

Line	Item	Change from Budget Estimate
1	Defense Research Sciences	
	Coal Transformation Laboratory	1,000
	Development and Validation of Advanced Design Technologies for Hypersonic Research	3,000
	High Energy Laser for Detection, Inspection and Non-destructive Testing	5,000
	Hybrid Materials for Thermal Management	1,000
	UNR-Millimeter Wave-Based Fatigue Countermeasure Technology	700
2	University Research Initiatives	
	Battlespace: Reducing Military Decision Cycles	3,000
	High Temperature Hydrogen Energy Production Facility	1,000
	Partnership in Innovative Preparation for Educators and Students (PIPES) and the Space Education Consortium (SEC)	2,000
	Secure Gridster Network Centric Operations	3,000
	University Research Initiatives	10,000
5	Materials	
	Accelerated Insertion of Advanced Materials and Certification for Military Aircraft Structure Material Substitution and Repair.	3,500
	Advanced Aerospace Carbon Foam Heat Exchangers	2,000
	Advanced Carbon Fiber Research & Testing Initiative	3,000
	Advanced Engineered Non-Linear Optical Materials for Critical Wavelengths	1,200
	Air Force Minority Leaders Program	7,500
	Aircraft Fatigue Modeling and Simulation	2,500
	Consortium for Nanomaterials for Aerospace Commerce and Technology (CONTACT)	2,000
	Durable Hybrid Coatings for Aircraft Systems	1,500
	Fire and Blast Resistant Materials for Force Protection	2,000
	Fully Integrated Solar-Powered Interior Lighting Technology	2,000
	Nanocomposites for Lightning Protection of Composite Airframe Structures	2,000
	Nanotechnology research	5,000
	ONAMI Safer Nanomaterials and Nanomanufacturing	4,000
	Polymer Stress and Sensor Damage Sensors for Composites	3,600
6	Aerospace Vehicle Technologies	
	Characterization of Airborne Environment for Tactical Lasers	4,000
	SingleMode Optical Connectors for Advanced Air Vehicles	1,000
7	Human Effectiveness Applied Research	
	Component Object Model (COM) Attitude Control System Simulation/Trainer	4,000
	Solid Electrolyte Oxygen Separator	4,000
8	Aerospace Propulsion	
	Active Combustion Control Systems for Military Aircraft	4,000
	Advanced Fuel Cell Based Power System for Small UAVs	800
	Alternative Energy Research	20,000
	High Energy Superior Lithium Battery Technology	6,000
	Modified F22 MaintenanceFree Nickel Cadmium Aircraft Batteries for the F16	1,000
	VDVP for UAV/UCAV Aircraft Engines	2,000
9	Aerospace Sensors	
	SuperResolution Sensor System (S3)	5,000
11	Space Technology	
	Advanced Modular Avionics for Operationally Responsive Space Use	2,500
	Deployable Structure Systems for Space	2,000
	Field Programmable Gate Arrays	2,000
	HAARP	4,000
	High Energy Matter Space Propulsion Initiative	1,000
	Microsatellite Target System	2,000
	Multicontinuum Technology for Space Structures	2,000
	Nuclear Test Seismic Research	3,000

Line	Item	Change from Budget Estimate
	Reconfigurable Electronics and NonVolatile Memory Research	2,000
	Shielding Rocket Payloads	400
14	Command Control and Communications	
	Cyber Attack Mitigation and Exploitation Laboratory II (CAMEL II)	2,000
20	Advanced Materials for Weapon Systems	
	Aircraft Evaluation Readiness Initiative (AERI)	2,000
	Hybrid Bearings	3,000
	Metals Affordability Initiative	5,000
	Strategic Biofuels Supply Program	2,000
	Materials Integrity Management Research for Air Force Systems (PE 0603112F)	1,000
23	Aerospace Propulsion and Power Technology	
	BiPolar Wafercell Nickel Metal Hydride Battery	2,000
	Family of Motors Capability Demonstration	8,000
	Silicon Carbide Power Electronics for More Electric Aircraft	6,900
	Versatile Affordable Advanced Turbine Engine, High Speed Turbine Engine Demonstrator	6,000
24	Crew Systems and Personnel Protection Technology	
	Low Cost/Improved Performance Helmet Display and Life Support Technologies	3,000
	Water Purification with Fused Carbon Nanotube Nanostructured Material	3,000
25	Electronic Combat Technology	
	Advanced Threat Alert Advanced Technology Demonstration	2,100
28	Advanced Spacecraft Technology	
	COTS Technology for Space Situational Awareness	2,500
	Intelligent Free Space Optical Satellite Communications Node	2,000
	Large Automated Production of Expendable Launch Structures (LAPELS)	4,300
	Systematic Hierarchical Approach to Radiation-Hardened Electronics (SHARE)	3,000
	Thin Film Amorphous Solar Arrays	4,000
30	Maui Space Surveillance System (MSSS)	
	Maui Space Surveillance System (MSSS) Operations & Research	24,000
	High Accuracy Network Determination System (HANDS)	6,500
	PanSTARRS	11,000
33	Advanced Weapons Technology	
	All Electric Laser	2,000
	Applications of LIDAR to Vehicles with Analysis (ALVA)	9,000
	Real-time Optical Surveillance Applications ... - ,	2,000
	Satellite Active Imaging National Testbed Program	3,000
	Space Situational Awareness research	15,000
34	C31 Advanced Development	
	Massively Parallel Optical Interconnects for Battlespace Information Exchange	4,900
41	Physical Security Equipment	
	Tactical Automated Security System (TASS) Advanced Communications Module	3,000
45	Space Control Technology	
	Multi-mission Deployable Optical System	5,000
54	Pollution Prevention _	
	02 Diesel Air Quality Project	2,000
	Assessment of Alternative Energy for Aircraft Ground Equipment (AGE)	3,000
67	B-1B	
	B-1 Bomber 16 Carry Adapter	10,000
68	Specialized Undergraduate Flight Training	
	AT-6B	3,000
72	Electronic Warfare Development	
	Rapid Replacement of Mission Critical Logistics Electronic Components -	2,000
76	Counterspace Systems	
	Space Control Test Capabilities	5,000

Line	Item	Change from Budget Estimate
	RAIDRS Block 20 (Air Force unfunded requirement)	7,000
88	Integrated Command & Control Applications (IC2A)	
	ASSET eWing and Data Fusion Technology Integration Base	5,000
	Global Awareness Presentation Services (GAPS)	3,000
89	Intelligence Equipment	
	Electronic Warfare Modeling, Simulation and Wireless Testing Center	4,500
91	Joint Strike Fighter USE)	
	Joint Strike Fighter F136 Alternate Engine	240,000
94	RDT&E for Aging Aircraft -	
	Aging Landing Gear Life Extension	2,000
105	Major T&E Investment	
	Holloman High Speed Test Track	4,500
128	MQ-9 UAV	
	Predator Aircrew Mission Training System (PMATS) Upgrade	4,000
131	F-15E Squadrons	
	F-15 AESA Radar Upgrade	3,000
141	Compass Call	
	Compass Call	5,000
160	USAF Modeling and Simulation	
	Research Visualization Facility	1,200
167	COBRA BALL	
	Pointing and Stabilization System Upgrade for Cobra Ball	2,500
174	Information Systems Security Program	
	Cyber Security Attack and Defend Exercises	800
180	Airborne SIGINT Enterprise	
	Ku Beyond Line of Sight Satcom Datalink for Senior Scout	8,000
185	Weather Service _	
	Operations Risk Management Visualization and Integration	1,000
186	Air Traffic Control, Approach, and Landing System {ATCALs}	
	Terminal Surveillance and Approach System (TSAS)/ATCALs	3,000
203	Manned Reconnaissance Systems	
	Combat Sent Wideband Sensor Upgrade Program	5,000
205	MQ-1 Predator A UAV	
	Center of Excellence for Defense UAV Education	4,000
	Integrator Unmanned Aircraft System Advanced Concepts Development	4,000
	Multi-Sensor Detect, See, & Avoid	5,000
217	C-130 Airlift Squadron	
	C-130 Automated Inspection, Repair, Corrosion and Aircraft Tracking Condition Based Maintenance Plus	2,000
	C-13G De-Icing System	1,500
228	Special Tactics/Combat Control	
	Combat Casualty Management System	3,600
231	Industrial Preparedness	
	High Temperature, Laser Sintered Polymeric Material Digital Product Definition	2,000
	Rapid Manufacturing and Repair of Composite Components	2,000
	Refigurable Tooling Systems	2,000
234	Support Systems Development	
	Alternate Carbon Stationary Fuel Cell Demonstrator	4,000
	Alternative Energy Fuel Cell Power Generation	2,500
	Heavy Duty Hybrid Electric Vehicle	2,000
	WR-ALC Special Operations Forces	3,000
	Total	653,500