

Fiscal Year 2004 National Defense Authorization Act Member Add-ons (in millions)

Emerging Threats

Collective Protection Chem-bio Protective Shelter 2.0

Army R,D,T &E

Low-temperature technology 2.0
Desert terrain analysis 4.0
University and Industry Research Center
Infrastructure Protection Research 4.0
Materials Technology
Advanced Materials Processing 3.0
Multifunctional Composite materials 3.0
Missile Technology
E-Strike Radar & Powertransmission Technologies 8.0
Maneuver Air Defense System 6.5
Multiple Component Flight Test 2.5
Advanced Concepts and Simulation
Advanced Photonics Detection Research 5.0
Combat Vehicle and Automotive Technology
Rapid Prototyping Technologies 2.0
Digital Executive Officer for UAVs 2.5
Advanced Energy and Manufacturing Technology 3.0
Advanced Electric Drive 3.0
Weapons and Munitions Technology
Single Capital Tungsten Alloy Penetrators 3.0
Countermine Systems
Chemical Vapor Sensing Technologies 2.5
Small SAR Mine Detection 2.0
RAPID and Reliable Countermeasure Capabilities 5.0
Environmental Quality Technology
Environmental Response and Security Protection
System 1.0
Military Engineering Technology
Geosciences and atmosphere research 3.0
Warfighter Technology
Embedded Optical Communication for
Objective Force Warrior 4.8
Medical Technology
Genomics Research 2.0
Medical Advanced Technology
Electronic Garments 5.0
Stable Hemostat Research 5.0

Combat Vehicle and Automotive Technology

21st Century Truck 17.5
Fuel Cell Technology 5.0
Advanced Collaboration Environments 2.0
Fastening and Joining Technologies 1.5
Tactical Vehicle Design Tool 2.0
Advanced Thermal Management Controls 1.5
Advanced Composite Materials for Future Combat
System 5.5
Medical Systems Advanced Development
Automated Detection for Biodefense 5.0
Topically Applied Vector Vaccines 1.0

Navy Research, Development, Test and Evaluation

Chemical Detection on UAVs 2.0
Advanced Fusion Processing 5.0

Fiber Reinforced Polymer for Ship Structuring 4.0
Rapid Prototype Polymeric Aircraft Components 4.8
Warfighter Sustainment Applied Research
Bioagent Diagnostic Tool 4.0
Biowarfare Agent Detector 4.0
Low Observable Materials for Stealth Application 6.0
Formidable Aligned Carbon Thermo Sets (FACTS) 1.5
Step-AIRSEDS (tether technology on UAVs
and electrodynamic propulsion capabilities) 1.0
RF Systems Applied Research
High Brightness Electron Sources 3.0
Advanced Semiconductor Research 2.0
Ocean Warfighting Environment Applied Research
Southeast Atlantic Coastal Ocean Observing
System (SEACOOS) 6.0
Undersea Warfare Applied Research
Low Acoustic Signature Motors & propulsors 2.8
Common Picture Advanced Technology
Consolidated Undersea Situational Awareness
Capabilities 4.0
Shipboard Automated Reconstruction Capability 6.0

Joint Warfare Experiments

Modeling and Simulation for Homeland Defense USJFCOM 15.0
Mine Expeditionary Warfare Advanced Technology
Augmented Reality Research 3.5
Studies and Analysis Support for Navy
Fire Retardant Fibers 1.0
Management, Technical & International Support
Warfare Analysis and Education 3.5
Modeling Simulation Support 2.0

AIR FORCE RESEARCH, DEVELOPMENT, TEST & EVALUATION

Materials

Low-cost Components for UAVs 4.0
Fabrication of Microelectronic Components 6.0
Closed Cell Foam Fire Retardant Materials 2.0
Nanotechnology Research for Aerospace Materials 4.5
Space Technology
Elastic Memory Composites Materials 4.0
Rigid Silicone Thin Film Solar Cells 3.5
Parallel Datacon Network for Satellite
Communication 4.0
Microsatellite Duster Technology 3.0
Command Control & Communication
MASINT Warfighter Visualization Tools 7.0
Advanced Materials for Weapons Systems
Materials Affordability Initiative for
Aerospace Materials 7.0
Aerospace Technology Development Demonstration
Advanced Aluminum Aerostructure 6.5
Life Cycle Extension Assessment for Tactical
Aircraft 2.0
Fly-by-light Photonic technology 3.0
Aerospace Propulsion and Power Technology
Fuel Lubrication and Turbine Engine Technology 7.0
Advanced Turbine Gas Engine Generator 6.0
Support System Development
Aging Aircraft 3.5

DEFENSE-WIDE, RESEARCH, DEVELOPMENT, TEST & EVALUATION

Nano and Micro-electro Mechanical Systems 5.0
Neural Engineering Research for Autonomous Control 4.0
Govt Industry Cosponsorship of University
Research Program 10.0
University Research Initiatives
Photonics Research 3.5
Advanced Remote Sensing Software 5.0
Bioterrorism Response Analysis 2.0
Carbon Nanotechnology Research 6.0
Chemical and Biological Defense Program
Bacteriophage Amplification 1.5
Cell and Tissue Culture and Bacterial Growth
Cell Research 2.0
Chemical and Biological Defense Program
Acoustic Wave Sensor Technology 2.0
Water Quality Sensor 3.5
Mustard Gas Antidote 3.0
Bioinformatics 6.5
Sensor Technologies 2.0
Food Security Technologies 3.0
Nerve Agent Decontamination Technology 1.0
Counterproliferation Advanced Development Technologies
Portable radiation search tool 10.0
Chemical and Biological Defense Program
Advanced Technologies 5.0
SensorNet Cell Phone Infrastructure for Chemical and Biological Defense Pilot Program 5.0
General Logistics R&D Technology Demonstrations
Multi-state Manufacturing Extensions Partnership to
Identify Requirements for Product
Delivery Time 9.0
DMS Data Warehouse 7.0
Vehicle Fuel Cell Program for JP-8 research 7.0
Command Control and Communications Systems
All Optical Switching System 3.0
Joint Robotics Program
Semi-autonomous Unmanned Ground Vehicle 3.0
Chemical and Biological Defense Program
Anthrax and Plague Oral Vaccine Development 6.0
Chemical and Biological Defense Program
Wide Area Decontaminate and Applicators 5.7
Joint Robotics Program
Semi-autonomous small UGV 4.0
General Support to C3I
See and Avoid UAV Technologies 3.0
Industrial Preparedness
Laser Additive Manufacturing Technology 3.0
Information Systems Security Program
Collaboration between industry, government, and
academia to share lessons learned and improve
cooperation to solve common defense information
systems security challenges 2.0

Sub-total 445.6

Airland

ARMY AIRCRAFT PROCUREMENT

OH-58D Kiowa Warrior GAV-19 Machine Gun 12.3

ARMY COMMUNICATIONS PROCUREMENT
Single Shelter System for Army Common User
System (ACUS) 25.0
Multiband Radios 6.2

ARMY TRAINING EQUIPMENT PROCUREMENT
Military Operation on Urbanized Terrain Instrumentation 4.8

NAVY AIRCRAFT PROCUREMENT
JPATS Texan 35.0

AIR FORCE AIRCRAFT MODIFICATION
KU-Band Satellite Communication Intergration
Capability 6.8

AIR FORCE SPECIAL COMMUNICATIONS ELECTRONICS PROJECTS
Joint Threat Emitter (JTE) System 5.0

AIR FORCE PERSONAL SAFETY AND RESCUE EQUIPMENT
Aircrew Survivable Radio Test Equipment 7.0
Fixed Aircraft Standardized Seats for C-130 & KC-135 4.8

AIR FORCE BASE SUPPORT EQUIPMENT
Expeditionary Medical Support Packages (EMEDS) 3.0

ARMY RESEARCH, DEVELOPMENT, TEST & EVALUATION
Missile and Rocket Advanced Technology Close-in Active Protective 6.0
Logistics and Engineer Equipment Advanced Development
Mobile Parts Hospital Development 6.0
Theater Support Vessel Development 7.5
Weapons and Munition
Abrams Tank Track Improvement 4.7
Full Authority Digital Engine Control Improvement
Program 5.0

AIR FORCE RESEARCH, DEVELOPMENT, TEST & EVALUATION
EW Development
Loitering Electronic Warfare Killer (LEWR) 6.0
Armament/Ordinance Development
Passive Attack Weapon 5.0
F-15 Eagle C/D AESA Radar Upgrade 16.5
Eagle Vision Commercial Imaging Program 8.0
Joint Air-to-Surface Missile Extended Range
(JASSME-ER) 17.0
KC-135 Simulator Upgrades (boom) 3.4

Sub-total 195.0

Readiness

NAVY RESEARCH, DEVELOPMENT, TEST & EVALUATION
Environmental Protection
Wireless Sensor-network Technology 2.0

ARMY OPERATION AND MAINTENANCE
Quadruple Shipping Containers 4.0
Satellite Communication Language Training

(SCOLA)USSOCOM 2.0
Corrosion Prevention and Control Program 8.0

NAVY OPERATION AND MAINTENANCE
Condition-based Maintenance Photonic Sensors
for Marine Gas Turbine Engines 6.5

AIR FORCE OPERATION & MAINTENANCE
Manufacturing Technical Assistance
Production Programs (MTAPP) 3.0

ARMY RESERVE OPERATION & MAINTENANCE
Equipment Storage Site Initial Operations 1.0

ARMY NATIONAL GUARD OPERATION & MAINTENANCE
Test Support Program 1.5

Sub-total 28.0

Seapower

ARMY, OTHER PROCUREMENT
Causeway Systems Modular Causeway Systems 25.0

NAVY, AIRCRAFT PROCUREMENT
H-1 Series Navigational Thermal Imaging System (NTIS) 5.5

NAVY, WEAPONS PROCUREMENT
ABL Facilities Restoration 20.0

NAVY OTHER PROCUREMENT
Submarine Training Device Mods
Submarine Training Performance Support Systems 5.0
Supply Support Equipment
Serial Number Tracking Systems (SNTS) 8.0

NAVY RDT&E
Force Protection Advanced Technology
Project M 4.7
High Temperature Superconducting Alternating
Current HRSAC synchronous motor 10.0
Laser Welding for shipbuilding 4.1
Warfighter Sustainment Advanced Technology
Automated Container and Cargo Handling System 6.5
Shipboard System Component Development
Improved Surface Vessel Torpedo Launcher 3.0
Surface Anti-Submarine Warfare (ASW)
ASW Risk Reduction 2.5
P-3 Modernization Program
P3 AIP Phased Capability Upgrade 12.3
(Integrated tactical picture, Link-16,
Tactical Common data link, electro-optic
geo-location)
SSN-688 and Trident Modernization
Submarine antenna technology improvements
Expandable two-way satellite communications
buoy 2.0
Tethered communication and sensor platform 3.0

Submarine Tactical Warfare System
Submarine Weapons Control System 10.0
Navy Energy Program
Uninterruptible Proton Exchange Membrane
Fuel Cell 3.5
Airborne Reconnaissance Systems
Podded Sensors for Air Reconnaissance 5.1

Sub-total 130.2

Strategic

AIR FORCE MISSILE PROCUREMENT
Evolved Expendable Launch Vehicle (EELV) 60.0

ARMY RESEARCH, DEVELOPMENT, TEST AND EVALUATION
Army Missile Defense Systems Integration (Non-Space)
Advanced Laser Electric Power 2.9
Integrated Composite Missile Systems 5.0
AMD Architecture Analysis (A3) Program 3.0
Army Security and Intelligence
Base Protection and Monitoring System 8.0

NAVY RESEARCH, DEVELOPMENT, TEST & EVALUATION
Space and Electronic Warfare Architecture
Advanced Wireless Network NAVCIITI 5.0
Strategic Sub & Weapons System Support (TPPL) 1.5
Thin plate pure lead batteries for submarines

AIR FORCE RESEARCH, DEVELOPMENT, TEST & EVALUATION
Advanced Spacecraft Technology
Satellite Hardening Technologies 6.8
Thin Film Amorphous Silicon Solar Arrays 7.0
Maui Space Surveillance System (MSSS), Hawaii
High Accuracy Network Detection System 10.0
Space Control Technology
Kinetic Energy Antisatellite Program (KEASAT) 4.0
Space Control Test Bed 2.5
Global Hawk Lithium Battery Demonstration 3.5
Applied Research
Air Force Research Lab Materials 1.0
Materials, electronics and Computer Technology
Costal Area Tactical Mapping System 2.0

DEFENSE WIDE RESEARCH, DEVELOPMENT, TEST & EVALUATION
Ballistic Missile Defense Terminal Defense Segment
Arrow, US/Israel Ballistic Missile Defense 10.0
Ballistic Missile Defense Sensors
E-2 Hawkeye Infrared Search and Track 3.8
Defense Research Sciences
Nanophotonic Systems Fabrication 2.0

DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS
Replacement, Los Alamos National Lab Albuquerque, NM 50.0

Sub-total 184.0

Grand Total \$982.8 million