

RDT&E PROGRAMS (R-1)



*Department of Defense Budget
Fiscal Year 2022
May 2021
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 <https://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 2021.

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<u>Appropriation</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Research, Development, Test & Eval, Army	12,842,958	14,144,856	12,799,645
Research, Development, Test & Eval, Navy	20,585,470	20,138,391	22,639,362
Research, Development, Test & Eval, AF	45,801,963	36,360,842	39,184,328
RDTE, Space Force		10,540,069	11,266,387
Research, Development, Test & Eval, DW	26,679,581	26,013,489	25,857,875
Operational Test & Eval, Defense	227,700	257,120	216,591
Total Research, Development, Test & Evaluation	106,137,672	107,454,767	111,964,188
 <u>Other RDT&E Budget Activities Not Included in the Research, Development, Test and Evaluation Title</u>			
Office of the Inspector General	2,371	1,098	2,365
Defense Health Program	3,657,995	2,392,579	630,680
Chem Agents & Munitions Destruction	890,830	942,493	1,001,231
National Defense Sealift Fund	2,383		
Total Not in Research, Development, Test & Evaluation Title	4,553,579	3,336,170	1,634,276

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Basic Research	2,521,818	2,625,796	2,282,934
Applied Research	6,058,947	6,436,330	5,508,884
Advanced Technology Development	7,331,522	7,754,361	6,893,460
Advanced Component Development & Prototypes	26,670,000	27,997,263	31,255,315
System Development & Demonstration	16,557,860	15,748,039	15,760,774
Management Support	9,538,693	7,626,771	7,387,250
Operational Systems Development	37,458,832	38,602,760	40,591,502
Software and Digital Technology Pilot Programs		663,447	2,284,069
Total Research, Development, Test & Evaluation	106,137,672	107,454,767	111,964,188

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	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
<u>Summary Recap of FYDP Programs</u>			
Strategic Forces	983,477	1,250,685	1,496,953
General Purpose Forces	6,183,794	6,102,622	6,620,681
Intelligence and Communications	3,384,178	3,187,616	2,913,505
Mobility Forces	883,396	1,010,820	844,787
Research and Development	62,575,303	61,876,329	63,712,836
Central Supply and Maintenance	221,069	304,754	198,456
Training Medical and Other	48,475	38,286	41,163
Administration and Associated Activities	123,922	100,974	63,706
Support of Other Nations	3,922	3,592	2,420
Special Operations Forces	845,439	806,596	689,649
Space	6,679,809	7,395,200	7,915,122
Classified Programs	24,204,888	25,377,293	27,464,910
Total Research, Development, Test & Evaluation	106,137,672	107,454,767	111,964,188
<u>Summary Recap of Non-RDT&E Title FYDP Programs</u>			
Mobility Forces	2,383		
Research and Development	3,657,995	2,392,579	630,680
Central Supply and Maintenance	890,830	942,493	1,001,231
Administration and Associated Activities	2,371	1,098	2,365
Total Research, Development, Test & Evaluation	4,553,579	3,336,170	1,634,276

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Basic Research	557,265	552,521	473,475
Applied Research	1,227,661	1,518,770	914,288
Advanced Technology Development	1,520,145	1,940,015	1,297,437
Advanced Component Development & Prototypes	2,895,592	3,577,387	3,806,330
System Development & Demonstration	3,072,662	2,948,445	3,392,358
Management Support	1,759,840	1,834,218	1,416,698
Operational Systems Development	1,809,793	1,716,794	1,380,248
Software and Digital Technology Pilot Programs		56,706	118,811
Total Research, Development, Test & Evaluation	12,842,958	14,144,856	12,799,645
 <u>Summary Recap of FYDP Programs</u>			
General Purpose Forces	733,243	589,525	542,571
Intelligence and Communications	287,081	362,184	280,473
Research and Development	11,434,683	13,058,379	11,911,888
Central Supply and Maintenance	105,885	130,785	61,720
Administration and Associated Activities	61		
Space	274,732		
Classified Programs	7,273	3,983	2,993
Total Research, Development, Test & Evaluation	12,842,958	14,144,856	12,799,645

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
1	0601102A	Defense Research Sciences	01	343,481	344,031	297,241	U
2	0601103A	University Research Initiatives	01	85,148	84,697	66,981	U
3	0601104A	University and Industry Research Centers	01	123,654	118,716	94,003	U
4	0601121A	Cyber Collaborative Research Alliance	01	4,982	5,077	5,067	U
5	0601601A	Artificial Intelligence and Machine Learning Basic Research	01			10,183	U
		Basic Research		557,265	552,521	473,475	
6	0602115A	Biomedical Technology	02		11,403	11,925	U
7	0602134A	Counter Improvised-Threat Advanced Studies	02		1,927	1,976	U
8	0602141A	Lethality Technology	02	68,852	117,484	64,126	U
9	0602142A	Army Applied Research	02	30,733	30,757	28,654	U
10	0602143A	Soldier Lethality Technology	02	141,154	201,750	105,168	U
11	0602144A	Ground Technology	02	143,172	158,158	56,400	U
12	0602145A	Next Generation Combat Vehicle Technology	02	255,041	258,351	172,166	U
13	0602146A	Network C3I Technology	02	133,804	202,257	84,606	U
14	0602147A	Long Range Precision Fires Technology	02	117,395	119,007	64,285	U
15	0602148A	Future Verticle Lift Technology	02	94,888	169,536	91,411	U
16	0602150A	Air and Missile Defense Technology	02	93,937	107,584	19,316	U
17	0602180A	Artificial Intelligence and Machine Learning Technologies	02			15,034	U
18	0602181A	All Domain Convergence Applied Research	02			25,967	U
19	0602182A	C3I Applied Research	02			12,406	U
20	0602183A	Air Platform Applied Research	02			6,597	U

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21	0602184A	Soldier Applied Research	02			11,064	U
22	0602213A	C3I Applied Cyber	02	17,351	18,816	12,123	U
23	0602386A	Biotechnology for Materials - Applied Research	02			20,643	U
24	0602785A	Manpower/Personnel/Training Technology	02	20,406	20,399	18,701	U
25	0602787A	Medical Technology	02	110,928	101,341	91,720	U
		Applied Research		1,227,661	1,518,770	914,288	
26	0603002A	Medical Advanced Technology	03	82,256	94,669	43,804	U
27	0603007A	Manpower, Personnel and Training Advanced Technology	03	10,225	11,344	14,273	U
28	0603025A	Army Agile Innovation and Demonstration	03			22,231	U
29	0603040A	Artificial Intelligence and Machine Learning Advanced Technologies	03			909	U
30	0603041A	All Domain Convergence Advanced Technology	03			17,743	U
31	0603042A	C3I Advanced Technology	03			3,151	U
32	0603043A	Air Platform Advanced Technology	03			754	U
33	0603044A	Soldier Advanced Technology	03			890	U
34	0603115A	Medical Development	03		26,711	26,521	U
35	0603116A	Lethality Advanced Technology	03			8,066	U
36	0603117A	Army Advanced Technology Development	03	66,424	62,663	76,815	U
37	0603118A	Soldier Lethality Advanced Technology	03	131,119	151,370	107,966	U
38	0603119A	Ground Advanced Technology	03	136,544	196,055	23,403	U
39	0603134A	Counter Improvised-Threat Simulation	03		24,087	24,747	U
40	0603386A	Biotechnology for Materials - Advanced Research	03			53,736	U

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41	0603457A	C3I Cyber Advanced Development	03	25,492	43,357	31,426	U
42	0603461A	High Performance Computing Modernization Program	03	217,389	221,161	189,123	U
43	0603462A	Next Generation Combat Vehicle Advanced Technology	03	255,386	302,209	164,951	U
44	0603463A	Network C3I Advanced Technology	03	138,937	216,520	155,867	U
45	0603464A	Long Range Precision Fires Advanced Technology	03	196,393	177,142	93,909	U
46	0603465A	Future Vertical Lift Advanced Technology	03	180,163	220,334	179,677	U
47	0603466A	Air and Missile Defense Advanced Technology	03	79,817	175,703	48,826	U
48	0603920A	Humanitarian Demining	03		16,690	8,649	U
Advanced Technology Development				1,520,145	1,940,015	1,297,437	
49	0603305A	Army Missile Defense Systems Integration	04	59,318	140,195	11,702	U
50	0603308A	Army Space Systems Integration	04		25,584	18,755	U
51	0603327A	Air and Missile Defense Systems Engineering	04	52,672	47,098		U
52	0603619A	Landmine Warfare and Barrier - Adv Dev	04	79,504	56,067	50,314	U
53	0603639A	Tank and Medium Caliber Ammunition	04	72,456	100,367	79,873	U
54	0603645A	Armored System Modernization - Adv Dev	04	138,300	138,685	170,590	U
55	0603747A	Soldier Support and Survivability	04	9,246	5,712	2,897	U
56	0603766A	Tactical Electronic Surveillance System - Adv Dev	04	37,490	182,400	113,365	U
57	0603774A	Night Vision Systems Advanced Development	04	192,530	15,429	18,000	U
58	0603779A	Environmental Quality Technology - Dem/Val	04	19,089	20,906	11,921	U
59	0603790A	NATO Research and Development	04	5,184	4,589	3,777	U
60	0603801A	Aviation - Adv Dev	04	488,397	694,296	1,125,641	U

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61	0603804A	Logistics and Engineer Equipment - Adv Dev	04	7,081	8,587	7,055	U
62	0603807A	Medical Systems - Adv Dev	04	36,307	33,085	22,071	U
63	0603827A	Soldier Systems - Advanced Development	04	25,204	23,184	17,459	U
64	0604017A	Robotics Development	04	80,909	95,367	87,198	U
65	0604019A	Expanded Mission Area Missile (EMAM)	04			50,674	U
66	0604021A	Electronic Warfare Technology Maturation (MIP)	04	23,043	15,034		U
67	0604035A	Low Earth Orbit (LEO) Satellite Capability	04		21,850	19,638	U
68	0604036A	Multi-Domain Sensing System (MDSS) Adv Dev	04			50,548	U
69	0604037A	Tactical Intel Targeting Access Node (TITAN) Adv Dev	04			28,347	U
70	0604100A	Analysis Of Alternatives	04	9,811	9,714	10,091	U
71	0604101A	Small Unmanned Aerial Vehicle (SUAV) (6.4)	04		1,328	926	U
72	0604113A	Future Tactical Unmanned Aircraft System (FTUAS)	04	40,745	57,083	69,697	U
73	0604114A	Lower Tier Air Missile Defense (LTAMD) Sensor	04	364,154	308,805	327,690	U
74	0604115A	Technology Maturation Initiatives	04	171,058	141,109	270,124	U
75	0604117A	Maneuver - Short Range Air Defense (M-SHORAD)	04	41,690	4,813	39,376	U
76	0604119A	Army Advanced Component Development & Prototyping	04	117,335	172,990	189,483	U
77	0604120A	Assured Positioning, Navigation and Timing (PNT)	04		115,688	96,679	U
78	0604121A	Synthetic Training Environment Refinement & Prototyping	04	99,357	112,093	194,195	U
79	0604134A	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04		13,326	13,379	U
80	0604182A	Hypersonics	04	394,619	832,166	300,928	U

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81	0604403A	Future Interceptor	04	1,918		7,895	U
82	0604531A	Counter - Small Unmanned Aircraft Systems Advanced Development	04			19,148	U
83	0604541A	Unified Network Transport	04	28,478	39,192	35,409	U
84	0604644A	Mobile Medium Range Missile	04	4,794	88,100	286,457	U
85	0604785A	Integrated Base Defense (Budget Activity 4)	04	2,000	2,020	2,040	U
86	0305251A	Cyberspace Operations Forces and Force Support	04	58,611	50,525	52,988	U
87	1206120A	Assured Positioning, Navigation and Timing (PNT)	04	133,307			U
88	1206308A	Army Space Systems Integration	04	100,985			U
Advanced Component Development & Prototypes				2,895,592	3,577,387	3,806,330	
89	0604201A	Aircraft Avionics	05	8,069	7,011	6,654	U
90	0604270A	Electronic Warfare Development	05	57,090	56,624	30,840	U
91	0604601A	Infantry Support Weapons	05	86,154	88,552	67,873	U
92	0604604A	Medium Tactical Vehicles	05		8,213	11,374	U
93	0604611A	JAVELIN	05	14,377	5,983	7,094	U
94	0604622A	Family of Heavy Tactical Vehicles	05	12,085	22,254	31,602	U
95	0604633A	Air Traffic Control	05	5,543	3,383	4,405	U
96	0604642A	Light Tactical Wheeled Vehicles	05	2,843	4,193	2,055	U
97	0604645A	Armored Systems Modernization (ASM) - Eng Dev	05	273,433	123,992	137,256	U
98	0604710A	Night Vision Systems - Eng Dev	05	135,283	54,234	62,690	U
99	0604713A	Combat Feeding, Clothing, and Equipment	05	7,295	2,734	1,658	U
100	0604715A	Non-System Training Devices - Eng Dev	05	29,785	27,013	26,540	U

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<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
101	0604741A	Air Defense Command, Control and Intelligence - Eng Dev	05	70,279	62,058	59,518	U
102	0604742A	Constructive Simulation Systems Development	05	11,158	9,779	22,331	U
103	0604746A	Automatic Test Equipment Development	05	10,466	5,375	8,807	U
104	0604760A	Distributive Interactive Simulations (DIS) - Eng Dev	05	7,480	7,605	7,453	U
105	0604768A	Brilliant Anti-Armor Submunition (BAT)	05	19,177	24,064		U
106	0604780A	Combined Arms Tactical Trainer (CATT) Core	05	8,861	3,438		U
107	0604798A	Brigade Analysis, Integration and Evaluation	05	29,852	18,737	21,534	U
108	0604802A	Weapons and Munitions - Eng Dev	05	182,119	268,858	309,778	U
109	0604804A	Logistics and Engineer Equipment - Eng Dev	05	105,668	53,676	59,261	U
110	0604805A	Command, Control, Communications Systems - Eng Dev	05	12,077	10,674	20,121	U
111	0604807A	Medical Materiel/Medical Biological Defense Equipment - Eng Dev	05	70,489	51,285	44,424	U
112	0604808A	Landmine Warfare/Barrier - Eng Dev	05	33,881	9,239	14,137	U
113	0604818A	Army Tactical Command & Control Hardware & Software	05	124,749	128,676	162,704	U
114	0604820A	Radar Development	05	91,782	105,271	127,919	U
115	0604822A	General Fund Enterprise Business System (GFEBs)	05	41,119	15,428	17,623	U
116	0604823A	Firefinder	05	16,583	18,278		U
117	0604827A	Soldier Systems - Warrior Dem/Val	05	4,606	6,296	6,454	U
118	0604852A	Suite of Survivability Enhancement Systems - EMD	05	81,899	62,012	106,354	U
119	0604854A	Artillery Systems - EMD	05	20,290	36,187		U
120	0605013A	Information Technology Development	05	89,541	126,498	122,168	U
121	0605018A	Integrated Personnel and Pay System-Army (IPPS-A)	05	97,873	111,078	76,936	U

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
122	0605028A	Armored Multi-Purpose Vehicle (AMPV)	05	80,381	76,140	35,560	U
123	0605029A	Integrated Ground Security Surveillance Response Capability (IGSSR-C)	05	6,423			U
124	0605030A	Joint Tactical Network Center (JTNC)	05	15,228	15,671	16,364	U
125	0605031A	Joint Tactical Network (JTN)	05	39,130	30,540	28,954	U
126	0605033A	Ground-Based Operational Surveillance System - Expeditionary (GBOSS-E)	05	3,689	5,758		U
127	0605034A	Tactical Security System (TSS)	05	7,343			U
128	0605035A	Common Infrared Countermeasures (CIRCM)	05	22,226	29,770	16,630	U
129	0605036A	Combating Weapons of Mass Destruction (CWMD)	05	9,589			U
130	0605038A	Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	05	5,805	4,669	7,618	U
131	0605041A	Defensive CYBER Tool Development	05	50,662	28,544	18,892	U
132	0605042A	Tactical Network Radio Systems (Low-Tier)	05	27,236	20,511	28,849	U
133	0605047A	Contract Writing System	05	16,379	22,025	22,960	U
134	0605049A	Missile Warning System Modernization (MWSM)	05	1,475			U
135	0605051A	Aircraft Survivability Development	05	130,211	99,208	65,603	U
136	0605052A	Indirect Fire Protection Capability Inc 2 - Block 1	05	186,369	153,362	233,512	U
137	0605053A	Ground Robotics	05	24,747	12,010	18,241	U
138	0605054A	Emerging Technology Initiatives	05	36,146	294,366	254,945	U
139	0605143A	Biometrics Enabling Capability (BEC)	05			4,326	U
140	0605144A	Next Generation Load Device - Medium	05			15,616	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
141	0605145A	Medical Products and Support Systems Development	05		919	962	U
142	0605148A	Tactical Intel Targeting Access Node (TITAN) EMD	05			54,972	U
143	0605203A	Army System Development & Demonstration	05	184,410	150,201	122,175	U
144	0605205A	Small Unmanned Aerial Vehicle (SUAV) (6.5)	05		5,780	2,275	U
145	0605224A	Multi-Domain Intelligence	05			9,313	U
146	0605225A	SIO Capability Development	05			22,713	U
147	0605231A	Precision Strike Missile (PrSM)	05			188,452	U
148	0605232A	Hypersonics EMD	05			111,473	U
149	0605233A	Accessions Information Environment (AIE)	05			18,790	U
150	0605450A	Joint Air-to-Ground Missile (JAGM)	05	6,314	7,566	2,134	U
151	0605457A	Army Integrated Air and Missile Defense (AIAMD)	05	211,634	206,850	157,873	U
152	0605531A	Counter - Small Unmanned Aircraft Systems Sys Dev & Demonstration	05			33,386	U
153	0605625A	Manned Ground Vehicle	05	197,304	171,890	225,106	U
154	0605766A	National Capabilities Integration (MIP)	05	7,835	7,670	14,454	U
155	0605812A	Joint Light Tactical Vehicle (JLTV) Engineering and Manufacturing Development Ph	05	7,119	1,678	2,564	U
156	0605830A	Aviation Ground Support Equipment	05	1,596	1,413	1,201	U
157	0303032A	TROJAN - RH12	05	3,936	3,451	3,362	U
158	0303267A	Auctioned Spectrum Relocation Fund	05	7,650			U
159	0303467A	SENSR Spectrum Pipeline SRF	05	251			U
160	0303567A	Non-SENSR Spectrum Pipeline SRF	05	1,236			U

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Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
161	0304270A	Electronic Warfare Development	05	18,432	59,755	75,520	U
System Development & Demonstration				3,072,662	2,948,445	3,392,358	
162	0604256A	Threat Simulator Development	06	41,566	41,486	18,439	U
163	0604258A	Target Systems Development	06	27,984	35,279	17,404	U
164	0604759A	Major T&E Investment	06	140,946	119,231	68,139	U
165	0605103A	Rand Arroyo Center	06	12,573	12,989	33,126	U
166	0605301A	Army Kwajalein Atoll	06	230,051	221,965	240,877	U
167	0605326A	Concepts Experimentation Program	06	35,403	50,394	79,710	U
168	0605502A	Small Business Innovative Research	06	392,999	369,715		U
169	0605601A	Army Test Ranges and Facilities	06	356,231	390,351	354,227	U
170	0605602A	Army Technical Test Instrumentation and Targets	06	60,170	81,829	49,253	U
171	0605604A	Survivability/Lethality Analysis	06	33,632	36,001	36,389	U
172	0605606A	Aircraft Certification	06	3,319	2,736	2,489	U
173	0605702A	Meteorological Support to RDT&E Activities	06	6,094	6,360	6,689	U
174	0605706A	Materiel Systems Analysis	06	21,233	21,830	21,558	U
175	0605709A	Exploitation of Foreign Items	06	11,168	8,936	13,631	U
176	0605712A	Support of Operational Testing	06	52,280	54,116	55,122	U
177	0605716A	Army Evaluation Center	06	60,474	56,827	65,854	U
178	0605718A	Army Modeling & Sim X-Cmd Collaboration & Integ	06	2,423	2,478	2,633	U
179	0605801A	Programwide Activities	06	56,800	84,510	96,589	U
180	0605803A	Technical Information Activities	06	30,434	25,487	26,808	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
181	0605805A	Munitions Standardization, Effectiveness and Safety	06	52,401	55,648	43,042	U
182	0605857A	Environmental Quality Technology Mgmt Support	06	4,489	1,715	1,789	U
183	0605898A	Army Direct Report Headquarters - R&D - MHA	06	53,320	54,564	52,108	U
184	0606001A	Military Ground-Based CREW Technology	06	2,053			U
185	0606002A	Ronald Reagan Ballistic Missile Defense Test Site	06	64,311	68,911	80,952	U
186	0606003A	CounterIntel and Human Intel Modernization	06	2,925	5,200	5,363	U
187	0606105A	Medical Program-Wide Activities	06		19,164	39,041	U
188	0606942A	Assessments and Evaluations Cyber Vulnerabilities	06	4,500	6,496	5,466	U
189	0909999A	Financing for Cancelled Account Adjustments	06	61			U
Management Support				1,759,840	1,834,218	1,416,698	
190	0603778A	MLRS Product Improvement Program	07	14,014	9,786	12,314	U
191	0605024A	Anti-Tamper Technology Support	07	8,141	8,436	8,868	U
192	0607131A	Weapons and Munitions Product Improvement Programs	07	14,222	19,666	22,828	U
193	0607134A	Long Range Precision Fires (LRPF)	07	149,455	100,146		U
194	0607136A	Blackhawk Product Improvement Program	07	22,502	8,300	4,773	U
195	0607137A	Chinook Product Improvement Program	07	164,820	49,409	52,372	U
196	0607139A	Improved Turbine Engine Program	07	197,941	232,159	275,024	U
197	0607142A	Aviation Rocket System Product Improvement and Development	07	1,847	13,421	12,417	U
198	0607143A	Unmanned Aircraft System Universal Products	07	17,386	19,460	4,594	U
199	0607145A	Apache Future Development	07	5,224	52,502	10,067	U
200	0607148A	AN/TPQ-53 Counterfire Target Acquisition Radar System	07			56,681	U

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
201	0607150A	Intel Cyber Development	07		14,652	3,611	U
202	0607312A	Army Operational Systems Development	07	45,026	35,851	28,029	U
203	0607313A	Electronic Warfare Development	07			5,673	U
204	0607665A	Family of Biometrics	07	1,576	1,276	1,178	U
205	0607865A	Patriot Product Improvement	07	83,833	178,984	125,932	U
206	0203728A	Joint Automated Deep Operation Coordination System (JADOCs)	07	45,447	43,060	25,547	U
207	0203735A	Combat Vehicle Improvement Programs	07	266,197	213,728	211,523	U
208	0203743A	155mm Self-Propelled Howitzer Improvements	07	191,076	217,959	213,281	U
209	0203744A	Aircraft Modifications/Product Improvement Programs	07	8,896	11,261		U
210	0203752A	Aircraft Engine Component Improvement Program	07	138	80	132	U
211	0203758A	Digitization	07	4,043	4,351	3,936	U
212	0203801A	Missile/Air Defense Product Improvement Program	07	1,235	1,241	127	U
213	0203802A	Other Missile Product Improvement Programs	07		15,268	10,265	U
214	0205412A	Environmental Quality Technology - Operational System Dev	07	10,000	250	262	U
215	0205456A	Lower Tier Air and Missile Defense (AMD) System	07	93,743		182	U
216	0205778A	Guided Multiple-Launch Rocket System (GMLRS)	07	112,468	72,817	63,937	U
217	0208053A	Joint Tactical Ground System	07		9,510	13,379	U
219	0303028A	Security and Intelligence Activities	07	26,674	23,367	24,531	U
220	0303140A	Information Systems Security Program	07	25,710	28,270	15,720	U
221	0303141A	Global Combat Support System	07	57,604	70,652	52,739	U
222	0303142A	SATCOM Ground Environment (SPACE)	07		18,002	15,247	U

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** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
223	0303150A	WWMCCS/Global Command and Control System	07	1,988			U
226	0305179A	Integrated Broadcast Service (IBS)	07	459	382	5,430	U
227	0305204A	Tactical Unmanned Aerial Vehicles	07	22,147	38,151	8,410	U
228	0305206A	Airborne Reconnaissance Systems	07	13,177	28,858	24,460	U
229	0305208A	Distributed Common Ground/Surface Systems	07	28,821	40,771		U
230	0305219A	MQ-1C Gray Eagle UAS	07	5,000			U
231	0305232A	RQ-11 UAV	07	3,218			U
232	0305233A	RQ-7 UAV	07	7,817			U
233	0307665A	Biometrics Enabled Intelligence	07	4,350		2,066	U
234	0708045A	End Item Industrial Preparedness Activities	07	105,885	130,785	61,720	U
235	1203142A	SATCOM Ground Environment (SPACE)	07	32,764			U
236	1208053A	Joint Tactical Ground System	07	7,676			U
9999	9999999999	Classified Programs		7,273	3,983	2,993	U
		Operational Systems Development		1,809,793	1,716,794	1,380,248	
237	0608041A	Defensive CYBER - Software Prototype Development	08		56,706	118,811	U
		Software and Digital Technology Pilot Programs			56,706	118,811	
Total Research, Development, Test & Eval, Army				12,842,958	14,144,856	12,799,645	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Basic Research	633,868	650,180	601,869
Applied Research	1,130,156	1,179,053	975,915
Advanced Technology Development	811,459	835,756	777,788
Advanced Component Development & Prototypes	5,199,276	5,529,668	7,077,987
System Development & Demonstration	6,042,127	5,875,510	5,910,089
Management Support	1,647,523	981,078	998,686
Operational Systems Development	5,121,061	5,062,354	5,313,319
Software and Digital Technology Pilot Programs		24,792	983,709
Total Research, Development, Test & Evaluation	20,585,470	20,138,391	22,639,362
 <u>Summary Recap of FYDP Programs</u>			
Strategic Forces	199,637	250,606	323,076
General Purpose Forces	1,723,845	1,632,610	1,528,517
Intelligence and Communications	811,581	691,939	612,252
Research and Development	15,910,716	15,658,000	18,260,975
Central Supply and Maintenance	72,675	49,757	40,209
Administration and Associated Activities	2,100	1,536	1,747
Space	14,407	35,956	
Classified Programs	1,850,509	1,817,987	1,872,586
Total Research, Development, Test & Evaluation	20,585,470	20,138,391	22,639,362

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
1	0601103N	University Research Initiatives	01	162,576	144,102	117,448	U
2	0601152N	In-House Laboratory Independent Research	01	18,337	19,030		U
3	0601153N	Defense Research Sciences	01	452,955	487,048	484,421	U
Basic Research				633,868	650,180	601,869	
4	0602114N	Power Projection Applied Research	02	27,859	38,701	23,013	U
5	0602123N	Force Protection Applied Research	02	208,810	209,008	122,888	U
6	0602131M	Marine Corps Landing Force Technology	02	67,350	55,403	51,112	U
7	0602235N	Common Picture Applied Research	02	41,874	43,495	51,477	U
8	0602236N	Warfighter Sustainment Applied Research	02	93,481	116,051	70,547	U
9	0602271N	Electromagnetic Systems Applied Research	02	86,680	92,624	85,157	U
10	0602435N	Ocean Warfighting Environment Applied Research	02	80,475	79,881	70,086	U
11	0602651M	Joint Non-Lethal Weapons Applied Research	02	6,155	6,316	6,405	U
12	0602747N	Undersea Warfare Applied Research	02	95,251	96,039	57,484	U
13	0602750N	Future Naval Capabilities Applied Research	02	147,050	170,681	173,356	U
14	0602782N	Mine and Expeditionary Warfare Applied Research	02	52,330	33,081	32,160	U
15	0602792N	Innovative Naval Prototypes (INP) Applied Research	02	148,923	161,028	152,976	U
16	0602861N	Science and Technology Management - ONR Field Activities	02	73,918	76,745	79,254	U
Applied Research				1,130,156	1,179,053	975,915	
17	0603123N	Force Protection Advanced Technology	03	43,630	24,305	21,661	U
18	0603271N	Electromagnetic Systems Advanced Technology	03	9,069	22,957	8,146	U
19	0603640M	USMC Advanced Technology Demonstration (ATD)	03	228,703	249,340	224,155	U

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Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
20	0603651M	Joint Non-Lethal Weapons Technology Development	03	12,907	13,243	13,429	U
21	0603673N	Future Naval Capabilities Advanced Technology Development	03	216,798	231,061	265,299	U
22	0603680N	Manufacturing Technology Program	03	63,432	59,861	57,236	U
23	0603729N	Warfighter Protection Advanced Technology	03	32,989	33,120	4,935	U
24	0603758N	Navy Warfighting Experiments and Demonstrations	03	65,608	40,591	47,167	U
25	0603782N	Mine and Expeditionary Warfare Advanced Technology	03	12,802	1,940	1,981	U
26	0603801N	Innovative Naval Prototypes (INP) Advanced Technology Development	03	125,521	159,338	133,779	U
Advanced Technology Development				811,459	835,756	777,788	
27	0603128N	Unmanned Aerial System	04			16,879	U
28	0603178N	Medium and Large Unmanned Surface Vehicles (USVs)	04		91,747	144,846	U
29	0603207N	Air/Ocean Tactical Applications	04	41,862	35,245	27,849	U
30	0603216N	Aviation Survivability	04	11,742	13,342	16,815	U
31	0603239N	Naval Construction Forces	04		2,341	5,290	U
32	0603251N	Aircraft Systems	04	1,467	418		U
33	0603254N	ASW Systems Development	04	6,991	18,500	17,612	U
34	0603261N	Tactical Airborne Reconnaissance	04	3,419	3,411	3,111	U
35	0603382N	Advanced Combat Systems Technology	04	56,464	52,381	32,310	U
36	0603502N	Surface and Shallow Water Mine Countermeasures	04	387,991	47,575	58,013	U
37	0603506N	Surface Ship Torpedo Defense	04	7,175	11,759	1,862	U
38	0603512N	Carrier Systems Development	04	4,906	7,526	7,182	U
39	0603525N	PILOT FISH	04	189,133	328,757	408,087	U

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Appropriation: 1319N Research, Development, Test & Eval, Navy

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40	0603527N	RETRACT LARCH	04	32,798	49,062	44,197	U
41	0603536N	RETRACT JUNIPER	04	127,643	131,288	144,541	U
42	0603542N	Radiological Control	04	679	775	761	U
43	0603553N	Surface ASW	04	1,098	1,156	1,144	U
44	0603561N	Advanced Submarine System Development	04	111,281	151,547	99,782	U
45	0603562N	Submarine Tactical Warfare Systems	04	10,820	10,481	14,059	U
46	0603563N	Ship Concept Advanced Design	04	100,887	131,741	111,590	U
47	0603564N	Ship Preliminary Design & Feasibility Studies	04	21,630	46,657	106,957	U
48	0603570N	Advanced Nuclear Power Systems	04	181,652	149,188	203,572	U
49	0603573N	Advanced Surface Machinery Systems	04	84,227	40,510	78,122	U
50	0603576N	CHALK EAGLE	04	52,772	71,181	80,270	U
51	0603581N	Littoral Combat Ship (LCS)	04	16,354	42,035	84,924	U
52	0603582N	Combat System Integration	04	16,715	17,764	17,322	U
53	0603595N	Ohio Replacement	04	411,431	316,396	296,231	U
54	0603596N	LCS Mission Modules	04	105,412	77,573	75,995	U
55	0603597N	Automated Test and Re-Test (ATRT)	04	41,412	34,766	7,805	U
56	0603599N	Frigate Development	04	56,890	81,942	109,459	U
57	0603609N	Conventional Munitions	04	8,917	9,877	7,296	U
58	0603635M	Marine Corps Ground Combat/Support System	04	50,057	43,457	77,065	U
59	0603654N	Joint Service Explosive Ordnance Development	04	45,789	57,288	34,785	U
60	0603713N	Ocean Engineering Technology Development	04	5,499	6,318	8,774	U

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Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
61	0603721N	Environmental Protection	04	20,165	20,514	20,677	U
62	0603724N	Navy Energy Program	04	55,750	56,389	33,824	U
63	0603725N	Facilities Improvement	04	3,611	4,645	6,327	U
64	0603734N	CHALK CORAL	04	301,803	429,577	579,389	U
65	0603739N	Navy Logistic Productivity	04	3,710	3,880	669	U
66	0603746N	RETRACT MAPLE	04	242,633	297,685	295,295	U
67	0603748N	LINK PLUMERIA	04	358,204	482,418	692,280	U
68	0603751N	RETRACT ELM	04	59,804	86,730	83,904	U
69	0603764M	LINK EVERGREEN	04	28,961	201,984	221,253	U
70	0603764N	LINK EVERGREEN	04	161,313			U
71	0603790N	NATO Research and Development	04	7,697	6,880	5,805	U
72	0603795N	Land Attack Technology	04	7,044	7,254	4,017	U
73	0603851M	Joint Non-Lethal Weapons Testing	04	27,922	28,435	29,589	U
74	0603860N	Joint Precision Approach and Landing Systems - Dem/Val	04	47,417	33,612	24,450	U
75	0603925N	Directed Energy and Electric Weapon Systems	04	136,535	126,325	81,803	U
76	0604014N	F/A -18 Infrared Search and Track (IRST)	04	111,061	84,190	48,793	U
77	0604027N	Digital Warfare Office	04	35,551	35,480	46,769	U
78	0604028N	Small and Medium Unmanned Undersea Vehicles	04	45,467	38,968	84,676	U
79	0604029N	Unmanned Undersea Vehicle Core Technologies	04	40,400	39,882	59,299	U
80	0604030N	Rapid Prototyping, Experimentation and Demonstration.	04	31,000	12,046		U
81	0604031N	Large Unmanned Undersea Vehicles	04	66,664	62,209	88,063	U

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82	0604112N	Gerald R. Ford Class Nuclear Aircraft Carrier (CVN 78 - 80)	04	106,381	104,433	121,509	U
83	0604126N	Littoral Airborne MCM	04	19,672	17,889	18,669	U
84	0604127N	Surface Mine Countermeasures	04	18,083	18,670	13,655	U
85	0604272N	Tactical Air Directional Infrared Countermeasures (TADIRCM)	04	54,175	49,450	33,246	U
86	0604289M	Next Generation Logistics	04	18,260	5,000	1,071	U
87	0604292N	Future Vertical Lift (Maritime Strike)	04		5,097	9,825	U
88	0604320M	Rapid Technology Capability Prototype	04	4,860	5,664	6,555	U
89	0604454N	LX (R)	04	12,012	10,158	3,344	U
90	0604536N	Advanced Undersea Prototyping	04	180,106	89,296	58,473	U
91	0604636N	Counter Unmanned Aircraft Systems (C-UAS)	04	3,030	2,598	5,529	U
92	0604659N	Precision Strike Weapons Development Program	04	621,250	79,417	97,944	U
93	0604707N	Space and Electronic Warfare (SEW) Architecture/Engineering Support	04	5,060	6,208	9,340	U
94	0604786N	Offensive Anti-Surface Warfare Weapon Development	04	112,555	46,750	127,756	U
95	0605512N	MEDIUM UNMANNED SURFACE VEHICLES (MUSVs))	04		55,285	60,028	U
96	0605513N	Unmanned Surface Vehicle Enabling Capabilities	04			170,838	U
97	0605514M	GROUND BASED ANTI-SHIP MISSILE (MARFORRES)	04		29,678	102,716	U
98	0605516M	LONG RANGE FIRES (MARFORRES)	04		56,250	88,479	U
99	0605518N	CONVENTIONAL PROMPT STRIKE (CPS)	04		766,637	1,372,340	U
100	0303354N	ASW Systems Development - MIP	04	9,991	9,151	8,571	U
101	0304240M	Advanced Tactical Unmanned Aircraft System	04	45,407	28,125	16,204	U

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102	0304270N	Electronic Warfare Development - MIP	04	609	805	506	U
Advanced Component Development & Prototypes				5,199,276	5,529,668	7,077,987	
103	0603208N	Training System Aircraft	05	15,371	4,307	5,864	U
104	0604212N	Other Helo Development	05	37,812	23,133	56,444	U
105	0604214M	AV-8B Aircraft - Eng Dev	05	27,057	16,749	10,146	U
106	0604215N	Standards Development	05	3,499	4,218	4,082	U
107	0604216N	Multi-Mission Helicopter Upgrade Development	05	18,710	36,889	46,418	U
108	0604221N	P-3 Modernization Program	05		598	579	U
109	0604230N	Warfare Support System	05	8,365	14,942	10,167	U
110	0604231N	Command and Control Systems	05	72,811	124,780	122,913	U
111	0604234N	Advanced Hawkeye	05	221,058	275,813	386,860	U
112	0604245M	H-1 Upgrades	05	59,611	57,094	50,158	U
113	0604261N	Acoustic Search Sensors	05	45,792	47,182	46,066	U
114	0604262N	V-22A	05	184,443	132,427	107,984	U
115	0604264N	Air Crew Systems Development	05	18,652	21,376	22,746	U
116	0604269N	EA-18	05	122,048	106,134	68,425	U
117	0604270N	Electronic Warfare Development	05	107,097	127,718	139,535	U
118	0604273M	Executive Helo Development	05	170,364	96,693	45,932	U
119	0604274N	Next Generation Jammer (NGJ)	05	480,684	447,152	243,923	U
120	0604280N	Joint Tactical Radio System - Navy (JTRS-Navy)	05	180,878	232,930	234,434	U
121	0604282N	Next Generation Jammer (NGJ) Increment II	05	88,635	165,614	248,096	U

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122	0604307N	Surface Combatant Combat System Engineering	05	361,311	357,530	371,575	U
123	0604311N	LPD-17 Class Systems Integration	05	615	941	904	U
124	0604329N	Small Diameter Bomb (SDB)	05	48,257	51,097	46,769	U
125	0604366N	Standard Missile Improvements	05	196,135	305,795	343,511	U
126	0604373N	Airborne MCM	05	10,488	10,861	10,881	U
127	0604378N	Naval Integrated Fire Control - Counter Air Systems Engineering	05	28,912	41,992	46,121	U
128	0604419N	Advanced Sensors Application Program (ASAP)	05		12,483		U
129	0604501N	Advanced Above Water Sensors	05	28,297	67,167	77,852	U
130	0604503N	SSN-688 and Trident Modernization	05	75,822	92,682	95,693	U
131	0604504N	Air Control	05	50,195	38,863	27,499	U
132	0604512N	Shipboard Aviation Systems	05	14,478	11,593	8,924	U
133	0604518N	Combat Information Center Conversion	05	15,478	12,661	11,631	U
134	0604522N	Air and Missile Defense Radar (AMDR) System	05	35,694	61,656	96,556	U
135	0604530N	Advanced Arresting Gear (AAG)	05	115,912	65,834	147	U
136	0604558N	New Design SSN	05	309,212	242,108	503,252	U
137	0604562N	Submarine Tactical Warfare System	05	60,842	71,093	62,115	U
138	0604567N	Ship Contract Design/ Live Fire T&E	05	44,972	63,531	54,829	U
139	0604574N	Navy Tactical Computer Resources	05	3,604	3,836	4,290	U
140	0604601N	Mine Development	05	54,431	84,793	76,027	U
141	0604610N	Lightweight Torpedo Development	05	102,112	115,102	94,386	U
142	0604654N	Joint Service Explosive Ordnance Development	05	7,942	8,346	8,348	U

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143	0604657M	USMC Ground Combat/Supporting Arms Systems - Eng Dev	05	19,312	29,467	42,144	U
144	0604703N	Personnel, Training, Simulation, and Human Factors	05	4,538	7,164	7,375	U
145	0604727N	Joint Standoff Weapon Systems	05	15,745	30,351		U
146	0604755N	Ship Self Defense (Detect & Control)	05	170,474	153,532	149,433	U
147	0604756N	Ship Self Defense (Engage: Hard Kill)	05	118,609	94,420	87,862	U
148	0604757N	Ship Self Defense (Engage: Soft Kill/EW)	05	91,928	84,852	69,006	U
149	0604761N	Intelligence Engineering	05	44,611	12,088	20,684	U
150	0604771N	Medical Development	05	32,036	39,612	3,967	U
151	0604777N	Navigation/ID System	05	44,207	49,862	48,837	U
152	0604800M	Joint Strike Fighter (JSF) - EMD	05	1,708	561	577	U
153	0604800N	Joint Strike Fighter (JSF) - EMD	05	1,481	250	262	U
154	0604850N	SSN(X)	05		996	29,829	U
155	0605013M	Information Technology Development	05	1,448	974	11,277	U
156	0605013N	Information Technology Development	05	256,492	270,110	243,828	U
157	0605024N	Anti-Tamper Technology Support	05	4,882	7,702	8,426	U
158	0605180N	TACAMO Modernization	05			150,592	U
159	0605212M	CH-53K RDTE	05	489,699	406,406	256,903	U
160	0605215N	Mission Planning	05	70,881	83,980	88,128	U
161	0605217N	Common Avionics	05	34,430	53,782	60,117	U
162	0605220N	Ship to Shore Connector (SSC)	05	19,188	12,632	6,320	U
163	0605327N	T-AO 205 Class	05	1,616	2,064	4,336	U

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164	0605414N	Unmanned Carrier Aviation (UCA)	05	628,169	256,970	268,937	U
165	0605450M	Joint Air-to-Ground Missile (JAGM)	05	13,427	12,713	356	U
166	0605500N	Multi-mission Maritime Aircraft (MMA)	05	20,645	24,084	27,279	U
167	0605504N	Multi-Mission Maritime (MMA) Increment III	05	137,310	185,328	173,784	U
168	0605611M	Marine Corps Assault Vehicles System Development & Demonstration	05	48,396	41,775	80,709	U
169	0605813M	Joint Light Tactical Vehicle (JLTV) System Development & Demonstration	05	2,094	2,541	2,005	U
170	0204202N	DDG-1000	05	105,122	222,519	112,576	U
171	0303267N	Auctioned Spectrum Relocation Fund	05	127,368			U
172	0303467N	SENSR Spectrum Pipeline SRF	05	855			U
173	0303567N	Non-SENSR Spectrum Pipeline SRF	05	1,652			U
174	0304785N	ISR & Info Operations	05	87,099	107,964	136,140	U
175	0306250M	Cyber Operations Technology Development	05	19,109	25,098	26,318	U
System Development & Demonstration				6,042,127	5,875,510	5,910,089	
176	0604256N	Threat Simulator Development	06	60,968	22,043	20,862	U
177	0604258N	Target Systems Development	06	11,734	10,095	12,113	U
178	0604759N	Major T&E Investment	06	108,129	105,195	84,617	U
179	0605152N	Studies and Analysis Support - Navy	06	3,913	3,089	3,108	U
180	0605154N	Center for Naval Analyses	06	46,185	43,352	38,590	U
181	0605285N	Next Generation Fighter	06	7,006			U
182	0605502N	Small Business Innovative Research	06	526,969			U

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183	0605804N	Technical Information Services	06	1,461	928	934	U
184	0605853N	Management, Technical & International Support	06	112,085	103,987	93,966	U
185	0605856N	Strategic Technical Support	06	3,617	3,813	3,538	U
186	0605863N	RDT&E Ship and Aircraft Support	06	92,596	103,630	135,149	U
187	0605864N	Test and Evaluation Support	06	522,497	418,873	429,277	U
188	0605865N	Operational Test and Evaluation Capability	06	24,654	26,092	24,872	U
189	0605866N	Navy Space and Electronic Warfare (SEW) Support	06	12,217	15,695	17,653	U
190	0605867N	SEW Surveillance/Reconnaissance Support	06	8,402	8,559	8,065	U
191	0605873M	Marine Corps Program Wide Support	06	33,809	37,749	47,042	U
192	0605898N	Management HQ - R&D	06	38,921	41,091	35,614	U
193	0606355N	Warfare Innovation Management	06	27,668	33,058	38,958	U
194	0305327N	Insider Threat	06	2,592	2,293	2,581	U
195	0902498N	Management Headquarters (Departmental Support Activities)	06	1,456	1,536	1,747	U
196	0909999N	Financing for Cancelled Account Adjustments	06	644			U
		Management Support		1,647,523	981,078	998,686	
198	0604227N	HARPOON Modifications	07	2,302	697		U
199	0604840M	F-35 C2D2	07	380,232	349,879	515,746	U
200	0604840N	F-35 C2D2	07	342,860	370,235	481,962	U
201	0605520M	MARINE CORPS AIR DEFENSE WEAPONS SYSTEMS (MARFORRES)	07		124,681	65,381	U
202	0607658N	Cooperative Engagement Capability (CEC)	07	122,817	133,962	176,486	U
203	0101221N	Strategic Sub & Weapons System Support	07	121,122	124,990	177,098	U

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204	0101224N	SSBN Security Technology Program	07	42,104	45,970	45,775	U
205	0101226N	Submarine Acoustic Warfare Development	07	6,548	37,693	64,752	U
206	0101402N	Navy Strategic Communications	07	29,863	41,953	35,451	U
207	0204136N	F/A-18 Squadrons	07	182,014	185,084	189,224	U
208	0204228N	Surface Support	07	33,248	33,333	13,733	U
209	0204229N	Tomahawk and Tomahawk Mission Planning Center (TMPC)	07	256,668	199,673	132,181	U
210	0204311N	Integrated Surveillance System	07	103,371	112,574	84,276	U
211	0204313N	Ship-Towed Array Surveillance Systems	07	14,449	10,825	6,261	U
212	0204413N	Amphibious Tactical Support Units (Displacement Craft)	07	5,577	1,706	1,657	U
213	0204460M	Ground/Air Task Oriented Radar (G/ATOR)	07	30,669	22,205	21,367	U
214	0204571N	Consolidated Training Systems Development	07	129,251	75,508	56,741	U
215	0204575N	Electronic Warfare (EW) Readiness Support	07	68,393	42,702	62,006	U
216	0205601N	Anti-Radiation Missile Improvement	07	129,863	161,166	133,520	U
217	0205620N	Surface ASW Combat System Integration	07	28,439	29,217	28,804	U
218	0205632N	MK-48 ADCAP	07	69,800	70,542	114,492	U
219	0205633N	Aviation Improvements	07	118,010	126,371	132,486	U
220	0205675N	Operational Nuclear Power Systems	07	106,192	110,313	113,760	U
221	0206313M	Marine Corps Communications Systems	07	171,400	76,610	89,897	U
222	0206335M	Common Aviation Command and Control System (CAC2S)	07	4,484	4,406	9,324	U
223	0206623M	Marine Corps Ground Combat/Supporting Arms Systems	07	49,264	54,871	108,235	U
224	0206624M	Marine Corps Combat Services Support	07	28,892	10,421	13,185	U

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225	0206625M	USMC Intelligence/Electronic Warfare Systems (MIP)	07	30,990	29,983	37,695	U
226	0206629M	Amphibious Assault Vehicle	07	5,324	6,469	7,551	U
227	0207161N	Tactical AIM Missiles	07	19,136	5,859	23,881	U
228	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	33,289	40,253	32,564	U
229	0208043N	Planning and Decision Aid System (PDAS)	07			3,101	U
233	0303109N	Satellite Communications (SPACE)	07	29,932	50,978		U
234	0303138N	Afloat Networks	07	21,996	34,630	30,890	U
235	0303140N	Information Systems Security Program	07	43,866	38,814	33,311	U
236	0305192N	Military Intelligence Program (MIP) Activities	07	8,913	6,137	7,514	U
237	0305204N	Tactical Unmanned Aerial Vehicles	07	9,451	7,108	9,837	U
238	0305205N	UAS Integration and Interoperability	07	37,740	61,235	9,797	U
239	0305208M	Distributed Common Ground/Surface Systems	07	20,738	21,500	38,800	U
240	0305220N	MQ-4C Triton	07	11,784	11,120	13,029	U
241	0305231N	MQ-8 UAV	07	29,613	28,968	26,543	U
242	0305232M	RQ-11 UAV	07	509	537	533	U
243	0305234N	Small (Level 0) Tactical UAS (STUASL0)	07	9,410	8,773	1,772	U
244	0305239M	RQ-21A	07	10,914	10,853		U
245	0305241N	Multi-Intelligence Sensor Development	07	64,912	60,211	59,252	U
246	0305242M	Unmanned Aerial Systems (UAS) Payloads (MIP)	07	10,004	5,000	9,274	U
247	0305251N	Cyberspace Operations Forces and Force Support	07		34,792	36,378	U
248	0305421N	RQ-4 Modernization	07	195,445	129,164	134,323	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Department of the Navy
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

Appropriation: 1319N Research, Development, Test & Eval, Navy

Line	Program Element	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
No	Number						c
249	0307577N	Intelligence Mission Data (IMD)	07			907	U
250	0308601N	Modeling and Simulation Support	07	11,672	8,683	9,772	U
251	0702207N	Depot Maintenance (Non-IF)	07	46,489	43,090	36,880	U
252	0708730N	Maritime Technology (MARITECH)	07	26,186	6,667	3,329	U
253	1203109N	Satellite Communications (SPACE)	07	14,407	35,956		U
9999	9999999999	Classified Programs		1,850,509	1,817,987	1,872,586	U
		Operational Systems Development		5,121,061	5,062,354	5,313,319	
254	0608013N	Risk management Information - Software Pilot Program	08		13,924	13,703	U
255	0608113N	Navy Next Generation Enterprise Network (NGEN) - Software Pilot program	08			955,151	U
256	0608231N	Maritime Tactical Command and Control (MTC2) - Software Pilot Program	08		10,868	14,855	U
		Software and Digital Technology Pilot Programs			24,792	983,709	
		Total Research, Development, Test & Eval, Navy		20,585,470	20,138,391	22,639,362	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Department of the Air Force
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 (Dollars in Thousands)

May 2021

<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Basic Research	517,217	536,314	490,706
Applied Research	1,687,989	1,560,836	1,312,490
Advanced Technology Development	956,409	1,000,257	733,986
Advanced Component Development & Prototypes	8,137,663	7,428,252	8,937,224
System Development & Demonstration	6,521,351	2,449,238	2,570,315
Management Support	3,911,806	2,879,982	3,015,788
Operational Systems Development	24,069,528	20,505,963	21,705,541
Software and Digital Technology Pilot Programs			418,278
Total Research, Development, Test & Evaluation	45,801,963	36,360,842	39,184,328
 <u>Summary Recap of FYDP Programs</u>			
Strategic Forces	783,840	1,000,079	1,173,877
General Purpose Forces	3,638,050	3,811,478	4,488,007
Intelligence and Communications	1,187,219	1,127,211	1,013,665
Mobility Forces	883,396	1,010,820	844,787
Research and Development	15,377,077	14,184,508	15,653,055
Central Supply and Maintenance	35,898	113,472	86,648
Training Medical and Other	8,302	7,061	10,944
Administration and Associated Activities	87,640	69,398	35,212
Support of Other Nations	3,922	3,592	2,420

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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May 2021

<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Space	6,114,555	9,974	6,740
Classified Programs	17,682,064	15,023,249	15,868,973
Total Research, Development, Test & Evaluation	45,801,963	36,360,842	39,184,328

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Department of the Air Force
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May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
1	0601102F	Defense Research Sciences	01	331,102	324,755	328,303	U
2	0601103F	University Research Initiatives	01	172,379	196,502	162,403	U
3	0601108F	High Energy Laser Research Initiatives	01	13,736	15,057		U
Basic Research				517,217	536,314	490,706	
4	0602020F	Future AF Capabilities Applied Research	02		79,854	79,901	U
5	0602102F	Materials	02	212,551	237,847	113,460	U
6	0602201F	Aerospace Vehicle Technologies	02	148,176	164,426	163,032	U
7	0602202F	Human Effectiveness Applied Research	02	128,434	133,877	136,273	U
8	0602203F	Aerospace Propulsion	02	214,814	201,048	174,683	U
9	0602204F	Aerospace Sensors	02	210,940	232,876	193,514	U
10	0602212F	Defense Laboratories R&D Projects (10 U.S.C, Sec 2358)	02	100,519			U
11	0602298F	Science and Technology Management - Major Headquarters Activities	02	8,346	8,910	8,891	U
12	0602602F	Conventional Munitions	02	132,090	127,193	151,757	U
13	0602605F	Directed Energy Technology	02	114,297	130,375	121,869	U
14	0602788F	Dominant Information Sciences and Methods	02	214,376	215,275	169,110	U
15	0602890F	High Energy Laser Research	02	47,462	29,155		U
16	1206601F	Space Technology	02	155,984			U
Applied Research				1,687,989	1,560,836	1,312,490	
17	0603032F	Future AF Integrated Technology Demos	03		147,350	131,643	U
18	0603112F	Advanced Materials for Weapon Systems	03	58,657	60,059	31,905	U
19	0603199F	Sustainment Science and Technology (S&T)	03	14,376	16,902	21,057	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
20	0603203F	Advanced Aerospace Sensors	03	40,116	35,274	44,730	U
21	0603211F	Aerospace Technology Dev/Demo	03	95,730	62,117	70,486	U
22	0603216F	Aerospace Propulsion and Power Technology	03	161,352	144,229	75,273	U
23	0603270F	Electronic Combat Technology	03	45,882	35,841	46,591	U
24	0603401F	Advanced Spacecraft Technology	03	75,405	87,608		U
25	0603444F	Maui Space Surveillance System (MSSS)	03	11,343	12,068		U
26	0603456F	Human Effectiveness Advanced Technology Development	03	32,827	31,667	24,589	U
27	0603601F	Conventional Weapons Technology	03	202,048	133,900	157,423	U
28	0603605F	Advanced Weapons Technology	03	32,578	31,388	28,258	U
29	0603680F	Manufacturing Technology Program	03	133,059	138,748	45,259	U
30	0603788F	Battlespace Knowledge Development and Demonstration	03	53,036	63,106	56,772	U
Advanced Technology Development				956,409	1,000,257	733,986	
31	0603260F	Intelligence Advanced Development	04	5,672	4,312	5,795	U
32	0603742F	Combat Identification Technology	04	31,367	26,348	21,939	U
33	0603790F	NATO Research and Development	04	4,774	3,640	4,114	U
34	0603851F	Intercontinental Ballistic Missile - Dem/Val	04	29,881	32,899	49,621	U
35	0603859F	Pollution Prevention - Dem/Val	04	2,890			U
36	0604001F	NC3 Advanced Concepts	04			6,900	U
37	0604002F	Air Force Weather Services Research	04	747	2,234	986	U
38	0604003F	Advanced Battle Management System (ABMS)	04	139,203	158,492	203,849	U
39	0604004F	Advanced Engine Development	04	647,850	665,280	123,712	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
40	0604006F	Architecture Initiatives	04			82,438	U
41	0604015F	Long Range Strike - Bomber	04	2,878,798	2,843,214	2,872,624	U
42	0604032F	Directed Energy Prototyping	04	42,390	19,429	10,820	U
43	0604033F	Hypersonics Prototyping	04	566,935	386,157	438,378	U
44	0604201F	PNT Resiliency, Mods, and Improvements	04	120,267		39,742	U
45	0604257F	Advanced Technology and Sensors	04	23,145	24,702	23,745	U
46	0604288F	Survivable Airborne Operations Center	04	12,205	59,390	133,253	U
47	0604317F	Technology Transfer	04	37,269	16,980	15,768	U
48	0604327F	Hard and Deeply Buried Target Defeat System (HDBTDS) Program	04	111,506	52,825	15,886	U
49	0604414F	Cyber Resiliency of Weapon Systems-ACS	04	54,676	69,656	71,229	U
50	0604776F	Deployment & Distribution Enterprise R&D	04	27,618	25,788	40,103	U
51	0604858F	Tech Transition Program	04	322,793	305,943	343,545	U
52	0605230F	Ground Based Strategic Deterrent	04	538,643	1,447,113	2,553,541	U
53	0207100F	Light Attack Armed Reconnaissance (LAAR) Squadrons	04	1,982			U
54	0207110F	Next Generation Air Dominance	04	872,539	902,440	1,524,667	U
55	0207455F	Three Dimensional Long-Range Radar (3DELRR)	04	22,469	19,321		U
56	0207522F	Airbase Air Defense Systems (ABADS)	04		8,721	10,905	U
57	0208030F	War Reserve Materiel - Ammunition	04			3,943	U
58	0208099F	Unified Platform (UP)	04	9,634	5,979		U
59	0305236F	Common Data Link Executive Agent (CDL EA)	04	36,893	39,221	43,881	U
60	0305251F	Cyberspace Operations Forces and Force Support	04		20,000		U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
61	0305601F	Mission Partner Environments	04	8,237	11,409	16,420	U
62	0306250F	Cyber Operations Technology Support	04	194,958	234,395	242,499	U
63	0306415F	Enabled Cyber Activities	04	16,024	10,541	16,578	U
64	0401310F	C-32 Executive Transport Recapitalization	04		6,197		U
65	0708051F	Rapid Sustainment Modernization (RSM)	04	5,802	19,964		U
66	0901410F	Contracting Information Technology System	04	22,266	5,662	20,343	U
67	1203164F	NAVSTAR Global Positioning System (User Equipment) (SPACE)	04	308,215			U
68	1203710F	EO/IR Weather Systems	04	121,723			U
69	1206422F	Weather System Follow-on	04	195,495			U
70	1206425F	Space Situation Awareness Systems	04	29,013			U
71	1206427F	Space Systems Prototype Transitions (SSPT)	04	137,470			U
72	1206438F	Space Control Technology	04	56,270			U
73	1206730F	Space Security and Defense Program	04	56,385			U
74	1206760F	Protected Tactical Enterprise Service (PTES)	04	101,583			U
75	1206761F	Protected Tactical Service (PTS)	04	154,237			U
76	1206855F	Evolved Strategic SATCOM (ESS)	04	161,882			U
77	1206857F	Space Rapid Capabilities Office	04	25,957			U
		Advanced Component Development & Prototypes		8,137,663	7,428,252	8,937,224	
78	0604200F	Future Advanced Weapon Analysis & Programs	05	4,993	22,894	23,499	U
79	0604201F	PNT Resiliency, Mods, and Improvements	05	202,354	38,494	167,520	U
80	0604222F	Nuclear Weapons Support	05	4,249	26,057	30,050	U

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
81	0604270F	Electronic Warfare Development	05	1,994	2,094	2,110	U
82	0604281F	Tactical Data Networks Enterprise	05	182,691	121,188	169,836	U
83	0604287F	Physical Security Equipment	05	11,122	6,740	8,469	U
84	0604329F	Small Diameter Bomb (SDB) - EMD	05	44,530			U
85	0604602F	Armament/Ordnance Development	05	29,505	23,034	9,047	U
86	0604604F	Submunitions	05	3,043	3,085	2,954	U
87	0604617F	Agile Combat Support	05	31,133	18,980	16,603	U
88	0604618F	Joint Direct Attack Munition	05		6,806		U
89	0604706F	Life Support Systems	05	14,137	28,608	25,437	U
90	0604735F	Combat Training Ranges	05	52,678	23,854	23,980	U
91	0604800F	F-35 - EMD	05	7,420	5,413		U
92	0604932F	Long Range Standoff Weapon	05	701,866	384,727	609,042	U
93	0604933F	ICBM Fuze Modernization	05	155,476	156,693	129,709	U
94	0605030F	Joint Tactical Network Center (JTNC)	05	2,326			U
95	0605056F	Open Architecture Management	05	28,902	30,491	37,109	U
96	0605221F	KC-46	05	52,623		1	U
97	0605223F	Advanced Pilot Training	05	328,414	248,216	188,898	U
98	0605229F	HH-60W	05	238,457	63,054	66,355	U
99	0605931F	B-2 Defensive Management System	05	224,358			U
100	0101125F	Nuclear Weapons Modernization	05	10,157	9,665		U
101	0207171F	F-15 EPAWSS	05	46,040	170,368	112,012	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
102	0207328F	Stand In Attack Weapon	05	151,534	150,371	166,570	U
103	0207701F	Full Combat Mission Training	05	11,238	9,405	7,064	U
104	0305176F	Combat Survivor Evader Locator	05		971		U
105	0401221F	KC-46A Tanker Squadrons	05		76,023	73,458	U
106	0401310F	C-32 Executive Transport Recapitalization	05	62			U
107	0401319F	VC-25B	05	730,183	799,429	680,665	U
108	0701212F	Automated Test Systems	05	2,685	10,654	15,445	U
109	0804772F	Training Developments	05		4,471	4,482	U
110	0901299F	AF A1 Systems	05		7,453		U
111	1203176F	Combat Survivor Evader Locator	05	1,949			U
112	1203269F	GPS III Follow-On (GPS IIIF)	05	427,210			U
113	1203940F	Space Situation Awareness Operations	05	51,749			U
114	1206421F	Counterspace Systems	05	26,246			U
115	1206422F	Weather System Follow-on	05	2,155			U
116	1206425F	Space Situation Awareness Systems	05	349,612			U
117	1206431F	Advanced EHF MILSATCOM (SPACE)	05	111,023			U
118	1206432F	Polar MILSATCOM (SPACE)	05	385,665			U
119	1206433F	Wideband Global SATCOM (SPACE)	05	1,855			U
120	1206441F	Space Based Infrared System (SBIRS) High EMD	05	1			U
121	1206442F	Next Generation OPIR	05	1,470,278			U
122	1206445F	Commercial SATCOM (COMSATCOM) Integration	05	4,817			U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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May 2021

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
123	1206853F	National Security Space Launch Program (SPACE) - EMD	05	414,621			U
System Development & Demonstration				6,521,351	2,449,238	2,570,315	
124	0604256F	Threat Simulator Development	06	58,906	57,620	41,909	U
125	0604759F	Major T&E Investment	06	106,014	208,299	130,766	U
126	0605101F	RAND Project Air Force	06	33,968	35,738	36,017	U
127	0605502F	Small Business Innovation Research	06	884,237			U
128	0605712F	Initial Operational Test & Evaluation	06	13,288	13,532	12,582	U
129	0605807F	Test and Evaluation Support	06	795,626	761,307	811,032	U
130	0605826F	Acq Workforce- Global Power	06	256,906	270,781		U
131	0605827F	Acq Workforce- Global Vig & Combat Sys	06	264,506	254,768	243,796	U
132	0605828F	Acq Workforce- Global Reach	06	159,011	157,964	435,930	U
133	0605829F	Acq Workforce- Cyber, Network, & Bus Sys	06	241,623	254,838	435,274	U
134	0605830F	Acq Workforce- Global Battle Mgmt	06	166,552	177,811		U
135	0605831F	Acq Workforce- Capability Integration	06	239,728	219,467	243,806	U
136	0605832F	Acq Workforce- Advanced Prgm Technology	06	38,517	58,477	103,041	U
137	0605833F	Acq Workforce- Nuclear Systems	06	135,770	179,318	226,055	U
138	0605898F	Management HQ - R&D	06	5,932	5,724	4,079	U
139	0605976F	Facilities Restoration and Modernization - Test and Evaluation Support	06	88,445	70,856	70,788	U
140	0605978F	Facilities Sustainment - Test and Evaluation Support	06	29,424	29,826	30,057	U
141	0606017F	Requirements Analysis and Maturation	06	81,734	68,256	85,799	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
142	0606398F	Management HQ - T&E	06	6,213	5,774	6,163	U
143	0303166F	Support to Information Operations (IO) Capabilities	06			537	U
144	0303255F	Command, Control, Communication, and Computers (C4) - STRATCOM	06		21,525	25,340	U
145	0308602F	ENTEPRISE INFORMATION SERVICES (EIS)	06	10,239	9,865	28,720	U
146	0702806F	Acquisition and Management Support	06	5,696	13,384	37,211	U
147	0804731F	General Skill Training	06	6,238	1,260	1,506	U
148	0804772F	Training Developments	06			2,957	U
149	0909999F	Financing for Cancelled Account Adjustments	06	4,703			U
150	1001004F	International Activities	06	3,922	3,592	2,420	U
151	1206116F	Space Test and Training Range Development	06	14,515			U
152	1206392F	ACQ Workforce - Space & Missile Systems	06	187,110			U
153	1206398F	Space & Missile Systems Center - MHA	06	10,170			U
154	1206860F	Rocket Systems Launch Program (SPACE)	06	15,613			U
155	1206862F	Tactically Responsive Launch	06	21,965			U
156	1206864F	Space Test Program (STP)	06	25,235		3	U
		Management Support		3,911,806	2,879,982	3,015,788	
157	0604233F	Specialized Undergraduate Flight Training	07	2,492	11,556	5,509	U
158	0604445F	Wide Area Surveillance	07	19,268		2,760	U
159	0604776F	Deployment & Distribution Enterprise R&D	07	870	499		U
160	0604840F	F-35 C2D2	07	624,973	695,869	985,404	U
161	0605018F	AF Integrated Personnel and Pay System (AF-IPPS)	07	39,275	26,986	22,010	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
162	0605024F	Anti-Tamper Technology Executive Agency	07	46,934	47,107	51,492	U
163	0605117F	Foreign Materiel Acquisition and Exploitation	07	68,397	71,099	71,391	U
164	0605278F	HC/MC-130 Recap RDT&E	07	16,523	19,491	46,796	U
165	0606018F	NC3 Integration	07	25,414	26,308	26,532	U
166	0606942F	Assessments and Evaluations Cyber Vulnerabilities	07		3,000		U
167	0101113F	B-52 Squadrons	07	308,048	482,741	715,811	U
168	0101122F	Air-Launched Cruise Missile (ALCM)	07	10,116	1,430	453	U
169	0101126F	B-1B Squadrons	07	1,000	15,737	29,127	U
170	0101127F	B-2 Squadrons	07	85,742	181,068	144,047	U
171	0101213F	Minuteman Squadrons	07	90,595	89,306	113,622	U
172	0101316F	Worldwide Joint Strategic Communications	07	25,312	31,166	15,202	U
173	0101324F	Integrated Strategic Planning & Analysis Network	07	23,542	24,227		U
174	0101328F	ICBM Reentry Vehicles	07	63,484	112,547	96,313	U
176	0102110F	UH-1N Replacement Program	07	165,844	41,388	16,132	U
177	0102326F	Region/Sector Operation Control Center Modernization Program	07		10,704	771	U
178	0102412F	North Warning System (NWS)	07		100	99	U
179	0102417F	Over-the-Horizon Backscatter Radar	07			42,300	U
180	0202834F	Vehicles and Support Equipment - General	07			5,889	U
181	0205219F	MQ-9 UAV	07	122,919	106,885	85,135	U
182	0205671F	Joint Counter RCIED Electronic Warfare	07	3,854	4,080	3,111	U
183	0207040F	Multi-Platform Electronic Warfare Equipment	07			36,607	U

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
184	0207131F	A-10 Squadrons	07	25,533	24,490	39,224	U
185	0207133F	F-16 Squadrons	07	179,655	202,498	224,573	U
186	0207134F	F-15E Squadrons	07	640,124	288,381	239,616	U
187	0207136F	Manned Destructive Suppression	07	15,044	14,933	15,855	U
188	0207138F	F-22A Squadrons	07	537,232	663,825	647,296	U
189	0207142F	F-35 Squadrons	07	94,731	114,621	69,365	U
190	0207146F	F-15EX	07		159,470	118,126	U
191	0207161F	Tactical AIM Missiles	07	10,012	19,382	32,974	U
192	0207163F	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	53,681	51,705	51,288	U
193	0207227F	Combat Rescue - Pararescue	07	281	668	852	U
194	0207247F	AF TENCAP	07	22,115	18,820	23,685	U
195	0207249F	Precision Attack Systems Procurement	07	10,395	9,244	12,083	U
196	0207253F	Compass Call	07	30,687	15,825	91,266	U
197	0207268F	Aircraft Engine Component Improvement Program	07	108,446	125,666	103,715	U
198	0207325F	Joint Air-to-Surface Standoff Missile (JASSM)	07	73,510	70,663	117,325	U
199	0207327F	Small Diameter Bomb (SDB)	07		20,780	27,109	U
200	0207410F	Air & Space Operations Center (AOC)	07	110,651	51,094	3	U
201	0207412F	Control and Reporting Center (CRC)	07	6,642	16,012	9,875	U
202	0207417F	Airborne Warning and Control System (AWACS)	07	67,341	123,925	171,014	U
203	0207418F	AFSPECWAR - TACP	07	2,372	4,215	4,598	U
205	0207431F	Combat Air Intelligence System Activities	07	13,547	16,534	21,863	U

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<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
206	0207438F	Theater Battle Management (TBM) C4I	07		7,844	7,905	U
207	0207439F	Electronic Warfare Integrated Reprogramming (EWIR)	07			15,000	U
208	0207444F	Tactical Air Control Party-Mod	07	4,019	12,882	13,081	U
209	0207452F	DCAPES	07	19,180	14,789	4,305	U
210	0207521F	Air Force Calibration Programs	07		1,966	1,984	U
211	0207522F	Airbase Air Defense Systems (ABADS)	07			7,392	U
212	0207573F	National Technical Nuclear Forensics	07	1,723	395	1,971	U
213	0207590F	Seek Eagle	07	28,175	29,626	30,539	U
214	0207601F	USAF Modeling and Simulation	07	15,243	17,634	17,110	U
215	0207605F	Wargaming and Simulation Centers	07	4,158	6,341	7,535	U
216	0207610F	Battlefield Abn Comm Node (BACN)	07	25,960	6,815	32,008	U
217	0207697F	Distributed Training and Exercises	07	4,146	3,384	4,007	U
218	0208006F	Mission Planning Systems	07	69,232	91,601	92,557	U
219	0208007F	Tactical Deception	07	7,173		489	U
220	0208064F	OPERATIONAL HQ - CYBER	07	7,335	5,493	2,115	U
221	0208087F	Distributed Cyber Warfare Operations	07	67,725	68,154	72,487	U
222	0208088F	AF Defensive Cyberspace Operations	07	37,309	30,108	18,449	U
223	0208097F	Joint Cyber Command and Control (JCC2)	07	11,306	38,410	79,079	U
224	0208099F	Unified Platform (UP)	07	90,002	84,491	101,893	U
228	0208288F	Intel Data Applications	07	1,156	1,224	493	U
229	0301025F	GeoBase	07	2,623	2,762	2,782	U

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230	0301112F	Nuclear Planning and Execution System (NPES)	07	42,719	32,699		U
231	0301113F	Cyber Security Intelligence Support	07			5,224	U
238	0301401F	Air Force Space and Cyber Non-Traditional ISR for Battlespace Awareness	07	3,575	1,382	2,463	U
239	0302015F	E-4B National Airborne Operations Center (NAOC)	07	58,059	3,462	26,331	U
240	0303131F	Minimum Essential Emergency Communications Network (MEECN)	07	13,132	44,640	20,700	U
241	0303133F	High Frequency Radio Systems	07	15,689			U
242	0303140F	Information Systems Security Program	07	26,732	10,351	8,032	U
243	0303142F	Global Force Management - Data Initiative	07	2,129	1,344	452	U
244	0303248F	All Domain Common Platform	07			64,000	U
246	0304260F	Airborne SIGINT Enterprise	07	85,157	127,832	97,546	U
247	0304310F	Commercial Economic Analysis	07	3,305	4,035	3,770	U
250	0305015F	C2 Air Operations Suite - C2 Info Services	07	9,022			U
251	0305020F	CCMD Intelligence Information Technology	07	1,121	1,646	1,663	U
252	0305022F	ISR Modernization & Automation Dvmt (IMAD)	07	19,000	19,230	18,888	U
253	0305099F	Global Air Traffic Management (GATM)	07	4,404	4,637	4,672	U
254	0305103F	Cyber Security Initiative	07		383	290	U
255	0305111F	Weather Service	07	34,292	36,573	26,228	U
256	0305114F	Air Traffic Control, Approach, and Landing System (ATCALs)	07	8,394	6,541	8,749	U
257	0305116F	Aerial Targets	07	8,761	448	1,528	U
260	0305128F	Security and Investigative Activities	07	409	431	223	U

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261	0305145F	Arms Control Implementation	07	40,177			U
262	0305146F	Defense Joint Counterintelligence Activities	07	6,858	4,881	8,733	U
264	0305179F	Integrated Broadcast Service (IBS)	07	8,728	8,848	21,335	U
265	0305202F	Dragon U-2	07	36,389	36,593	17,146	U
266	0305205F	Endurance Unmanned Aerial Vehicles	07	15,000			U
267	0305206F	Airborne Reconnaissance Systems	07	137,157	123,287	71,791	U
268	0305207F	Manned Reconnaissance Systems	07	11,787	14,684	14,799	U
269	0305208F	Distributed Common Ground/Surface Systems	07	25,009	14,126	24,568	U
270	0305220F	RQ-4 UAV	07	191,733	163,291	83,124	U
271	0305221F	Network-Centric Collaborative Targeting	07	10,757	15,022	17,224	U
272	0305238F	NATO AGS	07	32,567	36,664	19,473	U
273	0305240F	Support to DCGS Enterprise	07	37,774	33,486	40,421	U
274	0305600F	International Intelligence Technology and Architectures	07	13,515	17,283	14,473	U
275	0305881F	Rapid Cyber Acquisition	07	4,223	4,254	4,326	U
276	0305984F	Personnel Recovery Command & Ctrl (PRC2)	07	2,057	2,203	2,567	U
277	0307577F	Intelligence Mission Data (IMD)	07	8,614	6,266	6,169	U
278	0401115F	C-130 Airlift Squadron	07	89,532	41,896	9,752	U
279	0401119F	C-5 Airlift Squadrons (IF)	07	9,883	30,560	17,507	U
280	0401130F	C-17 Aircraft (IF)	07	20,653	9,935	16,360	U
281	0401132F	C-130J Program	07	6,919	10,656	14,112	U
282	0401134F	Large Aircraft IR Countermeasures (LAIRCM)	07	5,247	5,497	5,540	U

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<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
283	0401218F	KC-135s	07		4,583	3,564	U
284	0401219F	KC-10s	07	19			U
285	0401318F	CV-22	07	17,355	18,385	17,189	U
286	0408011F	Special Tactics / Combat Control	07	3,543	7,659	6,640	U
287	0702207F	Depot Maintenance (Non-IF)	07	1,821			U
288	0708055F	Maintenance, Repair & Overhaul System	07	9,239	24,468	26,921	U
289	0708610F	Logistics Information Technology (LOGIT)	07	10,133	33,186	7,071	U
290	0708611F	Support Systems Development	07	522	11,816		U
291	0804743F	Other Flight Training	07	2,054	1,330	1,999	U
292	0808716F	Other Personnel Activities	07	10			U
293	0901202F	Joint Personnel Recovery Agency	07	1,985	2,088	1,841	U
294	0901218F	Civilian Compensation Program	07	3,809	3,862	3,560	U
295	0901220F	Personnel Administration	07	4,265	1,581	3,368	U
296	0901226F	Air Force Studies and Analysis Agency	07	1,390	1,195	1,248	U
297	0901538F	Financial Management Information Systems Development	07	8,983	6,993	4,852	U
298	0901554F	Defense Enterprise Acntng and Mgt Sys (DEAMS)	07	40,239	40,564		U
299	1201017F	Global Sensor Integrated on Network (GSIN)	07	3,532			U
300	1201921F	Service Support to STRATCOM - Space Activities	07	952	991		U
301	1202140F	Service Support to SPACECOM Activities	07	11,429	8,983	6,737	U
302	1203001F	Family of Advanced BLoS Terminals (FAB-T)	07	173,903			U
303	1203110F	Satellite Control Network (SPACE)	07	54,850			U

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Sec
305	1203173F	Space and Missile Test and Evaluation Center	07	5,322			U
306	1203174F	Space Innovation, Integration and Rapid Technology Development	07	36,890			U
307	1203182F	Spacelift Range System (SPACE)	07	20,128			U
308	1203265F	GPS III Space Segment	07	47,178			U
309	1203400F	Space Superiority Intelligence	07	14,428			U
310	1203614F	JSpOC Mission System	07	82,044			U
311	1203620F	National Space Defense Center	07	2,649			U
312	1203873F	Ballistic Missile Defense Radars	07	15,335			U
313	1203913F	NUDET Detection System (SPACE)	07	49,300			U
314	1203940F	Space Situation Awareness Operations	07	16,228			U
315	1206423F	Global Positioning System III - Operational Control Segment	07	439,560			U
316	1206770F	Enterprise Ground Services	07	114,824			U
9999	9999999999	Classified Programs		17,682,064	15,023,249	15,868,973	U
		Operational Systems Development		24,069,528	20,505,963	21,705,541	
317	0608158F	Strategic Mission Planning and Execution System - Software Pilot Program	08			96,100	U
318	0608410F	Air & Space Operations Center (AOC) - Software Pilot Program	08			186,915	U
319	0608920F	Defense Enterprise Accounting and Management System (DEAMS) - Software Pilot Pro	08			135,263	U
		Software and Digital Technology Pilot Programs				418,278	
		Total Research, Development, Test & Eval, AF		45,801,963	36,360,842	39,184,328	

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<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Applied Research		216,874	175,796
Advanced Technology Development			76,653
Advanced Component Development & Prototypes		1,366,409	1,579,433
System Development & Demonstration		3,748,516	3,339,325
Management Support		273,510	355,642
Operational System Development		4,785,018	5,585,009
Software & Digital Technology Pilot Programs		149,742	154,529
Total Research, Development, Test & Evaluation		10,540,069	11,266,387
 <u>Summary Recap of FYDP Programs</u>			
Space		6,882,703	6,791,578
Classified Programs		3,657,366	4,474,809
Total Research, Development, Test & Evaluation		10,540,069	11,266,387

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Appropriation: 3620F RDTE, Space Force

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
1	1206601SF	Space Technology	02		216,874	175,796	U
		Applied Research			216,874	175,796	
2	1206616SF	Space Advanced Technology Development/Demo	03			76,653	U
		Advanced Technology Development				76,653	
3	1203164SF	NAVSTAR Global Positioning System (User Equipment) (SPACE)	04		380,704	434,194	U
4	1203710SF	EO/IR Weather Systems	04		131,000	162,274	U
5	1203905SF	Space System Support	04			37,000	U
6	1206422SF	Weather System Follow-on	04		83,384	61,521	U
7	1206425SF	Space Situation Awareness Systems	04		33,359	123,262	U
8	1206427SF	Space Systems Prototype Transitions (SSPT)	04		151,595	101,851	U
9	1206438SF	Space Control Technology	04		40,575	32,931	U
10	1206730SF	Space Security and Defense Program	04		56,311	56,546	U
11	1206760SF	Protected Tactical Enterprise Service (PTES)	04		109,390	100,320	U
12	1206761SF	Protected Tactical Service (PTS)	04		200,178	243,285	U
13	1206855SF	Evolved Strategic SATCOM (ESS)	04		71,395	160,056	U
14	1206857SF	Space Rapid Capabilities Office	04		108,518	66,193	U
		Advanced Component Development & Prototypes			1,366,409	1,579,433	
15	1203269SF	GPS III Follow-On (GPS IIIIF)	05		285,496	264,265	U
16	1203940SF	Space Situation Awareness Operations	05		36,897	56,279	U
17	1206421SF	Counterspace Systems	05		57,189	38,063	U
18	1206422SF	Weather System Follow-on	05		2,526	1,438	U

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Appropriation: 3620F RDTE, Space Force

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
19	1206425SF	Space Situation Awareness Systems	05		173,074	127,026	U
20	1206431SF	Advanced EHF MILSATCOM (SPACE)	05		90,045	28,218	U
21	1206432SF	Polar MILSATCOM (SPACE)	05		190,235	127,870	U
22	1206442SF	Next Generation OPIR	05		2,318,864	2,451,256	U
23	1206445SF	Commercial SATCOM (COMSATCOM) Integration	05		43,212	23,400	U
24	1206853SF	National Security Space Launch Program (SPACE) - EMD	05		550,978	221,510	U
System Development & Demonstration					3,748,516	3,339,325	
25	1206116SF	Space Test and Training Range Development	06		20,281	19,319	U
26	1206392SF	ACQ Workforce - Space & Missile Systems	06		183,930	214,051	U
27	1206398SF	Space & Missile Systems Center - MHA	06		9,765	12,119	U
28	1206759SF	Major T&E Investment - Space	06			71,503	U
29	1206860SF	Rocket Systems Launch Program (SPACE)	06		17,993	17,769	U
30	1206862SF	Tactically Responsive Launch	06		15,000		U
31	1206864SF	Space Test Program (STP)	06		26,541	20,881	U
Management Support					273,510	355,642	
33	1201017SF	Global Sensor Integrated on Network (GSIN)	07		5,597	4,731	U
34	1203001SF	Family of Advanced BLoS Terminals (FAB-T)	07		232,229	156,788	U
35	1203040SF	DCO-Space	07			2,150	U
36	1203109SF	Narrowband Satellite Communications	07			112,012	U
37	1203110SF	Satellite Control Network (SPACE)	07		60,480	36,810	U
38	1203165SF	NAVSTAR Global Positioning System (Space and Control Segments)	07		1,984	1,966	U

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Department of the Air Force
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Appropriation: 3620F RDTE, Space Force

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
39	1203173SF	Space and Missile Test and Evaluation Center	07		4,397	1,699	U
40	1203174SF	Space Innovation, Integration and Rapid Technology Development	07		38,746	18,054	U
41	1203182SF	Spacelift Range System (SPACE)	07		21,020	11,115	U
42	1203265SF	GPS III Space Segment	07		10,777	7,207	U
43	1203330SF	Space Superiority ISR	07		16,810	18,109	U
44	1203620SF	National Space Defense Center	07		2,687	1,280	U
45	1203873SF	Ballistic Missile Defense Radars	07		28,179	12,292	U
46	1203906SF	NCMC - TW/AA System	07		6,990	9,858	U
47	1203913SF	NUDET Detection System (SPACE)	07		29,157	45,887	U
48	1203940SF	Space Situation Awareness Operations	07		69,809	64,763	U
49	1206423SF	Global Positioning System III - Operational Control Segment	07		481,999	413,766	U
53	1206770SF	Enterprise Ground Services	07		116,791	191,713	U
9999	9999999999	Classified Programs			3,657,366	4,474,809	U
		Operational System Development			4,785,018	5,585,009	
54	1203614SF	JSpOC Mission System	08		149,742	154,529	U
		Software & Digital Technology Pilot Programs			149,742	154,529	
Total RDTE, Space Force					10,540,069	11,266,387	

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<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Basic Research	813,468	886,781	716,884
Applied Research	2,013,141	1,960,797	2,130,395
Advanced Technology Development	4,043,509	3,978,333	4,007,596
Advanced Component Development & Prototypes	10,437,469	10,095,547	9,854,341
System Development & Demonstration	921,720	726,330	548,687
Management Support	1,991,824	1,400,863	1,383,845
Operational Systems Development	6,458,450	6,532,631	6,607,385
Software And Digital Technology Pilot Programs		432,207	608,742
Total Research, Development, Test & Evaluation	26,679,581	26,013,489	25,857,875
 <u>Summary Recap of FYDP Programs</u>			
General Purpose Forces	88,656	69,009	61,586
Intelligence and Communications	1,098,297	1,006,282	1,007,115
Research and Development	19,625,127	18,718,322	17,670,327
Central Supply and Maintenance	6,611	10,740	9,879
Training Medical and Other	40,173	31,225	30,219
Administration and Associated Activities	34,121	30,040	26,747
Special Operations Forces	845,439	806,596	689,649
Space	276,115	466,567	1,116,804
Classified Programs	4,665,042	4,874,708	5,245,549
Total Research, Development, Test & Evaluation	26,679,581	26,013,489	25,857,875

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<u>Appropriation</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Chemical and Biological Defense Program	1,163,287	1,043,228	1,037,545
Defense Advanced Research Projects Agency	3,571,321	3,500,048	3,528,729
Defense Contract Audit Agency	1,600	2,198	2,568
Defense Contract Management Agency	3,495	1,441	4,265
Defense Counterintelligence & Security Agency			
Defense-Wide	3,000		
Defense Human Resources Activity	36,843	37,919	27,509
Defense Intelligence Agency			
Defense Information Systems Agency	510,009	390,750	377,812
Defense Logistics Agency	316,218	247,947	251,904
Defense Security Cooperative Agency	14,257	6,294	7,398
Defense Technical Information Center	63,423	60,553	65,002
Defense Threat Reduction Agency	708,056	594,138	634,930
Missile Defense Agency	8,142,356	7,855,485	7,161,181
National Geospatial Intelligence Agency			
National Security Agency			
Office of Secretary of Defense	5,966,762	5,598,733	5,234,677
Space Development Agency	95,217	267,116	808,817
U.S., Special Operations Command	851,798	812,658	695,643
The Joint Staff	150,246	118,451	109,061
Washington Headquarters Services	10,920	999	918
Total Research, Development, Test & Evaluation	26,679,581	26,013,489	25,857,875

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
1	0601000BR	DTRA Basic Research	01	25,359	14,617	11,828	U
2	0601101E	Defense Research Sciences	01	427,837	474,158	395,781	U
3	0601108D8Z	High Energy Laser Research Initiatives	01			15,390	U
4	0601110D8Z	Basic Research Initiatives	01	68,534	75,542	39,828	U
5	0601117E	Basic Operational Medical Research Science	01	57,721	53,730	76,018	U
6	0601120D8Z	National Defense Education Program	01	139,002	137,154	112,195	U
7	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	50,775	81,280	31,136	U
8	0601384BP	Chemical and Biological Defense Program	01	44,240	50,300	34,708	U
		Basic Research		813,468	886,781	716,884	
9	0602000D8Z	Joint Munitions Technology	02	19,092	24,397	19,591	U
10	0602115E	Biomedical Technology	02	131,017	107,568	108,698	U
11	0602134BR	Improvised Threat Reduction Applied Research	02	1,677	3,699		U
12	0602230D8Z	Defense Technology Innovation	02		17,476	22,918	U
13	0602234D8Z	Lincoln Laboratory Research Program	02	50,685	41,053	55,692	U
14	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	58,450	53,359	65,015	U
15	0602303E	Information & Communications Technology	02	416,935	420,920	430,363	U
16	0602383E	Biological Warfare Defense	02	30,011	26,950	31,421	U
17	0602384BP	Chemical and Biological Defense Program	02	201,105	201,807	206,956	U
18	0602668D8Z	Cyber Security Research	02	24,454	25,245	15,380	U
19	0602702E	Tactical Technology	02	300,010	237,271	202,515	U
20	0602715E	Materials and Biological Technology	02	260,831	245,107	317,024	U

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
21	0602716E	Electronics Technology	02	309,811	322,693	357,384	U
22	0602718BR	Counter Weapons of Mass Destruction Applied Research	02	163,601	174,221	197,011	U
23	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	9,232	9,567	9,601	U
24	0602890D8Z	High Energy Laser Research	02			45,997	U
25	1160401BB	SOF Technology Development	02	36,230	49,464	44,829	U
Applied Research				2,013,141	1,960,797	2,130,395	
26	0603000D8Z	Joint Munitions Advanced Technology	03	25,399	22,905	23,213	U
27	0603121D8Z	SO/LIC Advanced Development	03	4,847	4,904	4,665	U
28	0603122D8Z	Combating Terrorism Technology Support	03	113,445	144,847	69,376	U
29	0603133D8Z	Foreign Comparative Testing	03	24,510	25,115	25,432	U
30	0603134BR	Counter Improvised-Threat Simulation	03	49,528	3,861		U
31	0603160BR	Counter Weapons of Mass Destruction Advanced Technology Development	03	325,640	356,659	399,362	U
32	0603176C	Advanced Concepts and Performance Assessment	03	45,852	49,410	15,800	U
33	0603180C	Advanced Research	03	27,166	35,024	21,466	U
34	0603183D8Z	Joint Hypersonic Technology Development & Transition	03			51,340	U
35	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,681	18,861	19,063	U
36	0603286E	Advanced Aerospace Systems	03	266,646	223,478	174,043	U
37	0603287E	Space Programs and Technology	03	173,839	151,439	101,524	U
38	0603288D8Z	Analytic Assessments	03	17,807	19,775	24,012	U
39	0603289D8Z	Advanced Innovative Analysis and Concepts	03	36,801	28,524	51,513	U
40	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	14,339	14,703		U

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se</u> <u>c</u>
41	0603294C	Common Kill Vehicle Technology	03	13,319	11,058		U
42	0603338D8Z	Defense Modernization and Prototyping	03		155,505	115,443	U
43	0603342D8Z	Defense Innovation Unit (DIU)	03	29,268	35,617	31,873	U
44	0603375D8Z	Technology Innovation	03	29,009	27,693	54,433	U
45	0603384BP	Chemical and Biological Defense Program - Advanced Development	03	209,552	191,001	197,824	U
46	0603527D8Z	RETRACT LARCH	03	154,415	130,220	99,175	U
47	0603618D8Z	Joint Electronic Advanced Technology	03	11,762	15,152	18,221	U
48	0603648D8Z	Joint Capability Technology Demonstrations	03	87,384	71,452	102,669	U
49	0603662D8Z	Networked Communications Capabilities	03	2,767	5,882	2,984	U
50	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	251,516	245,757	134,022	U
51	0603680S	Manufacturing Technology Program	03	50,184	69,025	37,543	U
52	0603699D8Z	Emerging Capabilities Technology Development	03	105,998			U
53	0603712S	Generic Logistics R&D Technology Demonstrations	03	17,402	10,235	12,418	U
54	0603716D8Z	Strategic Environmental Research Program	03	69,914	85,429	51,863	U
55	0603720S	Microelectronics Technology Development and Support	03	201,544	136,049	160,821	U
56	0603727D8Z	Joint Warfighting Program	03	4,532	3,869	2,169	U
57	0603739E	Advanced Electronics Technologies	03	107,259	95,864	116,716	U
58	0603760E	Command, Control and Communications Systems	03	225,917	221,724	251,794	U
59	0603766E	Network-Centric Warfare Technology	03	515,879	641,158	584,771	U
60	0603767E	Sensor Technology	03	158,040	190,220	294,792	U
61	0603769D8Z	Distributed Learning Advanced Technology Development	03	21,991	6,765	6,398	U

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
62	0603781D8Z	Software Engineering Institute	03	14,556	12,590	14,677	U
63	0603826D8Z	Quick Reaction Special Projects	03	34,457			U
64	0603833D8Z	Engineering Science & Technology	03	18,900			U
65	0603924D8Z	High Energy Laser Advanced Technology Program	03	78,057	112,842	107,397	U
66	0603941D8Z	Test & Evaluation Science & Technology	03	186,017	178,438	267,161	U
67	0603950D8Z	National Security Innovation Network	03	37,658	40,000	21,270	U
68	0604055D8Z	Operational Energy Capability Improvement	03	62,686	16,000	74,300	U
70	0303310D8Z	CWMD Systems	03	27,878			U
71	0303367D8Z	Spectrum Access Research and Development	03	53,247			U
74	1160402BB	SOF Advanced Technology Development	03	95,862	96,861	93,415	U
75	1206310SDA	Space Science and Technology Research and Development	03	20,001	72,422	172,638	U
9999	9999999999	Classified Programs		2,038			U
		Advanced Technology Development		4,043,509	3,978,333	4,007,596	
76	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	41,768	32,616	28,687	U
77	0603600D8Z	WALKOFF	04	90,404	101,529	108,652	U
78	0603821D8Z	Acquisition Enterprise Data & Information Services	04	5,293			U
79	0603851D8Z	Environmental Security Technical Certification Program	04	65,016	73,307	71,429	U
80	0603881C	Ballistic Missile Defense Terminal Defense Segment	04	295,312	312,317	277,949	U
81	0603882C	Ballistic Missile Defense Midcourse Defense Segment	04	1,275,414	1,219,261	745,144	U
82	0603884BP	Chemical and Biological Defense Program - Dem/Val	04	104,580	76,167	129,445	U
83	0603884C	Ballistic Missile Defense Sensors	04	348,356	265,803	224,750	U

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>S e c</u>
84	0603890C	BMD Enabling Programs	04	630,196	616,455	595,301	U
85	0603891C	Special Programs - MDA	04	504,031	390,216	413,374	U
86	0603892C	AEGIS BMD	04	722,582	877,336	732,512	U
87	0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communicati	04	550,513	645,741	603,448	U
88	0603898C	Ballistic Missile Defense Joint Warfighter Support	04	51,095	49,560	50,594	U
89	0603904C	Missile Defense Integration & Operations Center (MDIOC)	04	54,783	55,356	52,403	U
90	0603906C	Regarding Trench	04	22,550	11,863	11,952	U
91	0603907C	Sea Based X-Band Radar (SBX)	04	137,604	118,318	147,241	U
92	0603913C	Israeli Cooperative Programs	04	300,000	300,000	300,000	U
93	0603914C	Ballistic Missile Defense Test	04	398,939	365,208	362,906	U
94	0603915C	Ballistic Missile Defense Targets	04	545,764	536,133	553,334	U
95	0603920D8Z	Humanitarian Demining	04	14,294			U
96	0603923D8Z	Coalition Warfare	04	11,159	10,123	5,103	U
97	0604011D8Z	Next Generation Information Communications Technology (5G)	04	199,965	439,769	374,665	U
98	0604016D8Z	Department of Defense Corrosion Program	04	13,032	5,323	3,259	U
99	0604102C	Guam Defense Development	04			78,300	U
100	0604115C	Technology Maturation Initiatives	04	259,465	107,389		U
101	0604132D8Z	Missile Defeat Project	04	14,288			U
102	0604134BR	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04	105,480	19,931		U
103	0604181C	Hypersonic Defense	04	386,528	272,632	247,931	U

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
104	0604250D8Z	Advanced Innovative Technologies	04	1,106,137	749,030	716,456	U
105	0604294D8Z	Trusted & Assured Microelectronics	04	534,340	503,750	509,195	U
106	0604331D8Z	Rapid Prototyping Program	04	70,227	92,023	103,575	U
107	0604341D8Z	Defense Innovation Unit (DIU) Prototyping	04	22,000	31,255	11,213	U
108	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	6,565	7,085	2,778	U
109	0604551BR	Catapult	04	8,110		7,166	U
110	0604555D8Z	Operational Energy Capability Improvement - Non S&T	04			23,200	U
111	0604672C	Homeland Defense Radar - Hawaii (HDR-H)	04	181,569	133,000		U
112	0604673C	Pacific Discriminating Radar	04	2,921			U
113	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,613	3,469	3,519	U
114	0604826J	Joint C5 Capability Development, Integration and interoperability Assessments	04	20,062	19,190	17,439	U
115	0604873C	Long Range Discrimination Radar (LRDR)	04	131,135	138,317	133,335	U
116	0604874C	Improved Homeland Defense Interceptors	04	514,062	860,384	926,125	U
117	0604876C	Ballistic Missile Defense Terminal Defense Segment Test	04	24,771	1,000	32,697	U
118	0604878C	Aegis BMD Test	04	167,364	71,498	117,055	U
119	0604879C	Ballistic Missile Defense Sensor Test	04	96,082	64,245	77,428	U
120	0604880C	Land-Based SM-3 (LBSM3)	04	36,918	56,628	43,158	U
121	0604887C	Ballistic Missile Defense Midcourse Segment Test	04	96,711	67,071	61,424	U
122	0202057C	Safety Program Management	04			2,323	U
123	0300206R	Enterprise Information Technology Systems	04	1,600	2,198	2,568	U

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

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124	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	3,190	997		U
125	0305103C	Cyber Security Initiative	04	11,109	1,148	1,142	U
126	1206410SDA	Space Technology Development and Prototyping	04	75,216	194,694	636,179	U
127	1206893C	Space Tracking & Surveillance System	04	35,469	34,144	15,176	U
128	1206895C	Ballistic Missile Defense System Space Programs	04	139,887	162,068	292,811	U
Advanced Component Development & Prototypes				10,437,469	10,095,547	9,854,341	
129	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	7,810	7,169	5,682	U
130	0604165D8Z	Prompt Global Strike Capability Development	05	152,782	89,863		U
131	0604384BP	Chemical and Biological Defense Program - EMD	05	417,723	356,472	299,848	U
132	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	52,059	51,284	9,345	U
133	0605000BR	Counter Weapons of Mass Destruction Systems Development	05	15,332	15,650	14,063	U
134	0605013BL	Information Technology Development	05	3,070	1,441	4,265	U
135	0605021SE	Homeland Personnel Security Initiative	05	7,295	7,287	7,205	U
136	0605022D8Z	Defense Exportability Program	05	11,864	12,920	5,447	U
137	0605027D8Z	OUSD(C) IT Development Initiatives	05	9,238	10,259	16,892	U
138	0605070S	DOD Enterprise Systems Development and Demonstration	05	2,291	1,377	679	U
139	0605075D8Z	CMO Policy and Integration	05	1,618	1,618		U
140	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	23,114	20,537	32,254	U
141	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	6,368	1,638		U
142	0605141BR	Mission Assurance Risk Management System (MARMS)	05		5,500	5,500	U
143	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	8,995	8,274	7,148	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
144	0605294D8Z	Trusted & Assured Microelectronics	05	170,849	107,513	113,895	U
145	0605502BR	Small Business Innovation Research	05	13,329			U
146	0605772D8Z	Nuclear Command, Control, & Communications	05		3,683	3,991	U
147	0303140BL	Information Systems Security Program	05	425			U
148	0303141K	Global Combat Support System	05	1,262			U
149	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,537	3,273	2,227	U
150	0305310D8Z	CWMD Systems: System Development and Demonstration	05	11,759	20,572	20,246	U
		System Development & Demonstration		921,720	726,330	548,687	
151	0603829J	Joint Capability Experimentation	06	10,971	11,239	8,444	U
152	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	9,722	9,793	7,508	U
153	0604875D8Z	Joint Systems Architecture Development	06	8,971	8,492	7,859	U
154	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	381,356	423,206	550,140	U
155	0604942D8Z	Assessments and Evaluations	06	30,064	18,368	17,980	U
156	0605001E	Mission Support	06	68,983	74,334	73,145	U
157	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	87,776	79,046	71,410	U
158	0605104D8Z	Technical Studies, Support and Analysis	06	17,088			U
159	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	64,834	50,255	52,671	U
160	0605128D8Z	Classified Program USD(P)	06	104,000	110,000		U
161	0605142D8Z	Systems Engineering	06	35,860	45,626	40,030	U
162	0605151D8Z	Studies and Analysis Support - OSD	06	4,611	5,777	4,612	U
163	0605161D8Z	Nuclear Matters-Physical Security	06	7,803	16,542	14,429	U

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** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se</u>
164	0605170D8Z	Support to Networks and Information Integration	06	7,295	9,582	4,759	U
165	0605200D8Z	General Support to USD (Intelligence)	06	20,196	7,904	1,952	U
166	0605384BP	Chemical and Biological Defense Program	06	113,307	127,951	110,503	U
167	0605502BP	Small Business Innovative Research - Chemical Biological Def	06	22,072			U
168	0605502C	Small Business Innovation Research - MDA	06	107,824			U
169	0605502D8Z	Small Business Innovative Research	06	133,393			U
170	0605502E	Small Business Innovative Research	06	107,294			U
171	0605502S	Small Business Innovative Research	06	10,065			U
172	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	3,567	3,582	3,639	U
173	0605797D8Z	Maintaining Technology Advantage	06	20,244	25,561	25,889	U
174	0605798D8Z	Defense Technology Analysis	06	15,334	23,341	39,774	U
175	0605801KA	Defense Technical Information Center (DTIC)	06	60,396	57,716	61,453	U
176	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	29,448	29,420	18,762	U
177	0605804D8Z	Development Test and Evaluation	06	21,422	27,198	27,366	U
178	0605898E	Management HQ - R&D	06	13,291	13,434	12,740	U
179	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	3,027	2,837	3,549	U
180	0606100D8Z	Budget and Program Assessments	06	8,723	10,099	15,438	U
181	0606225D8Z	ODNA Technology and Resource Analysis	06	3,193	3,200	2,897	U
182	0606589D8W	Defense Digital Service (DDS) Development Support	06	10,920	999	918	U
183	0606771D8Z	Cyber Resiliency and Cybersecurity Policy	06			31,638	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
184	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	7,775	3,099	2,925	U
185	0204571J	Joint Staff Analytical Support	06	9,216	3,058	977	U
186	0208045K	C4I Interoperability	06		59,813	55,361	U
189	0303140SE	Information Systems Security Program	06		1,112	853	U
190	0303166J	Support to Information Operations (IO) Capabilities	06	553	545		U
191	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	984	1,014	969	U
192	0305172K	Combined Advanced Applications	06	58,667	30,824	15,696	U
194	0305208K	Distributed Common Ground/Surface Systems	06		3,048	3,073	U
195	0305245D8Z	Intelligence Capabilities and Innovation Investments	06	15,868			U
196	0307588D8Z	Algorithmic Warfare Cross Functional Teams	06	232,946			U
197	0804768J	COCOM Exercise Engagement and Training Transformation (CE2T2) - non-MHA	06	40,073	31,125	29,530	U
198	0808709SE	Defense Equal Opportunity Management Institute (DEOMI)	06	100	100	689	U
199	0901598C	Management HQ - MDA	06	27,065	26,902	24,102	U
200	0903235K	Joint Service Provider (JSP)	06	3,090	3,138	2,645	U
201	0909999D8Z	Financing for Cancelled Account Adjustments	06	966			U
9999	9999999999	Classified Programs		51,471	41,583	37,520	U
		Management Support		1,991,824	1,400,863	1,383,845	
202	0604130V	Enterprise Security System (ESS)	07	9,653	14,378	5,355	U
203	0604532K	Joint Artificial Intelligence	07	183,834	137,058	10,033	U
204	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	1,947	1,986		U

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
205	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	310	316		U
206	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	101,760	172,145	58,189	U
207	0607310D8Z	CWMD Systems: Operational Systems Development	07	12,268	16,954	18,721	U
208	0607327T	Global Theater Security Cooperation Management Information Systems (G-TSCMIS)	07	12,000	3,992	7,398	U
209	0607384BP	Chemical and Biological Defense (Operational Systems Development)	07	50,708	39,530	58,261	U
210	0208043J	Planning and Decision Aid System (PDAS)	07	4,537	3,039		U
211	0208045K	C4I Interoperability	07	67,128			U
215	0302019K	Defense Info Infrastructure Engineering and Integration	07	10,798	16,324	16,233	U
216	0303126K	Long-Haul Communications - DCS	07	11,749	11,884	10,275	U
217	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	17,699	5,560	4,892	U
218	0303136G	Key Management Infrastructure (KMI)	07	54,516	73,356	83,751	U
219	0303140D8Z	Information Systems Security Program	07	51,876	46,529	49,191	U
220	0303140G	Information Systems Security Program	07	337,198	394,713	423,745	U
221	0303140K	Information Systems Security Program	07	39,798	8,922	5,707	U
222	0303150K	Global Command and Control System	07	14,534	3,695	4,150	U
223	0303153K	Defense Spectrum Organization	07	19,212	20,113	19,302	U
224	0303228K	Joint Regional Security Stacks (JRSS)	07	16,869	9,728	9,342	U
225	0303430K	Federal Investigative Services Information Technology	07	44,001			U
226	0303430V	Federal Investigative Services Information Technology	07			15,326	U
227	0303467K	SENSR Spectrum Pipeline SRF	07	11,484			U

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
232	0305128V	Security and Investigative Activities	07	2,400	5,700	8,800	U
235	0305146V	Defense Joint Counterintelligence Activities	07			3,820	U
237	0305186D8Z	Policy R&D Programs	07	6,231	6,291	4,843	U
238	0305199D8Z	Net Centricity	07	22,400	21,793	13,471	U
240	0305208BB	Distributed Common Ground/Surface Systems	07	6,359	6,062	5,994	U
243	0305208K	Distributed Common Ground/Surface Systems	07	2,981			U
246	0305327V	Insider Threat	07	1,964	3,000		U
247	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,203	2,188	1,273	U
255	0708012K	Logistics Support Activities	07	1,361	1,654	1,690	U
256	0708012S	Pacific Disaster Centers	07	1,705	1,785	1,799	U
257	0708047S	Defense Property Accountability System	07	3,545	7,301	6,390	U
258	0904903D	Defense-Wide Resources	07	3,000			U
259	1105219BB	MQ-9 UAV	07	19,960	21,265	19,065	U
260	1160279BB	Small Business Innovative Research/Small Bus Tech Transfer Pilot Prog	07	27,278			U
261	1160403BB	Aviation Systems	07	256,658	250,623	173,537	U
262	1160405BB	Intelligence Systems Development	07	15,349	26,519	32,766	U
263	1160408BB	Operational Enhancements	07	158,493	174,122	145,830	U
264	1160431BB	Warrior Systems	07	76,628	64,095	78,592	U
265	1160432BB	Special Programs	07	19,357	7,494	6,486	U
266	1160434BB	Unmanned ISR	07	42,457	17,154	18,006	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
267	1160480BB	SOF Tactical Vehicles	07	11,104	14,256	7,703	U
268	1160483BB	Maritime Systems	07	70,738	68,538	58,430	U
269	1160489BB	Global Video Surveillance Activities	07	5,363	4,602		U
270	1160490BB	Operational Enhancements Intelligence	07	9,962	11,603	10,990	U
271	1203610K	Teleport Program	07	5,542	3,239		U
9999	9999999999	Classified Programs		4,611,533	4,833,125	5,208,029	U
		Operational Systems Development		6,458,450	6,532,631	6,607,385	
272	0604532K	Joint Artificial Intelligence	08			186,639	U
273	0608197V	National Background Investigation Services - Software Pilot Program	08		109,676	123,570	U
274	0608648D8Z	Acquisition Visibility - Software Pilot Program	08		16,838	18,307	U
275	0303150K	Global Command and Control System	08		75,750	32,774	U
276	0308588D8Z	Algorithmic Warfare Cross Functional Teams - Software Pilot Program	08		229,943	247,452	U
		Software And Digital Technology Pilot Programs			432,207	608,742	
Total Research, Development, Test & Eval, DW				26,679,581	26,013,489	25,857,875	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Management Support	227,700	257,120	216,591
Total Research, Development, Test & Evaluation	227,700	257,120	216,591
 <u>Summary Recap of FYDP Programs</u>			
Research and Development	227,700	257,120	216,591
Total Research, Development, Test & Evaluation	227,700	257,120	216,591

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Appropriation: 0460D Operational Test & Eval, Defense

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
1	06051180TE	Operational Test and Evaluation	06	93,291	100,021	105,394	U
2	06051310TE	Live Fire Test and Evaluation	06	69,172	70,933	68,549	U
3	06058140TE	Operational Test Activities and Analyses	06	65,237	86,166	42,648	U
		Management Support		227,700	257,120	216,591	
Total Operational Test & Eval, Defense				227,700	257,120	216,591	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Chemical and Biological Defense Program
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May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
8	0601384BP	Chemical and Biological Defense Program	01	44,240	50,300	34,708	U
	Basic Research			44,240	50,300	34,708	
17	0602384BP	Chemical and Biological Defense Program	02	201,105	201,807	206,956	U
	Applied Research			201,105	201,807	206,956	
45	0603384BP	Chemical and Biological Defense Program - Advanced Development	03	209,552	191,001	197,824	U
	Advanced Technology Development			209,552	191,001	197,824	
82	0603884BP	Chemical and Biological Defense Program - Dem/Val	04	104,580	76,167	129,445	U
	Advanced Component Development & Prototypes			104,580	76,167	129,445	
131	0604384BP	Chemical and Biological Defense Program - EMD	05	417,723	356,472	299,848	U
	System Development & Demonstration			417,723	356,472	299,848	
166	0605384BP	Chemical and Biological Defense Program	06	113,307	127,951	110,503	U
167	0605502BP	Small Business Innovative Research - Chemical Biological Def	06	22,072			U
	Management Support			135,379	127,951	110,503	
209	0607384BP	Chemical and Biological Defense (Operational Systems Development)	07	50,708	39,530	58,261	U
	Operational Systems Development			50,708	39,530	58,261	
Total Chemical and Biological Defense Program				1,163,287	1,043,228	1,037,545	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Defense Advanced Research Projects Agency
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Appropriation: 0400D Research, Development, Test & Eval, DW

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
2	0601101E	Defense Research Sciences	01	427,837	474,158	395,781	U
5	0601117E	Basic Operational Medical Research Science	01	57,721	53,730	76,018	U
Basic Research				485,558	527,888	471,799	
10	0602115E	Biomedical Technology	02	131,017	107,568	108,698	U
15	0602303E	Information & Communications Technology	02	416,935	420,920	430,363	U
16	0602383E	Biological Warfare Defense	02	30,011	26,950	31,421	U
19	0602702E	Tactical Technology	02	300,010	237,271	202,515	U
20	0602715E	Materials and Biological Technology	02	260,831	245,107	317,024	U
21	0602716E	Electronics Technology	02	309,811	322,693	357,384	U
Applied Research				1,448,615	1,360,509	1,447,405	
36	0603286E	Advanced Aerospace Systems	03	266,646	223,478	174,043	U
37	0603287E	Space Programs and Technology	03	173,839	151,439	101,524	U
57	0603739E	Advanced Electronics Technologies	03	107,259	95,864	116,716	U
58	0603760E	Command, Control and Communications Systems	03	225,917	221,724	251,794	U
59	0603766E	Network-Centric Warfare Technology	03	515,879	641,158	584,771	U
60	0603767E	Sensor Technology	03	158,040	190,220	294,792	U
Advanced Technology Development				1,447,580	1,523,883	1,523,640	
156	0605001E	Mission Support	06	68,983	74,334	73,145	U
170	0605502E	Small Business Innovative Research	06	107,294			U
178	0605898E	Management HQ - R&D	06	13,291	13,434	12,740	U
Management Support				189,568	87,768	85,885	

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

Line	Program Element	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
No	Number						
Total Defense Advanced Research Projects Agency				3,571,321	3,500,048	3,528,729	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Contract Audit Agency
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 (Dollars in Thousands)

May 2021

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

Line	Program Element No	Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
123	0300206R		Enterprise Information Technology Systems	04	1,600	2,198	2,568	U
			Advanced Component Development & Prototypes		1,600	2,198	2,568	
Total Defense Contract Audit Agency					1,600	2,198	2,568	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Defense Contract Management Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
134	0605013BL	Information Technology Development	05	3,070	1,441	4,265	U
147	0303140BL	Information Systems Security Program	05	425			U
System Development & Demonstration				3,495	1,441	4,265	
Total Defense Contract Management Agency				3,495	1,441	4,265	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Counterintelligence & Security Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
202	0604130V	Enterprise Security System (ESS)	07	9,653	14,378	5,355	U
226	0303430V	Federal Investigative Services Information Technology	07			15,326	U
232	0305128V	Security and Investigative Activities	07	2,400	5,700	8,800	U
235	0305146V	Defense Joint Counterintelligence Activities	07			3,820	U
246	0305327V	Insider Threat	07	1,964	3,000		U
Operational Systems Development				14,017	23,078	33,301	
273	0608197V	National Background Investigation Services - Software Pilot Program 08			109,676	123,570	U
Software And Digital Technology Pilot Programs					109,676	123,570	
Total Defense Counterintelligence & Security Agency				14,017	132,754	156,871	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense-Wide
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line	Program Element No	Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
258	0904903D		Defense-Wide Resources	07	3,000	-----	-----	U
			Operational Systems Development		3,000	-----	-----	
					-----	-----	-----	
			Total Defense-Wide		3,000			

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Human Resources Activity
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
135	0605021SE	Homeland Personnel Security Initiative	05	7,295	7,287	7,205	U
		System Development & Demonstration		7,295	7,287	7,205	
176	0605803SE	R&D in Support of DoD Enlistment, Testing and Evaluation	06	29,448	29,420	18,762	U
189	0303140SE	Information Systems Security Program	06		1,112	853	U
198	0808709SE	Defense Equal Opportunity Management Institute (DEOMI)	06	100	100	689	U
		Management Support		29,548	30,632	20,304	
Total Defense Human Resources Activity				36,843	37,919	27,509	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Information Systems Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
148	0303141K	Global Combat Support System	05	1,262			U
		System Development & Demonstration		1,262			
186	0208045K	C4I Interoperability	06		59,813	55,361	U
192	0305172K	Combined Advanced Applications	06	58,667	30,824	15,696	U
194	0305208K	Distributed Common Ground/Surface Systems	06		3,048	3,073	U
200	0903235K	Joint Service Provider (JSP)	06	3,090	3,138	2,645	U
		Management Support		61,757	96,823	76,775	
203	0604532K	Joint Artificial Intelligence	07	183,834	137,058	10,033	U
211	0208045K	C4I Interoperability	07	67,128			U
215	0302019K	Defense Info Infrastructure Engineering and Integration	07	10,798	16,324	16,233	U
216	0303126K	Long-Haul Communications - DCS	07	11,749	11,884	10,275	U
217	0303131K	Minimum Essential Emergency Communications Network (MEECN)	07	17,699	5,560	4,892	U
221	0303140K	Information Systems Security Program	07	39,798	8,922	5,707	U
222	0303150K	Global Command and Control System	07	14,534	3,695	4,150	U
223	0303153K	Defense Spectrum Organization	07	19,212	20,113	19,302	U
224	0303228K	Joint Regional Security Stacks (JRSS)	07	16,869	9,728	9,342	U
225	0303430K	Federal Investigative Services Information Technology	07	44,001			U
227	0303467K	SENSR Spectrum Pipeline SRF	07	11,484			U
243	0305208K	Distributed Common Ground/Surface Systems	07	2,981			U
255	0708012K	Logistics Support Activities	07	1,361	1,654	1,690	U
271	1203610K	Teleport Program	07	5,542	3,239		U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Information Systems Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
	Operational Systems Development			446,990	218,177	81,624	
272	0604532K	Joint Artificial Intelligence	08			186,639	U
275	0303150K	Global Command and Control System	08		75,750	32,774	U
	Software And Digital Technology Pilot Programs				75,750	219,413	
Total Defense Information Systems Agency				510,009	390,750	377,812	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Logistics Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line	Program Element No	Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
51	0603680S		Manufacturing Technology Program	03	50,184	69,025	37,543	U
53	0603712S		Generic Logistics R&D Technology Demonstrations	03	17,402	10,235	12,418	U
55	0603720S		Microelectronics Technology Development and Support	03	201,544	136,049	160,821	U
	Advanced Technology Development				269,130	215,309	210,782	
138	0605070S		DOD Enterprise Systems Development and Demonstration	05	2,291	1,377	679	U
140	0605080S		Defense Agency Initiatives (DAI) - Financial System	05	23,114	20,537	32,254	U
141	0605090S		Defense Retired and Annuitant Pay System (DRAS)	05	6,368	1,638		U
	System Development & Demonstration				31,773	23,552	32,933	
171	0605502S		Small Business Innovative Research	06	10,065			U
	Management Support				10,065			
256	0708012S		Pacific Disaster Centers	07	1,705	1,785	1,799	U
257	0708047S		Defense Property Accountability System	07	3,545	7,301	6,390	U
	Operational Systems Development				5,250	9,086	8,189	
Total Defense Logistics Agency					316,218	247,947	251,904	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Defense Security Cooperative Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Sec
204	0605127T	Regional International Outreach (RIO) and Partnership for Peace Information Mana	07	1,947	1,986		U
205	0605147T	Overseas Humanitarian Assistance Shared Information System (OHASIS)	07	310	316		U
208	0607327T	Global Theater Security Cooperation Management Information Systems (G-TSCMIS)	07	12,000	3,992	7,398	U
Operational Systems Development				14,257	6,294	7,398	
Total Defense Security Cooperative Agency				14,257	6,294	7,398	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Technical Information Center
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
175	0605801KA	Defense Technical Information Center (DTIC)	06	60,396	57,716	61,453	U
179	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	3,027	2,837	3,549	U
Management Support				63,423	60,553	65,002	
Total Defense Technical Information Center				63,423	60,553	65,002	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Defense Threat Reduction Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
1	0601000BR	DTRA Basic Research	01	25,359	14,617	11,828	U
Basic Research				25,359	14,617	11,828	
11	0602134BR	Improvised Threat Reduction Applied Research	02	1,677	3,699		U
22	0602718BR	Counter Weapons of Mass Destruction Applied Research	02	163,601	174,221	197,011	U
Applied Research				165,278	177,920	197,011	
30	0603134BR	Counter Improvised-Threat Simulation	03	49,528	3,861		U
31	0603160BR	Counter Weapons of Mass Destruction Advanced Technology Development	03	325,640	356,659	399,362	U
Advanced Technology Development				375,168	360,520	399,362	
102	0604134BR	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04	105,480	19,931		U
109	0604551BR	Catapult	04	8,110		7,166	U
Advanced Component Development & Prototypes				113,590	19,931	7,166	
133	0605000BR	Counter Weapons of Mass Destruction Systems Development	05	15,332	15,650	14,063	U
142	0605141BR	Mission Assurance Risk Management System (MARMS)	05		5,500	5,500	U
145	0605502BR	Small Business Innovation Research	05	13,329			U
System Development & Demonstration				28,661	21,150	19,563	
Total Defense Threat Reduction Agency				708,056	594,138	634,930	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Missile Defense Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
32	0603176C	Advanced Concepts and Performance Assessment	03	45,852	49,410	15,800	U
33	0603180C	Advanced Research	03	27,166	35,024	21,466	U
41	0603294C	Common Kill Vehicle Technology	03	13,319	11,058		U
Advanced Technology Development				86,337	95,492	37,266	
80	0603881C	Ballistic Missile Defense Terminal Defense Segment	04	295,312	312,317	277,949	U
81	0603882C	Ballistic Missile Defense Midcourse Defense Segment	04	1,275,414	1,219,261	745,144	U
83	0603884C	Ballistic Missile Defense Sensors	04	348,356	265,803	224,750	U
84	0603890C	BMD Enabling Programs	04	630,196	616,455	595,301	U
85	0603891C	Special Programs - MDA	04	504,031	390,216	413,374	U
86	0603892C	AEGIS BMD	04	722,582	877,336	732,512	U
87	0603896C	Ballistic Missile Defense Command and Control, Battle Management and Communicati	04	550,513	645,741	603,448	U
88	0603898C	Ballistic Missile Defense Joint Warfighter Support	04	51,095	49,560	50,594	U
89	0603904C	Missile Defense Integration & Operations Center (MDIOC)	04	54,783	55,356	52,403	U
90	0603906C	Regarding Trench	04	22,550	11,863	11,952	U
91	0603907C	Sea Based X-Band Radar (SBX)	04	137,604	118,318	147,241	U
92	0603913C	Israeli Cooperative Programs	04	300,000	300,000	300,000	U
93	0603914C	Ballistic Missile Defense Test	04	398,939	365,208	362,906	U
94	0603915C	Ballistic Missile Defense Targets	04	545,764	536,133	553,334	U
99	0604102C	Guam Defense Development	04			78,300	U
100	0604115C	Technology Maturation Initiatives	04	259,465	107,389		U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Missile Defense Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
103	0604181C	Hypersonic Defense	04	386,528	272,632	247,931	U
111	0604672C	Homeland Defense Radar - Hawaii (HDR-H)	04	181,569	133,000		U
112	0604673C	Pacific Discriminating Radar	04	2,921			U
115	0604873C	Long Range Discrimination Radar (LRDR)	04	131,135	138,317	133,335	U
116	0604874C	Improved Homeland Defense Interceptors	04	514,062	860,384	926,125	U
117	0604876C	Ballistic Missile Defense Terminal Defense Segment Test	04	24,771	1,000	32,697	U
118	0604878C	Aegis BMD Test	04	167,364	71,498	117,055	U
119	0604879C	Ballistic Missile Defense Sensor Test	04	96,082	64,245	77,428	U
120	0604880C	Land-Based SM-3 (LBSM3)	04	36,918	56,628	43,158	U
121	0604887C	Ballistic Missile Defense Midcourse Segment Test	04	96,711	67,071	61,424	U
122	0202057C	Safety Program Management	04			2,323	U
125	0305103C	Cyber Security Initiative	04	11,109	1,148	1,142	U
127	1206893C	Space Tracking & Surveillance System	04	35,469	34,144	15,176	U
128	1206895C	Ballistic Missile Defense System Space Programs	04	139,887	162,068	292,811	U
Advanced Component Development & Prototypes				7,921,130	7,733,091	7,099,813	
168	0605502C	Small Business Innovation Research - MDA	06	107,824			U
199	0901598C	Management HQ - MDA	06	27,065	26,902	24,102	U
Management Support				134,889	26,902	24,102	
Total Missile Defense Agency				8,142,356	7,855,485	7,161,181	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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National Security Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
218	0303136G	Key Management Infrastructure (KMI)	07	54,516	73,356	83,751	U
220	0303140G	Information Systems Security Program	07	337,198	394,713	423,745	U
		Operational Systems Development		-----	-----	-----	
		Total National Security Agency		-----	-----	-----	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Office of Secretary of Defense
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 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
3	0601108D8Z	High Energy Laser Research Initiatives	01			15,390	U
4	0601110D8Z	Basic Research Initiatives	01	68,534	75,542	39,828	U
6	0601120D8Z	National Defense Education Program	01	139,002	137,154	112,195	U
7	0601228D8Z	Historically Black Colleges and Universities/Minority Institutions	01	50,775	81,280	31,136	U
Basic Research				258,311	293,976	198,549	
9	0602000D8Z	Joint Munitions Technology	02	19,092	24,397	19,591	U
12	0602230D8Z	Defense Technology Innovation	02		17,476	22,918	U
13	0602234D8Z	Lincoln Laboratory Research Program	02	50,685	41,053	55,692	U
14	0602251D8Z	Applied Research for the Advancement of S&T Priorities	02	58,450	53,359	65,015	U
18	0602668D8Z	Cyber Security Research	02	24,454	25,245	15,380	U
23	0602751D8Z	Software Engineering Institute (SEI) Applied Research	02	9,232	9,567	9,601	U
24	0602890D8Z	High Energy Laser Research	02			45,997	U
Applied Research				161,913	171,097	234,194	
26	0603000D8Z	Joint Munitions Advanced Technology	03	25,399	22,905	23,213	U
27	0603121D8Z	SO/LIC Advanced Development	03	4,847	4,904	4,665	U
28	0603122D8Z	Combating Terrorism Technology Support	03	113,445	144,847	69,376	U
29	0603133D8Z	Foreign Comparative Testing	03	24,510	25,115	25,432	U
34	0603183D8Z	Joint Hypersonic Technology Development & Transition	03			51,340	U
35	0603225D8Z	Joint DoD-DoE Munitions Technology Development	03	18,681	18,861	19,063	U
38	0603288D8Z	Analytic Assessments	03	17,807	19,775	24,012	U
39	0603289D8Z	Advanced Innovative Analysis and Concepts	03	36,801	28,524	51,513	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Office of Secretary of Defense
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May 2021

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

<u>Line No</u>	<u>Program Element Number</u>	<u>Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>Se c</u>
40	0603291D8Z	Advanced Innovative Analysis and Concepts - MHA	03	14,339	14,703		U
42	0603338D8Z	Defense Modernization and Prototyping	03		155,505	115,443	U
43	0603342D8Z	Defense Innovation Unit (DIU)	03	29,268	35,617	31,873	U
44	0603375D8Z	Technology Innovation	03	29,009	27,693	54,433	U
46	0603527D8Z	RETRACT LARCH	03	154,415	130,220	99,175	U
47	0603618D8Z	Joint Electronic Advanced Technology	03	11,762	15,152	18,221	U
48	0603648D8Z	Joint Capability Technology Demonstrations	03	87,384	71,452	102,669	U
49	0603662D8Z	Networked Communications Capabilities	03	2,767	5,882	2,984	U
50	0603680D8Z	Defense-Wide Manufacturing Science and Technology Program	03	251,516	245,757	134,022	U
52	0603699D8Z	Emerging Capabilities Technology Development	03	105,998			U
54	0603716D8Z	Strategic Environmental Research Program	03	69,914	85,429	51,863	U
56	0603727D8Z	Joint Warfighting Program	03	4,532	3,869	2,169	U
61	0603769D8Z	Distributed Learning Advanced Technology Development	03	21,991	6,765	6,398	U
62	0603781D8Z	Software Engineering Institute	03	14,556	12,590	14,677	U
63	0603826D8Z	Quick Reaction Special Projects	03	34,457			U
64	0603833D8Z	Engineering Science & Technology	03	18,900			U
65	0603924D8Z	High Energy Laser Advanced Technology Program	03	78,057	112,842	107,397	U
66	0603941D8Z	Test & Evaluation Science & Technology	03	186,017	178,438	267,161	U
67	0603950D8Z	National Security Innovation Network	03	37,658	40,000	21,270	U
68	0604055D8Z	Operational Energy Capability Improvement	03	62,686	16,000	74,300	U
70	0303310D8Z	CWMD Systems	03	27,878			U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Office of Secretary of Defense
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 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
71	0303367D8Z	Spectrum Access Research and Development	03	53,247			U
		Advanced Technology Development		1,537,841	1,422,845	1,372,669	
76	0603161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E ADC&P	04	41,768	32,616	28,687	U
77	0603600D8Z	WALKOFF	04	90,404	101,529	108,652	U
78	0603821D8Z	Acquisition Enterprise Data & Information Services	04	5,293			U
79	0603851D8Z	Environmental Security Technical Certification Program	04	65,016	73,307	71,429	U
95	0603920D8Z	Humanitarian Demining	04	14,294			U
96	0603923D8Z	Coalition Warfare	04	11,159	10,123	5,103	U
97	0604011D8Z	Next Generation Information Communications Technology (5G)	04	199,965	439,769	374,665	U
98	0604016D8Z	Department of Defense Corrosion Program	04	13,032	5,323	3,259	U
101	0604132D8Z	Missile Defeat Project	04	14,288			U
104	0604250D8Z	Advanced Innovative Technologies	04	1,106,137	749,030	716,456	U
105	0604294D8Z	Trusted & Assured Microelectronics	04	534,340	503,750	509,195	U
106	0604331D8Z	Rapid Prototyping Program	04	70,227	92,023	103,575	U
107	0604341D8Z	Defense Innovation Unit (DIU) Prototyping	04	22,000	31,255	11,213	U
108	0604400D8Z	Department of Defense (DoD) Unmanned System Common Development	04	6,565	7,085	2,778	U
110	0604555D8Z	Operational Energy Capability Improvement - Non S&T	04			23,200	U
113	0604682D8Z	Wargaming and Support for Strategic Analysis (SSA)	04	3,613	3,469	3,519	U
124	0303191D8Z	Joint Electromagnetic Technology (JET) Program	04	3,190	997		U
		Advanced Component Development & Prototypes		2,201,291	2,050,276	1,961,731	
129	0604161D8Z	Nuclear and Conventional Physical Security Equipment RDT&E SDD	05	7,810	7,169	5,682	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Office of Secretary of Defense
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 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
130	0604165D8Z	Prompt Global Strike Capability Development	05	152,782	89,863		U
132	0604771D8Z	Joint Tactical Information Distribution System (JTIDS)	05	52,059	51,284	9,345	U
136	0605022D8Z	Defense Exportability Program	05	11,864	12,920	5,447	U
137	0605027D8Z	OUSD(C) IT Development Initiatives	05	9,238	10,259	16,892	U
139	0605075D8Z	CMO Policy and Integration	05	1,618	1,618		U
143	0605210D8Z	Defense-Wide Electronic Procurement Capabilities	05	8,995	8,274	7,148	U
144	0605294D8Z	Trusted & Assured Microelectronics	05	170,849	107,513	113,895	U
146	0605772D8Z	Nuclear Command, Control, & Communications	05		3,683	3,991	U
149	0305304D8Z	DoD Enterprise Energy Information Management (EEIM)	05	4,537	3,273	2,227	U
150	0305310D8Z	CWMD Systems: System Development and Demonstration	05	11,759	20,572	20,246	U
		System Development & Demonstration		431,511	316,428	184,873	
152	0604774D8Z	Defense Readiness Reporting System (DRRS)	06	9,722	9,793	7,508	U
153	0604875D8Z	Joint Systems Architecture Development	06	8,971	8,492	7,859	U
154	0604940D8Z	Central Test and Evaluation Investment Development (CTEIP)	06	381,356	423,206	550,140	U
155	0604942D8Z	Assessments and Evaluations	06	30,064	18,368	17,980	U
157	0605100D8Z	Joint Mission Environment Test Capability (JMETC)	06	87,776	79,046	71,410	U
158	0605104D8Z	Technical Studies, Support and Analysis	06	17,088			U
160	0605128D8Z	Classified Program USD(P)	06	104,000	110,000		U
161	0605142D8Z	Systems Engineering	06	35,860	45,626	40,030	U
162	0605151D8Z	Studies and Analysis Support - OSD	06	4,611	5,777	4,612	U
163	0605161D8Z	Nuclear Matters-Physical Security	06	7,803	16,542	14,429	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Office of Secretary of Defense
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
164	0605170D8Z	Support to Networks and Information Integration	06	7,295	9,582	4,759	U
165	0605200D8Z	General Support to USD (Intelligence)	06	20,196	7,904	1,952	U
169	0605502D8Z	Small Business Innovative Research	06	133,393			U
172	0605790D8Z	Small Business Innovation Research (SBIR)/ Small Business Technology Transfer	06	3,567	3,582	3,639	U
173	0605797D8Z	Maintaining Technology Advantage	06	20,244	25,561	25,889	U
174	0605798D8Z	Defense Technology Analysis	06	15,334	23,341	39,774	U
177	0605804D8Z	Development Test and Evaluation	06	21,422	27,198	27,366	U
180	0606100D8Z	Budget and Program Assessments	06	8,723	10,099	15,438	U
181	0606225D8Z	ODNA Technology and Resource Analysis	06	3,193	3,200	2,897	U
183	0606771D8Z	Cyber Resiliency and Cybersecurity Policy	06			31,638	U
184	0203345D8Z	Defense Operations Security Initiative (DOSI)	06	7,775	3,099	2,925	U
191	0303260D8Z	Defense Military Deception Program Office (DMDPO)	06	984	1,014	969	U
195	0305245D8Z	Intelligence Capabilities and Innovation Investments	06	15,868			U
196	0307588D8Z	Algorithmic Warfare Cross Functional Teams	06	232,946			U
201	0909999D8Z	Financing for Cancelled Account Adjustments	06	966			U
	Management Support			1,179,157	831,430	871,214	
206	0607210D8Z	Industrial Base Analysis and Sustainment Support	07	101,760	172,145	58,189	U
207	0607310D8Z	CWMD Systems: Operational Systems Development	07	12,268	16,954	18,721	U
219	0303140D8Z	Information Systems Security Program	07	51,876	46,529	49,191	U
237	0305186D8Z	Policy R&D Programs	07	6,231	6,291	4,843	U

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Office of Secretary of Defense
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 (Dollars in Thousands)

May 2021

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

Line No	Element Number	Program Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se
238	0305199D8Z	Net Centricity	07	22,400	21,793	13,471	U
247	0305387D8Z	Homeland Defense Technology Transfer Program	07	2,203	2,188	1,273	U
Operational Systems Development				196,738	265,900	145,688	
274	0608648D8Z	Acquisition Visibility - Software Pilot Program	08		16,838	18,307	U
276	0308588D8Z	Algorithmic Warfare Cross Functional Teams - Software Pilot Program	08		229,943	247,452	U
Software And Digital Technology Pilot Programs					246,781	265,759	
Total Office of Secretary of Defense				5,966,762	5,598,733	5,234,677	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Space Development Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

<u>Line No</u>	<u>Element Number</u>	<u>Program Item</u>	<u>Act</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>	<u>S e c</u>
75	1206310	SDA Space Science and Technology Research and Development	03	20,001	72,422	172,638	U
		Advanced Technology Development		20,001	72,422	172,638	
126	1206410	SDA Space Technology Development and Prototyping	04	75,216	194,694	636,179	U
		Advanced Component Development & Prototypes		75,216	194,694	636,179	
Total Space Development Agency				95,217	267,116	808,817	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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U.S., Special Operations Command
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
25	1160401BB	SOF Technology Development	02	36,230	49,464	44,829	U
Applied Research				36,230	49,464	44,829	
74	1160402BB	SOF Advanced Technology Development	03	95,862	96,861	93,415	U
Advanced Technology Development				95,862	96,861	93,415	
240	0305208BB	Distributed Common Ground/Surface Systems	07	6,359	6,062	5,994	U
259	1105219BB	MQ-9 UAV	07	19,960	21,265	19,065	U
260	1160279BB	Small Business Innovative Research/Small Bus Tech Transfer Pilot Prog	07	27,278			U
261	1160403BB	Aviation Systems	07	256,658	250,623	173,537	U
262	1160405BB	Intelligence Systems Development	07	15,349	26,519	32,766	U
263	1160408BB	Operational Enhancements	07	158,493	174,122	145,830	U
264	1160431BB	Warrior Systems	07	76,628	64,095	78,592	U
265	1160432BB	Special Programs	07	19,357	7,494	6,486	U
266	1160434BB	Unmanned ISR	07	42,457	17,154	18,006	U
267	1160480BB	SOF Tactical Vehicles	07	11,104	14,256	7,703	U
268	1160483BB	Maritime Systems	07	70,738	68,538	58,430	U
269	1160489BB	Global Video Surveillance Activities	07	5,363	4,602		U
270	1160490BB	Operational Enhancements Intelligence	07	9,962	11,603	10,990	U
Operational Systems Development				719,706	666,333	557,399	
Total U.S., Special Operations Command				851,798	812,658	695,643	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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The Joint Staff
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
114	0604826J	Joint C5 Capability Development, Integration and interoperability Assessments	04	20,062	19,190	17,439	U
Advanced Component Development & Prototypes				20,062	19,190	17,439	
151	0603829J	Joint Capability Experimentation	06	10,971	11,239	8,444	U
159	0605126J	Joint Integrated Air and Missile Defense Organization (JIAMDO)	06	64,834	50,255	52,671	U
185	0204571J	Joint Staff Analytical Support	06	9,216	3,058	977	U
190	0303166J	Support to Information Operations (IO) Capabilities	06	553	545		U
197	0804768J	COCOM Exercise Engagement and Training Transformation (CE2T2) - non-MHA	06	40,073	31,125	29,530	U
Management Support				125,647	96,222	91,622	
210	0208043J	Planning and Decision Aid System (PDAS)	07	4,537	3,039		U
Operational Systems Development				4,537	3,039		
Total The Joint Staff				150,246	118,451	109,061	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Washington Headquarters Services
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

May 2021

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

Line	Program Element No	Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
182	0606589D8W		Defense Digital Service (DDS) Development Support	06	10,920	999	918	U
			Management Support		10,920	999	918	
Total Washington Headquarters Services					10,920	999	918	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Inspector General
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

May 2021

<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
RDT&E	2,371	1,098	2,365
Total Research, Development, Test & Evaluation	2,371	1,098	2,365
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>			
Administration and Associated Activities	2,371	1,098	2,365
Total Research, Development, Test & Evaluation	2,371	1,098	2,365

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Inspector General
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

May 2021

Appropriation: 0107D Office of the Inspector General

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	Se c
1	0901517X	Inspector General, DoD, Audit, Intelligence and Non-Criminal Investigative Activ	02	2,304	966	2,365	U
2	0902498X	Office of the DoD Inspector General - MHA	02	67	132		U
		RDT&E		2,371	1,098	2,365	
Total Office of the Inspector General				2,371	1,098	2,365	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Defense Health Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

May 2021

<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
RDT&E	3,657,995	2,392,579	630,680
Total Research, Development, Test & Evaluation	3,657,995	2,392,579	630,680
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>			
Research and Development	3,657,995	2,392,579	630,680
Total Research, Development, Test & Evaluation	3,657,995	2,392,579	630,680

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Defense Health Agency
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

May 2021

Appropriation: 0130D Defense Health Program

Line	Program Element No	Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
1	0601101DHA		In-House Laboratory Independent Research	02	4,013			U
2	0601117DHA		Basic Operational Medical Research Science	02	17,408	8,913	9,091	U
3	0602115DHA		Applied Biomedical Technology	02	175,032	72,573	74,024	U
4	0602787DHA		Medical Technology	02	1,383	1,411	1,439	U
5	0603002DHA		Medical Advanced Technology	02	345	352	359	U
6	0603115DHA		Medical Development	02	2,097,072	1,994,150	235,197	U
7	0604110DHA		Medical Products Support and Advanced Concept Development	02	1,174,955	147,331	142,252	U
8	0605013DHA		Information Technology Development	02	23,780	16,344	10,866	U
9	0605026DHA		Information Technology Development- DoD Healthcare Management System Modernizati	02	14,478	18,336	15,751	U
10	0605045DHA		Joint Operational Medicine Information System	02	41,902	46,214	52,948	U
11	0605145DHA		Medical Products and Support Systems Development	02	21,589	21,068	21,489	U
12	0606105DHA		Medical Program-Wide Activities	02	69,219	48,672	49,645	U
13	0607100DHA		Medical Products and Capabilities Enhancement Activities	02	16,819	17,215	17,619	U
			RDT&E		3,657,995	2,392,579	630,680	
			Total Defense Health Program		3,657,995	2,392,579	630,680	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Department of the Army
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

May 2021

<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Research, Development, Test, And Evaluation	890,830	942,493	1,001,231
Total Research, Development, Test & Evaluation	890,830	942,493	1,001,231
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>			
Central Supply and Maintenance	890,830	942,493	1,001,231
Total Research, Development, Test & Evaluation	890,830	942,493	1,001,231

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

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Department of the Army
 FY 2022 President's Budget
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 Non RDT&E Title
 (Dollars in Thousands)

May 2021

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No	Program Element Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
1	0708081D	Chemical Materials Agency	02	6,500	6,494	6,220	U
2	0708083D	Assembled Chemical Weapons Alternatives	02	884,330	935,999	995,011	U
		Research, Development, Test, And Evaluation		890,830	942,493	1,001,231	
		Total Chem Agents & Munitions Destruction		890,830	942,493	1,001,231	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

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Department of the Navy
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

May 2021

<u>Summary Recap of Budget Activities</u>	<u>FY 2020 Actual*</u>	<u>FY 2021 Enacted**</u>	<u>FY 2022 Request</u>
Research and Development	2,383		
Total Research, Development, Test & Evaluation	2,383		
 <u>Summary Recap of Non-RDT&E Title FYDP Programs</u>			
Mobility Forces	2,383		
Total Research, Development, Test & Evaluation	2,383		

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).

UNCLASSIFIED

Department of the Navy
 FY 2022 President's Budget
 Exhibit R-1 FY 2022 President's Budget
 Non RDT&E Title
 (Dollars in Thousands)

May 2021

Appropriation: 4557N National Defense Sealift Fund

Line	Program Element No	Number	Item	Act	FY 2020 Actual*	FY 2021 Enacted**	FY 2022 Request	S e c
1	0408042N		National Defense Sealift Fund	04	2,383	-----	-----	U
			Research and Development		2,383	-----	-----	
					-----	-----	-----	
			Total National Defense Sealift Fund		2,383	-----	-----	

*Includes Division A, Title IX and X of the Consolidated Appropriations Act, 2020 (P.L. 116-93), Division F, Title IV and V from the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) and the Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136).

** Includes Division C, Title IX and Division J, Title IV of the Consolidated Appropriations Act, 2021 (P.L. 116-260).