

# TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

## LEGISLATIVE PROVISIONS

### SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

#### Section 201—Authorization of Appropriations

This section would authorize appropriations for research, development, test, and evaluation at the levels identified in section 4201 of division D of this Act.

### SUBTITLE B—PROGRAM REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

#### Section 211—Cost Controls for Presidential Aircraft Recapitalization Program

This section would fix the requirements for Presidential Aircraft Replacement (PAR) Program aircraft to those identified by the systems requirements document (SRD) for the Presidential aircraft recapitalization program version 7.0 dated December 14, 2016. This section would also limit changes to PAR requirements to only those approved by the Secretary of the Air Force following a written determination provided to the congressional defense committees that the change is necessary. This section would require that not less than 50 percent of the total amount of funds obligated or expended for contracts for engineering and manufacturing development (EMD) under the PAR Program shall be for fixed price type contracts. This section would authorize contracts other than fixed price type contracts for EMD only if such contract type is approved by the service acquisition executive. This section would also require the Secretary of the Air Force to provide quarterly briefings to the House Committee on Armed Services beginning no later than October 1, 2017 and continuing through October 1, 2022 on the efforts to control costs. The quarterly updates shall include the following:

- (1) schedule overview;
- (2) contract type and status;
- (3) development status;
- (4) modification status;
- (5) test status;
- (6) delivery status; and
- (7) sustainment status.

#### Section 217—Limitation on Availability of Funds for MQ-25 Unmanned Air System

This section would allow only 75 percent of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2018 for the

MQ-25 unmanned air system to be obligated or expended until a period of 60 days has passed after the date on which the Secretary of the Navy certifies that the MQ-25 meets a validated capability gap; the Chief of Naval Operations has reviewed and approved the initial capabilities document (ICD) and the capability development document (CDD); and the ICD and CDD have been submitted to the congressional defense committees.

This section would also require the Assistant Secretary of the Navy for Research, Development, and Acquisition to submit a report to the congressional defense committees that includes key performance parameters, certification of performance parameters' achievement, as well as a description of requirements with respect to fuel transfer, equipment for intelligence, surveillance, and reconnaissance, electronic attack and electronic protection, communications equipment, weapons payload, range, mission endurance for unrefueled and aerial refueled operations, affordability, survivability, and interoperability.

#### Section 218—Limitation on Availability of Funds for Contract Writing Systems

This section would limit the amount of authorized funds available to be obligated or expended to not more than 75 percent for specified contract writing systems until the Secretary of Defense, in coordination with the Secretaries of the military departments, provides an assessment of the common requirements and potential use of shared information technology (IT) services as a means to provide that capability in a common, interoperable, and more cost effective manner.

The committee remains concerned that the Department of Defense continues to invest billions of dollars in systems that fail to provide integrated business solutions, timely and reliable information, and other important financial and business information for the daily operations of the military. In fiscal year 2015, the Defense Business Council approved certification requests totaling \$6.9 billion for 1,182 business systems. Of these, more than 30 are service or component unique contracting, procurement, and solicitation management systems. While this ongoing redundancy diverts available funding from direct warfighting capability and decreases the Department's ability to manage its operations as an enterprise, the Department has made little progress in consolidating such business systems.

Furthermore, the committee notes that the Government Accountability Office has repeatedly reported that the Department could achieve greater efficiency in defense business operations, including directing 49 related recommendations to the Department in 2011, 38 of which remain open and unresolved. The committee believes that more focus on implementing shared IT services may be helpful in overcoming the longstanding cultural barriers that continue to prevent more enterprise-wide management of defense business systems. It would also support the goal of the Secretary of Defense, as stated in his memorandum dated January 31, 2017, to achieve "horizontal integration across DOD components to improve efficiency and take advantage of economies of scale." As an example of where such efficiencies could be taken, the committee notes with skepticism the existence of

multiple service and agency unique contract writing systems. The committee recommends the inclusion of this section to better understand the risks associated with eliminating or consolidating such systems and will rely on the information provided in assessing future support for such systems.

**SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION  
(In Thousands of Dollars)**

<b>Line</b>	<b>Program Element</b>	<b>Item</b>	<b>FY 2018 Request</b>	<b>House Authorized</b>
<b>RESEARCH, DEVELOPMENT, TEST &amp; EVAL, ARMY</b>				
<b>BASIC RESEARCH</b>				
001	0601101A	IN-HOUSE LABORATORY INDEPENDENT RESEARCH .....	12,010	12,010
002	0601102A	DEFENSE RESEARCH SCIENCES .....	263,590	263,590
003	0601103A	UNIVERSITY RESEARCH INITIATIVES .....	67,027	67,027
004	0601104A	UNIVERSITY AND INDUSTRY RESEARCH CENTERS .....	87,395	87,395
		<b>SUBTOTAL BASIC RESEARCH .....</b>	<b>430,022</b>	<b>430,022</b>
<b>APPLIED RESEARCH</b>				
005	0602105A	MATERIALS TECHNOLOGY .....	29,640	29,640
006	0602120A	SENSORS AND ELECTRONIC SURVIVABILITY .....	35,730	35,730
007	0602122A	TRACTOR HIP .....	8,627	8,627
008	0602211A	AVIATION TECHNOLOGY .....	66,086	66,086
009	0602270A	ELECTRONIC WARFARE TECHNOLOGY .....	27,144	27,144
010	0602303A	MISSILE TECHNOLOGY .....	43,742	43,742
011	0602307A	ADVANCED WEAPONS TECHNOLOGY .....	22,785	22,785
012	0602308A	ADVANCED CONCEPTS AND SIMULATION .....	28,650	28,650
013	0602601A	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY .....	67,232	67,232
014	0602618A	BALLISTICS TECHNOLOGY .....	85,309	85,309
015	0602622A	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY.	4,004	4,004
016	0602623A	JOINT SERVICE SMALL ARMS PROGRAM .....	5,615	5,615
017	0602624A	WEAPONS AND MUNITIONS TECHNOLOGY .....	41,455	41,455
018	0602705A	ELECTRONICS AND ELECTRONIC DEVICES .....	58,352	58,352
019	0602709A	NIGHT VISION TECHNOLOGY .....	34,723	34,723
020	0602712A	COUNTERMINE SYSTEMS .....	26,190	26,190
021	0602716A	HUMAN FACTORS ENGINEERING TECHNOLOGY .....	24,127	24,127
022	0602720A	ENVIRONMENTAL QUALITY TECHNOLOGY .....	21,678	21,678
023	0602782A	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY .....	33,123	33,123
024	0602783A	COMPUTER AND SOFTWARE TECHNOLOGY .....	14,041	14,041
025	0602784A	MILITARY ENGINEERING TECHNOLOGY .....	67,720	67,720
026	0602785A	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY .....	20,216	20,216
027	0602786A	WARFIGHTER TECHNOLOGY .....	39,559	44,559
		Program increase .....		[5,000]
028	0602787A	MEDICAL TECHNOLOGY .....	83,434	83,434
		<b>SUBTOTAL APPLIED RESEARCH .....</b>	<b>889,182</b>	<b>894,182</b>
<b>ADVANCED TECHNOLOGY DEVELOPMENT</b>				
029	0603001A	WARFIGHTER ADVANCED TECHNOLOGY .....	44,863	44,863
030	0603002A	MEDICAL ADVANCED TECHNOLOGY .....	67,780	67,780
031	0603003A	AVIATION ADVANCED TECHNOLOGY .....	160,746	160,746
032	0603004A	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY .....	84,079	84,079
033	0603005A	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY.	125,537	125,537
034	0603006A	SPACE APPLICATION ADVANCED TECHNOLOGY .....	12,231	12,231
035	0603007A	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY.	6,466	6,466
036	0603009A	TRACTOR HIKE .....	28,552	28,552
037	0603015A	NEXT GENERATION TRAINING & SIMULATION SYSTEMS .....	16,434	16,434
039	0603125A	COMBATING TERRORISM—TECHNOLOGY DEVELOPMENT .....	26,903	26,903
040	0603130A	TRACTOR NAIL .....	4,880	4,880
041	0603131A	TRACTOR EGGS .....	4,326	4,326
042	0603270A	ELECTRONIC WARFARE TECHNOLOGY .....	31,296	31,296
043	0603313A	MISSILE AND ROCKET ADVANCED TECHNOLOGY .....	62,850	72,850
		Simulation upgrades for land based anti-ship missile development		[10,000]
044	0603322A	TRACTOR CAGE .....	12,323	12,323
045	0603461A	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM.	182,331	182,331
046	0603606A	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY.	17,948	17,948
047	0603607A	JOINT SERVICE SMALL ARMS PROGRAM .....	5,796	5,796
048	0603710A	NIGHT VISION ADVANCED TECHNOLOGY .....	47,135	47,135

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049	0603728A	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS.	10,421	10,421
050	0603734A	MILITARY ENGINEERING ADVANCED TECHNOLOGY .....	32,448	32,448
051	0603772A	ADVANCED TACTICAL COMPUTER SCIENCE AND SENSOR TECHNOLOGY.	52,206	52,206
052	0603794A	C3 ADVANCED TECHNOLOGY .....	33,426	33,426
		<b>SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT.</b>	<b>1,070,977</b>	<b>1,080,977</b>
		<b>ADVANCED COMPONENT DEVELOPMENT &amp; PROTOTYPES</b>		
053	0603305A	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION .....	9,634	9,634
055	0603327A	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING .....	33,949	48,949
		Realign European Reassurance Initiative to Base .....		[15,000]
056	0603619A	LANDMINE WARFARE AND BARRIER—ADV DEV .....	72,909	72,909
057	0603627A	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-ADV DEV.	7,135	7,135
058	0603639A	TANK AND MEDIUM CALIBER AMMUNITION .....	41,452	43,902
		Unfunded requirement—RF countermeasures .....		[2,450]
059	0603645A	ARMORED SYSTEM MODERNIZATION—ADV DEV .....	32,739	54,739
		Unfunded requirement .....		[22,000]
060	0603747A	SOLDIER SUPPORT AND SURVIVABILITY .....	10,157	10,157
061	0603766A	TACTICAL ELECTRONIC SURVEILLANCE SYSTEM—ADV DEV	27,733	29,353
		Unfunded requirement .....		[1,620]
062	0603774A	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT .....	12,347	12,347
063	0603779A	ENVIRONMENTAL QUALITY TECHNOLOGY—DEM/VAL .....	10,456	10,456
064	0603790A	NATO RESEARCH AND DEVELOPMENT .....	2,588	2,588
065	0603801A	AVIATION—ADV DEV .....	14,055	14,055
066	0603804A	LOGISTICS AND ENGINEER EQUIPMENT—ADV DEV .....	35,333	35,333
067	0603807A	MEDICAL SYSTEMS—ADV DEV .....	33,491	33,491
068	0603827A	SOLDIER SYSTEMS—ADVANCED DEVELOPMENT .....	20,239	45,239
		Enhanced lightweight body armor and combat helmets technology		[25,000]
069	0604017A	ROBOTICS DEVELOPMENT .....	39,608	39,608
070	0604100A	ANALYSIS OF ALTERNATIVES .....	9,921	9,921
071	0604114A	LOWER TIER AIR MISSILE DEFENSE (LTAMD) SENSOR .....	76,728	76,728
072	0604115A	TECHNOLOGY MATURATION INITIATIVES .....	115,221	100,221
		Program Reduction .....		[-15,000]
073	0604117A	MANEUVER—SHORT RANGE AIR DEFENSE (M-SHORAD) .....	20,000	20,000
074	0604118A	TRACTOR BEAM .....	10,400	10,400
075	0604120A	ASSURED POSITIONING, NAVIGATION AND TIMING (PNT) ...	164,967	164,967
076	0604121A	SYNTHETIC TRAINING ENVIRONMENT REFINEMENT & PROTOTYPING.	1,600	1,600
077	0604319A	INDIRECT FIRE PROTECTION CAPABILITY INCREMENT 2—INTERCEPT (IFPC2).	11,303	11,303
078	0305251A	CYBERSPACE OPERATIONS FORCES AND FORCE SUPPORT ..	56,492	56,492
079	1206308A	ARMY SPACE SYSTEMS INTEGRATION .....	20,432	20,432
		<b>SUBTOTAL ADVANCED COMPONENT DEVELOPMENT &amp; PROTOTYPES.</b>	<b>890,889</b>	<b>941,959</b>
		<b>SYSTEM DEVELOPMENT &amp; DEMONSTRATION</b>		
080	0604201A	AIRCRAFT AVIONICS .....	30,153	30,153
081	0604270A	ELECTRONIC WARFARE DEVELOPMENT .....	71,671	71,671
083	0604290A	MID-TIER NETWORKING VEHICULAR RADIO (MNVr) .....	10,589	10,589
084	0604321A	ALL SOURCE ANALYSIS SYSTEM .....	4,774	4,774
085	0604328A	TRACTOR CAGE .....	17,252	17,252
086	0604601A	INFANTRY SUPPORT WEAPONS .....	87,643	89,243
		Program increase—soldier enhancement program .....		[3,000]
		Program reduction- obligation delays .....		[-5,000]
		Unfunded requirement—air soldier system .....		[3,600]
087	0604604A	MEDIUM TACTICAL VEHICLES .....	6,039	6,039
088	0604611A	JAVELIN .....	21,095	21,095
089	0604622A	FAMILY OF HEAVY TACTICAL VEHICLES .....	10,507	10,507
090	0604633A	AIR TRAFFIC CONTROL .....	3,536	3,536
092	0604642A	LIGHT TACTICAL WHEELED VEHICLES .....	7,000	7,000
093	0604645A	ARMORED SYSTEMS MODERNIZATION (ASM)—ENG DEV .....	36,242	36,242
094	0604710A	NIGHT VISION SYSTEMS—ENG DEV .....	108,504	126,004
		Unfunded requirement .....		[17,500]
095	0604713A	COMBAT FEEDING, CLOTHING, AND EQUIPMENT .....	3,702	3,702
096	0604715A	NON-SYSTEM TRAINING DEVICES—ENG DEV .....	43,575	43,575
097	0604741A	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE—ENG DEV.	28,726	28,726
098	0604742A	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT .....	18,562	18,562
099	0604746A	AUTOMATIC TEST EQUIPMENT DEVELOPMENT .....	8,344	8,344
100	0604760A	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)—ENG DEV.	11,270	11,270
101	0604768A	BRILLIANT ANTI-ARMOR SUBMUNITION (BAT) .....	10,000	10,000
102	0604780A	COMBINED ARMS TACTICAL TRAINER (CATT) CORE .....	18,566	18,566
103	0604798A	BRIGADE ANALYSIS, INTEGRATION AND EVALUATION .....	145,360	145,360

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<b>Line</b>	<b>Program Element</b>	<b>Item</b>	<b>FY 2018 Request</b>	<b>House Authorized</b>
104	0604802A	WEAPONS AND MUNITIONS—ENG DEV .....	145,232	157,410
		Unfunded requirement .....		[8,000]
		Unfunded requirement—40mm low velocity M320 cartridge .....		[4,178]
105	0604804A	LOGISTICS AND ENGINEER EQUIPMENT—ENG DEV .....	90,965	92,965
		Next generation vehicle camouflage technology .....		[2,000]
106	0604805A	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS—ENG DEV.	9,910	9,910
107	0604807A	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT—ENG DEV.	39,238	39,238
108	0604808A	LANDMINE WARFARE/BARRIER—ENG DEV .....	34,684	34,684
109	0604818A	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE.	164,409	188,409
		Unfunded requirement .....		[5,000]
		Unfunded requirement—Assured Communications .....		[19,000]
110	0604820A	RADAR DEVELOPMENT .....	32,968	32,968
111	0604822A	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBs)	49,554	49,554
112	0604823A	FIREFINDER .....	45,605	45,605
113	0604827A	SOLDIER SYSTEMS—WARRIOR DEM/VAL .....	16,127	23,127
		Program increase- soldier power development initiatives .....		[7,000]
114	0604852A	SUITE OF SURVIVABILITY ENHANCEMENT SYSTEMS—EMD	98,600	133,600
		Unfunded requirements .....		[35,000]
115	0604854A	ARTILLERY SYSTEMS—EMD .....	1,972	3,972
		Unfunded requirement—IT3 demonstrator .....		[2,000]
116	0605013A	INFORMATION TECHNOLOGY DEVELOPMENT .....	81,776	81,776
117	0605018A	INTEGRATED PERSONNEL AND PAY SYSTEM-ARMY (IPPS-A)	172,361	172,361
118	0605028A	ARMORED MULTI-PURPOSE VEHICLE (AMPV) .....	199,778	199,778
119	0605029A	INTEGRATED GROUND SECURITY SURVEILLANCE RESPONSE CAPABILITY (IGSSR-C).	4,418	4,418
120	0605030A	JOINT TACTICAL NETWORK CENTER (JTNC) .....	15,877	15,877
121	0605031A	JOINT TACTICAL NETWORK (JTN) .....	44,150	44,150
122	0605032A	TRACTOR TIRE .....	34,670	113,570
		Unfunded requirement .....		[78,900]
123	0605033A	GROUND-BASED OPERATIONAL SURVEILLANCE SYSTEM—EXPEDITIONARY (GBOSS-E).	5,207	5,207
124	0605034A	TACTICAL SECURITY SYSTEM (TSS) .....	4,727	4,727
125	0605035A	COMMON INFRARED COUNTERMEASURES (CIRC) .....	105,778	105,778
126	0605036A	COMBATING WEAPONS OF MASS DESTRUCTION (CWMD) .....	6,927	6,927
127	0605037A	EVIDENCE COLLECTION AND DETAINEE PROCESSING .....	214	214
128	0605038A	NUCLEAR BIOLOGICAL CHEMICAL RECONNAISSANCE VEHICLE (NBCRV) SENSOR SUITE.	16,125	16,125
129	0605041A	DEFENSIVE CYBER TOOL DEVELOPMENT .....	55,165	55,165
130	0605042A	TACTICAL NETWORK RADIO SYSTEMS (LOW-TIER) .....	20,076	20,076
131	0605047A	CONTRACT WRITING SYSTEM .....	20,322	20,322
132	0605049A	MISSILE WARNING SYSTEM MODERNIZATION (MWSM) .....	55,810	55,810
133	0605051A	AIRCRAFT SURVIVABILITY DEVELOPMENT .....	30,879	30,879
134	0605052A	INDIRECT FIRE PROTECTION CAPABILITY INC 2—BLOCK 1	175,069	175,069
135	0605053A	GROUND ROBOTICS .....	70,760	70,760
137	0605380A	AMF JOINT TACTICAL RADIO SYSTEM (JTRS) .....	8,965	8,965
138	0605450A	JOINT AIR-TO-GROUND MISSILE (JAGM) .....	34,626	34,626
140	0605457A	ARMY INTEGRATED AIR AND MISSILE DEFENSE (AIAMD) .....	336,420	252,320
		Program Reduction .....		[-84,100]
143	0605766A	NATIONAL CAPABILITIES INTEGRATION (MIP) .....	6,882	9,382
		Unfunded requirement .....		[2,500]
144	0605812A	JOINT LIGHT TACTICAL VEHICLE (JLTV) ENGINEERING AND MANUFACTURING DEVELOPMENT PH.	23,467	23,467
145	0605830A	AVIATION GROUND SUPPORT EQUIPMENT .....	6,930	6,930
146	0210609A	PALADIN INTEGRATED MANAGEMENT (PIM) .....	6,112	6,112
147	0303032A	TROJAN—RH12 .....	4,431	4,431
150	0304270A	ELECTRONIC WARFARE DEVELOPMENT .....	14,616	14,616
151	1205117A	TRACTOR BEARS .....	17,928	17,928
		<b>SUBTOTAL SYSTEM DEVELOPMENT &amp; DEMONSTRATION.</b>	<b>3,012,840</b>	<b>3,111,418</b>
		<b>RDT&amp;E MANAGEMENT SUPPORT</b>		
152	0604256A	THREAT SIMULATOR DEVELOPMENT .....	22,862	22,862
153	0604258A	TARGET SYSTEMS DEVELOPMENT .....	13,902	13,902
154	0604759A	MAJOR T&E INVESTMENT .....	102,901	102,901
155	0605103A	RAND ARROYO CENTER .....	20,140	20,140
156	0605301A	ARMY KWAJALEIN ATOLL .....	246,663	246,663
157	0605326A	CONCEPTS EXPERIMENTATION PROGRAM .....	29,820	29,820
159	0605601A	ARMY TEST RANGES AND FACILITIES .....	307,588	307,588
160	0605602A	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	49,242	49,242
161	0605604A	SURVIVABILITY/LETHALITY ANALYSIS .....	41,843	41,843
162	0605606A	AIRCRAFT CERTIFICATION .....	4,804	4,804
163	0605702A	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES .....	7,238	7,238
164	0605706A	MATERIEL SYSTEMS ANALYSIS .....	21,890	21,890
165	0605709A	EXPLOITATION OF FOREIGN ITEMS .....	12,684	12,684
166	0605712A	SUPPORT OF OPERATIONAL TESTING .....	51,040	51,040

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167	0605716A	ARMY EVALUATION CENTER .....	56,246	56,246
168	0605718A	ARMY MODELING & SIM X-CMD COLLABORATION & INTEG ...	1,829	1,829
169	0605801A	PROGRAMWIDE ACTIVITIES .....	55,060	55,060
170	0605803A	TECHNICAL INFORMATION ACTIVITIES .....	33,934	33,934
171	0605805A	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY.	43,444	43,444
172	0605857A	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	5,087	5,087
173	0605898A	ARMY DIRECT REPORT HEADQUARTERS—R&D - MHA .....	54,679	54,679
174	0606001A	MILITARY GROUND-BASED CREW TECHNOLOGY .....	7,916	7,916
175	0606002A	RONALD REAGAN BALLISTIC MISSILE DEFENSE TEST SITE	61,254	61,254
176	0303260A	DEFENSE MILITARY DECEPTION INITIATIVE .....	1,779	1,779
		<b>SUBTOTAL RDT&amp;E MANAGEMENT SUPPORT .....</b>	<b>1,253,845</b>	<b>1,253,845</b>
		<b>OPERATIONAL SYSTEMS DEVELOPMENT</b>		
178	0603778A	MLRS PRODUCT IMPROVEMENT PROGRAM .....	8,929	8,929
179	0603813A	TRACTOR PULL .....	4,014	4,014
180	0605024A	ANTI-TAMPER TECHNOLOGY SUPPORT .....	4,094	4,094
181	0607131A	WEAPONS AND MUNITIONS PRODUCT IMPROVEMENT PROGRAMS.	15,738	15,738
182	0607133A	TRACTOR SMOKE .....	4,513	4,513
183	0607134A	LONG RANGE PRECISION FIRES (LRPF) .....	102,014	102,014
184	0607135A	APACHE PRODUCT IMPROVEMENT PROGRAM .....	59,977	59,977
185	0607136A	BLACKHAWK PRODUCT IMPROVEMENT PROGRAM .....	34,416	43,716
		Unfunded requirement—UH-60V development .....		[9,300]
186	0607137A	CHINOOK PRODUCT IMPROVEMENT PROGRAM .....	194,567	194,567
187	0607138A	FIXED WING PRODUCT IMPROVEMENT PROGRAM .....	9,981	9,981
188	0607139A	IMPROVED TURBINE ENGINE PROGRAM .....	204,304	204,304
189	0607140A	EMERGING TECHNOLOGIES FROM NIE .....	1,023	1,023
190	0607141A	LOGISTICS AUTOMATION .....	1,504	1,504
191	0607142A	AVIATION ROCKET SYSTEM PRODUCT IMPROVEMENT AND DEVELOPMENT.	10,064	10,064
192	0607143A	UNMANNED AIRCRAFT SYSTEM UNIVERSAL PRODUCTS .....	38,463	38,463
193	0607665A	FAMILY OF BIOMETRICS .....	6,159	6,159
194	0607865A	PATRIOT PRODUCT IMPROVEMENT .....	90,217	90,217
195	0202429A	AEROSTAT JOINT PROJECT—COCOM EXERCISE .....	6,749	6,749
196	0203728A	JOINT AUTOMATED DEEP OPERATION COORDINATION SYSTEM (JADOC).	33,520	33,520
197	0203735A	COMBAT VEHICLE IMPROVEMENT PROGRAMS .....	343,175	351,175
		Unfunded requirement—M88A2E1 .....		[8,000]
198	0203740A	MANEUVER CONTROL SYSTEM .....	6,639	6,639
199	0203743A	155MM SELF-PROPELLED HOWITZER IMPROVEMENTS .....	40,784	40,784
200	0203744A	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS.	39,358	39,358
201	0203752A	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	145	145
202	0203758A	DIGITIZATION .....	4,803	4,803
203	0203801A	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	2,723	17,723
		Realign European Reassurance Initiative to Base .....		[15,000]
204	0203802A	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS .....	5,000	5,000
205	0203808A	TRACTOR CARD .....	37,883	37,883
206	0205402A	INTEGRATED BASE DEFENSE—OPERATIONAL SYSTEM DEV		4,500
		Unfunded requirement—modal passive detection system .....		[4,500]
207	0205410A	MATERIALS HANDLING EQUIPMENT .....	1,582	1,582
208	0205412A	ENVIRONMENTAL QUALITY TECHNOLOGY—OPERATIONAL SYSTEM DEV.	195	195
209	0205456A	LOWER TIER AIR AND MISSILE DEFENSE (AMD) SYSTEM ...	78,926	78,926
210	0205778A	GUIDED MULTIPLE-LAUNCH ROCKET SYSTEM (GMLRS) .....	102,807	102,807
213	0303028A	SECURITY AND INTELLIGENCE ACTIVITIES .....	13,807	13,807
214	0303140A	INFORMATION SYSTEMS SECURITY PROGRAM .....	132,438	132,438
215	0303141A	GLOBAL COMBAT SUPPORT SYSTEM .....	64,370	64,370
217	0303150A	WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM .....	10,475	10,475
220	0305172A	COMBINED ADVANCED APPLICATIONS .....	1,100	1,100
222	0305204A	TACTICAL UNMANNED AERIAL VEHICLES .....	9,433	16,925
		Realign European Reassurance Initiative to Base .....		[7,492]
223	0305206A	AIRBORNE RECONNAISSANCE SYSTEMS .....	5,080	20,080
		Realign European Reassurance Initiative to Base .....		[15,000]
224	0305208A	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS .....	24,700	24,700
225	0305219A	MQ-1C GRAY EAGLE UAS .....	9,574	9,574
226	0305232A	RQ-11 UAV .....	2,191	2,191
227	0305233A	RQ-7 UAV .....	12,773	12,773
228	0307665A	BIOMETRICS ENABLED INTELLIGENCE .....	2,537	2,537
229	0310349A	WIN-T INCREMENT 2—INITIAL NETWORKING .....	4,723	4,723
230	0708045A	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES .....	60,877	60,877
231	1203142A	SATCOM GROUND ENVIRONMENT (SPACE) .....	11,959	11,959
232	1208053A	JOINT TACTICAL GROUND SYSTEM .....	10,228	10,228
232A	999999999	CLASSIFIED PROGRAMS .....	7,154	7,154
		<b>SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT.</b>	<b>1,877,685</b>	<b>1,936,977</b>

SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
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<b>TOTAL RESEARCH, DEVELOPMENT, TEST &amp; EVAL, ARMY</b>			<b>9,425,440</b>	<b>9,649,380</b>
<b>RESEARCH, DEVELOPMENT, TEST &amp; EVAL, NAVY</b>				
<b>BASIC RESEARCH</b>				
001	0601103N	UNIVERSITY RESEARCH INITIATIVES .....	118,130	138,130
		Program Increase .....		[20,000]
002	0601152N	IN-HOUSE LABORATORY INDEPENDENT RESEARCH .....	19,438	19,438
003	0601153N	DEFENSE RESEARCH SCIENCES .....	458,333	458,333
<b>SUBTOTAL BASIC RESEARCH .....</b>			<b>595,901</b>	<b>615,901</b>
<b>APPLIED RESEARCH</b>				
004	0602114N	POWER PROJECTION APPLIED RESEARCH .....	13,553	13,553
005	0602123N	FORCE PROTECTION APPLIED RESEARCH .....	125,557	125,557
006	0602131M	MARINE CORPS LANDING FORCE TECHNOLOGY .....	53,936	53,936
007	0602235N	COMMON PICTURE APPLIED RESEARCH .....	36,450	36,450
008	0602236N	WARFIGHTER SUSTAINMENT APPLIED RESEARCH .....	48,649	48,649
009	0602271N	ELECTROMAGNETIC SYSTEMS APPLIED RESEARCH .....	79,598	79,598
010	0602435N	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH .....	42,411	42,411
011	0602651M	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH .....	6,425	6,425
012	0602747N	UNDERSEA WARFARE APPLIED RESEARCH .....	56,094	56,094
013	0602750N	FUTURE NAVAL CAPABILITIES APPLIED RESEARCH .....	156,805	156,805
014	0602782N	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH .....	32,733	32,733
015	0602792N	INNOVATIVE NAVAL PROTOTYPES (INP) APPLIED RESEARCH.	171,146	171,146
016	0602861N	SCIENCE AND TECHNOLOGY MANAGEMENT—ONR FIELD ACTIVITIES.	62,722	62,722
<b>SUBTOTAL APPLIED RESEARCH .....</b>			<b>886,079</b>	<b>886,079</b>
<b>ADVANCED TECHNOLOGY DEVELOPMENT</b>				
019	0603123N	FORCE PROTECTION ADVANCED TECHNOLOGY .....	26,342	26,342
020	0603271N	ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY .....	9,360	9,360
021	0603640M	USMC ADVANCED TECHNOLOGY DEMONSTRATION (ATD) .....	154,407	154,407
022	0603651M	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT.	13,448	13,448
023	0603673N	FUTURE NAVAL CAPABILITIES ADVANCED TECHNOLOGY DEVELOPMENT.	231,772	231,772
024	0603680N	MANUFACTURING TECHNOLOGY PROGRAM .....	57,797	67,797
		Program Increase .....		[10,000]
025	0603729N	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY .....	4,878	4,878
027	0603758N	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS.	64,889	64,889
028	0603782N	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY.	15,164	15,164
029	0603801N	INNOVATIVE NAVAL PROTOTYPES (INP) ADVANCED TECHNOLOGY DEVELOPMENT.	108,285	132,285
		Program increase for railgun tactical demonstrator .....		[24,000]
<b>SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT.</b>			<b>686,342</b>	<b>720,342</b>
<b>ADVANCED COMPONENT DEVELOPMENT &amp; PROTOTYPES</b>				
030	0603207N	AIR/OCEAN TACTICAL APPLICATIONS .....	48,365	48,365
031	0603216N	AVIATION SURVIVABILITY .....	5,566	5,566
033	0603251N	AIRCRAFT SYSTEMS .....	695	695
034	0603254N	ASW SYSTEMS DEVELOPMENT .....	7,661	7,661
035	0603261N	TACTICAL AIRBORNE RECONNAISSANCE .....	3,707	3,707
036	0603382N	ADVANCED COMBAT SYSTEMS TECHNOLOGY .....	61,381	61,381
037	0603502N	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES.	154,117	177,117
		LDUV .....		[23,000]
038	0603506N	SURFACE SHIP TORPEDO DEFENSE .....	14,974	14,974
039	0603512N	CARRIER SYSTEMS DEVELOPMENT .....	9,296	9,296
040	0603525N	PILOT FISH .....	132,083	132,083
041	0603527N	RETRACT LARCH .....	15,407	15,407
042	0603536N	RETRACT JUNIPER .....	122,413	122,413
043	0603542N	RADIOLOGICAL CONTROL .....	745	745
044	0603553N	SURFACE ASW .....	1,136	1,136
045	0603561N	ADVANCED SUBMARINE SYSTEM DEVELOPMENT .....	100,955	100,955
046	0603562N	SUBMARINE TACTICAL WARFARE SYSTEMS .....	13,834	13,834
047	0603563N	SHIP CONCEPT ADVANCED DESIGN .....	36,891	36,891
048	0603564N	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES .....	12,012	12,012
049	0603570N	ADVANCED NUCLEAR POWER SYSTEMS .....	329,500	329,500
050	0603573N	ADVANCED SURFACE MACHINERY SYSTEMS .....	29,953	29,953
051	0603576N	CHALK EAGLE .....	191,610	191,610
052	0603581N	LITTORAL COMBAT SHIP (LCS) .....	40,991	40,991
053	0603582N	COMBAT SYSTEM INTEGRATION .....	24,674	24,674
054	0603595N	OHIO REPLACEMENT .....	776,158	776,158



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Line	Program Element	Item	FY 2018 Request	House Authorized
055	0603596N	LCS MISSION MODULES .....	116,871	116,871
056	0603597N	AUTOMATED TEST AND ANALYSIS .....	8,052	8,052
057	0603599N	FRIGATE DEVELOPMENT .....	143,450	143,450
058	0603609N	CONVENTIONAL MUNITIONS .....	8,909	8,909
060	0603635M	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM .....	1,428	1,428
061	0603654N	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT .....	53,367	53,367
063	0603713N	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT .....	8,212	8,212
064	0603721N	ENVIRONMENTAL PROTECTION .....	20,214	20,214
065	0603724N	NAVY ENERGY PROGRAM .....	50,623	50,623
066	0603725N	FACILITIES IMPROVEMENT .....	2,837	2,837
067	0603734N	CHALK CORAL .....	245,143	245,143
068	0603739N	NAVY LOGISTIC PRODUCTIVITY .....	2,995	2,995
069	0603746N	RETRACT MAPLE .....	306,101	306,101
070	0603748N	LINK PLUMERIA .....	253,675	253,675
071	0603751N	RETRACT ELM .....	55,691	55,691
072	0603764N	LINK EVERGREEN .....	48,982	48,982
074	0603790N	NATO RESEARCH AND DEVELOPMENT .....	9,099	9,099
075	0603795N	LAND ATTACK TECHNOLOGY .....	33,568	33,568
076	0603851M	JOINT NON-LETHAL WEAPONS TESTING .....	29,873	29,873
077	0603860N	JOINT PRECISION APPROACH AND LANDING SYSTEMS— DEM/VAL.	106,391	106,391
078	0603925N	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS .....	107,310	133,310
		Program increase for railgun tactical demonstrator .....		[26,000]
079	0604112N	GERALD R. FORD CLASS NUCLEAR AIRCRAFT CARRIER (CVN 78—80).	83,935	83,935
081	0604272N	TACTICAL AIR DIRECTIONAL INFRARED COUNTER- MEASURES (TADIRCM).	46,844	46,844
083	0604286M	MARINE CORPS ADDITIVE MANUFACTURING TECHNOLOGY DEVELOPMENT.	6,200	6,200
085	0604320M	RAPID TECHNOLOGY CAPABILITY PROTOTYPE .....	7,055	7,055
086	0604454N	LX (R) .....	9,578	9,578
087	0604536N	ADVANCED UNDERSEA PROTOTYPING .....	66,543	76,543
		XLUV .....		[10,000]
089	0604659N	PRECISION STRIKE WEAPONS DEVELOPMENT PROGRAM .....	31,315	31,315
090	0604707N	SPACE AND ELECTRONIC WARFARE (SEW) ARCHITECTURE/ ENGINEERING SUPPORT.	42,851	42,851
091	0604786N	OFFENSIVE ANTI-SURFACE WARFARE WEAPON DEVELOP- MENT.	160,694	160,694
093	0303354N	ASW SYSTEMS DEVELOPMENT—MIP .....	8,278	8,278
094	0304240M	ADVANCED TACTICAL UNMANNED AIRCRAFT SYSTEM .....	7,979	7,979
095	0304270N	ELECTRONIC WARFARE DEVELOPMENT—MIP .....	527	527
		<b>SUBTOTAL ADVANCED COMPONENT DEVELOP- MENT &amp; PROTOTYPES.</b>	<b>4,218,714</b>	<b>4,277,714</b>
		<b>SYSTEM DEVELOPMENT &amp; DEMONSTRATION</b>		
096	0603208N	TRAINING SYSTEM AIRCRAFT .....	16,945	16,945
097	0604212N	OTHER HELO DEVELOPMENT .....	26,786	26,786
098	0604214N	AV-8B AIRCRAFT—ENG DEV .....	48,780	48,780
099	0604215N	STANDARDS DEVELOPMENT .....	2,722	2,722
100	0604216N	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT .....	5,371	5,371
101	0604218N	AIR/OCEAN EQUIPMENT ENGINEERING .....	782	782
102	0604221N	P-3 MODERNIZATION PROGRAM .....	1,361	1,361
103	0604230N	WARFARE SUPPORT SYSTEM .....	14,167	14,167
104	0604231N	TACTICAL COMMAND SYSTEM .....	55,695	55,695
105	0604234N	ADVANCED HAWKEYE .....	292,535	292,535
106	0604245N	H-1 UPGRADES .....	61,288	61,288
107	0604261N	ACOUSTIC SEARCH SENSORS .....	37,167	37,167
108	0604262N	V-22A .....	171,386	186,386
		Unfunded requirement .....		[15,000]
109	0604264N	AIR CREW SYSTEMS DEVELOPMENT .....	13,235	23,235
		Air Crew Sensor Improvements .....		[10,000]
110	0604269N	EA-18 .....	173,488	173,488
111	0604270N	ELECTRONIC WARFARE DEVELOPMENT .....	54,055	83,055
		Unfunded requirement—EWSA .....		[5,500]
		Unfunded requirement—Intrepid Tiger II (V)3 UH-1Y jettison capability.		[3,000]
		Unfunded requirements—range improvements and upgrades .....		[20,500]
112	0604273N	EXECUTIVE HELO DEVELOPMENT .....	451,938	451,938
113	0604274N	NEXT GENERATION JAMMER (NGJ) .....	632,936	624,136
		Unjustified cost growth .....		[-8,800]
114	0604280N	JOINT TACTICAL RADIO SYSTEM—NAVY (JTRS-NAVY) .....	4,310	4,310
115	0604282N	NEXT GENERATION JAMMER (NGJ) INCREMENT II .....	66,686	66,686
116	0604307N	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING .....	390,238	390,238
117	0604311N	LPD-17 CLASS SYSTEMS INTEGRATION .....	689	689
118	0604329N	SMALL DIAMETER BOMB (SDB) .....	112,846	112,846
119	0604366N	STANDARD MISSILE IMPROVEMENTS .....	158,578	158,578
120	0604373N	AIRBORNE MCM .....	15,734	15,734
122	0604378N	NAVAL INTEGRATED FIRE CONTROL—COUNTER AIR SYS- TEMS ENGINEERING.	25,445	25,445

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Line	Program Element	Item	FY 2018 Request	House Authorized
124	0604501N	ADVANCED ABOVE WATER SENSORS .....	87,233	92,233
		SPY-1 Solid State Advancement .....		[5,000]
125	0604503N	SSN-688 AND TRIDENT MODERNIZATION .....	130,981	130,981
126	0604504N	AIR CONTROL .....	75,186	75,186
127	0604512N	SHIPBOARD AVIATION SYSTEMS .....	177,926	177,926
128	0604518N	COMBAT INFORMATION CENTER CONVERSION .....	8,062	8,062
129	0604522N	AIR AND MISSILE DEFENSE RADAR (AMDR) SYSTEM .....	32,090	32,090
130	0604558N	NEW DESIGN SSN .....	120,087	120,087
131	0604562N	SUBMARINE TACTICAL WARFARE SYSTEM .....	50,850	50,850
132	0604567N	SHIP CONTRACT DESIGN/ LIVE FIRE T&E .....	67,166	87,166
		CVN 80 DFA .....		[20,000]
133	0604574N	NAVY TACTICAL COMPUTER RESOURCES .....	4,817	4,817
134	0604580N	VIRGINIA PAYLOAD MODULE (VPM) .....	72,861	72,861
135	0604601N	MINE DEVELOPMENT .....	25,635	25,635
136	0604610N	LIGHTWEIGHT TORPEDO DEVELOPMENT .....	28,076	28,076
137	0604654N	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT .....	7,561	7,561
138	0604703N	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FAC- TORS.	40,828	40,828
139	0604727N	JOINT STANDOFF WEAPON SYSTEMS .....	435	435
140	0604755N	SHIP SELF DEFENSE (DETECT & CONTROL) .....	161,713	161,713
141	0604756N	SHIP SELF DEFENSE (ENGAGE: HARD KILL) .....	212,412	243,412
		OTH Weapon Development .....		[31,000]
142	0604757N	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW) .....	103,391	103,391
143	0604761N	INTELLIGENCE ENGINEERING .....	34,855	34,855
144	0604771N	MEDICAL DEVELOPMENT .....	9,353	9,353
145	0604777N	NAVIGATION/ID SYSTEM .....	92,546	92,546
146	0604800M	JOINT STRIKE FIGHTER (JSF)—EMD .....	152,934	152,934
147	0604800N	JOINT STRIKE FIGHTER (JSF)—EMD .....	108,931	108,931
148	0604810M	JOINT STRIKE FIGHTER FOLLOW ON MODERNIZATION (FOM)—MARINE CORPS.	144,958	144,958
149	0604810N	JOINT STRIKE FIGHTER FOLLOW ON MODERNIZATION (FOM)—NAVY.	143,855	143,855
150	0605013M	INFORMATION TECHNOLOGY DEVELOPMENT .....	14,865	14,865
151	0605013N	INFORMATION TECHNOLOGY DEVELOPMENT .....	152,977	152,977
152	0605024N	ANTI-TAMPER TECHNOLOGY SUPPORT .....	3,410	3,410
153	0605212N	CH-53K RDTE .....	340,758	340,758
154	0605215N	MISSION PLANNING .....	33,430	33,430
155	0605217N	COMMON AVIONICS .....	58,163	58,163
156	0605220N	SHIP TO SHORE CONNECTOR (SSC) .....	22,410	22,410
157	0605327N	T-AO 205 CLASS .....	1,961	1,961
158	0605414N	UNMANNED CARRIER AVIATION (UCA) .....	222,208	222,208
159	0605450N	JOINT AIR-TO-GROUND MISSILE (JAGM) .....	15,473	15,473
160	0605500N	MULTI-MISSION MARITIME AIRCRAFT (MMA) .....	11,795	11,795
161	0605504N	MULTI-MISSION MARITIME (MMA) INCREMENT III .....	181,731	181,731
162	0605611M	MARINE CORPS ASSAULT VEHICLES SYSTEM DEVELOP- MENT & DEMONSTRATION.	178,993	178,993
163	0605813M	JOINT LIGHT TACTICAL VEHICLE (JLTV) SYSTEM DEVEL- OPMENT & DEMONSTRATION.	20,710	20,710
164	0204202N	DDG-1000 .....	140,500	140,500
168	0304785N	TACTICAL CRYPTOLOGIC SYSTEMS .....	28,311	28,311
170	0306250M	CYBER OPERATIONS TECHNOLOGY DEVELOPMENT .....	4,502	4,502
		<b>SUBTOTAL SYSTEM DEVELOPMENT &amp; DEM- ONSTRATION.</b>	<b>6,362,102</b>	<b>6,463,302</b>
		<b>MANAGEMENT SUPPORT</b>		
171	0604256N	THREAT SIMULATOR DEVELOPMENT .....	91,819	91,819
172	0604258N	TARGET SYSTEMS DEVELOPMENT .....	23,053	23,053
173	0604759N	MAJOR T&E INVESTMENT .....	52,634	52,634
174	0605126N	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZA- TION.	141	141
175	0605152N	STUDIES AND ANALYSIS SUPPORT—NAVY .....	3,917	3,917
176	0605154N	CENTER FOR NAVAL ANALYSES .....	50,432	50,432
179	0605804N	TECHNICAL INFORMATION SERVICES .....	782	782
180	0605853N	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT .....	94,562	94,562
181	0605856N	STRATEGIC TECHNICAL SUPPORT .....	4,313	4,313
182	0605861N	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT .....	1,104	1,104
183	0605863N	RDT&E SHIP AND AIRCRAFT SUPPORT .....	105,666	105,666
184	0605864N	TEST AND EVALUATION SUPPORT .....	373,667	413,667
		Program increase .....		[40,000]
185	0605865N	OPERATIONAL TEST AND EVALUATION CAPABILITY .....	20,298	20,298
186	0605866N	NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT .....	17,341	17,341
188	0605873M	MARINE CORPS PROGRAM WIDE SUPPORT .....	21,751	21,751
189	0605898N	MANAGEMENT HQ—R&D .....	44,279	44,279
190	0606355N	WARFARE INNOVATION MANAGEMENT .....	28,841	28,841
191	0902498N	MANAGEMENT HEADQUARTERS (DEPARTMENTAL SUP- PORT ACTIVITIES).	1,749	1,749
194	1206867N	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT .....	9,408	9,408
		<b>SUBTOTAL MANAGEMENT SUPPORT</b> .....	<b>945,757</b>	<b>985,757</b>

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<b>OPERATIONAL SYSTEMS DEVELOPMENT</b>				
196	0607658N	COOPERATIVE ENGAGEMENT CAPABILITY (CEC) .....	92,571	103,571
		CEC IFF Mode 5 Acceleration .....		[11,000]
197	0607700N	DEPLOYABLE JOINT COMMAND AND CONTROL .....	3,137	3,137
198	0101221N	STRATEGIC SUB & WEAPONS SYSTEM SUPPORT .....	135,219	135,219
199	0101224N	SSBN SECURITY TECHNOLOGY PROGRAM .....	36,242	36,242
200	0101226N	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT .....	12,053	12,053
201	0101402N	NAVY STRATEGIC COMMUNICATIONS .....	18,221	18,221
203	0204136N	F/A-18 SQUADRONS .....	224,470	213,470
		Program reduction- delayed procurement rates .....		[-11,000]
204	0204163N	FLEET TELECOMMUNICATIONS (TACTICAL) .....	33,525	33,525
205	0204228N	SURFACE SUPPORT .....	24,829	24,829
206	0204229N	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC). Tomahawk Modernization .....	133,617	142,617
				[9,000]
207	0204311N	INTEGRATED SURVEILLANCE SYSTEM .....	38,972	50,572
		Realign European Reassurance Initiative to Base .....		[11,600]
208	0204413N	AMPHIBIOUS TACTICAL SUPPORT UNITS (DISPLACEMENT CRAFT). GROUND/AIR TASK ORIENTED RADAR (GATOR) .....	3,940	3,940
209	0204460M	GROUND/AIR TASK ORIENTED RADAR (GATOR) .....	54,645	54,645
210	0204571N	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT .....	66,518	76,518
		Modernization of Barking Sands Tactical Underwater Range .....		[10,000]
211	0204574N	CRYPTOLOGIC DIRECT SUPPORT .....	1,155	1,155
212	0204575N	ELECTRONIC WARFARE (EW) READINESS SUPPORT .....	51,040	51,040
213	0205601N	HARM IMPROVEMENT .....	87,989	97,989
		Unfunded requirement—AARGM Derivative Program .....		[10,000]
214	0205604N	TACTICAL DATA LINKS .....	89,852	89,852
215	0205620N	SURFACE ASW COMBAT SYSTEM INTEGRATION .....	29,351	29,351
216	0205632N	MK-48 ADCAP .....	68,553	68,553
217	0205633N	AVIATION IMPROVEMENTS .....	119,099	119,099
218	0205675N	OPERATIONAL NUCLEAR POWER SYSTEMS .....	127,445	127,445
219	0206313M	MARINE CORPS COMMUNICATIONS SYSTEMS .....	123,825	120,325
		Excess growth—tactical radio systems .....		[-3,500]
220	0206335M	COMMON AVIATION COMMAND AND CONTROL SYSTEM (CAC2S). MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS.	7,343	7,343
221	0206623M	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS.	66,009	66,009
222	0206624M	MARINE CORPS COMBAT SERVICES SUPPORT .....	25,258	25,258
223	0206625M	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP). AMPHIBIOUS ASSAULT VEHICLE .....	30,886	30,886
224	0206629M	AMPHIBIOUS ASSAULT VEHICLE .....	58,728	58,728
225	0207161N	TACTICAL AIM MISSILES .....	42,884	51,884
		Unfunded requirement—AIM-9X Blk II Systems Improvement program.		[9,000]
226	0207163N	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM) CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES (CANES).	25,364	25,364
232	0303138N	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES (CANES).	24,271	24,271
233	0303140N	INFORMATION SYSTEMS SECURITY PROGRAM .....	50,269	50,269
236	0305192N	MILITARY INTELLIGENCE PROGRAM (MIP) ACTIVITIES .....	6,352	6,352
237	0305204N	TACTICAL UNMANNED AERIAL VEHICLES .....	7,770	7,770
238	0305205N	UAS INTEGRATION AND INTEROPERABILITY .....	39,736	39,736
239	0305208M	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS .....	12,867	12,867
240	0305208N	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS .....	46,150	46,150
241	0305220N	MQ-4C TRITON .....	84,115	84,115
242	0305231N	MQ-8 UAV .....	62,656	62,656
243	0305232M	RQ-11 UAV .....	2,022	2,022
245	0305234N	SMALL (LEVEL 0) TACTICAL UAS (STUASLO) .....	4,835	4,835
246	0305239M	RQ-21A .....	8,899	8,899
247	0305241N	MULTI-INTELLIGENCE SENSOR DEVELOPMENT .....	99,020	99,020
248	0305242M	UNMANNED AERIAL SYSTEMS (UAS) PAYLOADS (MIP) .....	18,578	11,478
		Program reduction .....		[-7,100]
249	0305421N	RQ-4 MODERNIZATION .....	229,404	229,404
250	0308601N	MODELING AND SIMULATION SUPPORT .....	5,238	5,238
251	0702207N	DEPOT MAINTENANCE (NON-IF) .....	38,227	38,227
252	0708730N	MARITIME TECHNOLOGY (MARITECH) .....	4,808	4,808
253	1203109N	SATELLITE COMMUNICATIONS (SPACE) .....	37,836	37,836
253A	999999999	CLASSIFIED PROGRAMS .....	1,364,347	1,364,347
<b>SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT.</b>			<b>3,980,140</b>	<b>4,019,140</b>
<b>TOTAL RESEARCH, DEVELOPMENT, TEST &amp; EVAL, NAVY.</b>			<b>17,675,035</b>	<b>17,968,235</b>
<b>RESEARCH, DEVELOPMENT, TEST &amp; EVAL, AF</b>				
<b>BASIC RESEARCH</b>				
001	0601102F	DEFENSE RESEARCH SCIENCES .....	342,919	342,919
002	0601103F	UNIVERSITY RESEARCH INITIATIVES .....	147,923	147,923

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Line	Program Element	Item	FY 2018 Request	House Authorized
003	0601108F	HIGH ENERGY LASER RESEARCH INITIATIVES .....	14,417	14,417
		<b>SUBTOTAL BASIC RESEARCH .....</b>	<b>505,259</b>	<b>505,259</b>
		<b>APPLIED RESEARCH</b>		
004	0602102F	MATERIALS .....	124,264	124,264
005	0602201F	AEROSPACE VEHICLE TECHNOLOGIES .....	124,678	129,678
		Program increase .....		[5,000]
006	0602202F	HUMAN EFFECTIVENESS APPLIED RESEARCH .....	108,784	108,784
007	0602203F	AEROSPACE PROPULSION .....	192,695	192,695
008	0602204F	AEROSPACE SENSORS .....	152,782	152,782
009	0602298F	SCIENCE AND TECHNOLOGY MANAGEMENT— MAJOR HEADQUARTERS ACTIVITIES.	8,353	8,353
010	0602601F	SPACE TECHNOLOGY .....	116,503	116,503
011	0602602F	CONVENTIONAL MUNITIONS .....	112,195	112,195
012	0602605F	DIRECTED ENERGY TECHNOLOGY .....	132,993	132,993
013	0602788F	DOMINANT INFORMATION SCIENCES AND METHODS .....	167,818	167,818
014	0602890F	HIGH ENERGY LASER RESEARCH .....	43,049	43,049
		<b>SUBTOTAL APPLIED RESEARCH .....</b>	<b>1,284,114</b>	<b>1,289,114</b>
		<b>ADVANCED TECHNOLOGY DEVELOPMENT</b>		
015	0603112F	ADVANCED MATERIALS FOR WEAPON SYSTEMS .....	37,856	37,856
016	0603199F	SUSTAINMENT SCIENCE AND TECHNOLOGY (S&T) .....	22,811	22,811
017	0603203F	ADVANCED AEROSPACE SENSORS .....	40,978	40,978
018	0603211F	AEROSPACE TECHNOLOGY DEV/DEMO .....	115,966	115,966
019	0603216F	AEROSPACE PROPULSION AND POWER TECHNOLOGY .....	104,499	109,499
		Program Increase for Robust Electrical Power System .....		[5,000]
020	0603270F	ELECTRONIC COMBAT TECHNOLOGY .....	60,551	60,551
021	0603401F	ADVANCED SPACECRAFT TECHNOLOGY .....	58,910	58,910
022	0603444F	MAUI SPACE SURVEILLANCE SYSTEM (MSSS) .....	10,433	10,433
023	0603456F	HUMAN EFFECTIVENESS ADVANCED TECHNOLOGY DEVELOPMENT.	33,635	33,635
024	0603601F	CONVENTIONAL WEAPONS TECHNOLOGY .....	167,415	167,415
025	0603605F	ADVANCED WEAPONS TECHNOLOGY .....	45,502	45,502
026	0603680F	MANUFACTURING TECHNOLOGY PROGRAM .....	46,450	46,450
027	0603788F	BATTLESPACE KNOWLEDGE DEVELOPMENT AND DEMONSTRATION.	49,011	49,011
		<b>SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT.</b>	<b>794,017</b>	<b>799,017</b>
		<b>ADVANCED COMPONENT DEVELOPMENT &amp; PROTOTYPES</b>		
028	0603260F	INTELLIGENCE ADVANCED DEVELOPMENT .....	5,652	8,352
		Unfunded requirement—OSINT exploitation and fusion .....		[1,200]
		Unfunded requirement—SIGINT Tactical Analysis Reporting Gateway.		[1,500]
030	0603742F	COMBAT IDENTIFICATION TECHNOLOGY .....	24,397	24,397
031	0603790F	NATO RESEARCH AND DEVELOPMENT .....	3,851	3,851
033	0603851F	INTERCONTINENTAL BALLISTIC MISSILE—DEM/VAL .....	10,736	10,736
034	0603859F	POLLUTION PREVENTION—DEM/VAL .....	2	2
035	0604015F	LONG RANGE STRIKE—BOMBER .....	2,003,580	2,003,580
036	0604201F	INTEGRATED AVIONICS PLANNING AND DEVELOPMENT .....	65,458	65,458
037	0604257F	ADVANCED TECHNOLOGY AND SENSORS .....	68,719	94,919
		Unfunded requirement—ASARS-2B .....		[11,500]
		Unfunded requirement—Hyperspectral Chip Development .....		[14,700]
038	0604288F	NATIONAL AIRBORNE OPS CENTER (NAOC) RECAP .....	7,850	7,850
039	0604317F	TECHNOLOGY TRANSFER .....	3,295	3,295
040	0604327F	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS) PROGRAM.	17,365	17,365
041	0604414F	CYBER RESILIENCY OF WEAPON SYSTEMS-ACS .....	32,253	32,253
044	0604776F	DEPLOYMENT & DISTRIBUTION ENTERPRISE R&D .....	26,222	26,222
046	0604858F	TECH TRANSITION PROGRAM .....	840,650	935,650
		Program Increase .....		[10,000]
		Unfunded Requirement .....		[70,000]
		Unfunded requirement—Long-Endurance Aerial Platform(LEAP) Ahead Prototyping.		[15,000]
047	0605230F	GROUND BASED STRATEGIC DETERRENT .....	215,721	215,721
049	0207110F	NEXT GENERATION AIR DOMINANCE .....	294,746	421,746
		Unfunded Requirement .....		[127,000]
050	0207455F	THREE DIMENSIONAL LONG-RANGE RADAR (3DELRR) .....	10,645	10,645
052	0305236F	COMMON DATA LINK EXECUTIVE AGENT (CDL EA) .....	41,509	41,509
053	0306250F	CYBER OPERATIONS TECHNOLOGY DEVELOPMENT .....	226,287	226,287
054	0306415F	ENABLED CYBER ACTIVITIES .....	16,687	16,687
055	0408011F	SPECIAL TACTICS / COMBAT CONTROL .....	4,500	4,500
056	0901410F	CONTRACTING INFORMATION TECHNOLOGY SYSTEM .....	15,867	15,867
057	1203164F	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT) (SPACE). Demonstration of Backup and Complementary PNT Capabilities of GPS.	253,939	263,939
				[10,000]

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Line	Program Element	Item	FY 2018 Request	House Authorized
058	1203710F	EO/IR WEATHER SYSTEMS .....	10,000	10,000
059	1206422F	WEATHER SYSTEM FOLLOW-ON .....	112,088	112,088
060	1206425F	SPACE SITUATION AWARENESS SYSTEMS .....	34,764	34,764
061	1206434F	MIDTERM POLAR MILSATCOM SYSTEM .....	63,092	63,092
062	1206438F	SPACE CONTROL TECHNOLOGY .....	7,842	7,842
063	1206730F	SPACE SECURITY AND DEFENSE PROGRAM .....	41,385	41,385
064	1206760F	PROTECTED TACTICAL ENTERPRISE SERVICE (PTES) .....	18,150	18,150
065	1206761F	PROTECTED TACTICAL SERVICE (PTS) .....	24,201	24,201
066	1206855F	PROTECTED SATCOM SERVICES (PSCS)—AGGREGATED .....	16,000	16,000
067	1206857F	OPERATIONALLY RESPONSIVE SPACE .....	87,577	117,577
		Responsive Launch vehicles, infrastructure, and small sats .....		[30,000]
		<b>SUBTOTAL ADVANCED COMPONENT DEVELOPMENT &amp; PROTOTYPES.</b>	<b>4,605,030</b>	<b>4,895,930</b>
<b>SYSTEM DEVELOPMENT &amp; DEMONSTRATION</b>				
068	0604200F	FUTURE ADVANCED WEAPON ANALYSIS & PROGRAMS .....	5,100	5,100
069	0604201F	INTEGRATED AVIONICS PLANNING AND DEVELOPMENT .....	101,203	101,203
070	0604222F	NUCLEAR WEAPONS SUPPORT .....	3,009	3,009
071	0604270F	ELECTRONIC WARFARE DEVELOPMENT .....	2,241	2,241
072	0604281F	TACTICAL DATA NETWORKS ENTERPRISE .....	38,250	38,250
073	0604287F	PHYSICAL SECURITY EQUIPMENT .....	19,739	19,739
074	0604329F	SMALL DIAMETER BOMB (SDB)—EMD .....	38,979	38,979
078	0604429F	AIRBORNE ELECTRONIC ATTACK .....	7,091	7,091
080	0604602F	ARMAMENT/ORDNANCE DEVELOPMENT .....	46,540	46,540
081	0604604F	SUBMUNITIONS .....	2,705	2,705
082	0604617F	AGILE COMBAT SUPPORT .....	31,240	34,240
		Joint Expeditionary Airfield Damage Repair .....		[3,000]
084	0604706F	LIFE SUPPORT SYSTEMS .....	9,060	9,060
085	0604735F	COMBAT TRAINING RANGES .....	87,350	87,350
086	0604800F	F-35—EMD .....	292,947	292,947
088	0604932F	LONG RANGE STANDOFF WEAPON .....	451,290	451,290
089	0604933F	ICBM FUZE MODERNIZATION .....	178,991	178,991
090	0605030F	JOINT TACTICAL NETWORK CENTER (JTNC) .....	12,736	12,736
091	0605031F	JOINT TACTICAL NETWORK (JTN) .....	9,319	9,319
092	0605213F	F-22 MODERNIZATION INCREMENT 3.2B .....	13,600	13,600
094	0605221F	KC-46 .....	93,845	0
		Under execution .....		[-93,845]
095	0605223F	ADVANCED PILOT TRAINING .....	105,999	105,999
096	0605229F	COMBAT RESCUE HELICOPTER .....	354,485	354,485
100	0605458F	AIR & SPACE OPS CENTER 10.2 RDT&E .....	119,745	59,745
		Program reduction .....		[-60,000]
101	0605931F	B-2 DEFENSIVE MANAGEMENT SYSTEM .....	194,570	194,570
102	0101125F	NUCLEAR WEAPONS MODERNIZATION .....	91,237	91,237
103	0207171F	F-15 EPAWSS .....	209,847	209,847
104	0207328F	STAND IN ATTACK WEAPON .....	3,400	3,400
105	0207701F	FULL COMBAT MISSION TRAINING .....	16,727	16,727
109	0307581F	JSTARS RECAP .....	417,201	417,201
110	0401310F	C-32 EXECUTIVE TRANSPORT RECAPITALIZATION .....	6,017	6,017
111	0401319F	PRESIDENTIAL AIRCRAFT RECAPITALIZATION (PAR) .....	434,069	434,069
112	0701212F	AUTOMATED TEST SYSTEMS .....	18,528	18,528
113	1203176F	COMBAT SURVIVOR EVADER LOCATOR .....	24,967	24,967
114	1203940F	SPACE SITUATION AWARENESS OPERATIONS .....	10,029	10,029
115	1206421F	COUNTERSPACE SYSTEMS .....	66,370	66,370
116	1206425F	SPACE SITUATION AWARENESS SYSTEMS .....	48,448	48,448
117	1206426F	SPACE FENCE .....	35,937	35,937
118	1206431F	ADVANCED EHF MILSATCOM (SPACE) .....	145,610	145,610
119	1206432F	POLAR MILSATCOM (SPACE) .....	33,644	33,644
120	1206433F	WIDEBAND GLOBAL SATCOM (SPACE) .....	14,263	14,263
121	1206441F	SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD .....	311,844	311,844
122	1206442F	EVOLVED SBIRS .....	71,018	71,018
123	1206853F	EELV MODERNIZATION AND SUSTAINMENT OF ASSURED ACCESS TO SPACE.	297,572	297,572
		EELV Modernization .....		[297,572]
		Launch Service Agreement .....		[-297,572]
		<b>SUBTOTAL SYSTEM DEVELOPMENT &amp; DEMONSTRATION.</b>	<b>4,476,762</b>	<b>4,325,917</b>
<b>MANAGEMENT SUPPORT</b>				
124	0604256F	THREAT SIMULATOR DEVELOPMENT .....	35,405	35,405
125	0604759F	MAJOR T&E INVESTMENT .....	82,874	87,874
		Unfunded requirement .....		[5,000]
126	0605101F	RAND PROJECT AIR FORCE .....	34,346	34,346
128	0605712F	INITIAL OPERATIONAL TEST & EVALUATION .....	15,523	15,523
129	0605807F	TEST AND EVALUATION SUPPORT .....	678,289	738,089
		Program Increase .....		[32,400]
		Unfunded Requirement .....		[27,400]
130	0605826F	ACQ WORKFORCE- GLOBAL POWER .....	219,809	219,809
131	0605827F	ACQ WORKFORCE- GLOBAL VIG & COMBAT SYS .....	223,179	223,179

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132	0605828F	ACQ WORKFORCE- GLOBAL REACH .....	138,556	138,556
133	0605829F	ACQ WORKFORCE- CYBER, NETWORK, & BUS SYS .....	221,393	221,393
134	0605830F	ACQ WORKFORCE- GLOBAL BATTLE MGMT .....	152,577	152,577
135	0605831F	ACQ WORKFORCE- CAPABILITY INTEGRATION .....	196,561	196,561
136	0605832F	ACQ WORKFORCE- ADVANCED PRGM TECHNOLOGY .....	28,322	28,322
137	0605833F	ACQ WORKFORCE- NUCLEAR SYSTEMS .....	126,611	126,611
140	0605898F	MANAGEMENT HQ—R&D .....	9,154	9,154
141	0605976F	FACILITIES RESTORATION AND MODERNIZATION—TEST AND EVALUATION SUPPORT.	135,507	135,507
142	0605978F	FACILITIES SUSTAINMENT—TEST AND EVALUATION SUPPORT.	28,720	28,720
143	0606017F	REQUIREMENTS ANALYSIS AND MATURATION .....	35,453	110,453
		Unfunded requirement .....		[50,000]
		Unfunded requirement—Penetrating Counter air (PCA) Risk Reduction.		[25,000]
146	0308602F	ENTEPRISE INFORMATION SERVICES (EIS) .....	29,049	29,049
147	0702806F	ACQUISITION AND MANAGEMENT SUPPORT .....	14,980	14,980
148	0804731F	GENERAL SKILL TRAINING .....	1,434	1,434
150	1001004F	INTERNATIONAL ACTIVITIES .....	4,569	4,569
151	1206116F	SPACE TEST AND TRAINING RANGE DEVELOPMENT .....	25,773	25,773
152	1206392F	SPACE AND MISSILE CENTER (SMC) CIVILIAN WORKFORCE	169,887	169,887
153	1206398F	SPACE & MISSILE SYSTEMS CENTER—MHA .....	9,531	9,531
154	1206860F	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE) .....	20,975	20,975
155	1206864F	SPACE TEST PROGRAM (STP) .....	25,398	25,398
		<b>SUBTOTAL MANAGEMENT SUPPORT .....</b>	<b>2,663,875</b>	<b>2,803,675</b>
<b>OPERATIONAL SYSTEMS DEVELOPMENT</b>				
157	0604222F	NUCLEAR WEAPONS SUPPORT .....	27,579	27,579
158	0604233F	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING .....	5,776	5,776
159	0604445F	WIDE AREA SURVEILLANCE .....	16,247	16,247
161	0605018F	AF INTEGRATED PERSONNEL AND PAY SYSTEM (AF-IPPS) ..	21,915	21,915
162	0605024F	ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY .....	33,150	33,150
163	0605117F	FOREIGN MATERIEL ACQUISITION AND EXPLOITATION .....	66,653	66,653
164	0605278F	HC/MC-130 RECAP RDT&E .....	38,579	38,579
165	0606018F	NC3 INTEGRATION .....	12,636	12,636
166	0101113F	B-52 SQUADRONS .....	111,910	111,910
167	0101122F	AIR-LAUNCHED CRUISE MISSILE (ALCM) .....	463	463
168	0101126F	B-1B SQUADRONS .....	62,471	62,471
169	0101127F	B-2 SQUADRONS .....	193,108	193,108
170	0101213F	MINUTEMAN SQUADRONS .....	210,845	210,845
		Increase ICBM Cryptography Upgrade II .....		[20,000]
		Reduce MM Ground and Communications Equipment .....		[-10,000]
		Reduce MM Support Equipment .....		[-10,000]
171	0101313F	INTEGRATED STRATEGIC PLANNING AND ANALYSIS NETWORK (ISPAN)—USSTRATCOM.	25,736	25,736
173	0101316F	WORLDWIDE JOINT STRATEGIC COMMUNICATIONS .....	6,272	70,272
		Enhances E-4B cyber security .....		[64,000]
174	0101324F	INTEGRATED STRATEGIC PLANNING & ANALYSIS NETWORK.	11,032	11,032
176	0102110F	UH-1N REPLACEMENT PROGRAM .....	108,617	108,617
177	0102326F	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION PROGRAM.	3,347	3,347
179	0205219F	MQ-9 UAV .....	201,394	201,394
182	0207131F	A-10 SQUADRONS .....	17,459	17,459
183	0207133F	F-16 SQUADRONS .....	246,578	271,578
		Unfunded requirement—MIDS-JTRS software changes .....		[25,000]
184	0207134F	F-15E SQUADRONS .....	320,271	320,271
185	0207136F	MANNED DESTRUCTIVE SUPPRESSION .....	15,106	35,106
		HTS pod block upgrade program .....		[20,000]
186	0207138F	F-22A SQUADRONS .....	610,942	610,942
187	0207142F	F-35 SQUADRONS .....	334,530	334,530
188	0207161F	TACTICAL AIM MISSILES .....	34,952	34,952
189	0207163F	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	61,322	61,322
191	0207227F	COMBAT RESCUE—PARARESCUE .....	693	693
193	0207249F	PRECISION ATTACK SYSTEMS PROCUREMENT .....	1,714	1,714
194	0207253F	COMPASS CALL .....	14,040	14,040
195	0207268F	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	109,243	109,243
197	0207325F	JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM) .....	29,932	29,932
198	0207410F	AIR & SPACE OPERATIONS CENTER (AOC) .....	26,956	26,956
199	0207412F	CONTROL AND REPORTING CENTER (CRC) .....	2,450	2,450
200	0207417F	AIRBORNE WARNING AND CONTROL SYSTEM (AWACS) .....	151,726	151,726
201	0207418F	TACTICAL AIRBORNE CONTROL SYSTEMS .....	3,656	3,656
203	0207431F	COMBAT AIR INTELLIGENCE SYSTEM ACTIVITIES .....	13,420	13,420
204	0207444F	TACTICAL AIR CONTROL PARTY-MOD .....	10,623	10,623
205	0207448F	C2ISR TACTICAL DATA LINK .....	1,754	1,754
206	0207452F	DCAPES .....	17,382	17,382
207	0207573F	NATIONAL TECHNICAL NUCLEAR FORENSICS .....	2,307	2,307
208	0207590F	SEEK EAGLE .....	25,397	25,397

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209	0207601F	USAF MODELING AND SIMULATION .....	10,175	10,175
210	0207605F	WARGAMING AND SIMULATION CENTERS .....	12,839	12,839
211	0207697F	DISTRIBUTED TRAINING AND EXERCISES .....	4,190	4,190
212	0208006F	MISSION PLANNING SYSTEMS .....	85,531	85,531
213	0208007F	TACTICAL DECEPTION .....	3,761	3,761
214	0208087F	AF OFFENSIVE CYBERSPACE OPERATIONS .....	35,693	35,693
215	0208088F	AF DEFENSIVE CYBERSPACE OPERATIONS .....	20,964	20,964
218	0301017F	GLOBAL SENSOR INTEGRATED ON NETWORK (GSIN) .....	3,549	3,549
219	0301112F	NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES) .....	4,371	4,371
227	0301401F	AIR FORCE SPACE AND CYBER NON-TRADITIONAL ISR FOR BATTLESPACE AWARENESS.	3,721	3,721
228	0302015F	E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC) ...	35,467	35,467
230	0303131F	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NET- WORK (MEECN).	48,841	48,841
231	0303140F	INFORMATION SYSTEMS SECURITY PROGRAM .....	42,973	42,973
232	0303141F	GLOBAL COMBAT SUPPORT SYSTEM .....	105	105
233	0303142F	GLOBAL FORCE MANAGEMENT—DATA INITIATIVE .....	2,147	2,147
236	0304260F	AIRBORNE SIGINT ENTERPRISE .....	121,948	121,948
237	0304310F	COMMERCIAL ECONOMIC ANALYSIS .....	3,544	3,544
240	0305020F	CCMD INTELLIGENCE INFORMATION TECHNOLOGY .....	1,542	1,542
241	0305099F	GLOBAL AIR TRAFFIC MANAGEMENT (GATM) .....	4,453	4,453
243	0305111F	WEATHER SERVICE .....	26,654	31,654
		Commercial weather pilot program .....		[5,000]
244	0305114F	AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATCALs).	6,306	7,806
		Unfunded requirement—ground based sense and avoid .....		[1,500]
245	0305116F	AERIAL TARGETS .....	21,295	21,295
248	0305128F	SECURITY AND INVESTIGATIVE ACTIVITIES .....	415	415
250	0305146F	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES .....	3,867	3,867
257	0305202F	DRAGON U-2 .....	34,486	34,486
259	0305206F	AIRBORNE RECONNAISSANCE SYSTEMS .....	4,450	17,250
		WAMI Technology Upgrades .....		[12,800]
260	0305207F	MANNED RECONNAISSANCE SYSTEMS .....	14,269	14,269
261	0305208F	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS .....	27,501	39,001
		Unfunded requirement .....		[11,500]
262	0305220F	RQ-4 UAV .....	214,849	214,849
263	0305221F	NETWORK-CENTRIC COLLABORATIVE TARGETING .....	18,842	18,842
265	0305238F	NATO AGS .....	44,729	44,729
266	0305240F	SUPPORT TO DCGS ENTERPRISE .....	26,349	26,349
269	0305600F	INTERNATIONAL INTELLIGENCE TECHNOLOGY AND AR- CHITECTURES.	3,491	3,491
271	0305881F	RAPID CYBER ACQUISITION .....	4,899	4,899
275	0305984F	PERSONNEL RECOVERY COMMAND & CTRL (PRC2) .....	2,445	2,445
276	0307577F	INTELLIGENCE MISSION DATA (IMD) .....	8,684	8,684
278	0401115F	C-130 AIRLIFT SQUADRON .....	10,219	10,219
279	0401119F	C-5 AIRLIFT SQUADRONS (IF) .....	22,758	22,758
280	0401130F	C-17 AIRCRAFT (IF) .....	34,287	34,287
281	0401132F	C-130J PROGRAM .....	26,821	26,821
282	0401134F	LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCIM) .....	5,283	5,283
283	0401218F	KC-135S .....	9,942	9,942
284	0401219F	KC-10S .....	7,933	7,933
285	0401314F	OPERATIONAL SUPPORT AIRLIFT .....	6,681	6,681
286	0401318F	CV-22 .....	22,519	22,519
287	0401840F	AMC COMMAND AND CONTROL SYSTEM .....	3,510	3,510
288	0408011F	SPECIAL TACTICS / COMBAT CONTROL .....	8,090	8,090
289	0702207F	DEPOT MAINTENANCE (NON-IF) .....	1,528	1,528
290	0708055F	MAINTENANCE, REPAIR & OVERHAUL SYSTEM .....	31,677	31,677
291	0708610F	LOGISTICS INFORMATION TECHNOLOGY (LOGIT) .....	33,344	33,344
292	0708611F	SUPPORT SYSTEMS DEVELOPMENT .....	9,362	9,362
293	0804743F	OTHER FLIGHT TRAINING .....	2,074	2,074
294	0808716F	OTHER PERSONNEL ACTIVITIES .....	107	107
295	0901202F	JOINT PERSONNEL RECOVERY AGENCY .....	2,006	2,006
296	0901218F	CIVILIAN COMPENSATION PROGRAM .....	3,780	3,780
297	0901220F	PERSONNEL ADMINISTRATION .....	7,472	7,472
298	0901226F	AIR FORCE STUDIES AND ANALYSIS AGENCY .....	1,563	1,563
299	0901538F	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVEL- OPMENT.	91,211	91,211
300	1201921F	SERVICE SUPPORT TO STRATCOM—SPACE ACTIVITIES .....	14,255	14,255
301	1202247F	AF TENCAP .....	31,914	31,914
302	1203001F	FAMILY OF ADVANCED BLOS TERMINALS (FAB-T) .....	32,426	32,426
303	1203110F	SATELLITE CONTROL NETWORK (SPACE) .....	18,808	18,808
305	1203165F	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CON- TROL SEGMENTS).	10,029	10,029
306	1203173F	SPACE AND MISSILE TEST AND EVALUATION CENTER .....	25,051	25,051
307	1203174F	SPACE INNOVATION, INTEGRATION AND RAPID TECH- NOLOGY DEVELOPMENT.	11,390	11,390
308	1203179F	INTEGRATED BROADCAST SERVICE (IBS) .....	8,747	8,747
309	1203182F	SPACE LIFT RANGE SYSTEM (SPACE) .....	10,549	10,549

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Line	Program Element	Item	FY 2018 Request	House Authorized
310	1203265F	GPS III SPACE SEGMENT .....	243,435	243,435
311	1203400F	SPACE SUPERIORITY INTELLIGENCE .....	12,691	12,691
312	1203614F	JSPOC MISSION SYSTEM .....	99,455	99,455
313	1203620F	NATIONAL SPACE DEFENSE CENTER .....	18,052	18,052
314	1203699F	SHARED EARLY WARNING (SEW) .....	1,373	1,373
315	1203906F	NCMC—TWAA SYSTEM .....	5,000	5,000
316	1203913F	NUDET DETECTION SYSTEM (SPACE) .....	31,508	31,508
317	1203940F	SPACE SITUATION AWARENESS OPERATIONS .....	99,984	99,984
318	1206423F	GLOBAL POSITIONING SYSTEM III—OPERATIONAL CON- TROL SEGMENT.	510,938	510,938
318A	9999999999	CLASSIFIED PROGRAMS .....	14,938,002	14,974,002
		Program increase .....		[36,000]
		<b>SUBTOTAL OPERATIONAL SYSTEMS DEVELOP- MENT.</b>	<b>20,585,302</b>	<b>20,761,102</b>
		<b>UNDISTRIBUTED</b>		
319	0901560F	UNDISTRIBUTED .....		-195,900
		Bomber Modernization—Excess to Need .....		[-195,900]
		<b>SUBTOTAL UNDISTRIBUTED</b> .....		<b>-195,900</b>
		<b>TOTAL RESEARCH, DEVELOPMENT, TEST &amp; EVAL, AF.</b>	<b>34,914,359</b>	<b>35,184,114</b>
		<b>RESEARCH, DEVELOPMENT, TEST &amp; EVAL, DW</b>		
		<b>BASIC RESEARCH</b>		
001	0601000BR	DTRA BASIC RESEARCH .....	37,201	37,201
002	0601101E	DEFENSE RESEARCH SCIENCES .....	432,347	432,347
003	0601110D8Z	BASIC RESEARCH INITIATIVES .....	40,612	40,612
004	0601117E	BASIC OPERATIONAL MEDICAL RESEARCH SCIENCE .....	43,126	43,126
005	0601120D8Z	NATIONAL DEFENSE EDUCATION PROGRAM .....	74,298	74,298
006	0601228D8Z	HISTORICALLY BLACK COLLEGES AND UNIVERSITIES/MI- NORITY INSTITUTIONS.	25,865	35,865
		Program Increase .....		[10,000]
007	0601384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM .....	43,898	43,898
		<b>SUBTOTAL BASIC RESEARCH</b> .....	<b>697,347</b>	<b>707,347</b>
		<b>APPLIED RESEARCH</b>		
008	0602000D8Z	JOINT MUNITIONS TECHNOLOGY .....	19,111	19,111
009	0602115E	BIOMEDICAL TECHNOLOGY .....	109,360	109,360
011	0602234D8Z	LINCOLN LABORATORY RESEARCH PROGRAM .....	49,748	49,748
012	0602251D8Z	APPLIED RESEARCH FOR THE ADVANCEMENT OF S&T PRI- ORITIES.	49,226	49,226
013	0602303E	INFORMATION & COMMUNICATIONS TECHNOLOGY .....	392,784	392,784
014	0602383E	BIOLOGICAL WARFARE DEFENSE .....	13,014	13,014
015	0602384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM .....	201,053	201,053
016	0602668D8Z	CYBER SECURITY RESEARCH .....	14,775	14,775
017	0602702E	TACTICAL TECHNOLOGY .....	343,776	343,776
018	0602715E	MATERIALS AND BIOLOGICAL TECHNOLOGY .....	224,440	224,440
019	0602716E	ELECTRONICS TECHNOLOGY .....	295,447	295,447
020	0602718BR	COUNTER WEAPONS OF MASS DESTRUCTION APPLIED RE- SEARCH.	157,908	157,908
021	0602751D8Z	SOFTWARE ENGINEERING INSTITUTE (SEI) APPLIED RE- SEARCH.	8,955	8,955
022	1160401BB	SOF TECHNOLOGY DEVELOPMENT .....	34,493	34,493
		<b>SUBTOTAL APPLIED RESEARCH</b> .....	<b>1,914,090</b>	<b>1,914,090</b>
		<b>ADVANCED TECHNOLOGY DEVELOPMENT</b>		
023	0603000D8Z	JOINT MUNITIONS ADVANCED TECHNOLOGY .....	25,627	25,627
024	0603122D8Z	COMBATING TERRORISM TECHNOLOGY SUPPORT .....	76,230	81,230
		Program increase—conventional EOD equipment .....		[5,000]
025	0603133D8Z	FOREIGN COMPARATIVE TESTING .....	24,199	24,199
026	0603160BR	COUNTER WEAPONS OF MASS DESTRUCTION ADVANCED TECHNOLOGY DEVELOPMENT.	268,607	268,607
027	0603176C	ADVANCED CONCEPTS AND PERFORMANCE ASSESSMENT ...	12,996	12,996
029	0603178C	WEAPONS TECHNOLOGY .....	5,495	60,595
		Restore funding for directed energy prioritization in DoD's BMD efforts.		[55,100]
031	0603180C	ADVANCED RESEARCH .....	20,184	20,184
032	0603225D8Z	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT	18,662	18,662
035	0603286E	ADVANCED AEROSPACE SYSTEMS .....	155,406	155,406
036	0603287E	SPACE PROGRAMS AND TECHNOLOGY .....	247,435	247,435
037	0603288D8Z	ANALYTIC ASSESSMENTS .....	13,154	13,154
038	0603289D8Z	ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS .....	37,674	37,674
039	0603291D8Z	ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS—MHA ..	15,000	15,000
040	0603294C	COMMON KILL VEHICLE TECHNOLOGY .....	252,879	252,879
041	0603342D8W	DEFENSE INNOVATION UNIT EXPERIMENTAL (DIUX) .....	29,594	29,594
042	0603375D8Z	TECHNOLOGY INNOVATION .....	59,863	24,863
		Unjustified growth .....		[-35,000]



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043	0603384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—ADVANCED DEVELOPMENT.	145,359	145,359
044	0603527D8Z	RETRACT LARCH .....	171,120	171,120
045	0603618D8Z	JOINT ELECTRONIC ADVANCED TECHNOLOGY .....	14,389	14,389
046	0603648D8Z	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS .....	105,871	105,871
047	0603662D8Z	NETWORKED COMMUNICATIONS CAPABILITIES .....	12,661	12,661
048	0603680D8Z	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM.	136,159	136,159
049	0603680S	MANUFACTURING TECHNOLOGY PROGRAM .....	40,511	40,511
050	0603699D8Z	EMERGING CAPABILITIES TECHNOLOGY DEVELOPMENT .... SOCOM ATL effort .....	57,876	49,876 [-8,000]
051	0603712S	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	10,611	10,611
053	0603716D8Z	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM .....	71,832	71,832
054	0603720S	MICROELECTRONICS TECHNOLOGY DEVELOPMENT AND SUPPORT.	219,803	219,803
055	0603727D8Z	JOINT WARFIGHTING PROGRAM .....	6,349	6,349
056	0603739E	ADVANCED ELECTRONICS TECHNOLOGIES .....	79,173	79,173
057	0603760E	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS .....	106,787	106,787
058	0603766E	NETWORK-CENTRIC WARFARE TECHNOLOGY .....	439,386	439,386
059	0603767E	SENSOR TECHNOLOGY .....	210,123	210,123
060	0603769D8Z	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT.	11,211	11,211
062	0603781D8Z	SOFTWARE ENGINEERING INSTITUTE .....	15,047	15,047
063	0603826D8Z	QUICK REACTION SPECIAL PROJECTS .....	69,203	69,203
064	0603833D8Z	ENGINEERING SCIENCE & TECHNOLOGY .....	25,395	25,395
065	0603941D8Z	TEST & EVALUATION SCIENCE & TECHNOLOGY .....	89,586	89,586
066	0604055D8Z	OPERATIONAL ENERGY CAPABILITY IMPROVEMENT .....	38,403	38,403
067	0303310D8Z	CWMD SYSTEMS .....	33,382	33,382
068	1160402BB	SOF ADVANCED TECHNOLOGY DEVELOPMENT .....	72,605	72,605
		<b>SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT.</b>	<b>3,445,847</b>	<b>3,462,947</b>
		<b>ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES</b>		
069	0603161D8Z	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E ADC&P.	32,937	32,937
070	0603600D8Z	WALKOFF .....	101,714	101,714
072	0603821D8Z	ACQUISITION ENTERPRISE DATA & INFORMATION SERVICES.	2,198	2,198
073	0603851D8Z	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM.	54,583	54,583
074	0603881C	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT.	230,162	230,162
075	0603882C	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT. Improve Discrimination Capability for GMD .....	828,097	850,093 [21,996]
076	0603884BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—DEVAL.	148,518	148,518
077	0603884C	BALLISTIC MISSILE DEFENSE SENSORS .....	247,345	326,207 [21,000]
		Funding increase to accelerate development and deployment of interim and perm MD enhancements for HI. Improve Discrimination Capability for GMD .....		[57,862]
078	0603890C	BMD ENABLING PROGRAMS .....	449,442	478,884 [23,342]
		GMD Discrimination .....		[6,100]
		Improve High Fidelity Modeling and Simulation for GMD .....		
079	0603891C	SPECIAL PROGRAMS—MDA .....	320,190	320,190
080	0603892C	AEGIS BMD .....	852,052	852,052
083	0603896C	BALLISTIC MISSILE DEFENSE COMMAND AND CONTROL, BATTLE MANAGEMENT AND COMMUNICATI.	430,115	430,115
084	0603898C	BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT.	48,954	48,954
085	0603904C	MISSILE DEFENSE INTEGRATION & OPERATIONS CENTER (MDIOC).	53,265	53,265
086	0603906C	REGARDING TRENCH .....	9,113	9,113
087	0603907C	SEA BASED X-BAND RADAR (SBX) .....	130,695	130,695
088	0603913C	ISRAELI COOPERATIVE PROGRAMS .....	105,354	105,354
089	0603914C	BALLISTIC MISSILE DEFENSE TEST .....	305,791	305,791
090	0603915C	BALLISTIC MISSILE DEFENSE TARGETS .....	410,425	410,425
091	0603920D8Z	HUMANITARIAN DEMINING .....	10,837	10,837
092	0603923D8Z	COALITION WARFARE .....	10,740	10,740
093	0604016D8Z	DEPARTMENT OF DEFENSE CORROSION PROGRAM .....	3,837	3,837
094	0604115C	TECHNOLOGY MATURATION INITIATIVES Acceleration of kinetic and nonkinetic boost phase BMD .....	128,406	228,406 [100,000]
095	0604132D8Z	MISSILE DEFEAT PROJECT .....	98,369	98,369
096	0604181C	HYPERSONIC DEFENSE .....	75,300	75,300
097	0604250D8Z	ADVANCED INNOVATIVE TECHNOLOGIES .....	1,175,832	1,175,832
098	0604294D8Z	TRUSTED & ASSURED MICROELECTRONICS .....	83,626	83,626
099	0604331D8Z	RAPID PROTOTYPING PROGRAM .....	100,000	100,000

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Line	Program Element	Item	FY 2018 Request	House Authorized
101	0604400D8Z	DEPARTMENT OF DEFENSE (DOD) UNMANNED SYSTEM COMMON DEVELOPMENT.	3,967	3,967
102	0604682D8Z	WARGAMING AND SUPPORT FOR STRATEGIC ANALYSIS (SSA).	3,833	3,833
104	0604826J	JOINT C5 CAPABILITY DEVELOPMENT, INTEGRATION AND INTEROPERABILITY ASSESSMENTS.	23,638	23,638
105	0604873C	LONG RANGE DISCRIMINATION RADAR (LRDR) .....	357,659	357,659
106	0604874C	IMPROVED HOMELAND DEFENSE INTERCEPTORS .....	465,530	545,530
		C3 Booster Development .....		[80,000]
107	0604876C	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT TEST.	36,239	36,239
108	0604878C	AEGIS BMD TEST .....	134,468	160,819
		To provide AAW at Aegis Ashore sites, consistent w/ FY16 and FY17 NDAs.		[26,351]
109	0604879C	BALLISTIC MISSILE DEFENSE SENSOR TEST .....	84,239	84,239
110	0604880C	LAND-BASED SM-3 (LBSM3) .....	30,486	97,761
		To provide AAW at Aegis Ashore sites, consistent w/ FY16 and FY17 NDAs.		[67,275]
111	0604881C	AEGIS SM-3 BLOCK IIA CO-DEVELOPMENT .....	9,739	9,739
112	0604887C	BALLISTIC MISSILE DEFENSE MIDCOURSE SEGMENT TEST	76,757	76,757
113	0604894C	MULTI-OBJECT KILL VEHICLE .....	6,500	6,500
114	0303191D8Z	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	2,902	2,902
115	0305103C	CYBER SECURITY INITIATIVE .....	986	986
116	1206893C	SPACE TRACKING & SURVEILLANCE SYSTEM .....	34,907	34,907
117	1206895C	BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS ..	16,994	16,994
		<b>SUBTOTAL ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES.</b>	<b>7,736,741</b>	<b>8,140,667</b>
		<b>SYSTEM DEVELOPMENT AND DEMONSTRATION</b>		
118	0604161D8Z	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E SDD.	12,536	12,536
119	0604165D8Z	PROMPT GLOBAL STRIKE CAPABILITY DEVELOPMENT .....	201,749	201,749
120	0604384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—EMD .....	406,789	406,789
122	0604771D8Z	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS).	15,358	15,358
123	0605000BR	COUNTER WEAPONS OF MASS DESTRUCTION SYSTEMS DEVELOPMENT.	6,241	6,241
124	0605013BL	INFORMATION TECHNOLOGY DEVELOPMENT .....	12,322	12,322
125	0605021SE	HOMELAND PERSONNEL SECURITY INITIATIVE .....	4,893	4,893
126	0605022D8Z	DEFENSE EXPORTABILITY PROGRAM .....	3,162	3,162
127	0605027D8Z	OUS(D) IT DEVELOPMENT INITIATIVES .....	21,353	21,353
128	0605070S	DOD ENTERPRISE SYSTEMS DEVELOPMENT AND DEMONSTRATION.	6,266	6,266
129	0605075D8Z	DCMO POLICY AND INTEGRATION .....	2,810	2,810
130	0605080S	DEFENSE AGENCY INITIATIVES (DAD)—FINANCIAL SYSTEM	24,436	24,436
131	0605090S	DEFENSE RETIRED AND ANNUITANT PAY SYSTEM (DRAS)	13,475	13,475
133	0605210D8Z	DEFENSE-WIDE ELECTRONIC PROCUREMENT CAPABILITIES.	11,870	11,870
134	0605294D8Z	TRUSTED & ASSURED MICROELECTRONICS .....	61,084	61,084
135	0303141K	GLOBAL COMBAT SUPPORT SYSTEM .....	2,576	2,576
136	0305304D8Z	DOD ENTERPRISE ENERGY INFORMATION MANAGEMENT (EEM).	3,669	3,669
137	0305310D8Z	CWMD SYSTEMS: SYSTEM DEVELOPMENT AND DEMONSTRATION.	8,230	8,230
		<b>SUBTOTAL SYSTEM DEVELOPMENT AND DEMONSTRATION.</b>	<b>818,819</b>	<b>818,819</b>
		<b>MANAGEMENT SUPPORT</b>		
138	0604774D8Z	DEFENSE READINESS REPORTING SYSTEM (DRRS) .....	6,941	6,941
139	0604875D8Z	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT .....	4,851	4,851
140	0604940D8Z	CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT (CTEIP).	211,325	211,325
141	0604942D8Z	ASSESSMENTS AND EVALUATIONS .....	30,144	50,144
		Program increase for cyber vulnerability assessments and hardening.		[20,000]
142	0605001E	MISSION SUPPORT .....	63,769	63,769
143	0605100D8Z	JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC)	91,057	91,057
144	0605104D8Z	TECHNICAL STUDIES, SUPPORT AND ANALYSIS .....	22,386	22,386
145	0605126J	JOINT INTEGRATED AIR AND MISSILE DEFENSE ORGANIZATION (JIAMDO).	36,581	36,581
147	0605142D8Z	SYSTEMS ENGINEERING .....	37,622	37,622
148	0605151D8Z	STUDIES AND ANALYSIS SUPPORT—OSD .....	5,200	5,200
149	0605161D8Z	NUCLEAR MATTERS-PHYSICAL SECURITY .....	5,232	5,232
150	0605170D8Z	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	12,583	12,583
151	0605200D8Z	GENERAL SUPPORT TO USD (INTELLIGENCE) .....	31,451	31,451
152	0605384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM .....	104,348	104,348
161	0605790D8Z	SMALL BUSINESS INNOVATION RESEARCH (SBIR)/ SMALL BUSINESS TECHNOLOGY TRANSFER.	2,372	2,372

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162	0605798D8Z	DEFENSE TECHNOLOGY ANALYSIS .....	24,365	24,365
163	0605801KA	DEFENSE TECHNICAL INFORMATION CENTER (DTIC) .....	54,145	54,145
164	0605803SE	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING AND EVALUATION.	30,356	30,356
165	0605804D8Z	DEVELOPMENT TEST AND EVALUATION .....	20,571	20,571
166	0605898E	MANAGEMENT HQ—R&D .....	14,017	14,017
167	0605998KA	MANAGEMENT HQ—DEFENSE TECHNICAL INFORMATION CENTER (DTIC).	4,187	4,187
168	0606100D8Z	BUDGET AND PROGRAM ASSESSMENTS .....	3,992	3,992
169	0606225D8Z	ODNA TECHNOLOGY AND RESOURCE ANALYSIS .....	1,000	1,000
170	0203345D8Z	DEFENSE OPERATIONS SECURITY INITIATIVE (DOSI) .....	2,551	2,551
171	0204571J	JOINT STAFF ANALYTICAL SUPPORT .....	7,712	7,712
174	0303166J	SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES.	673	673
175	0303260D8Z	DEFENSE MILITARY DECEPTION PROGRAM OFFICE (DMDPO).	1,006	1,006
177	0305172K	COMBINED ADVANCED APPLICATIONS .....	16,998	16,998
180	0305245D8Z	INTELLIGENCE CAPABILITIES AND INNOVATION INVESTMENTS.	18,992	18,992
181	0306310D8Z	CWMD SYSTEMS: RDT&E MANAGEMENT SUPPORT .....	1,231	1,231
183	0804767J	COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION (CE2T2)—MHA.	44,500	44,500
184	0901598C	MANAGEMENT HQ—MDA .....	29,947	29,947
187	0903235K	JOINT SERVICE PROVIDER (JSP) .....	5,113	5,113
187A	9999999999	CLASSIFIED PROGRAMS .....	63,312	63,312
		<b>SUBTOTAL MANAGEMENT SUPPORT .....</b>	<b>1,010,530</b>	<b>1,030,530</b>
		<b>OPERATIONAL SYSTEM DEVELOPMENT</b>		
188	0604130V	ENTERPRISE SECURITY SYSTEM (ESS) .....	4,565	4,565
189	0605127T	REGIONAL INTERNATIONAL OUTREACH (RIO) AND PARTNERSHIP FOR PEACE INFORMATION MANA.	1,871	1,871
190	0605147T	OVERSEAS HUMANITARIAN ASSISTANCE SHARED INFORMATION SYSTEM (OHASIS).	298	298
191	0607210D8Z	INDUSTRIAL BASE ANALYSIS AND SUSTAINMENT SUPPORT Program increase for increase analytical support .....	10,882	15,882 [5,000]
192	0607310D8Z	CWMD SYSTEMS: OPERATIONAL SYSTEMS DEVELOPMENT ..	7,222	7,222
193	0607327T	GLOBAL THEATER SECURITY COOPERATION MANAGEMENT INFORMATION SYSTEMS (G-TSCMIS).	14,450	14,450
194	0607384BP	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS DEVELOPMENT).	45,677	45,677
195	0208043J	PLANNING AND DECISION AID SYSTEM (PDAS) .....	3,037	3,037
196	0208045K	C4I INTEROPERABILITY .....	59,490	59,490
198	0301144K	JOINT/ALLIED COALITION INFORMATION SHARING .....	6,104	6,104
202	0302016K	NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT ...	1,863	1,863
203	0302019K	DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATION.	21,564	21,564
204	0303126K	LONG-HAUL COMMUNICATIONS—DCS .....	15,428	15,428
205	0303131K	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN).	15,855	15,855
206	0303135G	PUBLIC KEY INFRASTRUCTURE (PKI) .....	4,811	4,811
207	0303136G	KEY MANAGEMENT INFRASTRUCTURE (KMI) .....	33,746	33,746
208	0303140D8Z	INFORMATION SYSTEMS SECURITY PROGRAM .....	9,415	19,415 [10,000]
		Cyber Scholarship Program .....		
209	0303140G	INFORMATION SYSTEMS SECURITY PROGRAM .....	227,652	235,652 [8,000]
		Program increase to support cyber defense education of reservists and the National Guard.		
210	0303150K	GLOBAL COMMAND AND CONTROL SYSTEM .....	42,687	42,687
211	0303153K	DEFENSE SPECTRUM ORGANIZATION .....	8,750	8,750
214	0303228K	JOINT INFORMATION ENVIRONMENT (JIE) .....	4,689	4,689
216	0303430K	FEDERAL INVESTIGATIVE SERVICES INFORMATION TECHNOLOGY.	50,000	50,000
222	0305103K	CYBER SECURITY INITIATIVE .....	1,686	1,686
227	0305186D8Z	POLICY R&D PROGRAMS .....	6,526	6,526
228	0305199D8Z	NET CENTRICITY .....	18,455	18,455
230	0305208BB	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS .....	5,496	5,496
233	0305208K	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS .....	3,049	3,049
236	0305327V	INSIDER THREAT .....	5,365	5,365
237	0305387D8Z	HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM .....	2,071	2,071
243	0307577D8Z	INTELLIGENCE MISSION DATA (IMD) .....	13,111	13,111
245	0708012S	PACIFIC DISASTER CENTERS .....	1,770	1,770
246	0708047S	DEFENSE PROPERTY ACCOUNTABILITY SYSTEM .....	2,924	2,924
248	1105219BB	MQ-9 UAV .....	37,863	37,863
251	1160403BB	AVIATION SYSTEMS .....	259,886	267,386 [7,500]
		Per SOCOM requested realignment .....		
252	1160405BB	INTELLIGENCE SYSTEMS DEVELOPMENT .....	8,245	8,245
253	1160408BB	OPERATIONAL ENHANCEMENTS .....	79,455	79,455
254	1160431BB	WARRIOR SYSTEMS .....	45,935	45,935
255	1160432BB	SPECIAL PROGRAMS .....	1,978	1,978

SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
Line	Program Element	Item	FY 2018 Request	House Authorized
256	1160434BB	UNMANNED ISR .....	31,766	31,766
257	1160480BB	SOF TACTICAL VEHICLES .....	2,578	2,578
258	1160483BB	MARITIME SYSTEMS .....	42,315	55,115
		Per SOCOM requested realignment .....		[12,800]
259	1160489BB	GLOBAL VIDEO SURVEILLANCE ACTIVITIES .....	4,661	4,661
260	1160490BB	OPERATIONAL ENHANCEMENTS INTELLIGENCE .....	12,049	12,049
261	1203610K	TELEPORT PROGRAM .....	642	642
261A	999999999	CLASSIFIED PROGRAMS .....	3,689,646	3,689,646
		<b>SUBTOTAL OPERATIONAL SYSTEM DEVELOPMENT</b>	<b>4,867,528</b>	<b>4,910,828</b>
		<b>TOTAL RESEARCH, DEVELOPMENT, TEST &amp; EVAL, DW.</b>	<b>20,490,902</b>	<b>20,985,228</b>
		<b>OPERATIONAL TEST &amp; EVAL, DEFENSE MANAGEMENT SUPPORT</b>		
001	0605118OTE	OPERATIONAL TEST AND EVALUATION .....	83,503	83,503
002	0605131OTE	LIVE FIRE TEST AND EVALUATION .....	59,500	59,500
003	0605814OTE	OPERATIONAL TEST ACTIVITIES AND ANALYSES .....	67,897	67,897
		<b>SUBTOTAL MANAGEMENT SUPPORT</b>	<b>210,900</b>	<b>210,900</b>
		<b>TOTAL OPERATIONAL TEST &amp; EVAL, DEFENSE</b>	<b>210,900</b>	<b>210,900</b>
		<b>TOTAL RDT&amp;E</b>	<b>82,716,636</b>	<b>83,997,857</b>

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