977		60,977	

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Defense Technical Information Center
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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
169	0605801KA	Defense Technical Information Center (DTIC)	06	57,716				57,716	U
173	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	3,027				3,027	U
		Management Support		60,743				60,743	
Total Defense Technical Information Center				60,743				60,743	

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Defense Threat Reduction Agency
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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
1	0601000BR	DTRA Basic Research	01	36,369	37,023		37,023	U
		Basic Research		36,369	37,023		37,023	
10	0602134BR	Counter Improvised-Threat Advanced Studies	02					U
20	0602718BR	Counter Weapons of Mass Destruction Applied Research	02	152,544	155,924		155,924	U
		Applied Research		152,544	155,924		155,924	
27	0603134BR	Counter Improvised-Threat Simulation	03	23,366		13,648	13,648	U
28	0603160BR	Counter Weapons of Mass Destruction Advanced Technology Development	03	292,846	280,858		280,858	U
		Advanced Technology Development		316,212	280,858	13,648	294,506	
94	0604134BR	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04	144,934		169,638	169,638	U
105	0604775BR	Defense Rapid Innovation Program	04					U
		Advanced Component Development And Prototypes		144,934		169,638	169,638	
127	0605000BR	Counter Weapons of Mass Destruction Systems Development	05	6,199	6,163		6,163	U
		System Development And Demonstration		6,199	6,163		6,163	
159	0605502BR	Small Business Innovation Research	06	11,311				U
		Management Support		11,311				
Total Defense Threat Reduction Agency				667,569	479,968	183,286	663,254	

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Defense Threat Reduction Agency
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1	0601000BR	DTRA Basic Research	01	26,000				26,000	U
Basic Research				26,000				26,000	
10	0602134BR	Counter Improvised-Threat Advanced Studies	02			1,677	1,677	1,677	U
20	0602718BR	Counter Weapons of Mass Destruction Applied Research	02	179,096				179,096	U
Applied Research				179,096		1,677	1,677	180,773	
27	0603134BR	Counter Improvised-Threat Simulation	03			49,528	49,528	49,528	U
28	0603160BR	Counter Weapons of Mass Destruction Advanced Technology Development	03	340,065				340,065	U
Advanced Technology Development				340,065		49,528	49,528	389,593	
94	0604134BR	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04			113,590	113,590	113,590	U
105	0604775BR	Defense Rapid Innovation Program	04	14,021				14,021	U
Advanced Component Development And Prototypes				14,021		113,590	113,590	127,611	
127	0605000BR	Counter Weapons of Mass Destruction Systems Development	05	13,100				13,100	U
System Development And Demonstration				13,100				13,100	
159	0605502BR	Small Business Innovation Research	06						U
Management Support									
Total Defense Threat Reduction Agency				572,282		164,795	164,795	737,077	

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29	0603176C	Advanced Concepts and Performance Assessment	03	17,683	13,017		13,017	U
30	0603178C	Weapons Technology	03	28,894	13,400		13,400	U
31	0603180C	Advanced Research	03	23,765	42,565		42,565	U
38	0603294C	Common Kill Vehicle Technology	03	55,562	56,753		56,753	U
Advanced Technology Development				125,904	125,735		125,735	
74	0603881C	Ballistic Missile Defense Terminal Defense Segment	04	454,147	388,273		388,273	U
75	0603882C	Ballistic Missile Defense Midcourse Defense Segment	04	1,153,263	803,359		803,359	U
77	0603884C	Ballistic Missile Defense Sensors	04	290,289	385,375		385,375	U
78	0603890C	BMD Enabling Programs	04	533,993	620,831		620,831	U
79	0603891C	Special Programs - MDA	04	356,560	422,348		422,348	U
80	0603892C	AEGIS BMD	04	798,395	741,076		741,076	U
81	0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communicati	04	449,985	507,817		507,817	U
82	0603898C	Ballistic Missile Defense Joint Warfighter Support	04	48,574	48,767		48,767	U
83	0603904C	Missile Defense Integration & Operations Center (MDIOC)	04	51,905	58,125		58,125	U
84	0603906C	Regarding Trench	04	8,898	16,916		16,916	U
85	0603907C	Sea Based X-Band Radar (SBX)	04	173,988	136,715		136,715	U
86	0603913C	Israeli Cooperative Programs	04	373,800	300,000		300,000	U
87	0603914C	Ballistic Missile Defense Test	04	406,806	515,897		515,897	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
29	0603176C	Advanced Concepts and Performance Assessment	03	14,208				14,208	U
30	0603178C	Weapons Technology	03	10,000				10,000	U
31	0603180C	Advanced Research	03	20,674				20,674	U
38	0603294C	Common Kill Vehicle Technology	03	13,600				13,600	U
Advanced Technology Development				58,482				58,482	
74	0603881C	Ballistic Missile Defense Terminal Defense Segment	04	302,761				302,761	U
75	0603882C	Ballistic Missile Defense Midcourse Defense Segment	04	1,156,506				1,156,506	U
77	0603884C	Ballistic Missile Defense Sensors	04	283,487				283,487	U
78	0603890C	BMD Enabling Programs	04	571,507				571,507	U
79	0603891C	Special Programs - MDA	04	377,098				377,098	U
80	0603892C	AEGIS BMD	04	727,479				727,479	U
81	0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communicati	04	564,206				564,206	U
82	0603898C	Ballistic Missile Defense Joint Warfighter Support	04	51,532				51,532	U
83	0603904C	Missile Defense Integration & Operations Center (MDIOC)	04	56,161				56,161	U
84	0603906C	Regarding Trench	04	22,424				22,424	U
85	0603907C	Sea Based X-Band Radar (SBX)	04	128,156				128,156	U
86	0603913C	Israeli Cooperative Programs	04	300,000				300,000	U
87	0603914C	Ballistic Missile Defense Test	04	395,924				395,924	U

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88	0603915C	Ballistic Missile Defense Targets	04	512,838	561,352		561,352	U
92	0604115C	Technology Maturation Initiatives	04	163,947	316,822		316,822	U
95	0604181C	Hypersonic Defense	04	63,032	130,944		130,944	U
102	0604672C	Homeland Defense Radar - Hawaii (HDR-H)	04		62,221		62,221	U
103	0604673C	Pacific Discriminating Radar	04	59,564	15,926		15,926	U
108	0604873C	Long Range Discrimination Radar (LRDR)	04	370,516	166,543		166,543	U
109	0604874C	Improved Homeland Defense Interceptors	04	742,842	421,820		421,820	U
110	0604876C	Ballistic Missile Defense Terminal Defense Segment Test	04	35,738	61,017		61,017	U
111	0604878C	Aegis BMD Test	04	128,757	92,160		92,160	U
112	0604879C	Ballistic Missile Defense Sensor Test	04	88,840	77,405		77,405	U
113	0604880C	Land-Based SM-3 (LBSM3)	04	29,652	27,692		27,692	U
114	0604881C	AEGIS SM-3 Block IIA Co-Development	04	9,531				U
115	0604887C	Ballistic Missile Defense Midcourse Segment Test	04	85,030	72,634		72,634	U
116	0604894C	Multi-Object Kill Vehicle	04	6,347	6,500		6,500	U
119	0305103C	Cyber Security Initiative	04	964	985		985	U
121	1206893C	Space Tracking & Surveillance System	04	35,008	36,955		36,955	U
122	1206895C	Ballistic Missile Defense System Space Programs	04	45,123	94,484		94,484	U
Advanced Component Development And Prototypes				7,478,332	7,090,959		7,090,959	

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Missile Defense Agency
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88	0603915C	Ballistic Missile Defense Targets	04	554,171				554,171	U
92	0604115C	Technology Maturation Initiatives	04	303,458				303,458	U
95	0604181C	Hypersonic Defense	04	157,425				157,425	U
102	0604672C	Homeland Defense Radar - Hawaii (HDR-H)	04	274,714				274,714	U
103	0604673C	Pacific Discriminating Radar	04	6,711				6,711	U
108	0604873C	Long Range Discrimination Radar (LRDR)	04	136,423				136,423	U
109	0604874C	Improved Homeland Defense Interceptors	04	412,363				412,363	U
110	0604876C	Ballistic Missile Defense Terminal Defense Segment Test	04	25,137				25,137	U
111	0604878C	Aegis BMD Test	04	169,822				169,822	U
112	0604879C	Ballistic Missile Defense Sensor Test	04	105,530				105,530	U
113	0604880C	Land-Based SM-3 (LBSM3)	04	38,352				38,352	U
114	0604881C	AEGIS SM-3 Block IIA Co-Development	04						U
115	0604887C	Ballistic Missile Defense Midcourse Segment Test	04	98,139				98,139	U
116	0604894C	Multi-Object Kill Vehicle	04						U
119	0305103C	Cyber Security Initiative	04	1,138				1,138	U
121	1206893C	Space Tracking & Surveillance System	04	35,849				35,849	U
122	1206895C	Ballistic Missile Defense System Space Programs	04	27,565				27,565	U
Advanced Component Development And Prototypes				7,284,038				7,284,038	

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Missile Defense Agency
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160	0605502C	Small Business Innovation Research - MDA	06	115,278				U
177	0606942C	Assessments and Evaluations Cyber Vulnerabilities	06		3,400		3,400	U
193	0901598C	Management HQ - MDA	06	29,947	28,626		28,626	U
		Management Support		145,225	32,026		32,026	
Total Missile Defense Agency				7,749,461	7,248,720		7,248,720	

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160	0605502C	Small Business Innovation Research - MDA	06						U
177	0606942C	Assessments and Evaluations Cyber Vulnerabilities	06						U
193	0901598C	Management HQ - MDA	06	27,065	-----	-----	-----	27,065	U
		Management Support		27,065	-----	-----	-----	27,065	
Total Missile Defense Agency				7,369,585	-----	-----	-----	7,369,585	

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National Security Agency
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213	0303135G	Public Key Infrastructure (PKI)	07	4,811				U
214	0303136G	Key Management Infrastructure (KMI)	07	33,746	31,737		31,737	U
216	0303140G	Information Systems Security Program	07	234,652	228,382		228,382	U
		Operational System Development		-----	-----	-----	-----	
		Total National Security Agency		-----	-----	-----	-----	

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National Security Agency
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213	0303135G	Public Key Infrastructure (PKI)	07						U
214	0303136G	Key Management Infrastructure (KMI)	07	54,516				54,516	U
216	0303140G	Information Systems Security Program	07	289,080				289,080	U
		Operational System Development							
Total National Security Agency									

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3	0601110D8Z	Basic Research Initiatives	01	39,051	56,573		56,573	U
5	0601120D8Z	National Defense Education Program	01	100,850	135,610		135,610	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	39,006	40,320		40,320	U
Basic Research				178,907	232,503		232,503	
8	0602000D8Z	Joint Munitions Technology	02	19,053	19,126		19,126	U
11	0602234D8Z	Lincoln Laboratory Research Program	02	47,891	51,479		51,479	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	47,550	60,550		60,550	U
16	0602668D8Z	Cyber Security Research	02	14,429	14,935		14,935	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	8,614	9,279		9,279	U
Applied Research				137,537	155,369		155,369	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,550	25,540		25,540	U
24	0603121D8Z	SO/LIC Advanced Development	03					U
25	0603122D8Z	Combating Terrorism Technology Support	03	149,541	171,321		171,321	U
26	0603133D8Z	Foreign Comparative Testing	03	21,715	24,277		24,277	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	17,959	18,602		18,602	U
35	0603288D8Z	Analytic Assessments	03	12,658	18,430		18,430	U
36	0603289D8Z	Advanced Innovative Analysis and Concepts	03	36,763	37,178		37,178	U
37	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	14,971	13,590		13,590	U

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
3	0601110D8Z	Basic Research Initiatives	01	48,874				48,874	U
5	0601120D8Z	National Defense Education Program	01	92,074				92,074	U
6	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	30,708				30,708	U
Basic Research				171,656				171,656	
8	0602000D8Z	Joint Munitions Technology	02	19,306				19,306	U
11	0602234D8Z	Lincoln Laboratory Research Program	02	52,317				52,317	U
12	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	62,200				62,200	U
16	0602668D8Z	Cyber Security Research	02	15,118				15,118	U
21	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	9,580				9,580	U
Applied Research				158,521				158,521	
23	0603000D8Z	Joint Munitions Advanced Technology	03	25,779				25,779	U
24	0603121D8Z	SO/LIC Advanced Development	03	5,000				5,000	U
25	0603122D8Z	Combating Terrorism Technology Support	03	70,517		25,230	25,230	95,747	U
26	0603133D8Z	Foreign Comparative Testing	03	24,970				24,970	U
32	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,773				18,773	U
35	0603288D8Z	Analytic Assessments	03	19,429				19,429	U
36	0603289D8Z	Advanced Innovative Analysis and Concepts	03	37,645				37,645	U
37	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	14,668				14,668	U

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Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
40	0603342D8Z	Defense Innovation Unit (DIU)	03					U
41	0603375D8Z	Technology Innovation	03	24,825	33,068		33,068	U
43	0603527D8Z	RETRACT LARCH	03	164,544	160,762		160,762	U
44	0603618D8Z	Joint Electronic Advanced Technology	03	14,020	12,889		12,889	U
45	0603648D8Z	Joint Capability Technology Demonstrations	03	102,769	105,808		105,808	U
46	0603662D8Z	Networked Communications Capabilities	03	12,369	12,667		12,667	U
47	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	206,257	174,489		174,489	U
49	0603699D8Z	Emerging Capabilities Technology Development	03	79,469	60,700		60,700	U
51	0603716D8Z	Strategic Environmental Research Program	03	63,055	76,340		76,340	U
53	0603727D8Z	Joint Warfighting Program	03	3,236	5,978		5,978	U
58	0603769D8Z	Distributed Learning Advanced Technology Development	03	11,053	13,564		13,564	U
59	0603781D8Z	Software Engineering Institute	03	14,468	15,016		15,016	U
60	0603826D8Z	Quick Reaction Special Projects	03	64,775	59,490		59,490	U
61	0603833D8Z	Engineering Science & Technology	03	24,447	19,371		19,371	U
62	0603924D8Z	High Energy Laser Advanced Technology Program	03		74,364		74,364	U
63	0603941D8Z	Test & Evaluation Science & Technology	03	108,958	117,389		117,389	U
64	0603950D8Z	National Security Innovation Network	03					U

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40	0603342D8Z	Defense Innovation Unit (DIU)	03	29,398				29,398	U
41	0603375D8Z	Technology Innovation	03	60,000				60,000	U
43	0603527D8Z	RETRACT LARCH	03	159,688				159,688	U
44	0603618D8Z	Joint Electronic Advanced Technology	03	12,063				12,063	U
45	0603648D8Z	Joint Capability Technology Demonstrations	03	107,359				107,359	U
46	0603662D8Z	Networked Communications Capabilities	03	2,858				2,858	U
47	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	96,397				96,397	U
49	0603699D8Z	Emerging Capabilities Technology Development	03	80,911				80,911	U
51	0603716D8Z	Strategic Environmental Research Program	03	66,157				66,157	U
53	0603727D8Z	Joint Warfighting Program	03	4,846				4,846	U
58	0603769D8Z	Distributed Learning Advanced Technology Development	03	13,723				13,723	U
59	0603781D8Z	Software Engineering Institute	03	15,111				15,111	U
60	0603826D8Z	Quick Reaction Special Projects	03	47,147				47,147	U
61	0603833D8Z	Engineering Science & Technology	03	19,376				19,376	U
62	0603924D8Z	High Energy Laser Advanced Technology Program	03	85,223				85,223	U
63	0603941D8Z	Test & Evaluation Science & Technology	03	175,574				175,574	U
64	0603950D8Z	National Security Innovation Network	03	25,000				25,000	U

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65	0604055D8Z	Operational Energy Capability Improvement	03	39,788	45,478		45,478	U
66	0303310D8Z	CWMD Systems	03	32,111	26,583		26,583	U
67	0303367D8Z	Spectrum Access Research and Development	03	86,472				U
Advanced Technology Development				1,331,773	1,322,894		1,322,894	
70	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	32,165	28,076		28,076	U
71	0603600D8Z	WALKOFF	04	98,920	92,012		92,012	U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04	2,194	2,500		2,500	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	53,342	41,925		41,925	U
89	0603920D8Z	Humanitarian Demining	04	10,519	11,262		11,262	U
90	0603923D8Z	Coalition Warfare	04	10,515	8,509		8,509	U
91	0604016D8Z	Department of Defense Corrosion Program	04	4,503	8,458		8,458	U
93	0604132D8Z	Missile Defeat Project	04	121,025	43,508		43,508	U
96	0604250D8Z	Advanced Innovative Technologies	04	1,423,173	1,387,539		1,387,539	U
97	0604294D8Z	Trusted & Assured Microelectronics	04	147,481	522,950		522,950	U
98	0604331D8Z	Rapid Prototyping Program	04	46,984	99,107		99,107	U
99	0604341D8Z	Defense Innovation Unit (DIU) Prototyping	04					U
100	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	7,839	7,763		7,763	U

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65	0604055D8Z	Operational Energy Capability Improvement	03	70,536				70,536	U
66	0303310D8Z	CWMD Systems	03	28,907				28,907	U
67	0303367D8Z	Spectrum Access Research and Development	03						U
Advanced Technology Development				1,317,055		25,230	25,230	1,342,285	
70	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	42,695				42,695	U
71	0603600D8Z	WALKOFF	04	92,791				92,791	U
72	0603821D8Z	Acquisition Enterprise Data & Information Services	04	5,659				5,659	U
73	0603851D8Z	Environmental Security Technical Certification Program	04	66,572				66,572	U
89	0603920D8Z	Humanitarian Demining	04	10,820				10,820	U
90	0603923D8Z	Coalition Warfare	04	11,316				11,316	U
91	0604016D8Z	Department of Defense Corrosion Program	04	3,365				3,365	U
93	0604132D8Z	Missile Defeat Project	04	17,816				17,816	U
96	0604250D8Z	Advanced Innovative Technologies	04	1,312,735				1,312,735	U
97	0604294D8Z	Trusted & Assured Microelectronics	04	542,421				542,421	U
98	0604331D8Z	Rapid Prototyping Program	04	100,957				100,957	U
99	0604341D8Z	Defense Innovation Unit (DIU) Prototyping	04	92,000				92,000	U
100	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	3,021				3,021	U

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101	0604532D8Z	Joint Artificial Intelligence	04		12,970		12,970	U
104	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,686	3,759		3,759	U
106	0604775D8Z	Defense Rapid Innovation Program	04	250,000	249,432		249,432	U
118	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	2,896	3,097		3,097	U
Advanced Component Development And Prototypes				2,215,242	2,522,867		2,522,867	
123	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	12,320	8,314		8,314	U
124	0604165D8Z	Prompt Global Strike Capability Development	05	360,860	465,852		465,852	U
126	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	24,268	34,425		34,425	U
130	0605022D8Z	Defense Exportability Program	05	2,088	1,486		1,486	U
131	0605027D8Z	OUSD(C) IT Development Initiatives	05	21,312	9,568		9,568	U
133	0605075D8Z	CMO Policy and Integration	05	2,805	2,100		2,100	U
136	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	11,414	6,359		6,359	U
137	0605294D8Z	Trusted & Assured Microelectronics	05	59,516	95,959		95,959	U
140	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,032	2,429		2,429	U
141	0305310D8Z	CWMD Systems: System Development and Demonstration	05	8,214	17,009		17,009	U
System Development And Demonstration				506,829	643,501		643,501	
143	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	6,941	6,607		6,607	U

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101	0604532D8Z	Joint Artificial Intelligence	04						U
104	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,751				3,751	U
106	0604775D8Z	Defense Rapid Innovation Program	04						U
118	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	3,191				3,191	U
Advanced Component Development And Prototypes				2,309,110				2,309,110	
123	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	11,276				11,276	U
124	0604165D8Z	Prompt Global Strike Capability Development	05	107,000				107,000	U
126	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	40,102				40,102	U
130	0605022D8Z	Defense Exportability Program	05	17,615				17,615	U
131	0605027D8Z	OUSD(C) IT Development Initiatives	05	15,653				15,653	U
133	0605075D8Z	CMO Policy and Integration	05	1,618				1,618	U
136	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	9,619				9,619	U
137	0605294D8Z	Trusted & Assured Microelectronics	05	175,032				175,032	U
140	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,373				4,373	U
141	0305310D8Z	CWMD Systems: System Development and Demonstration	05	12,854				12,854	U
System Development And Demonstration				395,142				395,142	
143	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	9,724				9,724	U

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144	0604875D8Z	Joint Systems Architecture Development	06	4,695	4,079		4,079	U
145	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	204,268	270,013		270,013	U
146	0604942D8Z	Assessments and Evaluations	06	48,985	31,285		31,285	U
148	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	90,326	88,184		88,184	U
149	0605104D8Z	Technical Studies, Support and Analysis	06	21,575	22,525		22,525	U
151	0605128D8Z	Classified Program USD(P)	06	138,494	103,000		103,000	U
152	0605142D8Z	Systems Engineering	06	36,313	38,784		38,784	U
153	0605151D8Z	Studies and Analysis Support - OSD	06	5,029	3,534		3,534	U
154	0605161D8Z	Nuclear Matters-Physical Security	06	5,031	5,039		5,039	U
155	0605170D8Z	Support to Networks and Information Integration	06	12,141	11,424		11,424	U
156	0605200D8Z	General Support to USD (Intelligence)	06	165,090	5,693		5,693	U
161	0605502D8Z	Small Business Innovative Research	06	97,227				U
166	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	2,367	2,539		2,539	U
167	0605797D8Z	Maintaining Technology Advantage	06					U
168	0605798D8Z	Defense Technology Analysis	06	25,815	27,425		27,425	U
171	0605804D8Z	Development Test and Evaluation	06	19,810	20,133		20,133	U
174	0606100D8Z	Budget and Program Assessments	06	3,838	5,755		5,755	U

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144	0604875D8Z	Joint Systems Architecture Development	06	9,593				9,593	U
145	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	260,267				260,267	U
146	0604942D8Z	Assessments and Evaluations	06	30,834				30,834	U
148	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	83,091				83,091	U
149	0605104D8Z	Technical Studies, Support and Analysis	06	18,079				18,079	U
151	0605128D8Z	Classified Program USD(P)	06						U
152	0605142D8Z	Systems Engineering	06	37,140				37,140	U
153	0605151D8Z	Studies and Analysis Support - OSD	06	4,759				4,759	U
154	0605161D8Z	Nuclear Matters-Physical Security	06	8,307				8,307	U
155	0605170D8Z	Support to Networks and Information Integration	06	9,441				9,441	U
156	0605200D8Z	General Support to USD (Intelligence)	06	1,700				1,700	U
161	0605502D8Z	Small Business Innovative Research	06						U
166	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	3,568				3,568	U
167	0605797D8Z	Maintaining Technology Advantage	06	19,936				19,936	U
168	0605798D8Z	Defense Technology Analysis	06	16,875				16,875	U
171	0605804D8Z	Development Test and Evaluation	06	22,203				22,203	U
174	0606100D8Z	Budget and Program Assessments	06	8,017				8,017	U

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175	0606225D8Z	ODNA Technology and Resource Analysis	06	998	1,028		1,028	U
179	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	5,479	9,985		9,985	U
184	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	977	1,003		1,003	U
187	0305245D8Z	Intelligence Capabilities and Innovation Investments	06	15,255	189,529		189,529	U
188	0306310D8Z	CWMD Systems: RDT&E Management Support	06	1,229	1,241		1,241	U
189	0307588D8Z	Algorithmic Warfare Cross Functional Teams	06					U
Management Support				911,883	848,805		848,805	
199	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	16,464	48,765		48,765	U
200	0607310D8Z	CWMD Systems: Operational Systems Development	07	6,945	5,902		5,902	U
215	0303140D8Z	Information Systems Security Program	07	19,074	17,899		17,899	U
232	0305186D8Z	Policy R&D Programs	07	6,441	6,190		6,190	U
233	0305199D8Z	Net Centricity	07	17,812	16,742		16,742	U
242	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,067	1,137		1,137	U
249	0307577D8Z	Intelligence Mission Data (IMD)	07	13,086	6,889		6,889	U
Operational System Development				81,889	103,524		103,524	
Total Office of Secretary of Defense				5,364,060	5,829,463		5,829,463	

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175	0606225D8Z	ODNA Technology and Resource Analysis	06	3,194				3,194	U
179	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	3,037				3,037	U
184	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	1,014				1,014	U
187	0305245D8Z	Intelligence Capabilities and Innovation Investments	06	21,081				21,081	U
188	0306310D8Z	CWMD Systems: RDT&E Management Support	06						U
189	0307588D8Z	Algorithmic Warfare Cross Functional Teams	06	221,235				221,235	U
Management Support				793,095				793,095	
199	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	10,051				10,051	U
200	0607310D8Z	CWMD Systems: Operational Systems Development	07	12,734				12,734	U
215	0303140D8Z	Information Systems Security Program	07	67,631				67,631	U
232	0305186D8Z	Policy R&D Programs	07	6,301				6,301	U
233	0305199D8Z	Net Centricity	07	21,384				21,384	U
242	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,221				2,221	U
249	0307577D8Z	Intelligence Mission Data (IMD)	07						U
Operational System Development				120,322				120,322	
Total Office of Secretary of Defense				5,264,901		25,230	25,230	5,290,131	

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Space Development Agency
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69	1206310	SDA Space Science and Technology Research and Development	03					U
		Advanced Technology Development		-----	-----	-----	-----	
120	1206410	SDA Space Technology Development and Prototyping	04					U
		Advanced Component Development And Prototypes		-----	-----	-----	-----	
Total Space Development Agency				-----	-----	-----	-----	

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Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
69	1206310	SDA Space Science and Technology Research and Development	03	20,000				20,000	U
		Advanced Technology Development		20,000				20,000	
120	1206410	SDA Space Technology Development and Prototyping	04	85,000				85,000	U
		Advanced Component Development And Prototypes		85,000				85,000	
Total Space Development Agency				105,000				105,000	

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22	1160401BB	SOF Technology Development	02	33,375	35,921		35,921	U
		Applied Research		33,375	35,921		35,921	
68	1160402BB	SOF Advanced Technology Development	03	92,311	79,380		79,380	U
		Advanced Technology Development		92,311	79,380		79,380	
235	0305208BB	Distributed Common Ground/Surface Systems	07	5,488	6,286		6,286	U
254	1105219BB	MQ-9 UAV	07	33,106	18,403		18,403	U
255	1160279BB	Small Business Innovative Research/ Small Bus Tech Transfer Pilot Prog	07	23,371				U
256	1160403BB	Aviation Systems	07	250,604	175,862		175,862	U
257	1160405BB	Intelligence Systems Development	07	8,837	10,625		10,625	U
258	1160408BB	Operational Enhancements	07	73,734	99,307	3,632	102,939	U
259	1160431BB	Warrior Systems	07	74,169	63,542	11,040	74,582	U
260	1160432BB	Special Programs	07	2,300	2,479		2,479	U
261	1160434BB	Unmanned ISR	07	33,576	33,270	11,700	44,970	U
262	1160480BB	SOF Tactical Vehicles	07	2,483	1,121	725	1,846	U
263	1160483BB	Maritime Systems	07	66,280	42,471		42,471	U
264	1160489BB	Global Video Surveillance Activities	07	4,661	4,780		4,780	U
265	1160490BB	Operational Enhancements Intelligence	07	12,067	12,176		12,176	U
		Operational System Development		590,676	470,322	27,097	497,419	
Total U.S., Special Operations Command				716,362	585,623	27,097	612,720	

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22	1160401BB	SOF Technology Development	02	40,569				40,569	U
	Applied Research			40,569				40,569	
68	1160402BB	SOF Advanced Technology Development	03	89,154				89,154	U
	Advanced Technology Development			89,154				89,154	
235	0305208BB	Distributed Common Ground/Surface Systems	07	6,359				6,359	U
254	1105219BB	MQ-9 UAV	07	20,697				20,697	U
255	1160279BB	Small Business Innovative Research/ Small Bus Tech Transfer Pilot Prog	07						U
256	1160403BB	Aviation Systems	07	245,795				245,795	U
257	1160405BB	Intelligence Systems Development	07	15,484				15,484	U
258	1160408BB	Operational Enhancements	07	166,922		726	726	167,648	U
259	1160431BB	Warrior Systems	07	62,332		6,000	6,000	68,332	U
260	1160432BB	Special Programs	07	21,805				21,805	U
261	1160434BB	Unmanned ISR	07	37,377		5,000	5,000	42,377	U
262	1160480BB	SOF Tactical Vehicles	07	11,150				11,150	U
263	1160483BB	Maritime Systems	07	72,626				72,626	U
264	1160489BB	Global Video Surveillance Activities	07	5,363				5,363	U
265	1160490BB	Operational Enhancements Intelligence	07	12,962				12,962	U
	Operational System Development			678,872		11,726	11,726	690,598	
Total U.S., Special Operations Command				808,595		11,726	11,726	820,321	

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The Joint Staff
 FY 2020 President's Budget
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 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

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

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
107	0604826J	Joint C5 Capability Development, Integration and interoperability Assessments	04	23,638	22,435		22,435	U
Advanced Component Development And Prototypes				23,638	22,435		22,435	
142	0603829J	Joint Capability Experimentation	06					U
150	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	36,581	52,565		52,565	U
180	0204571J	Joint Staff Analytical Support	06	22,712	16,658		16,658	U
183	0303166J	Support to Information Operations (IO) Capabilities	06	673	652		652	U
190	0804767J	COCOM Exercise Engagement and Training Transformation (CE2T2) - MHA	06	37,334				U
191	0804768J	COCOM Exercise Engagement and Training Transformation (CE2T2) - non-MHA	06		42,653		42,653	U
Management Support				97,300	112,528		112,528	
203	0208043J	Planning and Decision Aid System (PDAS)	07	3,037	3,037		3,037	U
Operational System Development				3,037	3,037		3,037	
Total The Joint Staff				123,975	138,000		138,000	

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The Joint Staff
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 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

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

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
107	0604826J	Joint C5 Capability Development, Integration and interoperability Assessments	04	20,062				20,062	U
Advanced Component Development And Prototypes				20,062				20,062	
142	0603829J	Joint Capability Experimentation	06	13,000				13,000	U
150	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	70,038				70,038	U
180	0204571J	Joint Staff Analytical Support	06	9,216				9,216	U
183	0303166J	Support to Information Operations (IO) Capabilities	06	553				553	U
190	0804767J	COCOM Exercise Engagement and Training Transformation (CE2T2) - MHA	06						U
191	0804768J	COCOM Exercise Engagement and Training Transformation (CE2T2) - non-MHA	06	40,073				40,073	U
Management Support				132,880				132,880	
203	0208043J	Planning and Decision Aid System (PDAS)	07	4,537				4,537	U
Operational System Development				4,537				4,537	
Total The Joint Staff				157,479				157,479	

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Washington Headquarters Services
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 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

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

Line No	Element Number	Program Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se c
39	0603342D8W	Defense Innovation Unit Experimental (DIUx)	03	23,498	29,198		29,198	U
		Advanced Technology Development		23,498	29,198		29,198	
176	0606589D8W	Defense Digital Service (DDS) Development Support	06		1,000		1,000	U
		Management Support			1,000		1,000	
Total Washington Headquarters Services				23,498	30,198		30,198	

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Washington Headquarters Services
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 Exhibit R-1 FY 2020 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

Mar 2019

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

Line	Program Element No	Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	S e c
39	0603342D8W		Defense Innovation Unit Experimental (DIUx)	03						U
			Advanced Technology Development							
176	0606589D8W		Defense Digital Service (DDS) Development Support	06	1,000				1,000	U
			Management Support		1,000				1,000	
Total Washington Headquarters Services					1,000				1,000	

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Inspector General
 FY 2020 President's Budget
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 Non RDT&E Title
 (Dollars in Thousands)

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<u>Summary Recap of Budget Activities</u>	<u>FY 2018 (Base + OCO)</u>	<u>FY 2019 Base Enacted</u>	<u>FY 2019 OCO Enacted</u>	<u>FY 2019 Total Enacted</u>
RDT&E	2,800	3,977		3,977
Total Research, Development, Test & Evaluation	2,800	3,977		3,977
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>				
Administration and Associated Activities	2,800	3,977		3,977
Total Research, Development, Test & Evaluation	2,800	3,977		3,977

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Inspector General
 FY 2020 President's Budget
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

	FY 2020 <u>Base</u>	FY 2020 <u>OCO for Base Requirements</u>	FY 2020 <u>OCO for Direct War and Enduring Costs</u>	FY 2020 <u>Total OCO</u>	FY 2020 <u>Total (Base + OCO)</u>
<u>Summary Recap of Budget Activities</u>					
RDT&E	2,965				2,965
Total Research, Development, Test & Evaluation	2,965				2,965
<u>Summary Recap of Non-RDT&E Title FYDP Programs</u>					
Administration and Associated Activities	2,965				2,965
Total Research, Development, Test & Evaluation	2,965				2,965

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Inspector General
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

Appropriation: 0107D Office of the Inspector General

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
1	0901517X	Inspector General, DoD, Audit, Intelligence and Non-Criminal Investigative Activ	02	2,800	2,041		2,041	U
2	0902498X	Office of the DoD Inspector General - MHA	02		1,936		1,936	U
		RDT&E		2,800	3,977		3,977	
Total Office of the Inspector General				2,800	3,977		3,977	

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Inspector General
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 (Dollars in Thousands)

Mar 2019

Appropriation: 0107D Office of the Inspector General

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
1	0901517X	Inspector General, DoD, Audit, Intelligence and Non-Criminal Investigative Activ	02	2,965				2,965	U
2	0902498X	Office of the DoD Inspector General - MHA	02						U
		RDT&E		2,965				2,965	
Total Office of the Inspector General				2,965				2,965	

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Defense Health Agency
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 Exhibit R-1 FY 2020 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
<u>Summary Recap of Budget Activities</u>				
RDT&E	2,038,555	2,179,621		2,179,621
Total Research, Development, Test & Evaluation	2,038,555	2,179,621		2,179,621
<u>Summary Recap of Non-RDT&E Title FYDP Programs</u>				
Research and Development	2,038,555	2,179,621		2,179,621
Total Research, Development, Test & Evaluation	2,038,555	2,179,621		2,179,621

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Defense Health Agency
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

	FY 2020 <u>Base</u>	FY 2020 OCO for Base <u>Requirements</u>	FY 2020 OCO for Direct War and Enduring <u>Costs</u>	FY 2020 Total <u>OCO</u>	FY 2020 Total <u>(Base + OCO)</u>
<u>Summary Recap of Budget Activities</u>					
RDT&E	732,273				732,273
Total Research, Development, Test & Evaluation	732,273				732,273
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>					
Research and Development	732,273				732,273
Total Research, Development, Test & Evaluation	732,273				732,273

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Defense Health Agency
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

Appropriation: 0130D Defense Health Program

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	S e c
1	0601101DHA	In-House Laboratory Independent Research	02	2,774	3,687		3,687	U
2	0601117DHA	Basic Operational Medical Research Science	02	7,903	8,699		8,699	U
3	0602115DHA	Applied Biomedical Technology	02	91,814	112,754		112,754	U
4	0602787DHA	Medical Technology	02	1,282	1,356		1,356	U
5	0603002DHA	Medical Advanced Technology	02	320	338		338	U
6	0603115DHA	Medical Development	02	1,499,497	1,647,789		1,647,789	U
7	0604110DHA	Medical Products Support and Advanced Concept Development	02	139,995	161,094		161,094	U
8	0605013DHA	Information Technology Development	02	24,398	25,228		25,228	U
9	0605026DHA	Information Technology Development- DoD Healthcare Management System Modernizati	02	40,996	28,326		28,326	U
10	0605045DHA	Joint Operational Medicine Information System	02	65,047	78,136		78,136	U
11	0605145DHA	Medical Products and Support Systems Development	02	20,254	25,745		25,745	U
12	0605502DHA	Small Business Innovative Research	02	55,405				U
13	0606105DHA	Medical Program-Wide Activities	02	75,432	70,755		70,755	U
14	0607100DHA	Medical Products and Capabilities Enhancement Activities	02	13,438	15,714		15,714	U
		RDT&E		2,038,555	2,179,621		2,179,621	
		Total Defense Health Program		2,038,555	2,179,621		2,179,621	

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Defense Health Agency
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

Appropriation: 0130D Defense Health Program

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
1	0601101DHA	In-House Laboratory Research	02	4,013				4,013	U
2	0601117DHA	Basic Operational Medical Science	02	8,608				8,608	U
3	0602115DHA	Applied Biomedical Technology	02	82,883				82,883	U
4	0602787DHA	Medical Technology	02	1,383				1,383	U
5	0603002DHA	Medical Advanced Technology	02	345				345	U
6	0603115DHA	Medical Development	02	279,421				279,421	U
7	0604110DHA	Medical Products Support and Advanced Concept Development	02	128,055				128,055	U
8	0605013DHA	Information Technology Development	02	23,780				23,780	U
9	0605026DHA	Information Technology Development-DoD Healthcare Management System Modernizati	02	38,256				38,256	U
10	0605045DHA	Joint Operational Medicine Information System	02	59,902				59,902	U
11	0605145DHA	Medical Products and Support Systems Development	02	21,589				21,589	U
12	0605502DHA	Small Business Innovative Research	02						U
13	0606105DHA	Medical Program-Wide Activities	02	67,219				67,219	U
14	0607100DHA	Medical Products and Capabilities Enhancement Activities	02	16,819				16,819	U
		RDT&E		732,273				732,273	
Total Defense Health Program				732,273				732,273	

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Department of the Army
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
<u>Summary Recap of Budget Activities</u>				
Research, Development, Test, And Evaluation	839,414	886,728		886,728
Total Research, Development, Test & Evaluation	839,414	886,728		886,728
<u>Summary Recap of Non-RDT&E Title FYDP Programs</u>				
Central Supply and Maintenance	839,414	886,728		886,728
Total Research, Development, Test & Evaluation	839,414	886,728		886,728

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Department of the Army
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

	FY 2020 <u>Base</u>	FY 2020 <u>OCO for Base Requirements</u>	FY 2020 <u>OCO for Direct War and Enduring Costs</u>	FY 2020 <u>Total OCO</u>	FY 2020 <u>Total (Base + OCO)</u>
<u>Summary Recap of Budget Activities</u>					
Research, Development, Test, And Evaluation	875,930				875,930
Total Research, Development, Test & Evaluation	875,930				875,930
<u>Summary Recap of Non-RDT&E Title FYDP Programs</u>					
Central Supply and Maintenance	875,930				875,930
Total Research, Development, Test & Evaluation	875,930				875,930

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Department of the Army
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No	Program Element Number	Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
1	0708081D	Chemical Materials Agency	02	7,514	6,445		6,445	U
2	0708083D	Assembled Chemical Weapons Alternatives	02	831,900	880,283		880,283	U
		Research, Development, Test, And Evaluation		839,414	886,728		886,728	
Total Chem Agents & Munitions Destruction				839,414	886,728		886,728	

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Department of the Army
 FY 2020 President's Budget
 Exhibit R-1 FY 2020 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No	Program Element Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	Se
1	0708081D	Chemical Materials Agency	02	6,500				6,500	U
2	0708083D	Assembled Chemical Weapons Alternatives	02	869,430				869,430	U
		Research, Development, Test, And Evaluation		875,930				875,930	
Total Chem Agents & Munitions Destruction				875,930				875,930	

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Department of the Navy
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(Dollars in Thousands)

Mar 2019

	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted
<u>Summary Recap of Budget Activities</u>				
Research and Development	3,503			
Total Research, Development, Test & Evaluation	3,503			
<u>Summary Recap of Non-RDT&E Title FYDP Programs</u>				
Mobility Forces	3,503			
Total Research, Development, Test & Evaluation	3,503			

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Department of the Navy
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(Dollars in Thousands)

Mar 2019

	FY 2020 <u>Base</u>	FY 2020 OCO for Base <u>Requirements</u>	FY 2020 OCO for Direct War and Enduring <u>Costs</u>	FY 2020 Total <u>OCO</u>	FY 2020 Total <u>(Base + OCO)</u>
<u>Summary Recap of Budget Activities</u>					
Research and Development					
Total Research, Development, Test & Evaluation					
<u>Summary Recap of Non-RDT&E Title FYDP Programs</u>					
Mobility Forces					
Total Research, Development, Test & Evaluation					

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Department of the Navy
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 (Dollars in Thousands)

Mar 2019

Appropriation: 4557N National Defense Sealift Fund

Line No	Element Number	Program Item	Act	FY 2018 (Base + OCO)	FY 2019 Base Enacted	FY 2019 OCO Enacted	FY 2019 Total Enacted	Se
1	0408042N	National Defense Sealift Fund	04	3,503				U
		Research and Development		3,503				
Total National Defense Sealift Fund				3,503				

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Department of the Navy
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 Non RDT&E Title
 (Dollars in Thousands)

Mar 2019

Appropriation: 4557N National Defense Sealift Fund

Line	Program Element No	Number	Item	Act	FY 2020 Base	FY 2020 OCO for Base Requirements	FY 2020 OCO for Direct War and Enduring Costs	FY 2020 Total OCO	FY 2020 Total (Base + OCO)	S e c
1	0408042N		National Defense Sealift Fund	04	-----	-----	-----	-----	-----	U
			Research and Development		-----	-----	-----	-----	-----	
Total National Defense Sealift Fund					-----	-----	-----	-----	-----	