

PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

<i>Line</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Agreement</i>
Total Procurement		23,741,226	23,878,630

TITLE XLII—RESEARCH, DEVELOPMENT, TEST AND EVALUATION

SEC. 4201. RESEARCH, DEVELOPMENT, TEST AND EVALUATION.[]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
RESEARCH, DEVELOPMENT, TEST & EVALUATION, ARMY				
BASIC RESEARCH				
001	0601101A	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.	19,671	19,671
002	0601102A	DEFENSE RESEARCH SCIENCES	173,024	176,524
		Ballistic materials research		[3,500]
003	0601103A	UNIVERSITY RESEARCH INITIATIVES	88,421	92,421
		Nanocomposite materials research		[2,000]
		Open source intelligence research		[1,000]
		Smart Wound Dressing for MRSA-Infected Battle Wounds.		[1,000]
004	0601104A	UNIVERSITY AND INDUSTRY RESEARCH CENTERS.	96,144	98,844
		Immersive simulation research		[1,200]
		Materials processing research		[1,500]
SUBTOTAL, BASIC RESEARCH, ARMY			377,260	387,460
APPLIED RESEARCH				
005	0602105A	MATERIALS TECHNOLOGY	27,206	47,206
		Advanced renewable jet fuels		[3,000]
		Applied composite materials research		[3,000]
		High strength fibers for ballistic armor applications.		[2,000]
		Moldable fabric armor		[2,000]
		Smart materials and structures		[1,000]
		Dual Stage Variable Energy Absorber		[3,000]
		Next Generation High Strength Glass Fibers for Ballistic Armor Applications.		[2,000]
		Ultra Lightweight Metallic Armor		[1,000]
		Nanomanufacturing of Multifunctional Sensors.		[3,000]
006	0602120A	SENSORS AND ELECTRONIC SURVIVABILITY.	50,641	53,141
		Nanoelectronic memory, sensor and energy devices.		[2,500]
007	0602122A	TRACTOR HIP	14,324	14,324
008	0602211A	AVIATION TECHNOLOGY	41,332	41,332
009	0602270A	ELECTRONIC WARFARE TECHNOLOGY	16,119	16,119
010	0602303A	MISSILE TECHNOLOGY	50,716	50,716
011	0602307A	ADVANCED WEAPONS TECHNOLOGY	19,678	19,678
012	0602308A	ADVANCED CONCEPTS AND SIMULATION	17,473	19,473
		Cognitive modeling and simulation research ...		[2,000]
013	0602601A	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY.	55,937	74,437
		Advanced composite materials research		[3,500]
		Composite vehicle shelters		[2,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

Line	Program Element	Item	FY 2010 Request	Conference Authorized
		Tactical metal fabrication program		[1,000]
		Tribology research		[2,000]
		Vehicle systems engineering and integration activities.		[10,000]
014	0602618A	BALLISTICS TECHNOLOGY	61,843	65,843
		Electromagnetic gun		[092,000]
		Reactive armor research		[3,000]
		Beneficial Infrastructure for Rotorcraft Risk Reduction.		[1,000]
		Lethality research		[2,000]
015	0602622A	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY.	5,293	5,293
016	0602623A	JOINT SERVICE SMALL ARMS PROGRAM ...	7,674	7,674
017	0602624A	WEAPONS AND MUNITIONS TECHNOLOGY	41,085	59,085
		Acoustic gun detection systems		[2,000]
		Acoustic research		[3,000]
		UGV weaponization		[2,500]
		Highly Integrated Production for Expediting RESET.		[2,500]
		Hybrid Projectile Program		[3,000]
		Specialized Compact Automated Mechanical Clearance Platform.		[4,000]
		Defense Support for Civil Authorities (DSCA) for Key Resource Protection—South Central, PA.		[1,000]
018	0602705A	ELECTRONICS AND ELECTRONIC DEVICES	61,404	67,104
		Hybrid portable power program		[3,200]
		Novel Zinc Air Power Sources for Military		[2,500]
019	0602709A	NIGHT VISION TECHNOLOGY	26,893	26,893
020	0602712A	COUNTERMINE SYSTEMS	18,945	18,945
021	0602716A	HUMAN FACTORS ENGINEERING TECHNOLOGY.	18,605	33,605
		LWI Training-Based Collaborative Research ..		[15,000]
022	0602720A	ENVIRONMENTAL QUALITY TECHNOLOGY	15,902	20,402
		Cluster Bomb Unit & Combined Effects Munitions Demil System.		[1,000]
		SUNY Cobleskill Biowaste-to-Bioenergy Center		[2,500]
		Renewable Energy Testing Center		[1,000]
023	0602782A	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY.	24,833	24,833
024	0602783A	COMPUTER AND SOFTWARE TECHNOLOGY	5,639	5,639
025	0602784A	MILITARY ENGINEERING TECHNOLOGY	54,818	59,818
		Cellulose Nanocomposite Panels for Ballistic Protection.		[2,000]
		Geosciences Atmospheric Research		[3,000]
026	0602785A	MANPOWER / PERSONNEL / TRAINING TECHNOLOGY.	18,701	18,701
027	0602786A	WARFIGHTER TECHNOLOGY	27,109	29,609
		Thermal resistant fiber research		[2,500]
028	0602787A	MEDICAL TECHNOLOGY	99,027	134,527
		Biomechanics research		[3,500]
		Blast wave modeling		[3,000]
		Hemorrhage research		[3,000]
		Malaria vaccine development		[2,500]
		Neurotrauma research		[3,500]
		Secondary trauma research		[2,500]
		Advanced Functional Nanomaterials for Biological Processes.		[2,500]
		Improving Soldier Recovery from Catastrophic Bone Injuries.		[4,000]
		Advanced Bio-Engineering for Enhancement of Soldier Survivability.		[3,000]
		Self-Powered Prosthetic Limb Technology		[2,000]
		Human Organ and Tissue Preservation Technology.		[2,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
		Optical Neural Techniques for Combat and Post Trauma Care.		[4,000]
		SUBTOTAL, APPLIED RESEARCH, ARMY ..	781,197	914,397
		ADVANCED TECHNOLOGY DEVELOPMENT		
029	0603001A	WARFIGHTER ADVANCED TECHNOLOGY High Pressure Pasteurization & Pressure Assisted Thermal Sterilization.	37,574	45,874 [4,300]
		Next Generation Precision Airdrop System		[2,500]
		Onyx System Precision Guided Airdropped Equipment.		[1,500]
030	0603002A	MEDICAL ADVANCED TECHNOLOGY	72,940	124,240
		Biosensor controller systems development		[2,000]
		Body temperature conditioner systems		[2,500]
		Gulf War illness research		[12,000]
		Integrated medical technology program		[7,500]
		Lower limb prosthetics research		[2,000]
		Regenerative medical research		[4,000]
		Proton Treatment and Research Center—Northern Illinois.		[2,000]
		Wounded Service Member Bioelectrics Research.		[1,500]
		Malaria Vaccine Development		[5,000]
		Regenerative Medicine to Address Astute Hearing Loss.		[3,000]
		Multi-Dose Closed Loop pH Monitoring System for Platelets.		[1,000]
		Carbide-Derived Carbon for Treatment of Combat Related Sepsis.		[1,000]
		Clinical Technology Integration for Military Health.		[2,000]
		Institute for Simulation and Interprofessional Studies.		[5,800]
031	0603003A	AVIATION ADVANCED TECHNOLOGY	60,097	80,597
		Advanced Affordable Turbine Engine Program		[5,000]
		Robust Composite Structural Core for Army Helicopters.		[2,000]
		UH-60 Transmission/Gearbox Galvanic Corrosion Reduction.		[1,500]
		Drive System Composite Structural Component Risk Reduction Program.		[3,000]
		Universal Control—FADEC		[9,000]
032	0603004A	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY.	66,410	61,410
		Electromagnetic gun		[-11,500]
		Lethality research		[6,500]
033	0603005A	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY.	89,586	174,986
		Advanced APU development		[2,000]
		Advanced battery development program		[10,000]
		Advanced lithium ion battery systems		[3,000]
		Advanced suspension systems for heavy vehicles.		[2,700]
		Advanced thermal management systems		[3,000]
		Alternative energy research		[20,000]
		Hybrid engine development program		[4,000]
		Hybrid truck development		[4,000]
		Smart plug-in hybrid electric vehicle program		[4,100]
		Threat cue research		[2,000]
		Unmanned ground vehicle initiative		[12,000]
		Vehicle prognostics technologies		[3,100]
		Unmanned Robotic System Utilizing Hydrocarbon Fueled Solid Oxide Fuel Cell.		[3,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

Line	Program Element	Item	FY 2010 Request	Conference Authorized
		Advanced Composites for Light Weight, Low Cost Transportation Systems Using a 3+ Ring Extruder.		[3,000]
		Protective 3-D Armor Structure to Safeguard Military Vehicles and Troops.		[2,000]
		Fire Shield		[2,000]
		Hydraulic Hybrid Vehicle (HHV) for the Tactical Wheeled Fleet.		[3,500]
		Heavy Duty Hybrid Electric Vehicle		[2,000]
034	0603006A	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY.	8,667	12,467
		Applied Communications and Information Networking (ACIN).		[3,800]
035	0603007A	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY.	7,410	7,410
036	0603008A	ELECTRONIC WARFARE ADVANCED TECHNOLOGY.	50,458	50,458
037	0603009A	TRACTOR HIKE	11,328	11,328
038	0603015A	NEXT GENERATION TRAINING & SIMULATION SYSTEMS.	19,415	24,915
		Combat medic training systems		[2,000]
		Joint Fires & Effects Trainer System enhancements.		[2,500]
		HapMed Combat Medic Trainer		[1,000]
039	0603020A	TRACTOR ROSE	14,569	14,569
040	0603103A	EXPLOSIVES DEMILITARIZATION TECHNOLOGY.		2,000
		Propellant Conversion to Fertilizer Program for Tooele Army Depot.		[2,000]
041	0603105A	MILITARY HIV RESEARCH	6,657	6,657
042	0603125A	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT.	11,989	11,989
043	0603270A	ELECTRONIC WARFARE TECHNOLOGY	19,192	22,692
		Laser systems for light aircraft missile defense		[1,000]
		Advanced Ground Electronic Warfare & Signals Intelligence System.		[2,500]
044	0603313A	MISSILE AND ROCKET ADVANCED TECHNOLOGY.	63,951	67,251
		Discriminatory imaging research		[2,500]
		Scenario Generation for Integrated Air and Missile Defense Evaluation.		[800]
045	0603322A	TRACTOR CAGE	12,154	12,154
046	0603606A	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY.	30,317	30,317
047	0603607A	JOINT SERVICE SMALL ARMS PROGRAM ...	8,996	8,996
048	0603710A	NIGHT VISION ADVANCED TECHNOLOGY ..	40,329	52,329
		Bradley third generation FLIR		[5,000]
		Buster/Blacklight UAV Development		[1,000]
		Hyper Spectral Sensor for Improved Force Protection System.		[2,000]
		Brownout Situational Awareness		[3,000]
		High Resolution Personal Miniature Thermal Viewer.		[1,000]
049	0603728A	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS.	15,706	15,706
050	0603734A	MILITARY ENGINEERING ADVANCED TECHNOLOGY.	5,911	19,211
		Permafrost tunnel		[500]
		Photovoltaic technology development		[2,000]
		PacCom Renewable Energy Security System ...		[3,000]
		Field Deployable Hologram Production System		[4,800]
		Demonstration of Thin Film Solar Modules as a Renewable Energy Source.		[1,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
<i>(In Thousands of Dollars)</i>				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
		Nanotechnology for Potable Water and Waste Treatment.		[2,000]
051	0603772A	ADVANCED TACTICAL COMPUTER SCIENCE AND SENSOR TECHNOLOGY. Foliage Penetrating, Reconnaissance, Surveillance, Tracking, and Engagement Radar. Optimizing Natural Language Processing of Open Source Intelligence (OSINT).	41,561	45,061
				[2,000]
				[1,500]
		SUBTOTAL, ADVANCED TECHNOLOGY DEVELOPMENT, ARMY.	695,217	902,617
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES		
052	0603024A	UNIQUE ITEM IDENTIFICATION (UID)		
053	0603305A	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION(NON SPACE). Biological Air Filtering System Technology Compact Pulsed Power for Military Applications. Adaptive robotic technology	14,683	30,183
				[3,000]
				[4,000]
				[3,500]
				[3,000]
				[2,000]
054	0603308A	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE).	117,471	117,471
055	0603327A	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING. Center for Defense Systems Research	209,531	160,531
		Excessive Project Cost Growth—Integrated Air and Missile Defense.		[1,000]
				[-50,000]
056	0603460A	JOINT AIR-TO-GROUND MISSILE (JAGM)		
057	0603619A	LANDMINE WARFARE AND BARRIER—ADV DEV.	17,536	17,536
058	0603627A	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-ADV DEV.	4,920	4,920
059	0603639A	TANK AND MEDIUM CALIBER AMMUNITION.	33,934	33,934
060	0603653A	ADVANCED TANK ARMAMENT SYSTEM (ATAS).	90,299	90,299
061	0603747A	SOLDIER SUPPORT AND SURVIVABILITY ...	31,752	31,752
062	0603766A	TACTICAL ELECTRONIC SURVEILLANCE SYSTEM—ADV DEV.	18,228	18,228
063	0603774A	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT.		
064	0603779A	ENVIRONMENTAL QUALITY TECHNOLOGY Cadmium Emissions Reduction—Letterkenny Army Depot. Vanadium Technology Program	4,770	8,770
				[1,000]
				[3,000]
065	0603782A	WARFIGHTER INFORMATION NETWORK-TACTICAL.	180,673	180,673
066	0603790A	NATO RESEARCH AND DEVELOPMENT	5,048	5,048
067	0603801A	AVIATION—ADV DEV	8,537	8,537
068	0603804A	LOGISTICS AND ENGINEER EQUIPMENT—ADV DEV. Premature JLTV program growth	56,373	46,373
				[-10,000]
069	0603805A	COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION AND ANALYSIS.	9,868	9,868
070	0603807A	MEDICAL SYSTEMS—ADV DEV	31,275	31,275
071	0603827A	SOLDIER SYSTEMS—ADVANCED DEVELOPMENT. Acid Alkaline Direct Methanol Fuel Cell	71,832	73,832
				[2,000]
072	0603850A	INTEGRATED BROADCAST SERVICE	1,476	1,476

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
		SUBTOTAL, ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES, ARMY.	908,206	870,706
		SYSTEM DEVELOPMENT & DEMONSTRATION		
073	0604201A	AIRCRAFT AVIONICS	92,977	92,977
074	0604220A	ARMED, DEPLOYABLE HELOS	65,515	65,515
075	0604270A	ELECTRONIC WARFARE DEVELOPMENT	248,463	248,463
076	0604321A	ALL SOURCE ANALYSIS SYSTEM	13,107	13,107
077	0604328A	TRACTOR CAGE	16,286	16,286
078	0604601A	INFANTRY SUPPORT WEAPONS	74,814	78,814
		<i>Lightweight caliber .50 machine gun</i>		[4,000]
079	0604604A	MEDIUM TACTICAL VEHICLES	5,683	5,683
080	0604609A	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-SDD.	978	978
081	0604622A	FAMILY OF HEAVY TACTICAL VEHICLES	7,477	9,477
		<i>Heavy tactical vehicle development</i>		[2,000]
082	0604633A	AIR TRAFFIC CONTROL	7,578	7,578
083	0604646A	NON-LINE OF SIGHT LAUNCH SYSTEM	88,660	88,660
084	0604647A	NON-LINE OF SIGHT CANNON	58,216	31,216
		<i>Unjustified Termination Costs</i>		[-27,000]
085	0604660A	FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE.	368,557	184,557
		<i>Unjustified Termination Costs</i>		[-184,000]
086	0604661A	FCS SYSTEMS OF SYSTEMS ENGR & PROGRAM MGMT.	1,067,191	1,067,191
087	0604662A	FCS RECONNAISSANCE (UAV) PLATFORMS	68,701	68,701
088	0604663A	FCS UNMANNED GROUND VEHICLES	125,616	125,616
089	0604664A	FCS UNATTENDED GROUND SENSORS	26,919	26,919
090	0604665A	FCS SUSTAINMENT & TRAINING R&D	749,182	749,182
091	0604666A	SPIN OUT TECHNOLOGY/CAPABILITY INSERTION		
092	0604710A	NIGHT VISION SYSTEMS—SDD	55,410	55,410
093	0604713A	COMBAT FEEDING, CLOTHING, AND EQUIPMENT.	2,092	2,092
094	0604715A	NON-SYSTEM TRAINING DEVICES—SDD	30,209	30,209
095	0604741A	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE—SDD.	28,936	28,936
096	0604742A	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT.	33,213	33,213
097	0604746A	AUTOMATIC TEST EQUIPMENT DEVELOPMENT.	15,320	15,320
098	0604760A	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)—SDD.	15,727	15,727
099	0604778A	POSITIONING SYSTEMS DEVELOPMENT (SPACE).	9,446	9,446
100	0604780A	COMBINED ARMS TACTICAL TRAINER (CATT) CORE.	26,243	26,243
101	0604783A	JOINT NETWORK MANAGEMENT SYSTEM		
102	0604802A	WEAPONS AND MUNITIONS—SDD	34,878	42,378
		<i>Common guidance control module</i>		[7,500]
103	0604804A	LOGISTICS AND ENGINEER EQUIPMENT—SDD.	36,018	37,518
		<i>Autonomous Sustainment Cargo Container Sea Truck.</i>		[1,500]
104	0604805A	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS—SDD.	88,995	88,995
105	0604807A	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT—SDD.	33,893	34,693
		<i>Plasma Sterilizer</i>		[800]
106	0604808A	LANDMINE WARFARE/BARRIER—SDD	82,260	60,960
		<i>Program reduction</i>		[-21,300]
107	0604814A	ARTILLERY MUNITIONS	42,452	42,452
108	0604817A	COMBAT IDENTIFICATION	20,070	20,070

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
(In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
109	0604818A	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE.	90,864	90,864
110	0604820A	RADAR DEVELOPMENT		
111	0604822A	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBs).	6,002	6,002
112	0604823A	FIREFINDER	20,333	20,333
113	0604827A	SOLDIER SYSTEMS—WARRIOR DEM/VAL ..	19,786	19,786
114	0604854A	ARTILLERY SYSTEMS	23,318	81,534
		Accelerate Paladin integration management ...		[58,216]
115	0604869A	PATRIOT/MEADS COMBINED AGGREGATE PROGRAM (CAP).	569,182	569,182
116	0604870A	NUCLEAR ARMS CONTROL MONITORING SENSOR NETWORK.	7,140	7,140
117	0605013A	INFORMATION TECHNOLOGY DEVELOP- MENT.	35,309	66,109
		Transfer from RDDW, line 117, for DIMHRS execution.		[30,800]
118	0605450A	JOINT AIR-TO-GROUND MISSILE (JAGM)	127,439	127,439
119	0605625A	MANNED GROUND VEHICLE	100,000	100,000
		SUBTOTAL, SYSTEM DEVELOPMENT & DEMONSTRATION, ARMY.	4,640,455	4,512,971
		RDT&E MANAGEMENT SUPPORT		
120	0604256A	THREAT SIMULATOR DEVELOPMENT	22,222	22,222
121	0604258A	TARGET SYSTEMS DEVELOPMENT	13,615	13,615
122	0604759A	MAJOR T&E INVESTMENT	51,846	51,846
123	0605103A	RAND ARROYO CENTER	16,305	18,305
		Program Increase		[2,000]
124	0605301A	ARMY KWAJALEIN ATOLL	163,514	163,514
125	0605326A	CONCEPTS EXPERIMENTATION PROGRAM	23,445	23,445
126	0605502A	SMALL BUSINESS INNOVATIVE RESEARCH		
127	0605601A	ARMY TEST RANGES AND FACILITIES	354,693	354,693
128	0605602A	ARMY TECHNICAL TEST INSTRUMENTA- TION AND TARGETS.	72,911	84,111
		Common regional operational systems		[3,000]
		Data fusion systems		[2,500]
		Dugway field test improvements		[4,500]
		MOTS All Sky Imager		[1,200]
129	0605604A	SURVIVABILITY/LETHALITY ANALYSIS	45,016	45,016
130	0605605A	DOD HIGH ENERGY LASER TEST FACILITY Program increase	2,891	8,891
				[6,000]
131	0605606A	AIRCRAFT CERTIFICATION	3,766	3,766
132	0605702A	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES.	8,391	8,391
133	0605706A	MATERIEL SYSTEMS ANALYSIS	19,969	19,969
134	0605709A	EXPLOITATION OF FOREIGN ITEMS	5,432	5,432
135	0605712A	SUPPORT OF OPERATIONAL TESTING	77,877	77,877
136	0605716A	ARMY EVALUATION CENTER	66,309	66,309
137	0605718A	ARMY MODELING & SIM X-CMD COLLABO- RATION & INTEG.	5,357	5,357
138	0605801A	PROGRAMWIDE ACTIVITIES	77,823	77,823
139	0605803A	TECHNICAL INFORMATION ACTIVITIES	51,620	51,620
140	0605805A	MUNITIONS STANDARDIZATION, EFFEC- TIVENESS AND SAFETY.	45,053	47,053
		3D woven preform technology for Army muni- tions.		[2,000]
141	0605857A	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT.	5,191	5,191
142	0605898A	MANAGEMENT HQ—R&D	15,866	15,866
143	0909999A	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENTS		
		SUBTOTAL, RDT&E MANAGEMENT SUP- PORT, ARMY.	1,149,112	1,170,312

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
(In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
		OPERATIONAL SYSTEMS DEVELOPMENT		
144	0603778A	MLRS PRODUCT IMPROVEMENT PROGRAM	27,693	27,693
145	0603820A	WEAPONS CAPABILITY MODIFICATIONS UAV		
146	0102419A	AEROSTAT JOINT PROJECT OFFICE	360,076	340,076
		Program delay reduction		[-20,000]
147	0203726A	ADV FIELD ARTILLERY TACTICAL DATA SYSTEM.	23,727	26,227
		AFATDS Voice Recognition and Cross Platform Speech Interface System.		[2,500]
148	0203735A	COMBAT VEHICLE IMPROVEMENT PROGRAMS.	190,301	190,301
149	0203740A	MANEUVER CONTROL SYSTEM	21,394	21,394
150	0203744A	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS.	209,401	209,401
151	0203752A	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.	792	792
152	0203758A	DIGITIZATION	10,692	10,692
153	0203759A	FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)		
154	0203801A	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM.	39,273	39,273
155	0203802A	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS.		5,000
		Javelin Warhead Improvement Plan		[5,000]
156	0203808A	TRACTOR CARD	20,035	20,035
157	0208010A	JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC)		
158	0208053A	JOINT TACTICAL GROUND SYSTEM	13,258	13,258
159	0208058A	JOINT HIGH SPEED VESSEL (JHSV)	3,082	3,082
160	0301359A	SPECIAL ARMY PROGRAM	[]	[]
161	0303028A	SECURITY AND INTELLIGENCE ACTIVITIES.	2,144	2,144
162	0303140A	INFORMATION SYSTEMS SECURITY PROGRAM.	74,355	74,355
163	0303141A	GLOBAL COMBAT SUPPORT SYSTEM	144,733	144,733
164	0303142A	SATCOM GROUND ENVIRONMENT (SPACE)	40,097	40,097
165	0303150A	WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM.	12,034	12,034
166	0303158A	JOINT COMMAND AND CONTROL PROGRAM (JC2).	20,365	20,365
167	0305204A	TACTICAL UNMANNED AERIAL VEHICLES	202,521	202,521
168	0305208A	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.	188,414	190,714
		Joint STARS Surveillance and Control Data Link (SCDL) Technology Refresh.		[1,000]
		Adaptive Defense High-Speed IP Packet Inspection Engine on a Chip.		[1,300]
169	0305287A	BASE EXPED TARGETING SURVEILLANCE SYS-COMBINED		
170	0307207A	AERIAL COMMON SENSOR (ACS)	210,035	210,035
171	0702239A	AVIONICS COMPONENT IMPROVEMENT PROGRAM		
172	0708045A	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES.	68,466	71,966
		Smart machine platform initiative		[2,000]
		Weapon systems repair technologies		[1,500]
999	9999999	OTHER PROGRAMS	3,883	3,883
		SUBTOTAL, OPERATIONAL SYSTEMS DEVELOPMENT, ARMY.	1,886,771	1,880,071
		TOTAL, RDT&E ARMY	10,438,218	10,638,534

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
<i>(In Thousands of Dollars)</i>				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
RESEARCH, DEVELOPMENT, TEST & EVALUATION, NAVY				
BASIC RESEARCH				
001	0601103N	UNIVERSITY RESEARCH INITIATIVES	99,472	99,472
002	0601152N	IN-HOUSE LABORATORY INDEPENDENT RESEARCH.	18,076	18,076
003	0601153N	DEFENSE RESEARCH SCIENCES	413,743	416,243
		<i>Nanoelectronics, Nanometrology, and Nanobiology Initiative.</i>		[2,500]
SUBTOTAL, BASIC RESEARCH, NAVY			531,291	533,791
APPLIED RESEARCH				
004	0602114N	POWER PROJECTION APPLIED RESEARCH	59,787	64,787
		<i>Energetics research</i>		[3,000]
		<i>Multifunctional Materials, their Applications and Devices.</i>		[2,000]
005	0602123N	FORCE PROTECTION APPLIED RESEARCH	91,400	124,400
		<i>Alternative energy research</i>		[20,000]
		<i>Energy systems integration research</i>		[4,000]
		<i>Port security technologies</i>		[2,000]
		<i>Design Optimization of Composite High-Speed Boats Using Advanced Composite and Manufacturing and Non-destructive Evaluation.</i>		[2,000]
		<i>Lithium Ion Storage Advancement for Aircraft Applications.</i>		[2,500]
		<i>Non-Traditional Weaving Applications for Aramid Ballistic Fibers and Fabrics.</i>		[2,500]
006	0602131M	MARINE CORPS LANDING FORCE TECHNOLOGY.	39,308	39,308
007	0602234N	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY		
008	0602235N	COMMON PICTURE APPLIED RESEARCH	83,163	83,163
009	0602236N	WARFIGHTER SUSTAINMENT APPLIED RESEARCH.	104,169	107,169
		<i>Anti-reverse engineering technologies</i>		[1,000]
		<i>Managing and Extending DOD Asset Lifecycles (MEDAL).</i>		[2,000]
010	0602271N	ELECTROMAGNETIC SYSTEMS APPLIED RESEARCH.	64,816	64,816
011	0602435N	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH.	48,750	51,750
		<i>Advanced UUV research</i>		[1,000]
		<i>Laser underwater imaging and communications research.</i>		[2,000]
012	0602651M	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH.	6,008	6,008
013	0602747N	UNDERSEA WARFARE APPLIED RESEARCH	55,694	55,694
014	0602782N	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH.	40,880	42,880
		<i>Electromagnetic signature assessment system</i>		[2,000]
SUBTOTAL, APPLIED RESEARCH, NAVY ..			593,975	639,975
ADVANCED TECHNOLOGY DEVELOPMENT				
015	0603114N	POWER PROJECTION ADVANCED TECHNOLOGY.	107,969	116,369
		<i>Countermeasure Lidar UAV-Based System (CLUBS).</i>		[2,000]
		<i>Detection, Tracking, and Identification for ISRTE of Mobile Asymmetric Targets.</i>		[2,500]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
		Quiet Drive Advanced Rotary Actuator		[2,000]
		Tactical High Speed Anti-Radiation Missile Demonstration.		[1,900]
016	0603123N	FORCE PROTECTION ADVANCED TECHNOLOGY.	66,035	78,035
		Advance coatings for aviation components		[2,000]
		Single generator operations lithium ion battery.		[5,000]
		High-Temperature Radar Dome Materials		[2,000]
		Pure Hydrogen Supply from Logistic Fuels		[3,000]
017	0603235N	COMMON PICTURE ADVANCED TECHNOLOGY.	108,394	49,294
		High-integrity GPS		[-59,100]
018	0603236N	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY.	86,239	86,239
019	0603271N	ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY.	65,827	65,827
020	0603640M	USMC ADVANCED TECHNOLOGY DEMONSTRATION (ATD).	107,363	112,363
		Acoustic combat sensors		[5,000]
021	0603651M	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT.	10,998	10,998
022	0603729N	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY.	18,609	21,109
		Navy Special Warfare Performance and Injury Prevention Program for SBT 22 at Stennis Space Center.		[2,500]
023	0603747N	UNDERSEA WARFARE ADVANCED TECHNOLOGY.	68,037	68,037
024	0603758N	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS.	52,643	52,643
025	0603782N	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY.	28,782	28,782
		SUBTOTAL, ADVANCED TECHNOLOGY DEVELOPMENT, NAVY.	720,896	689,696
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES		
026	0603207N	AIR/OCEAN TACTICAL APPLICATIONS	116,082	117,482
		Semi-submersible for UUV sensor developments.		[1,400]
027	0603216N	AVIATION SURVIVABILITY	6,505	9,505
		Lighter Than Air Stratospheric UAV for Persistent Communications Relay and Surveillance.		[3,000]
028	0603237N	DEPLOYABLE JOINT COMMAND AND CONTROL.	6,032	6,032
029	0603254N	ASW SYSTEMS DEVELOPMENT	16,585	20,585
		Sonobuoy wave energy module		[1,000]
		Marine Mammal Awareness, Alert, and Response Systems.		[3,000]
030	0603261N	TACTICAL AIRBORNE RECONNAISSANCE ..	7,713	7,713
031	0603382N	ADVANCED COMBAT SYSTEMS TECHNOLOGY.	1,677	1,677
032	0603502N	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES.	76,739	76,739
033	0603506N	SURFACE SHIP TORPEDO DEFENSE	57,538	62,038
		Continuous Active Sonar for Torpedo Systems		[4,500]
034	0603512N	CARRIER SYSTEMS DEVELOPMENT	173,594	173,594
035	0603513N	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT.	1,691	18,791
		DDG-51 hybrid propulsion system		[8,100]
		Advanced Steam Turbine		[4,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
		Next Generation Shipboard Intergrated Power: Fuel Efficiency and Advanced Capability Enhancer.		[5,000]
036	0603525N	PILOT FISH	79,194	79,194
037	0603527N	RETRACT LARCH	99,757	99,757
038	0603536N	RETRACT JUNIPER	120,752	120,752
039	0603542N	RADIOLOGICAL CONTROL	1,372	1,372
040	0603553N	SURFACE ASW	21,995	21,995
041	0603561N	ADVANCED SUBMARINE SYSTEM DEVEL- OPMENT. Submarine Fatline Vector Sensor Towed Array.	551,836	553,836
				[2,000]
042	0603562N	SUBMARINE TACTICAL WARFARE SYS- TEMS.	10,172	10,172
043	0603563N	SHIP CONCEPT ADVANCED DESIGN	22,541	22,541
044	0603564N	SHIP PRELIMINARY DESIGN & FEASI- BILITY STUDIES. Support for Naval Ship Hydrodynamics Test Facilities.	28,135	32,135
				[4,000]
045	0603570N	ADVANCED NUCLEAR POWER SYSTEMS	259,887	259,887
046	0603573N	ADVANCED SURFACE MACHINERY SYS- TEMS. High Denstiy Power Conversion and Distribu- tion Equipment.	5,599	9,099
				[1,500]
		Hybrid Electric Drive		[2,000]
047	0603576N	CHALK EAGLE	443,555	443,555
048	0603581N	LITTORAL COMBAT SHIP (LCS)	360,518	360,518
049	0603582N	COMBAT SYSTEM INTEGRATION	22,558	22,558
050	0603609N	CONVENTIONAL MUNITIONS	3,458	3,458
051	0603611M	MARINE CORPS ASSAULT VEHICLES	293,466	293,466
052	0603612M	USMC MINE COUNTERMEASURES SYS- TEMS—ADV DEV		
053	0603635M	MARINE CORPS GROUND COMBAT/SUP- PORT SYSTEM. Premature JLTV program growth	73,798	61,798
				[-12,000]
054	0603654N	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.	21,054	21,054
055	0603658N	COOPERATIVE ENGAGEMENT	56,586	56,586
056	0603713N	OCEAN ENGINEERING TECHNOLOGY DE- VELOPMENT.	17,328	17,328
057	0603721N	ENVIRONMENTAL PROTECTION	20,661	20,661
058	0603724N	NAVY ENERGY PROGRAM	8,476	16,226
		Molten carbonate fuel cell demonstrator		[3,000]
		Solar heat reflective film development		[4,750]
059	0603725N	FACILITIES IMPROVEMENT	4,002	9,602
		Wave Energy Powerbuoy Generating System ...		[2,400]
		Photovoltaic Rooftop Systems—Navy		[1,500]
		Regenerative Fuel Cell Back-Up Power		[1,700]
060	0603734N	CHALK CORAL	70,772	70,772
061	0603739N	NAVY LOGISTIC PRODUCTIVITY	4,301	6,301
		Highly integrated optical interconnects for ad- vanced air vehicles. RFID technology exploitation		[1,000]
062	0603746N	RETRACT MAPLE	210,237	210,237
063	0603748N	LINK PLUMERIA	69,313	69,313
064	0603751N	RETRACT ELM	152,151	152,151
065	0603755N	SHIP SELF DEFENSE	6,960	6,960
066	0603764N	LINK EVERGREEN	123,660	123,660
067	0603787N	SPECIAL PROCESSES	54,115	54,115
068	0603790N	NATO RESEARCH AND DEVELOPMENT	10,194	10,194
069	0603795N	LAND ATTACK TECHNOLOGY	1,238	1,238
070	0603851M	NONLETHAL WEAPONS	46,971	46,971
071	0603860N	JOINT PRECISION APPROACH AND LAND- ING SYSTEMS.	150,304	150,304

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
072	0603879N	SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM ENGINEER (SE).	52,716	52,716
073	0603889N	COUNTERDRUG RDT&E PROJECTS		
074	0603925N	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS.	5,003	7,003
		Joint Technology Insertion & Accelerated System Intergration Capability for Electronic Warfare.		[2,000]
075	0604272N	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES (TADIRCM).	63,702	63,702
076	0604450N	JOINT AIR-TO-GROUND MISSILE (JAGM)		
077	0604653N	JOINT COUNTER RADIO CONTROLLED IED ELECTRONIC WARFARE (JCREW).	67,843	67,843
078	0604659N	PRECISION STRIKE WEAPONS DEVELOPMENT PROGRAM.	40,926	40,926
079	0604707N	SPACE AND ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINEERING SUPPORT.	42,533	42,533
		SUBTOTAL, ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES, NAVY.	4,163,795	4,208,645
		SYSTEM DEVELOPMENT & DEMONSTRATION		
080	0604212N	OTHER HELO DEVELOPMENT	54,092	54,092
081	0604214N	AV-8B AIRCRAFT—ENG DEV	20,886	20,886
082	0604215N	STANDARDS DEVELOPMENT	53,540	55,540
		Measurement Standards Research and Development.		[2,000]
083	0604216N	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT.	81,953	86,653
		USN MH-60S "Close the Lethality Gap" M230 Pylon Qualification.		[4,700]
084	0604218N	AIR/OCEAN EQUIPMENT ENGINEERING	7,485	7,485
085	0604221N	P-3 MODERNIZATION PROGRAM	3,659	3,659
086	0604230N	WARFARE SUPPORT SYSTEM	6,307	6,307
087	0604231N	TACTICAL COMMAND SYSTEM	86,462	86,462
088	0604234N	ADVANCED HAWKEYE	364,557	364,557
089	0604245N	H-1 UPGRADES	32,830	32,830
090	0604261N	ACOUSTIC SEARCH SENSORS	56,369	56,369
091	0604262N	V-22A	89,512	89,512
092	0604264N	AIR CREW SYSTEMS DEVELOPMENT	14,265	14,265
093	0604269N	EA-18	55,446	55,446
094	0604270N	ELECTRONIC WARFARE DEVELOPMENT	97,635	97,635
095	0604273N	VH-71A EXECUTIVE HELO DEVELOPMENT	85,240	85,240
096	0604274N	NEXT GENERATION JAMMER (NGJ)	127,970	127,970
097	0604280N	JOINT TACTICAL RADIO SYSTEM—NAVY (JTRS-NAVY).	876,374	876,374
098	0604300N	SC-21 TOTAL SHIP SYSTEM ENGINEERING		
099	0604307N	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING.	178,459	180,459
		Surface Ship Advanced Capability Build		[2,000]
100	0604311N	LPD-17 CLASS SYSTEMS INTEGRATION	5,304	5,304
101	0604329N	SMALL DIAMETER BOMB (SDB)	43,902	43,902
102	0604366N	STANDARD MISSILE IMPROVEMENTS	182,197	182,197
103	0604373N	AIRBORNE MCM	48,712	48,712
104	0604378N	NAVAL INTEGRATED FIRE CONTROL—COUNTER AIR SYSTEMS ENGINEERING.	11,727	11,727
105	0604501N	ADVANCED ABOVE WATER SENSORS	236,078	251,078
		Mobile maritime sensor technology development.		[15,000]
106	0604503N	SSN-688 AND TRIDENT MODERNIZATION ..	122,733	122,733
107	0604504N	AIR CONTROL	6,533	6,533
108	0604512N	SHIPBOARD AVIATION SYSTEMS	80,623	80,623

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
109	0604518N	COMBAT INFORMATION CENTER CONVERSION.	13,305	13,305
110	0604558N	NEW DESIGN SSN	154,756	162,756
		Common command & control system module ..		[6,000]
		Mold-in-Place Coating for Development of U.S. Submarine Fleet.		[2,000]
111	0604561N	SSN-21 DEVELOPMENTS		
112	0604562N	SUBMARINE TACTICAL WARFARE SYSTEM	59,703	69,703
		Artificial Intelligence-based combat system kernel.		[4,000]
		Submarine environment for evaluation & development.		[3,000]
		Weapon acquisition & firing system		[3,000]
113	0604567N	SHIP CONTRACT DESIGN/LIVE FIRE T&E ..	89,988	92,488
		Automated Fiber Optic Manufacturing Initiative for Navy Ships.		[2,500]
114	0604574N	NAVY TACTICAL COMPUTER RESOURCES ..	4,620	4,620
115	0604601N	MINE DEVELOPMENT	2,249	2,249
116	0604610N	LIGHTWEIGHT TORPEDO DEVELOPMENT ..	21,105	21,105
117	0604654N	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT.	10,327	10,327
118	0604703N	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS.	5,898	5,898
119	0604727N	JOINT STANDOFF WEAPON SYSTEMS	10,022	10,022
120	0604755N	SHIP SELF DEFENSE (DETECT & CONTROL).	35,459	38,459
		AUSV		[3,000]
121	0604756N	SHIP SELF DEFENSE (ENGAGE: HARD KILL).	34,236	46,236
		Phalanx Next Generation		[12,000]
122	0604757N	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW).	88,895	88,895
123	0604761N	INTELLIGENCE ENGINEERING	14,438	14,438
124	0604771N	MEDICAL DEVELOPMENT	9,888	23,488
		Composite tissue transplantation research		[2,000]
		Custom body implant development		[2,000]
		Multivalent dengue vaccine program		[1,600]
		Orthopedic surgery instrumentation		[3,000]
		U.S. Navy Vaccine Program		[3,000]
		U.S. Navy Pandemic Influenza Vaccine Program: Enhancement of Influenza Vaccine Efficacy.		[2,000]
125	0604777N	NAVIGATION/ID SYSTEM	63,184	63,184
126	0604784N	DISTRIBUTED SURVEILLANCE SYSTEM		
127	0604800N	JOINT STRIKE FIGHTER (JSF)	1,741,296	1,956,296
		F136 Development		[215,000]
128	0605013M	INFORMATION TECHNOLOGY DEVELOPMENT.	9,868	9,868
129	0605013N	INFORMATION TECHNOLOGY DEVELOPMENT.	69,026	77,126
		Information systems research		[4,000]
		Integrated network-centric technology systems		[2,600]
		Maintenance Planning and Assessment Technology (MPAT) Insertion.		[1,500]
130	0605212N	CH-53K RDTE	554,827	554,827
131	0605430N	C/KC-130 AVIONICS MODERNIZATION PROGRAM (AMP)		
132	0605450N	JOINT AIR-TO-GROUND MISSILE (JAGM)	81,434	81,434
133	0605500N	MULTI-MISSION MARITIME AIRCRAFT (MMA).	1,162,417	1,162,417
134	0204201N	CG(X)	150,022	110,022
		Program delay		[-40,000]
135	0204202N	DDG-1000	539,053	539,053
136	0304785N	TACTICAL CRYPTOLOGIC SYSTEMS	19,016	19,016

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
<i>(In Thousands of Dollars)</i>				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION, NAVY.			7,975,882	8,231,782
RDT&E MANAGEMENT SUPPORT				
137	0604256N	THREAT SIMULATOR DEVELOPMENT	25,534	25,534
138	0604258N	TARGET SYSTEMS DEVELOPMENT	79,603	79,603
139	0604759N	MAJOR T&E INVESTMENT	44,844	49,844
		Aviation enterprise interoperability upgrades ..		[5,000]
140	0605152N	STUDIES AND ANALYSIS SUPPORT—NAVY	11,422	11,422
141	0605154N	CENTER FOR NAVAL ANALYSES	49,821	49,821
142	0605502N	SMALL BUSINESS INNOVATIVE RESEARCH		
143	0605804N	TECHNICAL INFORMATION SERVICES	735	3,235
		Center for Commercialization of Advanced		[2,500]
		Technology.		
144	0605853N	MANAGEMENT, TECHNICAL & INTER-	60,590	60,590
		NATIONAL SUPPORT.		
145	0605856N	STRATEGIC TECHNICAL SUPPORT	3,633	3,633
146	0605861N	RDT&E SCIENCE AND TECHNOLOGY MAN-	70,942	70,942
		AGEMENT.		
147	0605862N	RDT&E INSTRUMENTATION MODERNIZA-		
		TION		
148	0605863N	RDT&E SHIP AND AIRCRAFT SUPPORT	193,353	193,353
149	0605864N	TEST AND EVALUATION SUPPORT	380,733	380,733
150	0605865N	OPERATIONAL TEST AND EVALUATION	12,010	12,010
		CAPABILITY.		
151	0605866N	NAVY SPACE AND ELECTRONIC WARFARE	2,703	2,703
		(SEW) SUPPORT.		
152	0605867N	SEW SURVEILLANCE/RECONNAISSANCE	20,921	20,921
		SUPPORT.		
153	0605873M	MARINE CORPS PROGRAM WIDE SUPPORT	19,004	19,004
154	0305885N	TACTICAL CRYPTOLOGIC ACTIVITIES	2,464	2,464
155	0804758N	SERVICE SUPPORT TO JFCOM, JNTC	4,197	4,197
156	0909999N	FINANCING FOR CANCELLED ACCOUNT		
		ADJUSTMENTS		
SUBTOTAL, RDT&E MANAGEMENT SUP-			982,509	990,009
PORT, NAVY.				
OPERATIONAL SYSTEMS DEVELOPMENT				
158	0604227N	HARPOON MODIFICATIONS		
159	0604402N	UNMANNED COMBAT AIR VEHICLE (UCAV)	311,204	311,204
		ADVANCED COMPONENT AND PROTO-		
		TYPE DEVELOPMENT.		
160	0101221N	STRATEGIC SUB & WEAPONS SYSTEM	74,939	76,109
		SUPPORT.		
		Advanced LINAC Facility		[1,170]
161	0101224N	SSBN SECURITY TECHNOLOGY PROGRAM	34,479	34,479
162	0101226N	SUBMARINE ACOUSTIC WARFARE DEVEL-	7,211	7,211
		OPMENT.		
163	0101402N	NAVY STRATEGIC COMMUNICATIONS	43,982	46,982
		E-6B Strategic Communications Upgrade		[3,000]
		Block 1A (VLF-TX & HPTS).		
164	0203761N	RAPID TECHNOLOGY TRANSITION (RTT)	39,125	39,125
165	0204136N	F/A-18 SQUADRONS	127,733	127,733
166	0204152N	E-2 SQUADRONS	63,058	63,058
167	0204163N	FLEET TELECOMMUNICATIONS (TAC-	37,431	37,431
		TICAL).		
168	0204229N	TOMAHAWK AND TOMAHAWK MISSION	13,238	13,238
		PLANNING CENTER (TMPC).		
169	0204311N	INTEGRATED SURVEILLANCE SYSTEM	24,835	24,835
170	0204413N	AMPHIBIOUS TACTICAL SUPPORT UNITS	2,324	2,324
		(DISPLACEMENT CRAFT).		
171	0204571N	CONSOLIDATED TRAINING SYSTEMS DE-	49,293	49,293
		VELOPMENT.		

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
172	0204574N	CRYPTOLOGIC DIRECT SUPPORT	1,609	1,609
173	0204575N	ELECTRONIC WARFARE (EW) READINESS SUPPORT.	37,524	37,524
174	0205601N	HARM IMPROVEMENT	30,045	30,045
175	0205604N	TACTICAL DATA LINKS	25,003	25,003
176	0205620N	SURFACE ASW COMBAT SYSTEM INTEGRATION.	41,803	41,803
177	0205632N	MK-48 ADCAP	28,438	28,438
178	0205633N	AVIATION IMPROVEMENTS	135,840	123,349
		F135 engine funding ahead of need		[-12,491]
179	0205658N	NAVY SCIENCE ASSISTANCE PROGRAM	3,716	3,716
180	0205675N	OPERATIONAL NUCLEAR POWER SYSTEMS	72,031	72,031
181	0206313M	MARINE CORPS COMMUNICATIONS SYSTEMS.	287,348	287,348
182	0206623M	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS.	120,379	124,379
		Expandable rigid wall composite shelters		[1,000]
		Marine personnel carrier support system		[3,000]
183	0206624M	MARINE CORPS COMBAT SERVICES SUPPORT.	17,057	18,057
		High performance capabilities for military vehicles.		[1,000]
184	0206625M	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP).	30,167	30,167
185	0207161N	TACTICAL AIM MISSILES	2,298	2,298
186	0207163N	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM).	3,604	3,604
187	0208058N	JOINT HIGH SPEED VESSEL (JHSV)	8,431	8,431
188	0301303N	MARITIME INTELLIGENCE	[]	[]
189	0301323N	COLLECTION MANAGEMENT	[]	[]
190	0301327N	TECHNICAL RECONNAISSANCE AND SURVEILLANCE.	[]	[]
191	0301372N	CYBER SECURITY INITIATIVE—GDIP	[]	[]
192	0303109N	SATELLITE COMMUNICATIONS (SPACE)	474,009	474,009
193	0303138N	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES (CANES).	45,513	45,513
194	0303140N	INFORMATION SYSTEMS SECURITY PROGRAM.	24,226	24,226
195	0303158M	JOINT COMMAND AND CONTROL PROGRAM (JC2).	2,453	2,453
196	0303158N	JOINT COMMAND AND CONTROL PROGRAM (JC2).	4,139	4,139
197	0305149N	COBRA JUDY	62,061	62,061
198	0305160N	NAVY METEOROLOGICAL AND OCEAN SENSORS-SPACE (METOC).	28,094	28,094
199	0305192N	MILITARY INTELLIGENCE PROGRAM (MIP) ACTIVITIES.	4,600	4,600
200	0305204N	TACTICAL UNMANNED AERIAL VEHICLES	8,971	8,971
201	0305205N	ENDURANCE UNMANNED AERIAL VEHICLES		
202	0305206N	AIRBORNE RECONNAISSANCE SYSTEMS ...	46,208	46,208
203	0305207N	MANNED RECONNAISSANCE SYSTEMS	22,599	22,599
204	0305208N	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.	18,079	18,079
205	0305220N	RQ-4 UAV	465,839	465,839
206	0305231N	MQ-8 UAV	25,639	25,639
207	0305232M	RQ-11 UAV	553	553
208	0305233N	RQ-7 UAV	986	986
209	0305234M	SMALL (LEVEL 0) TACTICAL UAS (STUASLO).	18,763	18,763
210	0305234N	SMALL (LEVEL 0) TACTICAL UAS (STUASLO).	23,594	23,594
211	0307207N	AERIAL COMMON SENSOR (ACS)		
212	0307217N	EP-3E REPLACEMENT (EPX)	11,976	11,976

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
(In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
213	0308601N	MODELING AND SIMULATION SUPPORT	8,028	8,028
214	0702207N	DEPOT MAINTENANCE (NON-IF)	14,675	14,675
215	0702239N	AVIONICS COMPONENT IMPROVEMENT PROGRAM.	2,725	2,725
216	0708011N	INDUSTRIAL PREPAREDNESS	56,691	66,691
		Integrated manufacturing enterprise		[5,000]
		Life extension of weapon system structures re- search.		[2,500]
		Laser Optimization Remote Lighting Systems		[2,500]
217	0708730N	MARITIME TECHNOLOGY (MARITECH)		4,000
		National Shipbuilding Research Program		[4,000]
999	9999999	OTHER PROGRAMS	1,258,018	1,258,018
		SUBTOTAL, OPERATIONAL SYSTEMS DE- VELOPMENT, RDT&E.	4,302,584	4,313,263
		TOTAL, RDT&E NAVY	19,270,932	19,607,161
RESEARCH, DEVELOPMENT, TEST & EVALUATION, AIR FORCE				
BASIC RESEARCH				
001	0601102F	DEFENSE RESEARCH SCIENCES	321,028	322,028
		Coal transformation research		[1,000]
002	0601103F	UNIVERSITY RESEARCH INITIATIVES	132,249	138,449
		Cybersecurity for control networks research		[1,700]
		End-user software safeguard research		[2,000]
		Informatics research		[1,000]
		Information security research		[1,500]
003	0601108F	HIGH ENERGY LASER RESEARCH INITIA- TIVES.	12,834	12,834
004	0301555F	CLASSIFIED PROGRAMS	[]	[]
005	0301556F	SPECIAL PROGRAM	[]	[]
		SUBTOTAL, BASIC RESEARCH, AIR FORCE.	466,111	473,311
APPLIED RESEARCH				
006	0602015F	MEDICAL DEVELOPMENT		
007	0602102F	MATERIALS	127,957	136,957
		Advanced aerospace heat exchangers		[3,000]
		Energy and automation technologies		[2,000]
		Energy efficiency, recovery, and generation systems.		[1,000]
		Health monitoring sensors for aerospace com- ponents.		[2,000]
		Mid-infrared laser source research		[1,000]
008	0602201F	AEROSPACE VEHICLE TECHNOLOGIES	127,129	136,529
		Unmanned aerial system collaboration tech- nologies.		[2,500]
		UAV Sensor and Maintenance Development		[4,900]
		Unmanned Sense, Track, and Avoid Radar		[2,000]
009	0602202F	HUMAN EFFECTIVENESS APPLIED RE- SEARCH.	85,122	85,122
010	0602203F	AEROSPACE PROPULSION	196,529	210,029
		Hybrid bearing development		[1,000]
		Integrated electrical starter/generator systems		[2,000]
		Lithium ion technologies for aviation batteries		[1,500]
		Thermally efficient engine pumping system		[2,000]
		Advanced Lithium Battery Scale-Up and Manufacturing.		[2,000]
		Advanced Vehicle Propulsion Center (AVPC) ..		[3,000]
		Multi-Mode Propulsion Phase IIA: High Per- formance Green Propellant.		[2,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
011	0602204F	AEROSPACE SENSORS	121,768	126,568
		Net-Centric Sensor Grids		[3,000]
		Information Quality Tools for Persistent Surveillance Data Sets.		[1,800]
012	0602601F	SPACE TECHNOLOGY	104,148	113,248
		Reconfigurable electronics research		[1,000]
		Seismic research program		[5,000]
		Advanced Modular Avionics for ORS Use		[3,100]
013	0602602F	CONVENTIONAL MUNITIONS	58,289	58,289
014	0602605F	DIRECTED ENERGY TECHNOLOGY	105,677	101,427
		Chemical laser technology		[-4,250]
015	0602702F	COMMAND CONTROL AND COMMUNICATIONS		
016	0602788F	DOMINANT INFORMATION SCIENCES AND METHODS.	115,278	115,278
017	0602890F	HIGH ENERGY LASER RESEARCH	52,754	48,654
		Advanced deformable mirrors for high energy laser weapons.		[2,000]
		Chemical laser technology		[-6,100]
		SUBTOTAL, APPLIED RESEARCH, AIR FORCE.	1,094,651	1,132,101
		ADVANCED TECHNOLOGY DEVELOPMENT		
018	0603112F	ADVANCED MATERIALS FOR WEAPON SYSTEMS.	37,901	54,201
		Sewage-derived biofuels program		[4,800]
		Metals Affordability Initiative		[10,000]
		Rapid Automated Processing of Advances Low Observables.		[1,500]
019	0603199F	SUSTAINMENT SCIENCE AND TECHNOLOGY (S&T).	2,955	2,955
020	0603203F	ADVANCED AEROSPACE SENSORS	51,482	53,482
		Reconfigurable secure computing technologies		[2,000]
021	0603211F	AEROSPACE TECHNOLOGY DEV/DEMO	76,844	81,844
		Long Loiter, Load Bearing Antenna Platform for Pervasive Airborne Intelligence.		[5,000]
022	0603216F	AEROSPACE PROPULSION AND POWER TECHNOLOGY.	175,676	198,676
		Alternative energy research		[20,000]
		Silicon carbide power electronics research		[3,000]
023	0603231F	CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY.		
024	0603270F	ELECTRONIC COMBAT TECHNOLOGY	31,021	31,021
025	0603401F	ADVANCED SPACECRAFT TECHNOLOGY	83,909	86,909
		Small Responsive Spacecraft at Low-Cost (SRSL).		[3,000]
026	0603444F	MAUI SPACE SURVEILLANCE SYSTEM (MSSS).	5,813	5,813
027	0603456F	HUMAN EFFECTIVENESS ADVANCED TECHNOLOGY DEVELOPMENT.	24,565	24,565
028	0603601F	CONVENTIONAL WEAPONS TECHNOLOGY	14,356	14,356
029	0603605F	ADVANCED WEAPONS TECHNOLOGY	30,056	30,056
030	0603680F	MANUFACTURING TECHNOLOGY PROGRAM.	39,913	45,163
		Next generation casting initiative		[3,250]
		Production of Nanocomposites for Aerospace Applications.		[2,000]
031	0603788F	BATTLESPACE KNOWLEDGE DEVELOPMENT AND DEMONSTRATION.	39,708	46,208
		Optical interconnects research		[2,500]
		Cyber Attack and Security Environment		[4,000]
032	0603789F	C3I ADVANCED DEVELOPMENT		

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
<i>(In Thousands of Dollars)</i>				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
033	0603924F	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM.	3,831	3,831
		SUBTOTAL, ADVANCED TECHNOLOGY DEVELOPMENT, AIR FORCE.	618,030	679,080
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES		
034	0603260F	INTELLIGENCE ADVANCED DEVELOPMENT.	5,009	5,009
035	0603287F	PHYSICAL SECURITY EQUIPMENT	3,623	3,623
036	0603421F	NAVSTAR GLOBAL POSITIONING SYSTEM III		
037	0603423F	GLOBAL POSITIONING SYSTEM III—OPERATIONAL CONTROL SEGMENT		
038	0603430F	ADVANCED EHF MILSATCOM (SPACE)	464,335	464,335
039	0603432F	POLAR MILSATCOM (SPACE)	253,150	253,150
040	0603438F	SPACE CONTROL TECHNOLOGY	97,701	102,701
		Space situational awareness		[5,000]
041	0603742F	COMBAT IDENTIFICATION TECHNOLOGY ..	27,252	27,252
042	0603790F	NATO RESEARCH AND DEVELOPMENT	4,351	4,351
043	0603791F	INTERNATIONAL SPACE COOPERATIVE R&D.	632	632
044	0603845F	TRANSFORMATIONAL SATCOM (TSAT)		
045	0603850F	INTEGRATED BROADCAST SERVICE	20,739	20,739
046	0603851F	INTERCONTINENTAL BALLISTIC MISSILE	66,079	66,079
047	0603854F	WIDEBAND GLOBAL SATCOM RDT&E (SPACE).	70,956	70,956
048	0603859F	POLLUTION PREVENTION	2,896	2,896
049	0603860F	JOINT PRECISION APPROACH AND LANDING SYSTEMS.	23,174	23,174
050	0604015F	NEXT GENERATION BOMBER		
051	0604283F	BATTLE MGMT COM & CTRL SENSOR DEVELOPMENT.	22,612	22,612
052	0604327F	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS) PROGRAM.	20,891	20,891
053	0604330F	JOINT DUAL ROLE AIR DOMINANCE MISSILE.	6,882	6,882
054	0604337F	REQUIREMENTS ANALYSIS AND MATURATION.	35,533	35,533
055	0604635F	GROUND ATTACK WEAPONS FUZE DEVELOPMENT.	18,778	18,778
056	0604796F	ALTERNATIVE FUELS	89,020	91,020
		Advanced Propulsion Non-Tactical Vehicle		[2,000]
057	0604830F	AUTOMATED AIR-TO-AIR REFUELING	43,158	43,158
058	0604856F	COMMON AERO VEHICLE (CAV)		
059	0604857F	OPERATIONALLY RESPONSIVE SPACE	112,861	112,861
060	0604858F	TECH TRANSITION PROGRAM	9,611	9,611
061	0305178F	NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM (NPOESS).	396,641	396,641
061a	604xxxxF	NEXT GENERATION MILSATCOM TECHNOLOGY DEVELOPMENT.		50,000
		Next generation MILSATCOM technology development.		[50,000]
		SUBTOTAL, ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES, AIR FORCE.	1,795,884	1,852,884
		SYSTEM DEVELOPMENT & DEMONSTRATION		
062	0603840F	GLOBAL BROADCAST SERVICE (GBS)	31,124	31,124
063	0604222F	NUCLEAR WEAPONS SUPPORT	37,860	37,860

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
064	0604226F	B-1B		
065	0604233F	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING.	6,227	6,227
066	0604240F	B-2 ADVANCED TECHNOLOGY BOMBER		12,000
		Advanced Data Link		[12,000]
067	0604261F	PERSONNEL RECOVERY SYSTEMS		
068	0604270F	ELECTRONIC WARFARE DEVELOPMENT	97,275	97,275
069	0604281F	TACTICAL DATA NETWORKS ENTERPRISE	88,444	88,444
070	0604287F	PHYSICAL SECURITY EQUIPMENT	50	50
071	0604329F	SMALL DIAMETER BOMB (SDB)	153,815	153,815
072	0604421F	COUNTERSPACE SYSTEMS	64,248	64,248
073	0604425F	SPACE SITUATION AWARENESS SYSTEMS	308,134	271,434
		SBSS follow-on—program delay		[-36,700]
074	0604429F	AIRBORNE ELECTRONIC ATTACK	11,107	11,107
075	0604441F	SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD.	512,642	512,642
076	0604443F	THIRD GENERATION INFRARED SURVEILLANCE (3GIRS).	143,169	143,169
077	0604602F	ARMAMENT/ORDNANCE DEVELOPMENT ...	18,671	18,671
078	0604604F	SUBMUNITIONS	1,784	1,784
079	0604617F	AGILE COMBAT SUPPORT	11,261	12,261
		Backpack Medical Oxygen System		[1,000]
080	0604706F	LIFE SUPPORT SYSTEMS	10,711	13,111
		ACES 5 Ejection Seat		[2,400]
081	0604735F	COMBAT TRAINING RANGES	29,718	29,718
082	0604740F	INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A).	10	4,010
		Distributed Mission Interoperability Toolkit (DMIT).		[4,000]
083	0604750F	INTELLIGENCE EQUIPMENT	1,495	1,495
084	0604800F	JOINT STRIKE FIGHTER (JSF)	1,858,055	2,073,055
		F136 Engine Development		[215,000]
085	0604851F	INTERCONTINENTAL BALLISTIC MISSILE	60,010	60,010
086	0604853F	EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE).	26,545	26,545
087	0605011F	RDT&E FOR AGING AIRCRAFT		
088	0605221F	NEXT GENERATION AERIAL REFUELING AIRCRAFT.	439,615	439,615
089	0605277F	CSAR-X RDT&E	89,975	0
		Use available prior year funds		[-89,975]
090	0605278F	HC/MC-130 RECAP RDT&E	20,582	20,582
091	0605452F	JOINT SIAP EXECUTIVE PROGRAM OFFICE	34,877	34,877
092	0207434F	LINK-16 SUPPORT AND SUSTAINMENT		
093	0207450F	E-10 SQUADRONS		
094	0207451F	SINGLE INTEGRATED AIR PICTURE (SIAP)	13,466	13,466
095	0207701F	FULL COMBAT MISSION TRAINING	99,807	99,807
096	0305176F	COMBAT SURVIVOR EVADER LOCATOR		
097	0401138F	JOINT CARGO AIRCRAFT (JCA)	9,353	9,353
098	0401318F	CV-22	19,640	19,640
099	0401845F	AIRBORNE SENIOR LEADER C3 (SLC3S)	20,056	20,056
		SUBTOTAL, SYSTEM DEVELOPMENT & DEMONSTRATION, AIR FORCE.	4,219,726	4,327,451
		RDT&E MANAGEMENT SUPPORT		
100	0604256F	THREAT SIMULATOR DEVELOPMENT	27,789	27,789
101	0604759F	MAJOR T&E INVESTMENT	60,824	68,324
		Holloman High Speed Test Track		[5,000]
		Eglin AFB Range Operations Control Center ..		[2,500]
102	0605101F	RAND PROJECT AIR FORCE	27,501	27,501
103	0605502F	SMALL BUSINESS INNOVATION RESEARCH		
104	0605712F	INITIAL OPERATIONAL TEST & EVALUATION.	25,833	25,833

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
(In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
105	0605807F	TEST AND EVALUATION SUPPORT	736,488	755,788
		Program increase		[19,300]
106	0605860F	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE).	14,637	14,637
107	0605864F	SPACE TEST PROGRAM (STP)	47,215	47,215
108	0605976F	FACILITIES RESTORATION AND MODERNIZATION—TEST AND EVALUATION SUPPORT.	52,409	52,409
109	0605978F	FACILITIES SUSTAINMENT—TEST AND EVALUATION SUPPORT.	29,683	29,683
110	0702806F	ACQUISITION AND MANAGEMENT SUPPORT.	18,947	18,947
111	0804731F	GENERAL SKILL TRAINING	1,450	1,450
112	0909999F	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENTS		
113	1001004F	INTERNATIONAL ACTIVITIES	3,748	3,748
		SUBTOTAL, RDT&E MANAGEMENT SUPPORT, AIR FORCE.	1,046,524	1,073,324
		OPERATIONAL SYSTEMS DEVELOPMENT		
114	0604263F	COMMON VERTICAL LIFT SUPPORT PLATFORM.	9,513	9,513
115	0605024F	ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY.	47,276	47,276
116	0605798F	ANALYSIS SUPPORT GROUP	[]	[]
117	0101113F	B-52 SQUADRONS	93,930	93,930
118	0101122F	AIR-LAUNCHED CRUISE MISSILE (ALCM) ...	3,652	3,652
119	0101126F	B-1B SQUADRONS	148,025	177,025
		Transferred from APAF Line 28		[29,000]
120	0101127F	B-2 SQUADRONS	415,414	415,414
121	0101313F	STRAT WAR PLANNING SYSTEM—USSTRATCOM.	33,836	33,836
122	0101314F	NIGHT FIST—USSTRATCOM	5,328	5,328
123	0101815F	ADVANCED STRATEGIC PROGRAMS	[]	[]
124	0102325F	ATMOSPHERIC EARLY WARNING SYSTEM	9,832	9,832
125	0102326F	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION PROGRAM.	25,734	25,734
126	0102823F	STRATEGIC AEROSPACE INTELLIGENCE SYSTEM ACTIVITIES.	18	18
127	0203761F	WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRANSITION FUND.	11,996	11,996
128	0205219F	MQ-9 UAV	39,245	39,245
129	0207040F	MULTI-PLATFORM ELECTRONIC WARFARE EQUIPMENT.	14,747	14,747
130	0207131F	A-10 SQUADRONS	9,697	9,697
131	0207133F	F-16 SQUADRONS	141,020	141,020
132	0207134F	F-15E SQUADRONS	311,167	312,167
		Corrosion Detection and Visualization Program.		[1,000]
133	0207136F	MANNED DESTRUCTIVE SUPPRESSION	10,748	10,748
134	0207138F	F-22A SQUADRONS	569,345	569,345
135	0207161F	TACTICAL AIM MISSILES	5,915	5,915
136	0207163F	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM).	49,971	49,971
137	0207170F	JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS).	2,529	2,529
138	0207227F	COMBAT RESCUE—PARARESCUE	2,950	2,950
139	0207247F	AF TENCAP	11,643	11,643
140	0207249F	PRECISION ATTACK SYSTEMS PROCUREMENT.	2,950	2,950
141	0207253F	COMPASS CALL	13,019	13,019
142	0207268F	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM.	166,563	154,563

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
		<i>F135 Engine—Early to need</i>		[−12,000]
143	0207277F	CSAF INNOVATION PROGRAM	4,621	4,621
144	0207325F	JOINT AIR-TO-SURFACE STANDOFF MIS- SILE (JASSM).	29,494	29,494
145	0207410F	AIR & SPACE OPERATIONS CENTER (AOC)	99,405	99,405
146	0207412F	CONTROL AND REPORTING CENTER (CRC)	52,508	52,508
147	0207417F	AIRBORNE WARNING AND CONTROL SYS- TEM (AWACS).	176,040	176,040
148	0207418F	TACTICAL AIRBORNE CONTROL SYSTEMS		
149	0207423F	ADVANCED COMMUNICATIONS SYSTEMS ..	63,782	63,782
150	0207424F	EVALUATION AND ANALYSIS PROGRAM	[]	[]
151	0207431F	COMBAT AIR INTELLIGENCE SYSTEM AC- TIVITIES.	1,475	1,475
152	0207438F	THEATER BATTLE MANAGEMENT (TBM) C4I.	19,067	19,067
153	0207445F	FIGHTER TACTICAL DATA LINK	72,106	72,106
154	0207446F	BOMBER TACTICAL DATA LINK		
155	0207448F	C2ISR TACTICAL DATA LINK	1,667	1,667
156	0207449F	COMMAND AND CONTROL (C2) CON- STELLATION.	26,792	26,792
157	0207581F	JOINT SURVEILLANCE/TARGET ATTACK RADAR SYSTEM (JSTARS).	140,670	140,670
158	0207590F	SEEK EAGLE	22,071	22,071
159	0207601F	USAF MODELING AND SIMULATION	27,245	27,245
160	0207605F	WARGAMING AND SIMULATION CENTERS	7,018	7,018
161	0207697F	DISTRIBUTED TRAINING AND EXERCISES	6,740	6,740
162	0208006F	MISSION PLANNING SYSTEMS	91,995	91,995
163	0208021F	INFORMATION WARFARE SUPPORT	12,271	12,271
164	0208161F	SPECIAL EVALUATION SYSTEM	[]	[]
165	0301310F	NATIONAL AIR INTELLIGENCE CENTER <i>Open Source Research Centers</i>	[]	[]
				[1,000]
166	0301314F	COBRA BALL	[]	[]
167	0301315F	MISSILE AND SPACE TECHNICAL COLLEC- TION.	[]	[]
168	0301324F	FOREST GREEN	[]	[]
169	0301386F	GDIP COLLECTION MANAGEMENT	[]	[]
170	0302015F	E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC).	26,107	26,107
171	0303112F	AIR FORCE COMMUNICATIONS (AIRCOM)		
172	0303131F	MINIMUM ESSENTIAL EMERGENCY COM- MUNICATIONS NETWORK (MEECN).	72,694	72,694
173	0303140F	INFORMATION SYSTEMS SECURITY PRO- GRAM.	196,621	196,621
174	0303141F	GLOBAL COMBAT SUPPORT SYSTEM	3,375	3,375
175	0303150F	GLOBAL COMMAND AND CONTROL SYS- TEM.	3,149	3,149
176	0303158F	JOINT COMMAND AND CONTROL PRO- GRAM (JC2).	3,087	3,087
177	0303601F	MILSATCOM TERMINALS	257,693	257,693
179	0304260F	AIRBORNE SIGINT ENTERPRISE	176,989	176,989
180	0304311F	SELECTED ACTIVITIES	[]	[]
181	0304348F	ADVANCED GEOSPATIAL INTELLIGENCE (AGI). <i>Advanced Technical Intelligence Center</i>	[]	[]
				[6,500]
182	0305099F	GLOBAL AIR TRAFFIC MANAGEMENT (GATM).	6,028	6,028
183	0305103F	CYBER SECURITY INITIATIVE	2,065	2,065
184	0305110F	SATELLITE CONTROL NETWORK (SPACE) ..	20,991	20,991
185	0305111F	WEATHER SERVICE	33,531	33,531
186	0305114F	AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATCALs).	9,006	9,006
187	0305116F	AERIAL TARGETS	54,807	54,807
188	0305124F	SPECIAL APPLICATIONS PROGRAM	[]	[]
189	0305127F	FOREIGN COUNTERINTELLIGENCE AC- TIVITIES.	[]	[]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
190	0305128F	SECURITY AND INVESTIGATIVE ACTIVITIES.	742	742
191	0305142F	APPLIED TECHNOLOGY AND INTEGRATION.	[]	[]
192	0305146F	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES.	39	39
194	0305164F	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT) (SPACE).	137,692	137,692
195	0305165F	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL SEGMENTS).	52,039	52,039
196	0305172F	COMBINED ADVANCED APPLICATIONS	[]	[]
197	0305173F	SPACE AND MISSILE TEST AND EVALUATION CENTER.	3,599	3,599
198	0305174F	SPACE WARFARE CENTER	3,009	3,009
199	0305182F	SPACELIFT RANGE SYSTEM (SPACE)	9,957	9,957
200	0305193F	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO).	1,240	1,240
201	0305202F	DRAGON U-2		
202	0305205F	ENDURANCE UNMANNED AERIAL VEHICLES.	73,736	38,736
		ISIS		[-35,000]
203	0305206F	AIRBORNE RECONNAISSANCE SYSTEMS ...	143,892	145,892
		GORGON STARE		
		Multiple UAS Cooperative Concentrated Observation and Engagement Against a Common Ground Objective.		[2,000]
204	0305207F	MANNED RECONNAISSANCE SYSTEMS	12,846	15,346
		Rivet Joint Services Oriented Architecture (SOA).		[2,500]
205	0305208F	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.	82,765	82,765
206	0305219F	MQ-1 PREDATOR A UAV	18,101	22,101
		Sense and avoid		[4,000]
207	0305220F	RQ-4 UAV	317,316	317,316
208	0305221F	NETWORK-CENTRIC COLLABORATIVE TARGETING.	8,160	8,160
209	0305265F	GPS III SPACE SEGMENT	815,095	717,695
		GPS Control Segment (OCX)		[-97,400]
210	0305614F	JSPOC MISSION SYSTEM	131,271	137,271
		Karnac		[6,000]
211	0305887F	INTELLIGENCE SUPPORT TO INFORMATION WARFARE.	5,267	5,267
212	0305906F	NCMC-TW/AA SYSTEM		
213	0305913F	NUDET DETECTION SYSTEM (SPACE)	84,021	84,021
214	0305924F	NATIONAL SECURITY SPACE OFFICE	10,634	10,634
215	0305940F	SPACE SITUATION AWARENESS OPERATIONS.	54,648	54,648
216	0307141F	INFORMATION OPERATIONS TECHNOLOGY INTEGRATION & TOOL DEVELOPMENT.	30,076	30,076
217	0308699F	SHARED EARLY WARNING (SEW)	3,082	3,082
218	0401115F	C-130 AIRLIFT SQUADRON	201,250	201,250
219	0401119F	C-5 AIRLIFT SQUADRONS (IF)	95,266	95,266
220	0401130F	C-17 AIRCRAFT (IF)	161,855	161,855
221	0401132F	C-130J PROGRAM	30,019	30,019
222	0401134F	LARGE AIRCRAFT IR COUNTERMEASURES (LAIRC).	31,784	31,784
223	0401218F	KC-135S	10,297	10,297
224	0401219F	KC-10S	35,586	35,586
225	0401221F	KC-135 TANKER REPLACEMENT		
226	0401314F	OPERATIONAL SUPPORT AIRLIFT	4,916	4,916
227	0401839F	AIR MOBILITY TACTICAL DATA LINK		
228	0408011F	SPECIAL TACTICS COMBAT CONTROL	8,222	8,222
229	0702207F	DEPOT MAINTENANCE (NON-IF)	1,508	1,508

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
230	0702976F	FACILITIES RESTORATION & MODERNIZATION—LOGISTICS		
231	0708011F	INDUSTRIAL PREPAREDNESS		2,000
		Wire Integrity Technology		[2,000]
232	0708610F	LOGISTICS INFORMATION TECHNOLOGY (LOGIT).	246,483	246,483
233	0708611F	SUPPORT SYSTEMS DEVELOPMENT	6,288	8,288
		ALC Logistics Integration Environment		[2,000]
234	0804743F	OTHER FLIGHT TRAINING	805	805
235	0804757F	JOINT NATIONAL TRAINING CENTER	3,220	3,220
236	0804772F	TRAINING DEVELOPMENTS	1,769	1,769
237	0808716F	OTHER PERSONNEL ACTIVITIES	116	116
238	0901202F	JOINT PERSONNEL RECOVERY AGENCY ... Biometric signature and passive physiological monitoring.	6,376	11,376 [5,000]
239	0901212F	SERVICE-WIDE SUPPORT (NOT OTHER-WISE ACCOUNTED FOR)		
240	0901218F	CIVILIAN COMPENSATION PROGRAM	8,174	8,174
241	0901220F	PERSONNEL ADMINISTRATION	10,492	30,982
		DIMHRS—OSD requested transfer from RDDW, Line 117.		[20,490]
242	0901538F	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT.	55,991	55,991
999	9999999	OTHER PROGRAMS	11,955,084	12,137,084
		Program Increase		[172,500]
		Carbon Nanotube Enhanced Power Sources for Space.		[2,000]
		SUBTOTAL, OPERATIONAL SYSTEMS DEVELOPMENT, AIR FORCE.	18,751,901	18,863,491
		TOTAL, RDT&E AIR FORCE	27,992,827	28,401,642
		RESEARCH, DEVELOPMENT, TEST & EVALUATION, DEFENSE-WIDE		
		BASIC RESEARCH		
001	0601000BR	DTRA BASIC RESEARCH INITIATIVE	48,544	48,544
002	0601101E	DEFENSE RESEARCH SCIENCES	226,125	226,125
003	0601111D8Z	GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEARCH		
004	0601114D8Z	DEFENSE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH.		
005	0601120D8Z	NATIONAL DEFENSE EDUCATION PROGRAM.	89,980	89,980
006	0601384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM. In-vitro models for bio-defense vaccines	58,974	64,874
		Synchrotron Beamline and Experimental Station.		[1,900] [4,000]
		SUBTOTAL, BASIC RESEARCH, DEFENSE-WIDE.	423,623	429,523
		APPLIED RESEARCH		
007	0602000D8Z	JOINT MUNITIONS TECHNOLOGY	22,669	18,961
		Partial Program Growth Reduction		[-3,708]
008	0602227D8Z	MEDICAL FREE ELECTRON LASER		
009	0602228D8Z	HISTORICALLY BLACK COLLEGES AND UNIVERSITIES (HBCU) SCIENCE. Historically Black Colleges and Universities and Minority Serving Institutions Program.	15,164	20,164
				[5,000]
010	0602234D8Z	LINCOLN LABORATORY RESEARCH PROGRAM.	34,034	34,034

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
011	0602303E	INFORMATION & COMMUNICATIONS TECHNOLOGY. Program Reduction	282,749	272,749 [-10,000]
012	0602304E	COGNITIVE COMPUTING SYSTEMS	142,840	142,840
013	0602383E	BIOLOGICAL WARFARE DEFENSE	40,587	40,587
014	0602384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM. Chemical and biological infrared detector	209,072	212,972 [1,900]
		Chemical and Biological Resistant Clothing ...		[2,000]
015	0602663D8Z	JOINT DATA MANAGEMENT ADVANCED DEVELOPMENT.	4,940	4,940
016	0602670D8Z	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) APPLIED RESEARCH.	9,446	9,446
017	0602702E	TACTICAL TECHNOLOGY	276,075	266,075
		Program Reduction		[-10,000]
018	0602715E	MATERIALS AND BIOLOGICAL TECHNOLOGY. Program Reduction	268,859	263,859 [-5,000]
019	0602716E	ELECTRONICS TECHNOLOGY	223,841	213,841
		Program Reduction		[-10,000]
020	0602718BR	WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES. Blast mitigation and protection	219,130	220,630 [1,500]
021	1160401BB	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT.	27,384	27,384
022	1160407BB	SOF MEDICAL TECHNOLOGY DEVELOPMENT		
		SUBTOTAL, APPLIED RESEARCH, DEFENSE-WIDE.	1,776,790	1,748,482
		ADVANCED TECHNOLOGY DEVELOPMENT		
023	0603000D8Z	JOINT MUNITIONS ADVANCED TECHNOLOGY. Partial Program Growth Reduction	23,538	16,754 [-6,784]
024	0603121D8Z	SO/LIC ADVANCED DEVELOPMENT	43,808	43,808
025	0603122D8Z	COMBATING TERRORISM TECHNOLOGY SUPPORT. Reconnaissance and data exploitation systems	81,868	92,368 [3,500]
		Affordable Robust Mid-Sized UGV		[2,000]
		Integrated Rugged Checkpoint Container		[2,500]
		Combating Terrorism: Threat and Risk Assessment.		[2,500]
026	0603160BR	COUNTERPROLIFERATION INITIATIVES—PROLIFERATION PREVENTION AND DEFEAT.	233,203	233,203
027	0603175C	BALLISTIC MISSILE DEFENSE TECHNOLOGY. General Reduction	109,760	104,760 [-5,000]
028	0603200D8Z	JOINT ADVANCED CONCEPTS	7,817	7,817
029	0603225D8Z	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT.	23,276	23,276
030	0603286E	ADVANCED AEROSPACE SYSTEMS	338,360	249,360
		Program Reduction		[-89,000]
031	0603287E	SPACE PROGRAMS AND TECHNOLOGY	200,612	200,612
032	0603384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—ADVANCED DEVELOPMENT. Total Perimeter Surveillance	282,235	284,235 [2,000]
033	0603618D8Z	JOINT ELECTRONIC ADVANCED TECHNOLOGY.	10,838	10,838
034	0603648D8Z	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS. JCTD new starts	198,352	177,352 [-25,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

Line	Program Element	Item	FY 2010 Request	Conference Authorized
		High Accuracy Network Determination System—Intelligent Optical Networks (HANDSION).		[2,000]
035	0603662D8Z	Distributed Network Switching and Security .. NETWORKED COMMUNICATIONS CAPABILITIES.	28,212	[2,000] 28,212
036	0603663D8Z	JOINT DATA MANAGEMENT RESEARCH	4,935	4,935
037	0603665D8Z	BIOMETRICS SCIENCE AND TECHNOLOGY	10,993	10,993
038	0603670D8Z	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) ADVANCED DEVELOPMENT.	11,480	11,480
039	0603680D8Z	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM. High performance defense manufacturing technology.	14,638	24,638 [10,000]
040	0603711D8Z	JOINT ROBOTICS PROGRAM/AUTONOMOUS SYSTEMS.	9,110	11,110
041	0603712S	Robotics training systems GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS.	19,043	[2,000] 33,643
		Biofuels program		[2,000]
		Biomass conversion research		[1,600]
		Fuel cell manufacturing research		[1,000]
		Vehicle fuel cell and hydrogen logistics program.		[8,000]
		Next Generation Manufacturing Technologies Initiative.		[2,000]
042	0603713S	DEPLOYMENT AND DISTRIBUTION ENTERPRISE TECHNOLOGY.	29,356	29,356
043	0603716D8Z	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM.	69,175	69,175
044	0603720S	MICROELECTRONICS TECHNOLOGY DEVELOPMENT AND SUPPORT. Feature Size Yield Enhancement at DMEA's Semiconductors Foundry.	26,310	30,810 [2,500]
		End to End Semi Fab Alpha Tool		[2,000]
045	0603727D8Z	JOINT WARFIGHTING PROGRAM	11,135	11,135
046	0603739E	ADVANCED ELECTRONICS TECHNOLOGIES.	205,912	190,912
		Program Reduction		[-15,000]
047	0603745D8Z	SYNTHETIC APERTURE RADAR (SAR) COHERENT CHANGE DETECTION (CDD).	4,864	4,864
048	0603750D8Z	ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS		
049	0603755D8Z	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM. Computational design of novel materials	221,286	224,286 [3,000]
050	0603760E	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS. CCC-CLS execution delays	293,476	275,326 [-18,150]
051	0603764E	LAND WARFARE TECHNOLOGY		
052	0603765E	CLASSIFIED DARPA PROGRAMS	186,526	186,526
053	0603766E	NETWORK-CENTRIC WARFARE TECHNOLOGY.	135,941	135,941
054	0603767E	SENSOR TECHNOLOGY	243,056	218,056 [-15,000]
		Program Reduction		[-10,000]
		SEN-CLS execution delays		
055	0603768E	GUIDANCE TECHNOLOGY	37,040	37,040
056	0603769SE	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT.	13,822	13,822
057	0603781D8Z	SOFTWARE ENGINEERING INSTITUTE	31,298	31,298
058	0603805S	DUAL USE TECHNOLOGY		
059	0603826D8Z	QUICK REACTION SPECIAL PROJECTS Quick Reaction Fund	107,984	94,484 [-15,000]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
(In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
		<i>Special warfare domain awareness</i>		[1,500]
060	0603828D8Z	JOINT EXPERIMENTATION	124,480	122,180
		<i>Tidewater Full Scale Exercise</i>		[2,700]
		<i>National Center for Small Unit Excellence</i>		[-5,000]
061	0603832D8Z	DOD MODELING AND SIMULATION MANAGEMENT OFFICE.	38,505	38,505
062	0603941D8Z	TEST & EVALUATION SCIENCE & TECHNOLOGY.	95,734	95,734
063	0603942D8Z	TECHNOLOGY TRANSFER	2,219	5,219
		<i>National Radio Frequency RD&T Transfer Center.</i>		[3,000]
064	0909999D8Z	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENTS		
065	1160402BB	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT.	31,675	36,775
		<i>Lithium ion battery safety research</i>		[1,600]
		<i>Partnership for Defense Innovation Wi-Fi Laboratory Testing and Assessment Center.</i>		[3,500]
066	1160422BB	AVIATION ENGINEERING ANALYSIS	3,544	3,544
067	1160472BB	SOF INFORMATION AND BROADCAST SYSTEMS ADVANCED TECHNOLOGY.	4,988	4,988
		SUBTOTAL, ADVANCED TECHNOLOGY DEVELOPMENT, DEFENSE-WIDE.	3,570,404	3,429,370
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES		
068	0603161D8Z	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E ADC&P.	36,019	36,019
069	0603228D8Z	PHYSICAL SECURITY EQUIPMENT		
070	0603527D8Z	RETRACT LARCH	21,718	21,718
071	0603709D8Z	JOINT ROBOTICS PROGRAM	11,803	13,803
		<i>Autonomous Machine Vision for Mapping and Investigation of Remote Sites.</i>		[2,000]
072	0603714D8Z	ADVANCED SENSOR APPLICATIONS PROGRAM.	17,771	17,771
073	0603851D8Z	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM.	31,613	31,613
074	0603881C	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT.	719,465	719,465
075	0603882C	BALLISTIC MISSILE DEFENSE MID-COURSE DEFENSE SEGMENT.	982,922	1,002,922
		<i>GBI vendor base sustainment</i>		[20,000]
076	0603883C	BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT.	186,697	186,697
077	0603884BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.	205,952	207,552
		<i>Real-time non-specific viral agent detector</i>		[1,600]
078	0603884C	BALLISTIC MISSILE DEFENSE SENSORS	636,856	636,856
079	0603886C	BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR		
080	0603888C	BALLISTIC MISSILE DEFENSE TEST & TARGETS.	966,752	940,752
		<i>Target Synchronization with Test Schedule</i>		[-26,000]
081	0603890C	BMD ENABLING PROGRAMS	369,145	354,145
		<i>Programs Reduction</i>		[-15,000]
082	0603891C	SPECIAL PROGRAMS—MDA	301,566	286,566
		<i>Program Decrease due to excessive growth</i>		[-15,000]
083	0603892C	AEGIS BMD	1,690,758	1,690,758
084	0603893C	SPACE TRACKING & SURVEILLANCE SYSTEM.	180,000	173,200
		<i>Demonstration Satellites</i>		[-6,800]
085	0603894C	MULTIPLE KILL VEHICLE		

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION (In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
086	0603895C	BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS.	12,549	12,549
087	0603896C	BALLISTIC MISSILE DEFENSE COMMAND AND CONTROL, BATTLE MANAGEMENT AND COMMUNICATIONS.	340,014	340,014
088	0603897C	BALLISTIC MISSILE DEFENSE HERCULES	48,186	48,186
089	0603898C	BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT.	60,921	61,421
		Independent Advisory Group to Review Ballistic Missile Defense Training Needs.		[500]
090	0603904C	MISSILE DEFENSE INTEGRATION & OPERATIONS CENTER (MDIOC).	86,949	86,949
091	0603906C	REGARDING TRENCH	6,164	6,164
092	0603907C	SEA BASED X-BAND RADAR (SBX)	174,576	174,576
093	0603908C	BMD EUROPEAN INTERCEPTOR SITE		
094	0603909C	BMD EUROPEAN MIDCOURSE RADAR		
095	0603911C	BMD EUROPEAN CAPABILITY	50,504	50,504
096	0603912C	BMD EUROPEAN COMMUNICATIONS SUPPORT		
097	0603913C	ISRAELI COOPERATIVE PROGRAMS	119,634	144,634
		Short-range ballistic missile defense		[25,000]
098	0603920D8Z	HUMANITARIAN DEMINING	14,687	14,687
099	0603923D8Z	COALITION WARFARE	13,885	13,885
100	0604016D8Z	DEPARTMENT OF DEFENSE CORROSION PROGRAM.	4,887	8,387
		Corrosion control research		[3,500]
101	0604400D8Z	DEPARTMENT OF DEFENSE (DOD) UNMANNED AIRCRAFT SYSTEM (UAS) COMMON DEVELOPMENT.	55,289	55,289
102	0604648D8Z	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS.	18,577	18,577
103	0604670D8Z	HUMAN, SOCIAL AND CULTURE BEHAVIOR MODELING (HSCB) RESEARCH AND ENGINEERING.	7,006	7,006
104	0604787D8Z	JOINT SYSTEMS INTEGRATION COMMAND (JSIC).	19,744	19,744
105	0604828D8Z	JOINT FIRES INTEGRATION AND INTEROPERABILITY TEAM.	16,972	16,972
106	0605017D8Z	REDUCTION OF TOTAL OWNERSHIP COST	24,647	24,647
107	0303191D8Z	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM.	3,949	3,949
		SUBTOTAL, ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES, DEFENSE-WIDE.	7,438,177	7,427,977
		SYSTEM DEVELOPMENT & DEMONSTRATION		
108	0604051D8Z	DEFENSE ACQUISITION CHALLENGE PROGRAM (DACP).	28,862	28,862
109	0604161D8Z	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E SDD.	7,628	7,628
110	0604165D8Z	PROMPT GLOBAL STRIKE CAPABILITY DEVELOPMENT.	166,913	166,913
111	0604384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.	332,895	332,895
112	0604709D8Z	JOINT ROBOTICS PROGRAM	5,127	5,127
113	0604764K	ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO).	39,911	39,911
114	0604771D8Z	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS).	20,633	20,633
115	0605000BR	WEAPONS OF MASS DESTRUCTION DEFEAT CAPABILITIES.	8,735	8,735

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION					
(In Thousands of Dollars)					
Line	Program Element	Item	FY 2010 Request	Conference Authorized	
116	0605013BL	INFORMATION TECHNOLOGY DEVELOPMENT.	11,705	11,705	
117	0605018BTA	DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM (DIMHRS).	70,000	18,710	
		Transfer to RDA, line 117 for DIMHRS execution.		[-30,800]	
		Transfer to RDAF, line 241 for DIMHRS execution.		[-20,490]	
118	0605020BTA	BUSINESS TRANSFORMATION AGENCY R&D ACTIVITIES.	197,008	197,008	
119	0605021SE	HOMELAND PERSONNEL SECURITY INITIATIVE.	395	395	
120	0605027D8Z	OUS(D) IT DEVELOPMENT INITIATIVES ...	5,000	5,000	
121	0605140D8Z	TRUSTED FOUNDRY	41,223	41,223	
122	0605648D8Z	DEFENSE ACQUISITION EXECUTIVE (DAE) PILOT PROGRAM.	4,267	4,267	
123	0303141K	GLOBAL COMBAT SUPPORT SYSTEM	18,431	18,431	
124	0303158K	JOINT COMMAND AND CONTROL PROGRAM (JC2).	49,047	49,047	
125	0807708D8Z	WOUNDED ILL AND INJURED SENIOR OVERSIGHT COMMITTEE (WII-SOC) STAFF OFFICE.	1,609	1,609	
		SUBTOTAL, SYSTEM DEVELOPMENT & DEMONSTRATION, DEFENSE-WIDE.	1,009,389	958,099	
		RDT&E MANAGEMENT SUPPORT			
126	0603757D8Z	TRAINING TRANSFORMATION (T2)			
127	0604774D8Z	DEFENSE READINESS REPORTING SYSTEM (DRRS).	13,121	13,121	
128	0604875D8Z	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT.	15,247	15,247	
129	0604940D8Z	CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT (CTEIP).	145,052	155,052	
		Joint Gulf Range Test and Training Complex		[3,000]	
		Gulf Range Mobile Instrumentation Capability.		[3,000]	
		Advanced SAM Hardware Simulator Development.		[4,000]	
130	0604943D8Z	THERMAL VICAR	9,045	9,045	
131	0605100D8Z	JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC).	9,455	9,455	
132	0605104D8Z	TECHNICAL STUDIES, SUPPORT AND ANALYSIS.	44,760	44,760	
133	0605110D8Z	USD(A&T)—CRITICAL TECHNOLOGY SUPPORT.	4,914	4,914	
134	0605117D8Z	FOREIGN MATERIAL ACQUISITION AND EXPLOITATION.	94,921	94,921	
135	0605126J	JOINT INTEGRATED AIR AND MISSILE DEFENSE ORGANIZATION (JIAMDO).	96,909	96,909	
136	0605128D8Z	CLASSIFIED PROGRAM USD(P)	[]	[]	
137	0605130D8Z	FOREIGN COMPARATIVE TESTING	35,054	35,054	
138	0605161D8Z	NUCLEAR MATTERS-PHYSICAL SECURITY	6,474	6,474	
139	0605170D8Z	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION.	14,916	14,916	
140	0605200D8Z	GENERAL SUPPORT TO USD (INTELLIGENCE).	5,888	5,888	
141	0605384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM.	106,477	106,477	
142	0605502BR	SMALL BUSINESS INNOVATION RESEARCH			
143	0605502C	SMALL BUSINESS INNOVATIVE RESEARCH—MDA			
144	0605502D8Z	SMALL BUSINESS INNOVATIVE RESEARCH			

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION				
(In Thousands of Dollars)				
Line	Program Element	Item	FY 2010 Request	Conference Authorized
145	0605502E	SMALL BUSINESS INNOVATIVE RESEARCH		
146	0605502S	SMALL BUSINESS INNOVATIVE RESEARCH		
147	0605790D8Z	SMALL BUSINESS INNOVATION RESEARCH / CHALLENGE ADMINISTRATION. Anti-tamper software systems	2,163	4,063 [1,900]
148	0605798D8Z	DEFENSE TECHNOLOGY ANALYSIS	11,005	11,005
149	0605798S	DEFENSE TECHNOLOGY ANALYSIS		
150	0605799D8Z	FORCE TRANSFORMATION DIRECTORATE	19,981	19,981
151	0605801KA	DEFENSE TECHNICAL INFORMATION CENTER (DTIC). Program Reduction	54,411	49,411 [-5,000]
152	0605803SE	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING AND EVALUATION.	19,554	19,554
153	0605804D8Z	DEVELOPMENT TEST AND EVALUATION	23,512	23,512
154	0605897E	DARPA AGENCY RELOCATION	45,000	45,000
155	0605898E	MANAGEMENT HQ—R&D	51,055	51,055
156	0606100D8Z	BUDGET AND PROGRAM ASSESSMENTS	5,929	5,929
157	0606301D8Z	AVIATION SAFETY TECHNOLOGIES	8,000	8,000
158	0204571J	JOINT STAFF ANALYTICAL SUPPORT	1,250	1,250
159	0301555G	CLASSIFIED PROGRAMS	[]	[]
160	0301556G	SPECIAL PROGRAM	[]	[]
161	0303166D8Z	SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES.	30,604	30,604
162	0303169D8Z	INFORMATION TECHNOLOGY RAPID ACQUISITION.	4,667	4,667
163	0305103E	CYBER SECURITY INITIATIVE	50,000	50,000
164	0305193D8Z	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO).	20,648	20,648
165	0305193G	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO).	[]	[]
166	0305400D8Z	WARFIGHTING AND INTELLIGENCE-RELATED SUPPORT.	829	829
167	0804767D8Z	COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION (CE2T2).	34,306	34,306
168	0901585C	PENTAGON RESERVATION	19,709	19,709
169	0901598C	MANAGEMENT HQ—MDA	57,403	57,403
170	0901598D8W	IT SOFTWARE DEV INITIATIVES	980	980
170A	9999999	OTHER PROGRAMS	124,705	124,705
		SUBTOTAL, RDT&E MANAGEMENT SUPPORT, DEFENSE-WIDE.	1,187,944	1,194,844
		OPERATIONAL SYSTEMS DEVELOPMENT		
171	0604130V	DEFENSE INFORMATION SYSTEM FOR SECURITY (DISS).	1,384	1,384
172	0605127T	REGIONAL INTERNATIONAL OUTREACH (RIO) AND PARTNERSHIP FOR PEACE INFORMATION MANA.	2,001	2,001
173	0605147T	OVERSEAS HUMANITARIAN ASSISTANCE SHARED INFORMATION SYSTEM (OHAIS).	292	292
174	0607384BP	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS DEVELOPMENT).	6,198	6,198
175	0607828D8Z	JOINT INTEGRATION AND INTEROPERABILITY.	46,214	46,214
176	0204571J	JOINT STAFF ANALYTICAL SUPPORT		
177	0208043J	CLASSIFIED PROGRAMS	2,179	2,179
178	0208045K	C4I INTEROPERABILITY	74,786	74,786
180	0301144K	JOINT/ALLIED COALITION INFORMATION SHARING.	10,767	10,767
181	0301301L	GENERAL DEFENSE INTELLIGENCE PROGRAM.	[]	[]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
		Advanced Scientific Missile Intelligence Preparation of the Battlespace (IPB).		[2,500]
		Portable Device for Latent Fingerprint Identification.		[1,800]
182	0301318BB	HUMINT (CONTROLLED)	[]	[]
183	0301371G	CYBER SECURITY INITIATIVE—CCP	[]	[]
184	0301372L	CYBER SECURITY INITIATIVE—GDIP	[]	[]
185	0301555BZ	CLASSIFIED PROGRAMS	[]	[]
186	0301556BZ	SPECIAL PROGRAM	[]	[]
187	0302016K	NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT.	548	548
188	0302019K	DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATION.	17,655	17,655
189	0303126K	LONG-HAUL COMMUNICATIONS—DCS	9,406	9,406
190	0303131K	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN).	9,830	9,830
191	0303135G	PUBLIC KEY INFRASTRUCTURE (PKI)	8,116	8,116
192	0303136G	KEY MANAGEMENT INFRASTRUCTURE (KMI).	41,002	41,002
193	0303140D8Z	INFORMATION SYSTEMS SECURITY PROGRAM.	13,477	13,477
194	0303140G	INFORMATION SYSTEMS SECURITY PROGRAM.	408,316	408,316
195	0303140K	INFORMATION SYSTEMS SECURITY PROGRAM		
196	0303148K	DISA MISSION SUPPORT OPERATIONS	1,205	1,205
197	0303149J	C4I FOR THE WARRIOR	4,098	4,098
198	0303150K	GLOBAL COMMAND AND CONTROL SYSTEM.	23,761	23,761
199	0303153K	JOINT SPECTRUM CENTER	18,944	18,944
200	0303170K	NET-CENTRIC ENTERPRISE SERVICES (NCES).	1,782	1,782
201	0303260D8Z	JOINT MILITARY DECEPTION INITIATIVE ..	942	942
202	0303610K	TELEPORT PROGRAM	5,239	5,239
203	0304210BB	SPECIAL APPLICATIONS FOR CONTINGENCIES.	16,381	16,381
204	0304345BQ	NATIONAL GEOSPATIAL-INTELLIGENCE PROGRAM (NGP).	[]	[]
206	0305103D8Z	CYBER SECURITY INITIATIVE	993	993
207	0305103G	CYBER SECURITY INITIATIVE	[]	[]
208	0305103K	CYBER SECURITY INITIATIVE	10,080	10,080
209	0305125D8Z	CRITICAL INFRASTRUCTURE PROTECTION (CIP).	12,725	12,725
210	0305127BZ	FOREIGN COUNTERINTELLIGENCE ACTIVITIES		
211	0305127L	FOREIGN COUNTERINTELLIGENCE ACTIVITIES.	[]	[]
212	0305146BZ	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES.	[]	[]
213	0305146L	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES.	[]	[]
214	0305183L	DEFENSE HUMAN INTELLIGENCE (HUMINT) ACTIVITIES.	[]	[]
215	0305186D8Z	POLICY R&D PROGRAMS	6,948	6,948
216	0305193L	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)		
217	0305199D8Z	NET CENTRICITY	1,479	1,479
218	0305202G	DRAGON U-2	[]	[]
219	0305206G	AIRBORNE RECONNAISSANCE SYSTEMS ...	[]	[]
220	0305207G	MANNED RECONNAISSANCE SYSTEMS		
221	0305208BB	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.	1,407	1,407
222	0305208BQ	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.	[]	[]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION						
(In Thousands of Dollars)						
Line	Program Element	Item	FY 2010 Request	Conference Authorized		
223	0305208G	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.		[]		[]
224	0305208K	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.	3,158			3,158
225	0305208L	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS.		[]		[]
226	0305219BB	MQ-1 PREDATOR A UAV	2,067			2,067
227	0305229G	REAL-TIME ARCHITECTURE DEVELOPMENT (RT10).		[]		[]
228	0305387D8Z	HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM.	2,963			2,963
229	0305600D8Z	INTERNATIONAL INTELLIGENCE TECHNOLOGY ASSESSMENT, ADVANCEMENT AND INTEGRATION.	1,389			1,389
230	0305866L	DIA SUPPORT TO SOUTHCOM INTELLIGENCE ACTIVITIES				
231	0305880L	COMBATANT COMMAND INTELLIGENCE OPERATIONS				
232	0305883L	HARD AND DEEPLY BURIED TARGET (HDBT) INTEL SUPPORT.		[]		[]
233	0305884L	INTELLIGENCE PLANNING AND REVIEW ACTIVITIES. Technology applications for security enhancement.		[]		[3,000]
235	0305889G	COUNTERDRUG INTELLIGENCE SUPPORT				
236	0307141G	INFORMATION OPERATIONS TECHNOLOGY INTEGRATION & TOOL DEV.		[]		[]
237	0307207G	AERIAL COMMON SENSOR (ACS)		[]		[]
238	0708011S	INDUSTRIAL PREPAREDNESS	20,514			51,714
		Industrial Base Innovation Fund				[30,000]
		Northwest Manufacturing Initiative				[1,200]
239	0708012S	LOGISTICS SUPPORT ACTIVITIES	2,798			2,798
240	0902298J	MANAGEMENT HEADQUARTERS (JCS)	8,303			8,303
241	1001018D8Z	NATO AGS	74,485			74,485
242	1105219BB	MQ-9 UAV	4,380			4,380
243	1130435BB	STORM				
244	1160279BB	SMALL BUSINESS INNOVATIVE RESEARCH/SMALL BUS TECH TRANSFER PILOT PROG				
245	1160403BB	SPECIAL OPERATIONS AVIATION SYSTEMS ADVANCED DEVELOPMENT. Avionics Modernization Program	82,621			72,621
246	1160404BB	SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT. SOF Resource Business Information System ...	6,182			1,594
247	1160405BB	SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT. Biometric Optical Surveillance System (BOSS) Counterproliferation Analysis and Planning System (CAPS). Advanced long endurance unattended ground sensor technologies.	21,273			33,173
248	1160408BB	SOF OPERATIONAL ENHANCEMENTS	60,310			60,310
249	1160421BB	SPECIAL OPERATIONS CV-22 DEVELOPMENT.	12,687			12,687
250	1160423BB	JOINT MULTI-MISSION SUBMERSIBLE	43,412			43,412
251	1160425BB	SPECIAL OPERATIONS AIRCRAFT DEFENSIVE SYSTEMS				
252	1160426BB	OPERATIONS ADVANCED SEAL DELIVERY SYSTEM (ASDS) DEVELOPMENT. ASDS	1,321			0
253	1160427BB	MISSION TRAINING AND PREPARATION SYSTEMS (MTPS).	3,192			3,192
254	1160428BB	UNMANNED VEHICLES (UV)				

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
255	1160429BB	MC130J SOF TANKER RECAPITALIZATION	5,957	5,957
256	1160474BB	SOF COMMUNICATIONS EQUIPMENT AND ELECTRONICS SYSTEMS.	733	733
257	1160476BB	SOF TACTICAL RADIO SYSTEMS	2,368	2,368
258	1160477BB	SOF WEAPONS SYSTEMS	1,081	1,081
259	1160478BB	SOF SOLDIER PROTECTION AND SURVIVAL SYSTEMS.	597	597
260	1160479BB	SOF VISUAL AUGMENTATION, LASERS AND SENSOR SYSTEMS. Miniature Day Night Sight for Crew Served Weapons.	3,369	4,869 [1,500]
261	1160480BB	SOF TACTICAL VEHICLES	1,973	1,973
262	1160482BB	SOF ROTARY WING AVIATION	18,863	18,863
263	1160483BB	SOF UNDERWATER SYSTEMS	3,452	7,452 [4,000]
		Transformer Technology for Combat Submersibles (TTCS).		
264	1160484BB	SOF SURFACE CRAFT	12,250	12,250
265	1160488BB	SOF PSYOP	9,887	9,887
266	1160489BB	SOF GLOBAL VIDEO SURVEILLANCE ACTIVITIES.	4,944	4,944
267	1160490BB	SOF OPERATIONAL ENHANCEMENTS INTELLIGENCE.	11,547	11,547
999	9999999	OTHER PROGRAMS	4,148,984	4,156,284
		SUBTOTAL, OPERATIONAL SYSTEMS DEVELOPMENT, DEFENSE-WIDE.	5,335,215	5,375,206
		DARPA execution adjustment		-150,000
		TOTAL, RDT&E DEFENSE-WIDE	20,741,542	20,413,501
		OPERATIONAL TEST & EVALUATION, DEFENSE		
001	0605118OTE	OPERATIONAL TEST AND EVALUATION	58,647	58,647
002	0605131OTE	LIVE FIRE TEST AND EVALUATION	12,285	12,285
003	0605814OTE	OPERATIONAL TEST ACTIVITIES AND ANALYSES.	119,838	119,838
		Total, Operational Test & Evaluation, Defense.	190,770	190,770
		TOTAL RDT&E	78,634,289	79,251,608

SEC. 4202. RESEARCH, DEVELOPMENT, TEST AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
		RESEARCH, DEVELOPMENT, TEST & EVALUATION, ARMY		
		SYSTEM DEVELOPMENT & DEMONSTRATION		
075	0604270A	ELECTRONIC WARFARE DEVELOPMENT	18,598	18,598
		SUBTOTAL, SYSTEM DEVELOPMENT & DEMONSTRATION, ARMY	18,598	18,598
		OPERATIONAL SYSTEMS DEVELOPMENT		
160	0301359A	SPECIAL ARMY PROGRAM	[]	[]

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
161	0303028A	SECURITY AND INTELLIGENCE ACTIVITIES	7,644	7,644
162	0303140A	INFORMATION SYSTEMS SECURITY PROGRAM	2,220	2,220
167	0305204A	TACTICAL UNMANNED AERIAL VEHICLES	29,500	29,500
SUBTOTAL, OPERATIONAL SYSTEMS DEVELOPMENT, ARMY			39,364	39,364
TOTAL, RDT&E ARMY			57,962	57,962
ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES				
026	0603207N	AIR/OCEAN TACTICAL APPLICATIONS		
027	0603216N	AVIATION SURVIVABILITY	8,000	0
		Non-emergency development funding		[-8,000]
041	0603561N	ADVANCED SUBMARINE SYSTEM DEVELOPMENT	9,000	0
		Non-emergency development funding		[-9,000]
SUBTOTAL, ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES, NAVY			17,000	0
SYSTEM DEVELOPMENT & DEMONSTRATION OPERATIONAL SYSTEMS DEVELOPMENT				
188	0301303N	MARITIME INTELLIGENCE	[]	[]
189	0301323N	COLLECTION MANAGEMENT	[]	[]
190	0301327N	TECHNICAL RECONNAISSANCE AND SURVEILLANCE	[]	[]
191	0301372N	CYBER SECURITY INITIATIVE—GDIP	[]	[]
203	0305207N	MANNED RECONNAISSANCE SYSTEMS	51,900	51,900
210	0305234N	SMALL (LEVEL 0) TACTICAL UAS (STUASLO)	6,000	6,000
999	9999999	OTHER PROGRAMS	32,280	32,280
SUBTOTAL, OPERATIONAL SYSTEMS DEVELOPMENT, RDT&E			90,180	90,180
TOTAL, RDT&E NAVY			107,180	90,180
RESEARCH, DEVELOPMENT, TEST & EVALUATION, AIR FORCE				
BASIC RESEARCH				
004	0301555F	CLASSIFIED PROGRAMS	[]	[]
005	0301556F	SPECIAL PROGRAM	[]	[]
SUBTOTAL, BASIC RESEARCH, AIR FORCE			0	0
OPERATIONAL SYSTEMS DEVELOPMENT				
116	0605798F	ANALYSIS SUPPORT GROUP	[]	[]
123	0101815F	ADVANCED STRATEGIC PROGRAMS	[]	[]
128	0205219F	MQ-9 UAV	1,400	1,400
149	0207423F	ADVANCED COMMUNICATIONS SYSTEMS	9,375	9,375
150	0207424F	EVALUATION AND ANALYSIS PROGRAM	[]	[]
164	0208161F	SPECIAL EVALUATION SYSTEM	[]	[]
165	0301310F	NATIONAL AIR INTELLIGENCE CENTER	[]	[]
166	0301314F	COBRA BALL	[]	[]
167	0301315F	MISSILE AND SPACE TECHNICAL COLLECTION	[]	[]
168	0301324F	FOREST GREEN	[]	[]
169	0301386F	GDIP COLLECTION MANAGEMENT	[]	[]
180	0304311F	SELECTED ACTIVITIES	[]	[]
181	0304348F	ADVANCED GEOSPATIAL INTELLIGENCE (AGI)	[]	[]
188	0305124F	SPECIAL APPLICATIONS PROGRAM	[]	[]
189	0305127F	FOREIGN COUNTERINTELLIGENCE ACTIVITIES	[]	[]
191	0305142F	APPLIED TECHNOLOGY AND INTEGRATION	[]	[]
196	0305172F	COMBINED ADVANCED APPLICATIONS	[]	[]
206	0305219F	MQ-1 PREDATOR A UAV	1,400	1,400

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

<i>Line</i>	<i>Program Element</i>	<i>Item</i>	<i>FY 2010 Request</i>	<i>Conference Authorized</i>
999	9999999	OTHER PROGRAMS	17,111	17,111
		SUBTOTAL, OPERATIONAL SYSTEMS DEVELOPMENT, AIR FORCE	29,286	29,286
		TOTAL, RDT&E AIR FORCE	29,286	29,286
 RESEARCH, DEVELOPMENT, TEST & EVALUATION, DEFENSE-WIDE				
RDT&E MANAGEMENT SUPPORT				
159	0301555G	CLASSIFIED PROGRAMS	[]	[]
160	0301556G	SPECIAL PROGRAM	[]	[]
165	0305193G	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	[]	[]
181	0301301L	GENERAL DEFENSE INTELLIGENCE PROGRAM	[]	[]
182	0301318BB	HUMINT (CONTROLLED)	[]	[]
183	0301371G	CYBER SECURITY INITIATIVE—CCP	[]	[]
184	0301372L	CYBER SECURITY INITIATIVE—GDIP	[]	[]
185	0301555BZ	CLASSIFIED PROGRAMS	[]	[]
186	0301556BZ	SPECIAL PROGRAM	[]	[]
198	0303150K	GLOBAL COMMAND AND CONTROL SYSTEM	2,750	2,750
204	0304345BQ	NATIONAL GEOSPATIAL-INTELLIGENCE PROGRAM (NGP)	[]	[]
207	0305103G	CYBER SECURITY INITIATIVE	[]	[]
211	0305127L	FOREIGN COUNTERINTELLIGENCE ACTIVITIES	[]	[]
212	0305146BZ	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	[]	[]
213	0305146L	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	[]	[]
214	0305183L	DEFENSE HUMAN INTELLIGENCE (HUMINT) ACTIVITIES	[]	[]
218	0305202G	DRAGON U-2	[]	[]
219	0305206G	AIRBORNE RECONNAISSANCE SYSTEMS	[]	[]
221	0305208BB	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	[]	[]
222	0305208BQ	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	[]	[]
223	0305208G	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	[]	[]
225	0305208L	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	[]	[]
226	0305219BB	MQ-1 PREDATOR A UAV	[]	[]
227	0305229G	REAL-TIME ARCHITECTURE DEVELOPMENT (RT10)	[]	[]
231	0305880L	COMBATANT COMMAND INTELLIGENCE OPERATIONS	[]	[]
232	0305883L	HARD AND DEEPLY BURIED TARGET (HDBT) INTEL SUPPORT	[]	[]
233	0305884L	INTELLIGENCE PLANNING AND REVIEW ACTIVITIES	[]	[]
236	0307141G	INFORMATION OPERATIONS TECHNOLOGY INTEGRATION & TOOL DEV.	[]	[]
237	0307207G	AERIAL COMMON SENSOR (ACS)	[]	[]
999	9999999	OTHER PROGRAMS	113,076	113,076
		SUBTOTAL, OPERATIONAL SYSTEMS DEVELOPMENT, DEFENSE-WIDE	115,826	115,826
		Total, RDT&E Defense-Wide	115,826	115,826
		TOTAL RDT&E	310,254	293,254

Multiyear procurement authority for DDG-51 Burke-class destroyers

The House bill contained a provision (sec. 125) that would authorize the Secretary of the Navy to enter into a multiyear contract, beginning in fiscal year 2010, for procuring DDG-51 Burke-class destroyers.

The Senate amendment contained no similar provision.

The House recedes.

Conversion of certain vessels; leasing rates

The House bill contained a provision (sec. 126) that would permit the Secretary of the Navy to use up to \$35.0 million from the Weapons Procurement, Navy, account to lease and convert vessels that have defaulted on construction loan guarantees: (1) that have become the property of the United States; and (2) for which, the Maritime Administrator has a right of disposal.

The Senate amendment contained no similar provision.

The House recedes.

The conferees agree that the Navy should in trying to make near-term additions to the high speed vessel fleet, consider fully the possibility of using vessels within the control of the Maritime Administration.

TITLE II—RESEARCH, DEVELOPMENT, TEST, AND
EVALUATION

BUDGET ITEMS

Minerva

The conferees note the potential of social science research to contribute to vital national security missions. The conferees are concerned over the dearth of social science expertise within the Department, and believe that as new initiatives are started or expanded, such as the Minerva Initiative and the Human Terrain System, that lack of organic expertise is becoming more acute and apparent.

The conference agreement includes an authorization of \$13.3 million in PE 61103A for the Minerva Research Initiative, a portion of the roughly \$20.0 million being requested for this purpose across the Department of Defense. The conferees direct that at least \$5.0 million of the Initiative's fiscal year 2010 funding be used to develop in-house Department of Defense capabilities at defense laboratories and schools consistent with the research goals of the Minerva Initiative. The conferees support the greater development of in-house social science capabilities in order to reduce dependencies on contractors on the battlefield, and to enable the Department to more effectively fund, manage, and oversee extramural social science research activities.

Electromagnetic gun

The budget request included \$11.7 million in PE 63004A, \$4.1 million in PE 62618A, and \$6.4 million in PE 61104A for activities related to the Army's Electromagnetic (EM) Gun initiative.

The House bill would authorize the budget request for these programs.

The Senate amendment would authorize reductions of \$11.5 million in PE 63004A and \$2.0 million in PE 62618A for these programs.

The conferees agree to authorize reductions of \$11.5 million in PE 63004A and \$2.0 million in PE 62618A for these programs. The conferees note that the Army has terminated its program to develop a vehicle-mounted EM gun due to significant questions raised about the technical feasibility of the program. The conferees further note that the Army still has a need to develop advanced lethality capabilities, leveraging technologies and mechanisms such as advanced energetic materials, hypervelocity, and novel penetrators. Therefore, the conferees authorize increases of \$2.0 million in PE 62618A and \$6.5 million in PE 63004A for advanced lethality research efforts.

The conferees note that the Army's reassessment of the large planned investments of its limited science and technology resources into the EM gun program and the ultimate termination of the effort was largely based on the independent analyses of the program performed by the JASON scientific advisory board, the Office of the Director of Defense Research and Engineering, and the Defense Advanced Research Projects Agency. The conferees are concerned that internal Army scientific and technical organizations appear to have been unable to identify and highlight the technical shortfalls in the envisioned program to decision-makers, and further that the Army did not task the National Research Council's Board on Army Science and Technology to examine the technical feasibility of the program.

The conferees believe that the Army should place a higher priority on robust technical analysis of modernization programs. The difficulties that the EM gun and Future Combat Systems development efforts have encountered can be partially attributed to a lack of independent, technically informed discussion within the Army's decision making process. The conferees recommend that the Secretary and Chief of Staff of the Army closely examine how they obtain independent technical advice to support technical and programmatic decision-making.

Joint Future Theater Lift

The budget request included \$8.5 million in PE 63801A for Aviation Advanced Development.

The House bill would authorize the requested amount.

The Senate amendment would authorize an additional \$50.0 million for risk reduction activities for the Joint Future Theater Lift (JFTL). The Senate amendment also would require a report from the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) by December 1, 2009.

The conferees do not expect that additional funds will be appropriated for JFTL risk-reduction activities, and therefore agree to authorize the requested amount for Army Aviation Advanced Development. The conferees also agree to modify the reporting requirement contained in the Senate amendment.

The conferees direct the USD(AT&L), in coordination with the Chairman of the Joint Requirements Oversight Council, to report to the congressional defense committees coincident with submission

of the fiscal year 2011 budget request with answers to the following questions:

1. What is the Department's acquisition strategy regarding a C-130 replacement and what is the schedule for such a program?
2. What is the Department's strategy for maintaining the advanced tiltrotor industrial base?
3. Are there operational benefits of a vertical takeoff and landing heavy transport worth paying a premium over the acquisition cost of a conventional fixed wing transport?
4. Does the operational requirement justify proceeding with an acquisition strategy requiring investing in a heavy lift vertical takeoff and landing transport program of record without first building a technology prototype to demonstrate technical feasibility and cost?

Future combat system non-line-of-sight cannon

The budget request included \$58.2 million in PE 64647A for the contract termination liability associated with the cancellation of the Future Combat Systems non-line-of-sight cannon.

The House bill would authorize a decrease of \$58.2 million in PE 64660A for excess contract termination liability.

The Senate amendment would authorize an identical decrease.

The conferees agree to authorize a decrease of \$27.0 million in PE 64647A for excess contract termination liability.

Future combat system manned ground vehicles and common ground vehicle

The budget request included \$368.6 million in PE 64660A for the contract termination liability associated with the cancellation of the Future Combat Systems manned ground vehicle.

The House bill would authorize a decrease of \$268.6 million in PE 64660A for excess contract termination liability.

The Senate amendment would authorize a decrease of \$368.6 million in PE 64660A for excess contract termination liability.

The conferees agree to authorize a decrease of \$184.0 million in PE 64660A for excess contract termination liability.

Life support systems

The budget request contained \$10.7 million in PE 64706F for life support systems development.

The House bill would add \$7.0 million for the advanced common ejection seat 5 (ACES 5) development program.

The Senate amendment would approve the budget request.

The conferees agree to authorize an additional \$2.4 million for the ACES 5 program within PE 64706F.

The conferees understand that the ACES 5 program might be able to serve as a competitor for the ejection seat system in the F-35 Joint Strike Fighter program. At this time, the F-35 Joint Program Office is considering the procurement of only one ejection seat system for all variants of the F-35 aircraft.

This approach raises a broader question about the implementation of the Weapon Systems Acquisition Reform Act of 2009 (Public Law 111-23). Section 202 of that Act requires that the Secretary

of Defense ensure that the acquisition strategy of every major defense acquisition program (MDAP) includes “measures to ensure competition, or the option of competition, at both the prime contract level and the subcontract level (at such tier or tiers as are appropriate) of such program throughout the life-cycle of such program as a means to improve contractor performance. . . .” The Act also lists a number of measures that such competition may include if such measures are cost-effective. These measures include dual sourcing and unbundling of contracts.

The conferees believe that the F-35 ejection seat system could be such a system where the benefits of competition would be cost-effective. The conferees believe that there may be other systems as well, such as training systems, logistics management systems, etc., that could lend themselves to increasing the competitive options for the F-35 program. As the Defense Department’s largest MDAP, the conferees believe the F-35 program should be one of the first to benefit from implementation of the Weapon Systems Acquisition Reform Act of 2009. The conferees expect that, over the next budget cycle, the Department and the F-35 Program Executive Office (PEO) will develop a specific plan for how the F-35 PEO will implement the provisions of that Act.

Wide-area airborne surveillance

The budget request included \$46.0 million in PE 35206F for Research, Development, Test, and Evaluation of the Gorgon Stare wide-area airborne surveillance system (WAAS); \$19.9 million in Aircraft Procurement Air Force, Line 25, and \$13.0 million in Operations and Maintenance, Air Force. The budget request also included \$39.0 million in PE 35206F to begin development of the WAAS program of record following the Gorgon Stare quick reaction capability (QRC).

The House bill would authorize the requested amounts.

The Senate amendment would authorize no funds to continue the Gorgon Stare Quick Reaction Capability (QRC).

The conferees are concerned that the Air Force is rushing to develop a WAAS program of record in fiscal year 2010 with the requirement, the mission, and the concept of operations remaining ill-defined. Based on the limited analysis done on systems with similar mission requirements, it is evident that Gorgon Stare does not currently have the resolution required to meet the full mission set of requirements. It is also evident that the technology required to meet the full mission set is several years away and program personnel are hoping that the technology required will evolve on a schedule to provide affordable capabilities.

The conferees believe that the Department should proceed expeditiously to deploy the Gorgon Stare QRC and Blue Devil to support ongoing military operations and to determine the value of WAAS imagery, in conjunction with other types of sensors, to support ground force overwatch operations and high-value individual targeting.

The conferees agree that WAAS technology development programs should be pursued to provide the necessary resolution and associated technology required and only at such time as technology

readiness levels are satisfactorily demonstrated should a program of record be initiated.

The conferees direct that the Under Secretary of Defense for Acquisition, Technology, and Logistics provide to the congressional defense and intelligence committees, not later than April 1, 2010, a report, for each WAAS project for which funding is requested in the fiscal year 2011 budget request, detailing:

(1) the operational requirement, including requirements for observing, identifying, and tracking individuals;

(2) the results of operations research studies associated with the WAAS requirement for high-value targeting, forensic analysis, and overwatch of ground operations;

(3) the concept of operations for each;

(4) lessons learned from the deployment of Constant Hawk, Angel Fire, and Gorgon Stare quick reaction capability;

(5) the number of sensors and orbits planned for each service and platform;

(6) the resolution, frame rate, area coverage, and look angles required to support operational requirements to track vehicles and individuals;

(7) data processing advances, data storage requirements, processing, exploitation, distribution requirements, and their associated costs and budgets to meet operational requirements;

(8) the relationship between the WAAS program of record and the Long Endurance, Multi-intelligence hybrid airship program; and

(9) the requirements and plans for multi-sensor integration, tipping and cueing necessary for the WAAS program of record to meet operational requirements.

Irregular Warfare Support

The budget request included \$43.8 million in PE 63121D8Z for Special Operations and Low Intensity Conflict advanced development, including funding for the Irregular Warfare Support Program (IWSP), in the base budget, and no funding in this PE in Research, Development, Test, & Evaluation for Overseas Contingency Operations (OCO).

The House bill would authorize an increase of \$100.0 million in this PE in Research, Development, Test, & Evaluation for OCO for expansion of IWSP.

The Senate amendment would authorize the budget request in PE 63121D8Z for both the base and OCO budget.

The conferees agree to authorize the requested amount in PE 63121D8Z for both the base and OCO budget. The conferees recognize the importance of enhancing the counterterrorism and counterinsurgency capabilities of the Department of Defense (DOD), and the government as a whole, through the types of innovative projects and activities undertaken and proposed by IWSP within the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (ASD(SO/LIC)).

The conferees are aware of concerns about whether this program office within ASD(SO/LIC) is the appropriate location for a substantial effort to support the combatant commands through unconventional, creative, and multi-disciplinary (military, cultural, so-

cial, ideological, economic, and legal) approaches to counterinsurgency and counterterrorism. The conferees are more concerned, however, that: (1) this small program office in the Office of the Secretary of Defense appears to be the only entity in the Department, and perhaps in the executive branch, engaged in these types of activities; and (2) that so little funding is requested each year to sustain such activities and to scale up those that prove to be successful. The conferees are aware that the Commander of the International Security Assistance Force (ISAF) in Afghanistan, General Stanley McChrystal, requested substantial, specific support from the IWSP office on an urgent basis, citing a “critical gap” in capabilities.

The conferees direct the ASD(SO/LIC) to inform the congressional defense committees, within 90 days of enactment of this Act, how DOD intends to respond to the ISAF Commander’s request. The conferees also direct the Assistant Secretary to provide a report to the congressional defense committees, coincident with the submission of the fiscal year 2011 budget request, describing all activities and programs within DOD and elsewhere in the executive branch that are similar to those projects underway or proposed by IWSP, their level of funding, and the executing organization. The report also should include an assessment of the results to date and the potential utility of the ongoing and proposed IWSP programs, at their present scope and if they were to be scaled up substantially.

Ground-Based Interceptor vendor base sustainment

The budget request included \$982.9 million in PE 63882C for the Ground-based Midcourse Defense element of the Ballistic Missile Defense System, including funds for the Ground-Based Interceptor (GBI). The request did not include funds for continued sustainment of the active vendor base for GBIs.

The House bill would authorize the budget request.

The Senate amendment would authorize the budget request.

The conference agreement includes an authorization of \$1.0 billion in PE 63882C, an additional \$20.0 million for sustainment of the GBI vendor base.

The conferees note a number of new developments since the budget submission that affect consideration of the GBI vendor base. In late summer, the Department of Defense approved the new Integrated Master Test Plan for the Ballistic Missile Defense System. The Missile Defense Agency acknowledges that it will need an additional seven GBIs to implement the new test plan. These GBIs would be in addition to the ones currently on contract, and would require new production. In September, 2009, the Missile Defense Agency informed the congressional defense committees that a recently finished study of the GBI vendor base concluded that additional funding in fiscal year 2010 would permit sustainment of active GBI vendors and reduce the amount of funding that would be needed for the same function in fiscal year 2011. The conferees believe such additional funding will help keep active vendors producing needed parts, and will reduce risk to the future production of GBIs for the test program.

National Cyber Range

The budget request included \$50.0 million in PE 35103E for Defense Advanced Research Projects Agency (DARPA)-funded efforts in Comprehensive National Cybersecurity Initiative.

The House bill would authorize the budget request.

The Senate amendment would authorize a decrease of \$19.6 million for the DARPA National Cyber Range (NCR) program.

The conferees agree to authorize the budget request for the NCR program. The conferees agree that DARPA is uniquely qualified to develop the test tools and infrastructure needed to assess potential future cyber capabilities. The conferees also agree that DARPA is not qualified to provide for the long-term operation of this type of infrastructure, which is intended to be shared between the Federal Government, industry and academia, and that there has been insufficient attention paid to the transition of this resource to an organization that can operate, maintain, and sustain the capability. The conferees note that DARPA has indicated that it “envisions transitioning the NCR program to a U.S. government operational partner after prototype development in the late 2010/early 2011 timeframe.” However, this partner has yet to be identified to the conferees’ knowledge and no funding has been programmed in any other organization’s budget to support continued operations of the NCR.

The conferees note that there has been a proliferation of network testbeds across the Department of Defense, the Federal Government, and even among contractors that operate program-specific testbeds. This creates an environment of unnecessary duplication and waste of resources and expertise. The conferees note that the Director of the Test Resource Management Center is currently assessing the Department’s overall capabilities for network systems testing, including for cyber security capabilities. The conferees look forward to reviewing the results of this assessment, and urge the leadership of the Department to pay greater attention to ensure a comprehensive approach to development, testing, and evaluation of cyber operations systems and capabilities.

ITEM OF SPECIAL INTEREST

Utilization of Future Combat Systems contract vehicles

The conferees note that, consistent with the direction of the Under Secretary of Defense for Acquisition, Technology, and Logistics, the Army intends to continue some second-tier technology development efforts that were initiated under the Future Combat Systems (FCS) program, including the development of active protection systems. The conferees understand that this work continues to be funded through the FCS Lead Systems Integrator (LSI) contract vehicle, despite the termination of the FCS program, thereby potentially incurring additional costs to the government. The conferees believe that any use of FCS contract vehicles for continuing FCS-related technology development efforts should only be temporary, and that the work should be transitioned into new contract vehicles as soon as practicable. The conferees direct the Secretary of the Army to report to the congressional defense committees no later than 45 days after the date of enactment of this Act, as to

the contract vehicles being used to continue FCS-related technology development work, the plan and schedule for the establishment of new contract vehicles, and the role of the LSI in these programs.

Subtitle A—Authorization of Appropriations

Authorization of appropriations (sec. 201)

The House bill contained a provision (sec. 201) that would authorize appropriations for fiscal year 2010 for the use of the Department of Defense for research, development, test, and evaluation.

The Senate bill contained a similar provision (sec. 201).

The agreement includes a provision that would authorize appropriations for fiscal year 2010 for the use of the Department of Defense for research, development, test, and evaluation.

Relation to funding table (sec. 202)

The Senate amendment contained a provision (sec. 201(b)) that would authorize funds in this title in accordance with the requirements of section 4001 and in the amounts specified in the funding table in section 4201.

The House bill contained no similar provision.

The House recesses.

Subtitle B—Program Requirements, Restrictions, and Limitations

Extension and enhancement of Global Research Watch Program (sec. 211)

The Senate amendment contained a provision (sec. 215) that would extend and enhance the Global Research Watch program.

The House bill contained no similar provision.

The House recesses.

Permanent authority for the Joint Defense Manufacturing Technology Panel (sec. 212)

The Senate amendment contained a provision (sec. 214) that would provide permanent authority for the Joint Defense Manufacturing Technology Panel.

The House bill contained no similar provision.

The House recesses.

Elimination of report requirements regarding defense science and technology program (sec. 213)

The Senate amendment contained a provision (sec. 217) that would modify report requirements related to the defense science and technology program.

The House bill contained no similar provision.

The House recesses with an amendment that would eliminate the reporting requirement that is the subject of the Senate provision. The conferees continue to support strong and stable investment in defense science and technology programs in order to support the development of advanced warfighting capabilities.

The conferees note that the recent JASON report entitled “S&T [Science and Technology] for National Security” raised a

number of critical concerns with respect to the Department of Defense's (DOD) basic research program. The JASONs observed that "important aspects of the DOD basic research programs are 'broken'" and that "throwing more money at the problems will not fix them." The study group further observed that "basic research funding is not exploited to seed inventions and discoveries that can shape the future; investments tend to be technological expenditures at the margin" and that "the portfolio balance of DOD basic research is generally not critically reviewed by independent, technically knowledgeable individuals," adding that the Office of the Director of Defense Research and Engineering "has too little time, staff, and authority to do this properly." Finally, the JASONs observed that "civilian career paths in the DOD research labs and program management are not competitive to other opportunities in attracting outstanding young scientists and retaining the best people."

The conferees note that the Secretary of Defense has called for significant increases in investments in basic research, and the conferees have supported that effort in this authorization act. However, given the significant concerns that a respected, independent review board have raised with the program, the conferees will carefully review how the DOD reacts to the JASON study and what steps it takes to address the issues raised in the study, before authorizing further increases in the basic research program.

Authorization for the Secretary of the Navy to purchase infrastructure and government purpose rights license associated with the Navy-Marine Corps Intranet (sec. 214)

The House bill contained a provision (sec. 211) that would limit the obligation of funds for the Navy Next-Generation Enterprise Network (NGEN) program until a detailed architectural specification for the network was submitted to the congressional defense committees.

The Senate amendment contained no similar provision.

The Senate recedes with an amendment that would provide the Secretary of the Navy with the authority to enter into one or more contracts for the purpose of purchasing infrastructure, technical data, and intellectual property related to the Navy-Marine Corps Intranet (NMCI) program. The intent of the provision is to authorize the Secretary of the Navy to establish contractual arrangements that would permit budgeting for these purchases over multiple years.

The conferees note that the purchase of the infrastructure and intellectual property related to the NMCI program is a critical step in the development and procurement of NGEN. The conferees are concerned that the Navy and the current NMCI contractor have yet to come to an agreement on the valuation, or terms of purchase, of the critical elements of NMCI that are the subject of this provision. As the NMCI program has been in planning and execution for over 10 years and represents a large investment of Department of Defense resources, it is a poor reflection on Navy planning and Office of the Secretary of Defense oversight that the detailed plans for the completion of the NMCI program and the transition to NGEN are still so uncertain.

The conferees direct that the Secretary of the Navy provide a detailed discussion of the use of the authority provided by the provision as part of the reporting requirement established by section 1034 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417).

Limitation on expenditure of funds for Joint Multi-Mission Submersible program (sec. 215)

The House bill contained a provision (sec. 212) that would require the Secretary of Defense, in consultation with the Director of National Intelligence, to complete an assessment of the feasibility of implementing a cost-sharing agreement between the Department of Defense and the intelligence community pertaining to the Joint Multi-Mission Submersible Program. The provision would also prohibit the expenditure of funds for the Joint Multi-Mission Submersible Program until such an assessment is complete.

The Senate amendment contained no similar provision.

The Senate recedes with an amendment that would prohibit the expenditure of funds for the Joint Multi-Mission Submersible Program to proceed beyond Defense Acquisition Milestone B Approval until such time as the Secretary of Defense, in consultation with the Director of National Intelligence, certifies that the agreement reached as a result of the assessment represents the most effective and affordable means of delivery for meeting a validated program requirement. The conferees expect that the required assessment will take into account any past use of submersible assets by the Department of Defense and the intelligence community.

The conferees strongly support the Department's decision to designate the Joint Multi-Mission Submersible Program as an Acquisition Category 1D Special Interest program, significantly increasing the level of program oversight from what was given to the Advanced SEAL Delivery System.

Separate program elements required for research and development of individual body armor and associated components (sec. 216)

The House bill contained a provision (sec. 213) that would require the Secretary of Defense to establish within each military service research, development, test, and evaluation account a separate program element assigned to the research and development of individual body armor.

The Senate amendment contained no similar provision.

The Senate recedes with a clarifying amendment. The conferees do not intend that this provision should limit the military departments' ability to use other rapid development or acquisition authorities to ensure the fastest possible exploitation of body armor material improvements, production, or fielding to our deployed or deploying forces.

Separate procurement and research, development, test, and evaluation line items and program elements for the F-35B and F-35C Joint Strike Fighter aircraft (sec. 217)

The House bill contained a provision (sec. 214) that would require the Secretary of Defense to ensure that the Department of Defense procurement and research, development, test, and evalua-

tion program and budget exhibits provide separate data for the Navy and Marine Corps variants of the Joint Strike Fighter aircraft (F-35C and F-35B, respectively).

The Senate amendment contained no similar provision.
The Senate recedes.

Restriction on obligation of funds for Army tactical ground network program pending receipt of report (sec. 218)

The House bill contained a provision (sec. 216) that would restrict the obligation of 75 percent of fiscal year 2010 Future Combat Systems (FCS) research and development funds pending receipt of the milestone review report required by section 214(c) of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364).

The Senate amendment contained no similar provision.

The Senate recedes with an amendment that would narrow the scope of the funding limitation to the Army tactical ground network program.

The conferees are concerned that despite termination of the FCS Brigade Combat Team program in June 2009, the Office of the Secretary of Defense (OSD) has not issued specific guidance to the Army with regard to network hardware and software development which could lead to a stop work order for, or modification to, the base FCS contract. As a result, the conferees note that, according to the Department's budget documentation, the Army continues to spend millions of dollars a day on a contract for which no approved program of record currently exists. The conferees note that the Army was directed in June 2009 to establish a separate, new major defense acquisition program for an Army tactical ground network, but that no such program has been established. In addition, OSD and the Army have yet to determine the new program's acquisition strategy, structure, estimated cost, or technology readiness levels, all of which the conferees consider essential to ensure that the new Army tactical ground network program complies with existing DOD policy and the Weapon Systems Acquisition Reform Act of 2009 (Public Law 111-23).

Therefore, the conferees have agreed to an amendment that would restrict the obligation of certain funds for the new Army tactical ground network program until Congress receives additional detailed information on the new program from the Under Secretary of Defense for Acquisition, Technology, and Logistics.

Programs for ground combat vehicle and self-propelled howitzer capabilities for the Army (sec. 219)

The House bill contained a provision (sec. 219) that would require the Secretary of Defense to carry out programs to develop and field new or upgraded Army ground combat vehicle and self-propelled artillery capabilities.

The Senate amendment contained a similar provision (sec. 218).

The managers note that cancelation of the Non-Line of Sight Cannon (NLOS-C) vehicle leaves the Army solely dependent upon the Paladin Integrated Management (PIM) program for upgrading its self-propelled howitzer fleet. The managers direct the Army to

prioritize the development and fielding of the PIM upgrade program. In doing so, it should ensure that maximum value is derived from the many years of research and development on the Crusader and NLOS-C programs. Efforts should be made to integrate relevant mature technologies from NLOS-C to the PIM.

The House recesses.

Guidance on budget justification materials describing funding requested for operation, sustainment, modernization, and personnel of major ranges and test facilities (sec. 220)

The Senate amendment contained a provision (sec. 213) that that would clarify and standardize the information required in budget justification materials delivered to Congress describing amounts requested for funding of major range and test facilities.

The House bill contained no similar provision.

The House recesses with a clarifying amendment.

Assessment of technological maturity and integration risk of Army modernization programs (sec. 221)

The Senate amendment contained a provision (sec. 219) that would require the Director of Defense Research and Engineering (DDRE) to review and assess the technological maturity and integration risk of the technologies critical to the development and deployment of systems and technologies related to the platforms, sensors, and networks of Army modernization programs.

The House bill contained no similar provision.

The House recesses with an amendment that would clarify the requirements of the required technology assessment.

The conferees note that the restructuring of the Future Combat Systems (FCS) program has resulted in a number of continuing changes in the nomenclature and execution of Army modernization programs. The intent of this provision is to require an assessment of the technological maturity and integration risk of all critical systems and technologies supportive of Army modernization efforts that were formerly within the FCS program. As the required assessment is initiated, the conferees direct that the DDRE consult with Congress on which systems are included and excluded from the assessment.

Assessment of activities for technology modernization of the combat vehicle and armored tactical wheeled vehicle fleets (sec. 222)

The Senate amendment contained a provision (sec. 220) that would require an independent assessment of the strategy for technology for modernization of combat and tactical wheeled vehicle fleets.

The House bill contained no similar provision.

The House recesses with an amendment that would modify the timing of the delivery of the assessment and clarify that the assessment should cover the combat vehicle fleet and armored tactical wheeled vehicle fleet.

Subtitle C—Missile Defense Programs

Sense of Congress on ballistic missile defense (sec. 231)

The House bill contained a provision (sec. 224) that would express the sense of Congress reaffirming support for protecting the United States against limited ballistic missile attack.

The Senate amendment contained a related provision (sec. 241) that would express the sense of the Congress on the development, testing, fielding, and maintenance of ballistic missile defense systems that are capable of defending the United States, its forward-deployed forces, allies, and other friendly nations from the threat of ballistic missile attacks from nations such as North Korea and Iran.

The House recedes with a clarifying amendment.

The conferees note that the terms “operationally effective” and “cost effective” encompass the qualities of affordable, reliable, suitable, and survivable missile defense systems.

Assessment and plan for the Ground-based Midcourse Defense element of the Ballistic Missile Defense System (sec. 232)

The House bill contained a provision (sec. 222) that would require the Secretary of Defense to establish a sustainment and modernization program for the Ground-based Midcourse Defense (GMD) element of the Ballistic Missile Defense System (BMDS), to ensure the long-term reliability, availability, maintainability, and supportability of the GMD element.

The Senate amendment contained a similar provision (sec. 243) that would require the Secretary of Defense to conduct a detailed assessment of the GMD element, and establish a plan for the GMD element, and to submit reports on the assessment and the plan at about the time of the submission of the budget request for fiscal year 2011. The assessment and the plan would each include consideration of issues related to the ability of the GMD element to maintain its operational effectiveness over the course of its service life.

The House recedes with an amendment that would add a statement of the sense of Congress that the Secretary of Defense should ensure the reliability, availability, maintainability, and supportability of the GMD element throughout its service life. The amendment would also require the assessment of, and the plan for, the GMD element.

The conferees note that the GMD element is expected to have a service life of approximately 20 years, and stress the importance of ensuring that the GMD element should remain operationally effective throughout its service life. In order to ensure this effectiveness, the Department of Defense should take appropriate actions to preserve the reliability, availability, and maintainability of the GMD element over its entire service life.

The conferees note that these actions include maintaining the ability to produce any Ground-Based Interceptors (GBIs) needed for the element, including those needed to implement the newly approved Integrated Master Test Plan (IMTP). The Missile Defense Agency (MDA) recently acknowledged a need for seven additional GBIs for that purpose. Accordingly, the conferees urge MDA to take appropriate actions to reduce risk to the production capability

for the additional GBIs, and for future GBI refurbishment and sustainment work. The conferees agree to authorize additional funding for the active GBI vendor base, as described elsewhere in this report.

The conferees note that a number of developments have occurred since the submission of the budget request, which affect the GMD element. These include the approval of the IMTP, the acknowledgment of a need for seven additional test GBIs, a new GBI industrial base study, and the decision to build seven silos at Missile Field 2 at Fort Greely, Alaska, and to decommission Missile Field 1. The conferees expect MDA to keep the congressional defense committees informed in a timely manner of any such changes in the future that would affect the reliability, availability, and maintainability of the GMD element.

Continued production of Ground-Based Interceptor missile and operation of Missile Field 1 at Fort Greely, Alaska (sec. 233)

The Senate amendment contained a provision (sec. 245) that would require the Secretary of Defense to not allow a break in the production of the Ground-Based Interceptor (GBI) missiles for the Ground-based Midcourse Defense (GMD) element until the Department of Defense completes the Ballistic Missile Defense Review and makes a determination on how many GBIs will be needed to support the service life of the GMD element. The provision would also require the Secretary to ensure that Missile Field 1 at Fort Greely, Alaska, is not completely decommissioned until seven GBI silos have been emplaced at Missile Field 2 at Fort Greely, and would require the Secretary to ensure that no irreversible decision is made with respect to the disposition of GBI silos at Missile Field 2 until 60 days after submitting the reports required in another section of the Senate amendment that would describe the Department's assessment of, and plan for, the GMD element.

The House amendment contained no similar provision.

The House recedes with a clarifying amendment.

Limitation on availability of funds for acquisition or deployment of missile defenses in Europe (sec. 234)

The House bill contained a provision (sec. 223) that would limit the availability of fiscal year 2010 or future funds for the acquisition (other than initial long-lead procurement) or deployment of operational interceptors of a long-range missile defense system in Europe until the Secretary of Defense submits a report certifying that the proposed interceptor and the proposed radars to be deployed as part of such missile defense system have demonstrated, through successful, operationally realistic flight testing, a high probability of working in an operationally effective manner and the ability to accomplish the mission.

The Senate amendment contained no similar provision.

The Senate recedes with an amendment that would remove the specific reference to the radars and clarify that the certification would include information about the ability of the proposed ballistic missile defense system to accomplish the mission.

The conferees note that this provision would extend a limitation contained in section 233(b) of the Duncan Hunter National De-

fense Authorization Act for Fiscal Year 2009 (Public Law 110–417, 122 Stat. 4393).

Authorization of funds for development and deployment of alternative missile defense systems in Europe (sec. 235)

The House bill contained a provision (sec. 226) that would authorize the use of \$353.1 million in fiscal year 2009 and 2010 funds authorized or otherwise made available for the Missile Defense Agency for the development of missile defenses in Europe to be used for the development and deployment of an alternative missile defense system that would protect Europe and the United States, subject to a certification by the Secretary of Defense that the alternative defense system is expected to meet certain conditions.

The Senate amendment contained a similar provision (sec. 246) that would authorize the use of the fiscal year 2009 and 2010 funds for the development and deployment of alternative missile defense systems designed to protect Europe, and the United States in the case of long-range missile threats, from the threats posed by current and future Iranian ballistic missiles of all ranges, if the Secretary certifies that the alternative systems are expected to meet certain conditions. The provision also included a rule of construction stating that it would not limit or prevent the Department of Defense from pursuing the development or deployment of operationally effective and cost effective missile defense systems in Europe.

The House recedes with an amendment that would add a requirement for an independent assessment of the operational effectiveness and cost-effectiveness of the alternative missile defense architecture announced by the President on September 17, 2009. The Secretary of Defense would be required to submit a report to the congressional defense committees by June 1, 2010, on the independent assessment.

The conference agreement would authorize the use of \$309.0 million in fiscal year 2009 and 2010 funds, the amount of funding available other than for military construction, for alternative European missile defense systems or their subsystems. The conferees expect the Department of Defense to promptly provide to the congressional defense committees an expenditure plan for any of these funds planned to be used for such missile defense systems in Europe pursuant to a certification by the Secretary.

Comprehensive plan for test and evaluation of the ballistic missile defense system (sec. 236)

The Senate amendment contained a provision (sec. 242) that would require the Secretary of Defense to establish a comprehensive plan for the developmental and operational test and evaluation of the Ballistic Missile Defense System. The provision would require the Secretary of Defense to submit a report to the congressional defense committees setting forth the plan by March 1, 2011.

The House bill contained no similar provision.

The House recedes with an amendment that would require the Secretary to submit the report by March 1, 2010.

Study on discrimination capabilities of ballistic missile defense system (sec. 237)

The House bill contained a provision (sec. 227) that would require the Secretary of Defense to enter into an arrangement with the JASON Defense Advisory Panel to conduct a study on the discrimination capabilities of the Ballistic Missile Defense System. The provision would require the Secretary to submit to the appropriate congressional committees a report on the study.

The Senate amendment contained no similar provision.
The Senate recesses with a clarifying amendment.

Ascent phase missile defense strategy and plan (sec. 238)

The House bill contained a provision (sec. 225) that would require the Secretary of Defense to submit to the congressional defense committees a strategy for ascent phase missile defense.

The Senate amendment contained no similar provision.

The Senate recesses with an amendment that would clarify that the Secretary's report would include both a strategy and a plan for ascent phase missile defense.

Extension of deadline for study on boost-phase missile defense (sec. 239)

The Senate amendment contained a provision (sec. 247) that would extend by 4 months the deadline for the submission of the boost-phase missile defense study required by section 232 of the Duncan Hunter National Defense Act for Fiscal Year 2009 (Public Law 110-417).

The House bill contained no similar provision.
The House recesses.

Subtitle D—Reports

Repeal of requirement for biennial joint warfighting science and technology plan (sec. 241)

The Senate amendment contained a provision (sec. 251) that would eliminate the biennial Joint Warfighting Science and Technology Plan reporting requirement.

The House bill contained no similar provision.
The House recesses.

Modification of reporting requirement for defense nanotechnology research and development program (sec. 242)

The Senate amendment contained a provision (sec. 252) that would modify the reporting requirement for the defense nanotechnology research and development program.

The House bill contained no similar provision.
The House recesses.

Comptroller General assessment of coordination of energy storage device requirements, purchases, and investments (sec. 243)

The House bill contained a provision (sec. 231) that would require a Comptroller General assessment of energy storage device requirements and investments.

The Senate amendment contained no similar provision.

The Senate recedes with an amendment that would clarify the details of the required assessment.

Annual Comptroller General report on the F-35 Lightning II aircraft acquisition program (sec. 244)

The House bill contained a provision (sec. 232) that would require the Comptroller General to conduct, during the period from 2010 to 2015, an annual review of the F-35 Lightning II Aircraft acquisition program.

The Senate amendment contained no similar provision.

The Senate recedes.

Report on integration of Department of Defense Intelligence, Surveillance, and Reconnaissance capabilities (sec. 245)

The House bill contained a provision (sec. 233) that would limit the obligation and expenditure of funds to 25 percent of the amount authorized to be appropriated for program element 35884L until 30 days after the Under Secretary of Defense for Intelligence submits all elements of the report required under section 923(d)(1) of the National Defense Authorization Act for 2004 (Public Law 108-136).

The Senate amendment contained no similar provision.

Senate recedes with an amendment that would limit the obligation and expenditure of funds to 50 percent of program element 11815F.

Report on future research and development of man-portable and vehicle-mounted guided missile systems (sec. 246)

The House bill contained a provision (sec. 234) that would require a report from the Secretary of the Army on the Army's future plans for upgrades to and replacement of selected missile systems. The provision would also limit the obligation of funds pending submission of the report.

The Senate amendment contained no similar provision.

The Senate recedes with a technical amendment.

Report on the development of command and control systems (sec. 247)

The House bill contained a provision (sec. 217) that would limit the obligation of funds for the Net Enabled Command Capability (NECC) system.

The Senate amendment contained no similar provision.

The Senate recedes with an amendment that would require a report detailing the Department of Defense's (DOD) plans for consolidating the systems and technologies of the NECC program into the Global Command and Control System (GCCS) family of systems.

The conferees note the NECC program was originally intended to modernize DOD command and control systems, building them into a web-based, open architecture, interoperable set of systems that would better support joint warfighting operational capabilities. However, the NECC program has not managed to overcome significant technical, programmatic, and bureaucratic challenges and so is expected to be terminated or significantly restructured in the near future.

The conferees direct that the Department of Defense merge the NECC program and the GCCS family of systems and transition appropriate technologies from NECC into the GCCS family of systems. The conferees further expect that lessons learned from the attempted development of NECC be incorporated as DOD develops a plan of governance and development for next-generation command and control systems. The conferees note that the evolution of the GCCS family of systems into a more capable system may be best served using an incremental, spiral approach to modernizing the GCCS family of systems, deploying modular, operationally useful, and tested capabilities while moving towards a net-centric, web-based, standards-based service oriented architecture.

Since both the NECC program and the GCCS family of systems are currently undergoing significant restructuring, the conferees direct that the Department actively engage with the congressional defense committees during the development of the report required by this provision to ensure that the intent of the conferees is satisfied.

Evaluation of Extended Range Modular Sniper Rifle Systems (sec. 248)

The Senate amendment contained a provision (sec. 253) that would require the Assistant Secretary of the Army for Acquisition, Logistics, and Technology to conduct a comparative evaluation of extended range modular sniper rifles.

The House bill contained no similar provision.

The House recedes with an amendment that would strike language making available unobligated balances from prior years' appropriations.

Subtitle E—Other Matters

Enhancement of duties of Director of Department of Defense Test Resource Management Center with respect to the major range and test facility base (sec. 251)

The House bill contained a provision (sec. 241) that would authorize the Director of the Test Resource Management Center (TRMC) to have access to all of the data and records he or she needs to make recommendations to the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) on test resource issues.

The Senate amendment contained a provision (sec. 212) that would similarly authorize access to data and records, as well as authorizing the Director, TRMC to review changes to major test range funding before those changes are implemented.

The House recedes with a clarifying amendment.

The conferees note that the intent of this provision is to facilitate the Director, TRMC's ability to conduct appropriate oversight and analysis of changes to the Major Range and Test Facility Base (MTRFB) made outside the existing budget review mechanisms, and to enhance the Director's access to information. It is not the conferees intent to create a new administrative function so onerous that it detracts from the ability of the service testing organizations to accomplish their designated missions. The conferees' intent is to

authorize the Director, TRMC to review and advise the USD(AT&L) on changes to test facilities and resources that would result in the inability to adequately test critical defense systems, or that would place an undue burden on programs or other elements of the MRTFB. The provision is not intended to convey new authority to the Director, TRMC to unilaterally restrict service or agency efforts to execute improvements or upgrades, or to improve operational efficiency.

Therefore, the conferees direct that the USD(AT&L) work in conjunction with the Director, TRMC and appropriate service and agency organizations to establish procedures under which the review processes and access to records and data authorized by this provision are not overly intrusive and do not place an undue burden, in terms of workload or funding, on service and agency personnel and resources.

Establishment of program to enhance participation of historically black colleges and universities and minority-serving institutions in defense research programs (sec. 252)

The House bill contained a provision (sec. 243) that would authorize a program to enhance participation of historically black colleges and minority-serving institutions in defense research programs.

The Senate amendment contained no similar provision.

The Senate recedes with an amendment that would clarify the details of the program, modify the description of the types of institutions that could participate in the program, and authorize the Secretary of Defense, if so desired, to limit the participation of institutions that can successfully compete for research funding outside the program.

Extension of authority to award prizes for advanced technology achievements (sec. 253)

The House bill contained a provision (sec. 244) that would extend the authority for organizations within the Department of Defense to award prizes for advanced technology development.

The Senate amendment contained an identical provision (sec. 216).

The conference agreement includes the provision.

Authority for National Aeronautics and Space Administration federally funded research and development centers to participate in merit-based technology research and development programs (sec. 254)

The House bill contained a provision (sec. 248) that would authorize federally funded research and development centers of the National Aeronautics and Space Administration respond to Department of Defense broad agency announcements for research funding opportunities.

The Senate amendment contained no similar provision.

The Senate recedes with a clarifying amendment.

Next generation bomber aircraft (sec. 255)

The Senate amendment contained a provision (sec. 124) that would make a series of findings with respect to the next-generation bomber and that would declare that it is the policy of the United States to support a development program for next-generation bomber technologies.

The House bill contained no similar provision.

The House recesses.

LEGISLATIVE PROVISIONS NOT ADOPTED

F-35 and alternate propulsion system program

The Senate amendment contained a provision (sec. 211) that would: (1) increase in funding for procurement of UH-1Y/AH-1Z rotary wing aircraft and for management reserves for the F-35 Joint Strike Fighter program; and (2) prohibit the obligation of funds authorized to be appropriated for development or procurement of an alternate propulsion system for the F-35 until the Secretary of Defense certifies in writing to the congressional defense committees that development and procurement of the alternate propulsion system would: (a) reduce life cycle costs of the F-35; (b) improve operational readiness of the fleet of F-35 aircraft; (c) will not disrupt the F-35 research, development, test, and evaluation (RDT&E) and procurement phases of the program; and (d) will not result in the procurement of fewer F-35 aircraft during the life cycle of the program.

The House bill contained a provision (sec. 218) that would limit obligations for the F-35 RDT&E program to 75 percent until 15 days after the later of the dates on which: (1) the Under Secretary of Defense for Acquisition, Technology, and Logistics certifies in writing to the congressional defense committees that all fiscal year 2010 funds for the F-35 competitive propulsion system have been obligated; (2) the Secretary of Defense submits the report on F/A-18 multiyear procurement costs required by section 123 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110-417); and (3) the Department submits the 30-year aircraft procurement plan required by section 231a of title 10, United States Code.

The House bill also contained a provision (sec. 242) that would require the Secretary of Defense to include in annual budget requests submitted to the President, beginning in 2011, such amounts as are necessary for the full funding of continued development and procurement of a competitive propulsion system for the F-35.

Both the House and Senate recess from their respective provisions.

The conferees agree to authorize the budget request for 30 F-35 aircraft in Aircraft Procurement, Navy, and Aircraft Procurement, Air Force. The conferees also agree to authorize an increase of a total of \$430.0 million in RDT&E, Navy, and RDT&E, Air Force for continued F136 engine development; and \$130.0 million in Aircraft Procurement, Air Force, for F136 engine procurement. The conferees expect that the Secretary of Defense will comply with the direction in section 213 of the National Defense Authorization

Act for Fiscal Year 2008 (Public Law 110–181), and ensure that sufficient annual amounts are obligated and expended, in each fiscal year, for the continued development and procurement of two options for the F–35 propulsion system in order to ensure the development and competitive production of the F–35 propulsion system.

Restriction on obligation of funds pending submission of Selected Acquisition Report

The House bill contained a provision (sec. 215) that would restrict certain research and development accounts pending submission of comprehensive annual Selected Acquisition Reports for seven Army programs.

The Senate amendment contained no similar provision.

The House recesses.

Integrated Air and Missile Defense system project

The House bill contained a provision (sec. 221) that would restrict the availability of fiscal year 2010 funds for the Army's Integrated Air and Missile Defense project until the Secretary of Defense certifies to the congressional defense committees that certain conditions have been met.

The Senate amendment contained no similar provision.

The House recesses.

Systems engineering and prototyping program

The Senate amendment contained a provision (sec. 221) that would establish a systems engineering and prototyping program in the Department of Defense.

The House bill contained no similar provision.

The Senate recesses.

Sense of Congress reaffirming the requirement to thoroughly consider the role of ballistic missile defenses during the Quadrennial Defense Review and the Nuclear Posture Review

The House bill contained a provision (sec. 228) that would express the sense of Congress that the Secretary of Defense should thoroughly consider the role of ballistic missile defenses during the Quadrennial Defense Review and the Nuclear Posture Review.

The Senate amendment contained no similar provision.

The House recesses.

Executive agent for advanced energetics

The House bill contained a provision (sec. 245) that would have established an executive agent for advanced energetics within the Department of Defense.

The Senate amendment contained no similar provision.

The House recesses.

The conferees note the importance of advanced energetic materials in the development of next-generation defense capabilities. The conferees direct the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide a report describing the plan and process it is using to address the concerns raised in the original House provision (sec. 245). The report should clearly indicate how the activities envisioned to be undertaken by the proposed

executive agent are currently being executed with existing Departmental processes. The report should be provided to the congressional defense committees no later than October 1, 2010.

Study on thorium-liquid fueled reactors for Naval forces

The House bill contained a provision (sec. 246) that would have directed the Secretary of Defense and the Chairman of the Joint Chiefs of Staff to carry out jointly a study on the use of thorium-liquid fueled nuclear reactors for naval propulsion.

The Senate amendment contained no similar provision.

The House recedes.

The conferees note that while there may be credible research initiatives to explore the use of molten salt reactors for commercial power generation, the use of molten salt reactors on naval vessels is not currently technically feasible and a requirement to perform a study on the use of molten salt reactors is premature. This is due to technology challenges with material construction (molten salt reactors are inherently corrosive to metals), storage of the liquid fuel, and radiation shielding for the crew from a non-solid fuel reactor. The conferees recommend that the Navy continue to monitor the progress of technology development in commercial application of molten salt reactors, including licensing, for potential future application.

Visiting National Institutes of Health Senior Neuroscience Fellowship Program

The House bill contained a provision (sec. 247) that would establish a neuroscience fellowship program within the Department of Defense.

The Senate amendment contained no similar provision.

The House recedes.

The conferees direct the Department of Defense to continue to support neuroscience research to support the development of military capabilities.

TITLE III—OPERATION AND MAINTENANCE

BUDGET ITEM

Commercial imagery augmentation

The budget request included classified amounts in Operations and Maintenance, Defense-wide, in the National Geospatial Intelligence Agency budget to begin acquiring the equivalent capacity of two additional 1.1-meter electro-optical (EO) imaging satellites.

The House bill would authorize the Department of Defense (DOD) to implement the initiative as requested.

The Senate amendment would direct DOD to acquire the capacity of one 1.5-meter EO satellite in lieu of one of the two proposed 1.1-meter satellite equivalents “on a schedule keyed to the risks identified” by the Secretary of Defense in congressional testimony.

The conferees agree that DOD should consider obtaining the capabilities of 1.5-meter aperture EO satellites for multiple reasons: to hedge against the risk of gaps in national intelligence col-