

### **TITLE III – PROCUREMENT**

The agreement provides \$172,029,494,000 in Title III, Procurement, as follows:

~~(INSERT PROCUREMENT SUMMARY TABLE)~~ (Insert 63A

(DOLLARS IN THOUSANDS)

BUDGET  
REQUEST

FINAL  
BILL

SUMMARY

ARMY

AIRCRAFT.....	3,012,440	3,287,997
MISSILES.....	4,962,017	4,622,213
WEAPONS AND TRACKED COMBAT VEHICLES.....	3,765,521	4,244,226
AMMUNITION.....	2,967,578	2,943,574
OTHER.....	8,672,979	8,626,297
TOTAL, ARMY.....	23,380,535	23,724,307

NAVY

AIRCRAFT.....	17,336,760	19,826,909
WEAPONS.....	6,876,385	5,876,828
AMMUNITION.....	1,293,273	1,161,205
SHIPS.....	32,848,950	33,665,493
OTHER.....	14,535,257	14,385,665
MARINE CORPS.....	3,979,212	3,904,532
TOTAL, NAVY.....	76,869,837	78,820,632

AIR FORCE

AIRCRAFT.....	20,315,204	20,828,306
MISSILES.....	5,530,446	4,693,647
AMMUNITION.....	703,158	589,943
OTHER.....	30,417,892	31,327,131
TOTAL, AIR FORCE.....	56,966,700	57,439,027

SPACE FORCE

SPACE PROGRAMS.....	4,714,294	4,064,948
TOTAL, SPACE FORCE.....	4,714,294	4,064,948
DEFENSE-WIDE.....	6,156,975	6,392,675
DEFENSE PRODUCTION ACT PURCHASES.....	968,605	587,905
NATIONAL GUARD AND RESERVE EQUIPMENT.....	---	1,000,000
TOTAL PROCUREMENT.....	169,056,946	172,029,494

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#### REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

The Secretary of Defense is directed to continue to follow the reprogramming guidance as specified in the report accompanying the House version of the Department of Defense Appropriations bill for Fiscal Year 2008 (House Report 110-279). Specifically, the dollar threshold for reprogramming funds shall be \$15,000,000 for procurement and research, development, test and evaluation.

Also, the Under Secretary of Defense (Comptroller) is directed to continue to provide the congressional defense committees quarterly, spreadsheet-based DD Form 1416 reports for Service and defense-wide accounts in titles III and IV of this Act. Reports for titles III and IV shall comply with the guidance specified in the explanatory statement accompanying the Department of Defense Appropriations Act, 2006. The Department shall continue to follow the limitation that prior approval reprogrammings are set at either the specified dollar threshold or 20 percent of the procurement or research, development, test and evaluation line, whichever is less. These thresholds are cumulative from the base for reprogramming value as modified by any adjustments. Therefore, if the combined value of transfers into or out of a procurement (P-1) or research, development, test and evaluation (R-1) line exceeds the identified threshold, the Secretary of Defense must submit a prior approval reprogramming to the congressional defense committees. In addition, guidelines on the application of prior approval reprogramming procedures for congressional special interest items are established elsewhere in this report.

#### FUNDING INCREASES

The funding increases outlined in these tables shall be provided only for the specific purposes indicated in the tables. Additional guidance is provided in the overview of this explanatory statement.

#### PROCUREMENT SPECIAL INTEREST ITEMS

Items for which additional funds have been recommended or items for which funding is specifically reduced as shown in the project level tables detailing recommended adjustments or in paragraphs using the phrase "only for" or "only to" in the joint explanatory statement are congressional special interest items for the purpose of the Base for Reprogramming (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the stated amount, as specifically addressed elsewhere in the joint explanatory statement.

#### CRYSTALS FOR OPTICAL COMPONENTS

The agreement directs the Secretary of Defense to conduct a review of the amount of silicon and germanium optical components in U.S. defense systems that are being sourced from China and submit a report to the congressional defense committees not later than 180 days after the enactment of this Act. The Secretary is encouraged to develop specific plans to phase out the procurement of such components and support domestic growth and component manufacturing including through the use of defense production authorities in chapter 55 of title 50, United States Code, as appropriate. This language replaces the directives under this heading in House Report 118-121 as well as directives under the heading “Silicon and Germanium Crystals for Optical Components” in Senate Report 118–81.

#### AEROSPACE BEARING REPAIR AND REFURBISHMENT

The agreement directs the Secretary of Defense to submit a report to the congressional defense committees, not later than 180 days after the enactment of this Act, that examines the participation rates of domestic independent service providers for aerospace bearing repair and refurbishment solicitations. The report shall identify any potential cost, schedule, and performance benefits and include comparative data from previous awards relative to past performance. This includes cost overruns or schedule delays, the ability and capacity to provide ongoing life cycle product support, and the ability to meet technical requirements of the request for proposal for such services. Further, the report shall detail actions that the Department of Defense has taken to support domestic independent bearing repair service providers. This language replaces the directives under this heading in Senate Report 118-81 as well as directives under the heading “Repaired and Refurbished Aerospace Bearings” in House Report 118-121.

#### MUNITIONS STOCK

The agreement directs the Secretary of Defense and Chairman of the Joint Chiefs of Staff to jointly submit a report to the congressional defense committees, not later than 120 days after the enactment of this Act, that identifies current and future munitions shortfalls. The report shall include the following: areas of greatest operational risk in the most pressing theaters; novel munitions employment approaches to create platform optionality and reduce integration cost; munitions that are currently being produced by non-traditional suppliers; potential sources of low-cost components through non-traditional

suppliers; viable paths for system integration through non-traditional suppliers or relationships with traditional suppliers; a strategy for leveraging a broader industrial base for expanding munitions capability and capacity; and an assessment of the extent to which the fiscal year 2025 President's budget request will meet munitions requirements, including total munition requirements and global floor requirements, with estimated procurement costs, quantities, and projected inventory for such munitions identified for each year of the future years defense program. The report shall be submitted in an unclassified form and may include a classified annex.

#### COUNTER-SMALL UNMANNED AIRCRAFT SYSTEMS

Defeating small, unmanned aircraft systems, which pose significant risks to U.S. military personnel, is a national imperative that deserves concerted focus from the Department of Defense. Therefore, the agreement includes \$100,000,000 for the purpose of accelerating procurement of Counter-Small Unmanned Aircraft Systems (C-sUAS) to address emergent sUAS threats within the Service and Special Operations Command procurement appropriation accounts rather than within the Office of the Secretary of Defense as proposed in the budget request. The agreement directs the Undersecretary of Defense for Acquisition and Sustainment, in coordination with the service acquisition executives for each respective Service and Special Operations Command, to provide quarterly reports to the congressional defense committees beginning on the first day of the fiscal quarter after the date of enactment of this Act until the first day of the fiscal quarter after all such funds have been obligated. Each report shall include current spend plans, current obligation actuals, and an assessment of how this funding is being used to address operational capability gaps. The agreement retains the directive under the heading "Counter-Small Unmanned Aircraft Systems" in Senate Report 118-81.

## AIRCRAFT PROCUREMENT, ARMY

The agreement provides \$3,287,997,000 for Aircraft Procurement, Army, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 67A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>3 FUTURE UAS FAMILY</b>	<b>53,453</b>	<b>0</b>
Inc. 2 early to need		-53,453
<b>4 UH-72 LAKOTA LIGHT UTILITY HELICOPTER</b>	<b>0</b>	<b>10,000</b>
Program increase		10,000
<b>5 SMALL UNMANNED AIRCRAFT SYSTEMS</b>	<b>20,769</b>	<b>30,769</b>
Program increase - accelerate short range reconnaissance fielding		10,000
<b>6 AH-64 APACHE BLOCK IIIA REMAN</b>	<b>718,578</b>	<b>653,107</b>
Program decrease		-65,471
<b>7 AH-64 APACHE BLOCK IIIA REMAN (AP-CY)</b>	<b>110,360</b>	<b>110,360</b>
<b>8 UH-60 BLACKHAWK M MODEL (MYP)</b>	<b>668,258</b>	<b>728,258</b>
Program increase - additional aircraft for the National Guard		60,000
<b>9 UH-60 BLACKHAWK M MODEL (MYP) (AP-CY)</b>	<b>92,494</b>	<b>92,494</b>
<b>10 UH-60 BLACK HAWK L AND V MODELS</b>	<b>153,196</b>	<b>153,196</b>
<b>11 CH-47 HELICOPTER</b>	<b>202,487</b>	<b>423,887</b>
Program increase - additional helicopters		177,500
Program increase - SOCOM operational loss		43,900
<b>12 CH-47 HELICOPTER (AP-CY)</b>	<b>18,936</b>	<b>18,936</b>
<b>13 MQ-1 PAYLOAD</b>	<b>13,650</b>	<b>13,650</b>
<b>14 GRAY EAGLE MODS2</b>	<b>14,959</b>	<b>82,959</b>
Program increase - MQ-1C Gray Eagle 25M capability improvement		68,000
<b>16 AH-64 MODS</b>	<b>113,127</b>	<b>113,127</b>
<b>17 CH-47 CARGO HELICOPTER MODS</b>	<b>20,689</b>	<b>50,689</b>
Program increase - hybrid enhanced ballistic protection systems		15,000
Program increase - lightweight ballistic protection systems		15,000
<b>22 UTILITY HELICOPTER MODS</b>	<b>35,879</b>	<b>56,379</b>
Program increase - 60kVA generators for UH-60s		15,000
Program increase - powered ascenders for aviation readiness		2,500
Program increase - litter basket stabilization technology for search and rescue		3,000
<b>23 NETWORK AND MISSION PLAN</b>	<b>32,418</b>	<b>45,168</b>
Program increase - aviation mission common server		12,000
Program increase - flight scheduling software		750
<b>24 COMMS, NAV SURVEILLANCE</b>	<b>74,912</b>	<b>74,912</b>
<b>25 DEGRADED VISUAL ENVIRONMENT</b>	<b>16,838</b>	<b>16,838</b>

P-1	Budget Request	Final Bill
26 AVIATION ASSURED PNT	67,383	67,383
27 GATM ROLLUP	8,924	8,924
29 UAS MODS	2,258	2,258
30 AIRCRAFT SURVIVABILITY EQUIPMENT	161,731	121,562
Carryover		-34,939
B-kit unit cost adjustment		-5,230
31 SURVIVABILITY CM	6,526	6,526
32 CMWS	72,041	72,041
33 COMMON INFRARED COUNTERMEASURES (CIRCM)	261,384	261,384
34 COMMON GROUND EQUIPMENT	25,752	27,752
Program increase - aviation ground support equipment		2,000
35 AIRCREW INTEGRATED SYSTEMS	22,097	22,097
36 AIR TRAFFIC CONTROL	21,216	21,216
37 LAUNCHER, 2.75 ROCKET	2,125	2,125
<b>TOTAL, AIRCRAFT PROCUREMENT, ARMY</b>	<b>3,012,440</b>	<b>3,287,997</b>

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## MISSILE PROCUREMENT, ARMY

The agreement provides \$4,622,213,000 for Missile Procurement, Army, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 68A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 LOWER TIER AIR AND MISSILE DEFENSE (AMD)</b>	<b>6,625</b>	<b>6,625</b>
<b>3 M-SHORAD - PROCUREMENT</b>	<b>400,697</b>	<b>357,697</b>
Unjustified growth		-43,000
<b>4 MSE MISSILE</b>	<b>1,212,832</b>	<b>960,832</b>
Transfer to line 4a - advance procurement		-252,000
<b>4a MSE MISSILE - AP</b>	<b>0</b>	<b>252,000</b>
Transfer from line 4 - advance procurement (FY 2024 for FY2025)		126,000
Transfer from line 4 - advance procurement (FY 2024 for FY2026)		126,000
<b>6 PRECISION STRIKE MISSILE (PRSM)</b>	<b>384,071</b>	<b>334,759</b>
Schedule delay		-43,062
Unjustified growth - software maintenance		-6,250
<b>7 INDIRECT FIRE PROTECTION CAPABILITY INC 2-I</b>	<b>313,189</b>	<b>256,753</b>
Unjustified growth - integrated logistics support		-40,536
Contractor management		-15,900
<b>8 MID-RANGE CAPABILITY (MRC)</b>	<b>169,519</b>	<b>169,519</b>
<b>9 HELLFIRE SYS SUMMARY</b>	<b>21,976</b>	<b>21,976</b>
<b>10 JOINT AIR-TO-GROUND MSLS (JAGM)</b>	<b>303,409</b>	<b>255,269</b>
Contract delays		-48,140
<b>11 LONG RANGE PRECISION MUNITION</b>	<b>0</b>	<b>5,000</b>
Program increase - long range precision munition		5,000
<b>12 LONG-RANGE HYPERSONIC WEAPON</b>	<b>156,821</b>	<b>62,843</b>
Early to need		-70,265
Army-requested transfer to RDTE, A line 84		-23,713
<b>13 JAVELIN (AAWS-M) SYSTEM SUMMARY</b>	<b>199,509</b>	<b>122,147</b>
AUR excess to capacity		-77,362
<b>14 TOW 2 SYSTEM SUMMARY</b>	<b>120,475</b>	<b>110,765</b>
Unit cost increase		-9,710
<b>15 GUIDED MLRS ROCKET (GMLRS)</b>	<b>886,367</b>	<b>886,367</b>
<b>16 GUIDED MLRS ROCKET (GMLRS) (AP)</b>	<b>55,913</b>	<b>30,913</b>
Program decrease		-25,000
<b>17 MLRS REDUCED RANGE PRACTICE ROCKETS</b>	<b>10,334</b>	<b>10,334</b>
<b>18 HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)</b>	<b>179,230</b>	<b>179,230</b>
<b>19 ARMY TACTICAL MSL SYS (ATACMS) - SYSTEM SUMMARY</b>	<b>7,307</b>	<b>12,307</b>
Program increase - ATACMS		5,000

(68A)

P-1	Budget Request	Final Bill
20 LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS)	0	62,227
Program increase - loitering munition		10,000
Program increase		52,227
21 PATRIOT MODS	212,247	212,247
22 STINGER MODS	36,484	36,484
23 AVENGER MODS	22,274	22,274
25 MLRS MODS	168,198	168,198
26 HIMARS MODIFICATIONS	76,266	76,266
27 SPARES AND REPAIR PARTS	6,573	6,573
28 AIR DEFENSE TARGETS	11,701	11,701
UND RESCISSION NOT PROPERLY ACCOUNT FOR		-9,093
TOTAL MISSILE PROCUREMENT, ARMY	4,962,017	4,622,213

## PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

The agreement provides \$4,244,226,000 for Procurement of Weapons and Tracked Combat Vehicles, Army, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 69A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 ARMORED MULTI PURPOSE VEHICLE (AMPV)</b> Program adjustment	<b>554,777</b>	<b>392,099</b> -162,678
<b>3 MOBILE PROTECTED FIREPOWER</b> STS previously funded	<b>394,635</b>	<b>386,635</b> -8,000
<b>4 STRYKER UPGRADE</b> Program increase - additional vehicles DVHA1 30mm MCWS testing delays DVHA1 30mm MCWS production early to need	<b>614,282</b>	<b>665,913</b> 80,000 -17,676 -10,693
<b>5 BRADLEY FIRE SUPPORT TEAM (BFIST) VEHICLE</b>	<b>5,232</b>	<b>5,232</b>
<b>6 BRADLEY PROGRAM (MOD)</b> Carryover Program increase - active protection systems Unjustified growth - modification 7 installation	<b>158,274</b>	<b>182,811</b> -9,259 40,000 -6,204
<b>7 M109 FOV MODIFICATIONS</b>	<b>90,986</b>	<b>90,986</b>
<b>8 PALADIN INTEGRATED MANAGEMENT (PIM)</b> Program increase	<b>469,152</b>	<b>555,152</b> 86,000
<b>9 IMPROVED RECOVERY VEHICLE (M88 HERCULES)</b>	<b>41,058</b>	<b>41,058</b>
<b>12 JOINT ASSAULT BRIDGE</b>	<b>159,804</b>	<b>159,804</b>
<b>13 ABRAMS UPGRADE PROGRAM</b> Program increase - prognostic and predictive maintenance and predictive logistics Transfer from line 14 Program increase	<b>697,883</b>	<b>1,240,323</b> 10,000 102,440 430,000
<b>14 ABRAMS UPGRADE PROGRAM (AP-CY)</b> Transfer to line 13	<b>102,440</b>	<b>0</b> -102,440
<b>16 PERSONAL DEFENSE WEAPON (ROLL)</b> Excessive unit cost	<b>510</b>	<b>150</b> -360
<b>17 M240 MEDIUM MACHINE GUN (7.62MM)</b> Program increase - M240 medium machine gun	<b>425</b>	<b>12,500</b> 12,075
<b>19 MACHINE GUN, CAL .50 M2 ROLL</b>	<b>3,420</b>	<b>3,420</b>
<b>20 MORTAR SYSTEMS</b>	<b>8,013</b>	<b>8,013</b>
<b>21 LOCATION &amp; AZIMUTH DETERMINATION SYSTEM (LADS)</b>	<b>3,174</b>	<b>3,174</b>
<b>22 XM320 GRENADE LAUNCHER MODULE (GLM)</b>	<b>14,143</b>	<b>14,143</b>
<b>23 PRECISION SNIPER RIFLE</b> Program increase - Precision Sniper Rifle	<b>5,248</b>	<b>7,748</b> 2,500

69A

P-1	Budget Request	Final Bill
24 CARBINE Program increase - M4 carbine upper receivers	571	8,571 8,000
25 NEXT GENERATION SQUAD WEAPON	292,850	292,850
26 HANDGUN	32	32
27 MK-19 GRENADE MACHINE GUN MODS Program increase - Mk93 mounts	0	10,000 10,000
28 M777 MODS	18,920	18,920
31 M119 MODIFICATIONS	13,097	13,097
32 MORTAR MODIFICATION	423	423
33 ITEMS LESS THAN \$5.0M (WOCV-WTCV)	1,148	1,148
34 PRODUCTION BASE SUPPORT (WOCV-WTCV)	115,024	115,024
35 COMMON REMOTELY OPERATED WEAPONS STATION Program increase - CROWS-AHD	0	15,000 15,000
TOTAL, WEAPONS AND TRACKED COMBAT VEHICLES, ARMY	3,765,521	4,244,226

## PROCUREMENT OF AMMUNITION, ARMY

The agreement provides \$2,943,574,000 for Procurement of Ammunition, Army, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 70A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 CTG, 5.56MM, ALL TYPES</b>	<b>90,853</b>	<b>88,409</b>
Excess to need - Ctg, 5.56mm, short range training, M1037, single round		-2,444
<b>2 CTG, 7.62MM, ALL TYPES</b>	<b>65,370</b>	<b>76,732</b>
Program increase		25,000
Excess to need - Ctg, 7.62mm blank, M82 w/M13 link		-595
Excess to need - Ctg, 7.62mm 4 ball M80A1/1 tracer M62A1 lead free		-13,043
<b>3 NEXT GENERATION SQUAD WEAPON AMMUNITION</b>	<b>191,244</b>	<b>176,244</b>
Program delays		-15,000
<b>4 CTG, HANDGUN, ALL TYPES</b>	<b>6,597</b>	<b>6,420</b>
Excess to need - Ctg 9mm marking red		-177
<b>5 CTG, .50 CAL, ALL TYPES</b>	<b>41,534</b>	<b>64,402</b>
Program increase		22,868
<b>6 CTG, 20MM, ALL TYPES</b>	<b>7,925</b>	<b>15,425</b>
Program increase		7,500
<b>7 CTG, 25MM, ALL TYPES</b>	<b>38,760</b>	<b>22,804</b>
Excess to need - Ctg 25mm TPDS-T M910		-15,956
<b>8 CTG, 30MM, ALL TYPES</b>	<b>107,805</b>	<b>98,532</b>
Excess to need - Ctg, 30mm TP, M788, single, f/gun M230		-9,273
<b>9 CTG, 40MM, ALL TYPES</b>	<b>148,970</b>	<b>148,970</b>
<b>10 CTG, 50MM, ALL TYPES</b>	<b>28,000</b>	<b>28,000</b>
<b>11 60MM MORTAR, ALL TYPES</b>	<b>35,160</b>	<b>35,160</b>
<b>12 81MM MORTAR, ALL TYPES</b>	<b>40,562</b>	<b>40,562</b>
<b>13 120MM MORTAR, ALL TYPES</b>	<b>106,784</b>	<b>110,689</b>
Excess to need - Ctg, 120mm mortar FRTR, M931 series w/ pract fuze		-1,095
Program increase - 120mm mortar WP smoke		5,000
<b>14 CARTRIDGES, TANK, 105MM AND 120MM, ALL TYPES</b>	<b>300,368</b>	<b>300,368</b>
<b>15 ARTILLERY CARTRIDGES, 75MM &amp; 105MM</b>	<b>21,298</b>	<b>21,298</b>
<b>16 ARTILLERY PROJECTILE, 155MM, ALL TYPES</b>	<b>150,839</b>	<b>150,839</b>
<b>18 PRECISION ARTILLERY MUNITIONS</b>	<b>96,406</b>	<b>92,919</b>
Carryover		-3,487
<b>19 ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL TYPES</b>	<b>172,947</b>	<b>163,872</b>
Excess to need - PROP CHG 155mm, M231 series		-9,075

70 A



<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>20 MINES &amp; CLEARING CHARGES, ALL TYPES</b>	<b>71,182</b>	<b>66,182</b>
Carryover		-5,000
<b>21 CLOSE TERRAIN SHAPING OBSTACLE</b>	<b>55,374</b>	<b>17,410</b>
Program reduction - Close Terrain Shaping Obstacle, XM204		-37,964
<b>22 SHOULDER LAUNCHED MUNITIONS, ALL TYPES</b>	<b>18,630</b>	<b>18,630</b>
<b>23 ROCKET, HYDRA 70, ALL TYPES</b>	<b>87,293</b>	<b>120,293</b>
Program increase - Hydra 70 rockets		33,000
<b>24 CAD/PAD, ALL TYPES</b>	<b>6,564</b>	<b>6,564</b>
<b>25 DEMOLITION MUNITIONS, ALL TYPES</b>	<b>24,238</b>	<b>24,238</b>
<b>26 GRENADES, ALL TYPES</b>	<b>48,374</b>	<b>50,874</b>
Program increase - 66mm vehicle launched white smoke training grenade		1,000
Program increase - M18 green smoke hand grenade		500
Program increase - M18 yellow smoke hand grenade		500
Program increase - M18 violet smoke hand grenade		500
<b>27 SIGNALS, ALL TYPES</b>	<b>23,252</b>	<b>13,489</b>
Excess to need - Signal, hand held red star cluster M158		-1,680
Early to need - Flare, aircraft countermeasure, RF (Passive)		-8,083
<b>28 SIMULATORS, ALL TYPES</b>	<b>11,309</b>	<b>11,309</b>
<b>30 AMMO COMPONENTS, ALL TYPES</b>	<b>3,976</b>	<b>3,976</b>
<b>31 NON-LETHAL AMMUNITION, ALL TYPES</b>	<b>3,281</b>	<b>3,281</b>
<b>32 ITEMS LESS THAN \$5 MILLION (AMMO)</b>	<b>17,436</b>	<b>17,436</b>
<b>33 AMMUNITION PECULIAR EQUIPMENT</b>	<b>13,133</b>	<b>13,133</b>
<b>34 FIRST DESTINATION TRANSPORTATION (AMMO)</b>	<b>18,068</b>	<b>18,068</b>
<b>35 CLOSEOUT LIABILITIES</b>	<b>102</b>	<b>102</b>
<b>36 INDUSTRIAL FACILITIES</b>	<b>726,135</b>	<b>729,135</b>
Program increase - melt pour facility modernization		3,000
<b>37 CONVENTIONAL MUNITIONS DEMILITARIZATION</b>	<b>183,752</b>	<b>183,752</b>
<b>38 ARMS INITIATIVE</b>	<b>4,057</b>	<b>4,057</b>
<b>TOTAL, PROCUREMENT OF AMMUNITION, ARMY</b>	<b>2,967,578</b>	<b>2,943,574</b>

## OTHER PROCUREMENT, ARMY

The agreement provides \$8,626,297,000 for Other Procurement, Army, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ *2 (Insert 71A-F)*

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 SEMITRAILERS, FLATBED</b>	<b>22,751</b>	<b>22,751</b>
<b>2 SEMITRAILERS, TANKERS</b> Effort previously funded	<b>40,359</b>	<b>36,486</b> -3,873
<b>3 HI MOB MULTI-PURP WHLD VEH (HMMWV)</b>	<b>25,904</b>	<b>25,904</b>
<b>4 GROUND MOBILITY VEHICLES (GMV)</b>	<b>36,223</b>	<b>36,223</b>
<b>5 ARNG HMMWV MODERNIZATION PROGRAM</b> Program increase	<b>0</b>	<b>140,000</b> 140,000
<b>6 JOINT LIGHT TACTICAL VEHICLE FAMILY OF VEHICLES</b> Program decrease - production phasing	<b>839,413</b>	<b>541,334</b> -298,079
<b>7 TRUCK, DUMP, 20T (CCE)</b> Program increase	<b>20,075</b>	<b>35,075</b> 15,000
<b>8 FAMILY OF MEDIUM TACTICAL VEH (FMTV)</b>	<b>110,734</b>	<b>110,734</b>
<b>9 FAMILY OF COLD WEATHER ALL-TERRAIN VEHICLE (CATV)</b>	<b>28,745</b>	<b>28,745</b>
<b>10 FIRETRUCKS &amp; ASSOCIATED FIREFIGHTING EQUIPMNET</b>	<b>55,340</b>	<b>55,340</b>
<b>11 FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)</b> Program increase	<b>66,428</b>	<b>221,428</b> 155,000
<b>12 PLS ESP</b> Contract savings	<b>51,868</b>	<b>47,925</b> -3,943
<b>14 TACTICAL WHEELED VEHICLE PROTECTION KITS</b>	<b>3,792</b>	<b>3,792</b>
<b>15 MODIFICATION OF IN SVC EQUIP</b> Program increase - HMMWV ABS/ESC retrofit kits	<b>80,326</b>	<b>127,826</b> 47,500
<b>16 PASSENGER CARRYING VEHICLES</b>	<b>2,203</b>	<b>2,203</b>
<b>17 NONTACTICAL VEHICLES, OTHER</b> Prior year underexecution Program increase - airfield deicing equipment	<b>8,246</b>	<b>2,984</b> -6,762 1,500
<b>18 SIGNAL MODERNIZATION PROGRAM</b> Software ahead of need	<b>161,585</b>	<b>151,166</b> -10,419
<b>19 TACTICAL NETWORK TECHNOLOGY MOD IN SVC</b> SATCOM obsolescence previously funded Effort previously funded Program increase - SATCOM on the move	<b>358,646</b>	<b>339,344</b> -12,003 -16,799 9,500
<b>20 DISASTER INCIDENT RESPONSE COMMS TERMINAL</b>	<b>254</b>	<b>254</b>

-1A

P-1	Budget Request	Final Bill
21 JCSE EQUIPMENT (USRDECOM)	5,097	5,097
24 DEFENSE ENTERPRISE WIDEBAND SATCOM SYSTEMS	101,181	101,181
25 TRANSPORTABLE TACTICAL COMMAND COMMUNICATIONS	54,849	54,849
26 SHF TERM	41,634	41,634
27 ASSURED POSITIONING, NAVIGATION AND TIMING	202,370	202,370
28 EHF SATELLITE COMMUNICATION	19,122	15,576
Contract delays		-3,546
30 GLOBAL BRDCST SVC - GBS	531	5,831
Program increase - Joint CONUS communications support environment satellite communications upgrade		5,300
31 COE TACTICAL SERVER INFRASTRUCTURE (TSI)	77,999	77,999
32 HANDHELD MANPACK SMALL FORM FIT (HMS)	765,109	721,407
Leader radio unit cost increases		-9,890
Fielding overestimation		-5,000
Unjustified unit cost growth - manpack radio flyaway cost		-20,045
Cost overestimation - manpack radio support costs		-8,767
33 ARMY LINK 16 SYSTEMS	60,767	60,767
35 UNIFIED COMMAND SUITE	18,999	18,999
36 COTS COMMUNICATIONS EQUIPMENT	492,001	406,923
Fielding costs overestimation		-8,773
Phase program growth - low cost tactical radios		-86,305
Program increase - high frequency radios		10,000
37 FAMILY OF MED COMM FOR COMBAT CASUALTY CARE	1,374	1,374
38 ARMY COMMUNICATIONS & ELECTRONICS	52,485	52,485
39 CI AUTOMATION ARCHITECTURE-INTEL	16,767	16,767
41 MULTI-DOMAIN INTELLIGENCE	119,989	100,789
Phase program growth		-19,200
42 INFORMATION SYSTEM SECURITY PROGRAM-ISSP	701	701
43 COMMUNICATIONS SECURITY (COMSEC)	159,712	156,821
Carryover		-2,891
44 DEFENSIVE CYBER OPERATIONS	13,848	0
Transfer to RDTE,A line 228		-13,848
45 INSIDER THREAT PROGRAM - UNIT ACTIVITY MONITORING	1,502	0
Transfer to RDTE,A line 228		-1,502
47 BIOMETRIC ENABLING CAPABILITY (BEC)	453	453

TIB

P-1	Budget Request	Final Bill
49 BASE SUPPORT COMMUNICATIONS Program increase - land mobile radios	23,278	38,278 15,000
50 INFORMATION SYSTEMS	32,608	32,608
51 EMERGENCY MANAGEMENT MODERNIZATION PROGRAM	4,949	4,949
52 INSTALLATION INFO INFRASTRUCTURE MOD PROGRAM	243,011	243,011
55 JTT/CIBS-M	8,543	8,543
56 TERRESTRIAL LAYER SYSTEMS (TLS) Early to need - TLS BCT manpack production	85,486	56,830 -28,656
58 DCGS-A-INTEL	2,980	2,980
60 TROJAN	30,649	30,649
61 MOD OF IN-SVC EQUIP (INTEL SPT) Program increase - Prophet enhanced ESP kits	4,169	14,169 10,000
62 BIOMETRIC TACTICAL COLLECTION DEVICES	932	932
63 EW PLANNING & MANAGEMENT TOOLS (EWPMT)	21,278	21,278
64 AIR VIGILANCE (AV)	6,641	6,641
65 MULTI-FUNCTION ELECTRONIC WARFARE (MFEW)	15,941	15,941
67 COUNTERINTELLIGENCE/SECURITY COUNTERMEASURES Carryover	22,833	19,083 -3,750
68 CI MODERNIZATION	434	434
69 SENTINEL MODS	161,886	161,886
70 NIGHT VISION DEVICES Program decrease Transfer to RDTE,A line 101 Excess IVAS PM costs Program increase - ENVG-B Unjustified request - IVAS 1.0 and 1.1 fielding	141,143	249,122 -8,030 -20,055 -12,912 160,000 -11,024
71 SMALL TACTICAL OPTICAL RIFLE MOUNTED MLRF	15,484	15,484
73 FAMILY OF WEAPON SIGHTS (FWS)	185,634	185,634
74 ENHANCED PORTABLE INDUCTIVE ARTILLERY FUZE SETTER	3,652	3,652
75 FORWARD LOOKING INFRARED (IFLIR)	20,438	20,438
76 COUNTER SMALL UNMANNED AERIAL SYSTEM (C-SUAS) Unjustified growth - Army operational division Unjustified growth - integrated logistics support Transfer from P,DW line 2	365,376	317,725 -16,210 -52,691 21,250

71C

P-1	Budget Request	Final Bill
77 JOINT BATTLE COMMAND - PLATFORM (JBC-P) Acquisition objective met	215,290	154,049 -61,241
78 JOINT EFFECTS TARGETING SYSTEM (JETS)	8,932	8,932
79 COMPUTER BALLISTICS: LHMBC XM32 Prior year underexecution	2,965	1,653 -1,312
80 MORTAR FIRE CONTROL SYSTEM	8,024	8,024
81 MORTAR FIRE CONTROL SYSTEMS MODIFICATIONS	7,399	7,399
82 COUNTERFIRE RADARS Contract savings	99,782	73,799 -25,983
83 ARMY COMMAND POST INTEGRATED INFRASTRUCTURE	78,512	78,512
84 FIRE SUPPORT C2 FAMILY	10,052	10,052
85 AIR & MSL DEFENSE PLANNING & CONTROL SYSTEM	68,892	68,892
86 IAMD BATTLE COMMAND SYSTEM Unjustified growth - engineering change proposals	412,556	399,556 -13,000
87 LIFE CYCLE SOFTWARE SUPPORT (LCSS)	4,270	4,270
88 NETWORK MANAGEMENT INITIALIZATION AND SERVICE	37,194	37,194
89 GLOBAL COMBAT SUPPORT SYSTEM-ARMY (GCSS-A)	1,987	1,987
90 INTEGRATED PERSONNEL AND PAY SYSTEM-ARMY	5,318	5,318
91 MOD OF IN-SVC EQUIPMENT (ENFIRE) Program increase - land surveying systems	4,997	14,997 10,000
92 ARMY TRAINING MODERNIZATION	10,130	10,130
93 AUTOMATED DATA PROCESSING EQUIPMENT Ahead of need	61,489	59,426 -2,063
94 ACCESSIONS INFORMATION ENVIRONMENT (AIE)	4,198	4,198
96 HIGH PERF COMPUTING MOD PGM (HPCMP)	76,053	76,053
97 CONTRACT WRITING SYSTEM	6,061	6,061
98 CSS COMMUNICATIONS	56,804	56,804
102 BASE DEFENSE SYSTEMS (BDS)	70,781	70,781
103 CBRN DEFENSE Early to need - NBCRV SSU	63,198	57,198 -6,000
104 TACTICAL BRIDGING	1,157	1,157
105 TACTICAL BRIDGE, FLOAT-RIBBON	82,228	82,228

P-1	Budget Request	Final Bill
106 BRIDGE SUPPLEMENTAL SET	4,414	4,414
110 ROBOTICS AND APPLIQUE SYSTEMS	68,893	65,118
Program increase - soldier borne sensor		5,000
Effort previously funded		-8,775
112 FAMILY OF BOATS AND MOTORS	4,785	4,785
113 HEATERS AND ECUS	7,617	7,170
Contract savings - improved environmental control units		-447
115 PERSONNEL RECOVERY SUPPORT SYSTEM (PRSS)	5,356	5,356
116 GROUND SOLDIER SYSTEM	167,129	154,262
Pricing adjustment - systems fielding		-12,867
117 MOBILE SOLDIER POWER	15,967	13,284
Quantities previously funded - universal battery charger		-2,683
118 FORCE PROVIDER	34,200	75,200
Program increase - arctic basing solutions		10,000
Program increase - expeditionary base modules - Army National Guard		5,000
Program increase - expeditionary shelter protection system		26,000
120 CARGO AERIAL DEL & PERSONNEL PARACHUTE SYSTEM	45,792	42,279
Early to need - M-code capabilities		-3,513
121 FAMILY OF ENGR COMBAT AND CONSTRUCTION SETS	12,118	12,118
123 QUALITY SURVEILLANCE EQUIPMENT	2,507	2,507
124 DISTRIBUTION SYSTEMS, PETROLEUM & WATER	40,989	40,989
125 COMBAT SUPPORT MEDICAL	86,829	86,829
126 MOBILE MAINTENANCE EQUIPMENT SYSTEMS	17,287	137,287
Program increase - next generation HMMWV shop equipment		
contact maintenance vehicle		120,000
128 TRACTOR, FULL TRACKED	29,878	29,878
129 ALL TERRAIN CRANES	27,725	35,725
Program increase - Type I all terrain cranes		8,000
131 FAMILY OF DIVER SUPPORT EQUIPMENT	1,811	1,811
132 CONST EQUIP ESP	8,898	6,534
Prior year underexecution		-2,364
133 ARMY WATERCRAFT ESP	30,592	30,592
134 MANEUVER SUPPORT VESSEL (MSV)	149,449	149,449
Functional transfer - two additional vessels		99,545
Functional transfer - cost to complete prior year vessels		49,904
Functional transfer - program delays		-149,449

71E

P-1	Budget Request	Final Bill
136 GENERATORS AND ASSOCIATED EQUIPMENT	78,364	78,364
137 TACTICAL ELECTRIC POWER RECAPITALIZATION Program increase - deployable power generation and distribution system power unit	11,088	19,088 8,000
138 FAMILY OF FORKLIFTS	12,982	12,982
139 COMBAT TRAINING CENTERS SUPPORT	56,619	56,619
140 TRAINING DEVICES, NONSYSTEM	226,379	226,379
141 SYNTHETIC TRAINING ENVIRONMENT (STE)	234,965	234,965
142 GAMING TECHNOLOGY IN SUPPORT OF ARMY TRAINING	9,698	9,698
143 INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)	36,149	36,149
144 TEST EQUIPMENT MODERNIZATION (TEMOD)	32,623	32,623
145 PHYSICAL SECURITY SYSTEMS (OPA-3)	132,739	132,739
146 BASE LEVEL COMMON EQUIPMENT	34,460	34,460
147 MODIFICATION OF IN-SVC EQUIPMENT (OPA-3) Program increase - rough terrain crane handler service life extension program	35,239	50,239 15,000
148 BUILDING, PRE-FAB, RELOCATABLE Excess to need	31,011	12,500 -18,511
149 SPECIAL EQUIPMENT FOR TEST AND EVALUATION	52,481	52,481
151 INITIAL SPARES - C&E	9,169	9,169
999 CLASSIFIED PROGRAMS	1,781	1,781
<b>TOTAL, OTHER PROCUREMENT, ARMY</b>	<b>8,672,979</b>	<b>8,626,297</b>

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## AIRCRAFT PROCUREMENT, NAVY

The agreement provides \$19,826,909,000 for Aircraft Procurement, Navy, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 72A-D

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 F/A-18E/F (FIGHTER) HORNET</b>	<b>41,329</b>	<b>41,329</b>
<b>2 JOINT STRIKE FIGHTER CV</b>	<b>2,410,569</b>	<b>2,441,698</b>
Excess to need - AME		-16,360
Excess to need - NRE		-32,159
Unit cost shortfalls		48,519
JPO requested functional transfer from line 3		31,129
<b>3 JOINT STRIKE FIGHTER CV (AP-CY)</b>	<b>189,425</b>	<b>158,296</b>
JPO requested functional transfer to line 2		-31,129
<b>4 JSF STOVL</b>	<b>2,126,317</b>	<b>2,161,079</b>
Excess to need - AME		-15,646
Excess to need - NRE		-27,020
Unit cost shortfalls		42,666
JPO requested functional transfer from line 5		34,762
<b>5 JSF STOVL (AP-CY)</b>	<b>193,125</b>	<b>158,363</b>
JPO requested functional transfer to line 4		-34,762
<b>6 CH-53K (HEAVY LIFT)</b>	<b>1,698,050</b>	<b>1,686,050</b>
Contract award delay		-12,000
<b>7 CH-53K (HEAVY LIFT) (AP-CY)</b>	<b>456,567</b>	<b>456,567</b>
<b>8 V-22 (MEDIUM LIFT)</b>	<b>27,216</b>	<b>694,916</b>
Production line shutdown early to need		-7,300
Program increase - five additional CMV-22		675,000
<b>9 H-1 UPGRADES (UH-1Y/AH-1Z)</b>	<b>4,292</b>	<b>4,292</b>
<b>10 P-8A POSEIDON</b>	<b>31,257</b>	<b>1,831,257</b>
Program increase - ten additional aircraft		1,800,000
<b>11 E-2D ADV HAWKEYE</b>	<b>182,817</b>	<b>571,100</b>
Production line shutdown early to need		-24,717
Program increase - two additional aircraft		413,000
<b>13 MULTI-ENGINE TRAINING SYSTEM (METS)</b>	<b>289,141</b>	<b>289,141</b>
<b>15 KC-130J</b>	<b>241,291</b>	<b>360,091</b>
Program increase - Navy unique fleet essential airlift logistics KC-130J (+1 A/C Reserve)		118,800
<b>17 MQ-4 TRITON</b>	<b>416,010</b>	<b>416,010</b>
<b>19 MQ-8 UAV</b>	<b>1,546</b>	<b>1,546</b>
<b>21 MQ-25</b>	<b>545,697</b>	<b>0</b>
Transfer funds to RDT&E, N line 164 in support of two SDTA aircraft due to MS C delays		-89,852
Ahead of need		-455,845
<b>22 MQ-25 (AP-CY)</b>	<b>50,576</b>	<b>11,979</b>
Previously funded		-38,597
<b>23 MARINE GROUP 5 UAS</b>	<b>89,563</b>	<b>86,063</b>
Ancillary equipment carryover		-3,500

72A

P-1	Budget Request	Final Bill
23A UC-12W(ER) Program increase - unfunded requirement for 3 UC-12W(ER) with cargo door	0	57,053 57,053
24 F-18 A-D UNIQUE 31C SCS excess growth	116,551	108,226 -8,325
25 F-18E/F AND EA-18G MODERNIZATION AND SUSTAINMENT	605,416	605,416
26 MARINE GROUP 5 UAS SERIES	98,063	98,063
27 AEA SYSTEMS Transmitters unit cost growth Program increase - ALQ-99 Low Band Airborne Electronic Attack	24,110	22,396 -4,214 2,500
28 AV-8 SERIES Historical underexecution	22,829	20,829 -2,000
29 INFRARED SEARCH AND TRACK (IRST)	179,193	179,193
30 ADVERSARY	69,336	69,336
31 F-18 SERIES F/A-18 C/D/E/F and EA-18G training equipment previously funded ECP--6506 CPOMS improvements installs ahead of need ECP--6486 SATCOM E/F installs previously funded ECP--6486 SATCOM G installs previously funded	640,236	626,461 -5,812 -1,573 -2,428 -3,962
32 H-53 SERIES	41,414	41,414
33 MH-60 SERIES MH-60R/S obsolescence excess to need	106,495	104,233 -2,262
34 H-1 SERIES Program increase - structural improvements	114,284	124,284 10,000
35 EP-3 SERIES	8,548	8,548
36 E-2 SERIES Radio obsolescence mitigation kits ahead of need Installs ahead of need	183,246	173,735 -4,921 -4,590
37 TRAINER A/C SERIES	16,376	16,376
39 C-130 SERIES BLOS B-Kit installation previously funded OSIP 019-14 GFE excess to need	198,220	191,760 -460 -6,000
40 FEWSG	651	651
41 CARGO/TRANSPORT A/C SERIES	13,930	13,930
42 E-6 SERIES HPTS A and B Kits previously funded Communications upgrade (OSIP 012-07) support costs previously funded Mission systems (OSIP 014-21) training costs unjustified Program increase - capability improvements	164,571	158,783 -5,727 -3,438 -4,064 7,441
43 EXECUTIVE HELICOPTERS SERIES	60,498	60,498
44 T-45 SERIES	170,357	170,357

P-1	Budget Request	Final Bill
45 POWER PLANT CHANGES	21,079	21,079
46 JPATS SERIES	28,005	28,005
48 COMMON ECM EQUIPMENT	53,614	53,614
49 COMMON AVIONICS CHANGES	136,199	136,199
50 COMMON DEFENSIVE WEAPON SYSTEM Program increase - aviation infrared laser aiming device	6,585	13,585 7,000
51 ID SYSTEMS	13,085	13,085
52 P-8 SERIES	316,168	316,168
53 MAGTF EW FOR AVIATION	24,901	24,901
54 MQ-8 SERIES	14,700	14,700
55 V-22 (TILT/ROTOR ACFT) OSPREY MV-22 readiness (OSIP 028-12) ECP 1206 APU K8/K9 improvement previously funded MV-22 readiness (OSIP 028-12) ECP 1115.1 conversion area harness previously funded MV-22 readiness ECP 1081 aft sponson fuel tank previously funded MV-22 readiness ECP 1196.1 coanda valve reliability improvement previously funded Other support cost previously funded	215,997	204,840 -1,221 -4,454 -1,457 -1,932 -2,093
56 NEXT GENERATION JAMMER (NGJ) Support equipment (OSIP 002-19) unjustified growth Contract savings	426,396	418,852 -5,024 -2,520
57 F-35 STOVL SERIES Early to need - Lot 19 modifications	311,921	259,412 -52,509
58 F-35 CV SERIES Early to need - Lot 19 modifications	166,909	126,909 -40,000
59 QRC	28,206	28,206
60 MQ-4 SERIES Increment 1 main and forward operating base upgrade previously funded OSIP (004-23) previously funded OSIP (003-23) installation ahead of need	93,951	72,334 -12,809 -3,128 -5,680
62 SPARES AND REPAIR PARTS Program increase - F-35B/C engine spares Program increase - CH-53K initial and outfitting spares	2,451,244	2,697,244 132,000 114,000
63 COMMON GROUND EQUIPMENT Hydraulics particle counter contract award delay Electrical AECTS replacement modification contract award delay Unit cost growth	566,156	559,253 -3,620 -2,717 -566
64 AIRCRAFT INDUSTRIAL FACILITIES Program increase - additive manufacturing tier 2 sustainment	133,815	137,815 4,000
65 WAR CONSUMABLES	44,632	44,632
66 OTHER PRODUCTION CHARGES	49,907	49,907

P-1	Budget Request	Final Bill
67 SPECIAL SUPPORT EQUIPMENT Classified adjustment	404,178	384,850 -19,328
TOTAL, AIRCRAFT PROCUREMENT, NAVY	17,336,760	19,826,909

72D

## WEAPONS PROCUREMENT, NAVY

The agreement provides \$5,876,828,000 for Weapons Procurement, Navy, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 73A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 CONVENTIONAL PROMPT STRIKE</b>	<b>341,434</b>	<b>0</b>
Early to need - procurement support costs		-33,290
Early to need - TI-22 AUR + C		-108,144
Transfer to RDT&E, N line 97		-200,000
<b>2 TRIDENT II MODS</b>	<b>1,284,705</b>	<b>1,284,705</b>
<b>3 MISSILE INDUSTRIAL FACILITIES</b>	<b>7,954</b>	<b>7,954</b>
<b>4 TOMAHAWK</b>	<b>72,908</b>	<b>77,908</b>
Program increase - Tomahawk supply chain		5,000
<b>5 AMRAAM</b>	<b>439,153</b>	<b>385,678</b>
Unjustified request		-53,475
<b>6 SIDEWINDER</b>	<b>78,165</b>	<b>68,306</b>
AUR Block II unit cost increase		-5,477
Captive air training block missile unit cost increase		-4,382
<b>7 STANDARD MISSILE</b>	<b>969,525</b>	<b>663,758</b>
Navy requested realignment to RDTE, N line 125		-12,600
Unjustified request		-169,268
Program increase - second source rocket motor		50,000
Block IB delays		-98,037
Block IA production delays		-75,862
<b>8 STANDARD MISSILE (AP-CY)</b>	<b>227,320</b>	<b>117,620</b>
Unjustified request		-109,700
<b>9 SMALL DIAMETER BOMB II</b>	<b>65,863</b>	<b>63,035</b>
AUR unit cost growth		-2,828
<b>10 RAM</b>	<b>114,896</b>	<b>114,896</b>
<b>11 JOINT AIR GROUND MISSILE (JAGM)</b>	<b>79,292</b>	<b>73,924</b>
JAGM AUR unit cost growth		-5,368
<b>12 HELLFIRE</b>	<b>6,923</b>	<b>6,923</b>
<b>13 AERIAL TARGETS</b>	<b>176,588</b>	<b>174,725</b>
EM203 GQM-163A excess unit cost		-1,863
<b>14 OTHER MISSILE SUPPORT</b>	<b>3,687</b>	<b>3,687</b>
<b>15 LRASM</b>	<b>639,636</b>	<b>599,636</b>
Navy requested transfer to RDT&E, N line 92 for LRASM C-3		-40,000
<b>16 NAVAL STRIKE MISSILE (NSM)</b>	<b>29,925</b>	<b>25,551</b>
Naval strike missile unit cost growth		-4,374
<b>17 NAVAL STRIKE MISSILE (NSM) (AP-CY)</b>	<b>5,755</b>	<b>5,755</b>
<b>18 TOMAHAWK MODS</b>	<b>540,944</b>	<b>437,424</b>
NAVCOMM A kits excess growth		-28,620
Classified adjustment		-74,900
<b>19 ESSM</b>	<b>290,129</b>	<b>290,129</b>

73A

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>20 AARGM-ER</b> Program increase - additional AURs	<b>162,429</b>	<b>167,429</b> 5,000
<b>21 AARGM-ER (AP-CY)</b>	<b>33,273</b>	<b>33,273</b>
<b>22 STANDARD MISSILES MODS</b> SM-2 BLK IIIC unit cost growth	<b>89,255</b>	<b>80,536</b> -8,719
<b>23 WEAPONS INDUSTRIAL FACILITIES</b> Program increase - energetics capacity for solid rocket motors	<b>2,037</b>	<b>21,037</b> 19,000
<b>25 ORDNANCE SUPPORT EQUIPMENT</b> Classified adjustment	<b>208,154</b>	<b>168,654</b> -39,500
<b>26 SSTD</b>	<b>4,830</b>	<b>4,830</b>
<b>27 MK-48 TORPEDO</b> Guidance and control previously funded Installation excess cost	<b>308,497</b>	<b>296,347</b> -10,332 -1,818
<b>28 ASW TARGETS</b> Program increase - alternative ASW training target	<b>14,817</b>	<b>24,817</b> 10,000
<b>29 MK-54 TORPEDO MODS</b>	<b>104,086</b>	<b>104,086</b>
<b>30 MK-48 TORPEDO ADCAP MODS</b>	<b>20,714</b>	<b>20,714</b>
<b>31 MARITIME MINES</b>	<b>58,800</b>	<b>58,800</b>
<b>32 TORPEDO SUPPORT EQUIPMENT</b>	<b>133,187</b>	<b>133,187</b>
<b>33 ASW RANGE SUPPORT</b>	<b>4,146</b>	<b>4,146</b>
<b>34 FIRST DESTINATION TRANSPORTATION</b>	<b>5,811</b>	<b>5,811</b>
<b>35 SMALL ARMS AND WEAPONS</b>	<b>14,165</b>	<b>14,165</b>
<b>36 CIWS MODS</b>	<b>4,088</b>	<b>4,088</b>
<b>37 COAST GUARD WEAPONS</b>	<b>55,172</b>	<b>55,172</b>
<b>38 GUN MOUNT MODS</b>	<b>82,682</b>	<b>82,682</b>
<b>39 LCS MODULE WEAPONS</b>	<b>3,264</b>	<b>3,264</b>
<b>40 AIRBORNE MINE NEUTRALIZATION SYSTEMS</b>	<b>14,357</b>	<b>14,357</b>
<b>42 SPARES AND REPAIR PARTS</b>	<b>177,819</b>	<b>177,819</b>
<b>TOTAL, WEAPONS PROCUREMENT, NAVY</b>	<b>6,876,385</b>	<b>5,876,828</b>



## PROCUREMENT OF AMMUNITION, NAVY AND MARINE CORPS

The agreement provides \$1,161,205,000 for Procurement of Ammunition, Navy and Marine Corps, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 74A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 GENERAL PURPOSE BOMBS</b>	<b>43,519</b>	<b>35,159</b>
Unjustified growth		-8,360
<b>2 JDAM</b>	<b>73,689</b>	<b>70,049</b>
Miscellaneous support excess growth		-3,640
<b>3 AIRBORNE ROCKETS, ALL TYPES</b>	<b>67,423</b>	<b>52,046</b>
MK 66 rocket motor unit cost growth		-12,196
Containers excess growth		-2,760
Smokey Sam excess unit cost growth		-421
<b>4 MACHINE GUN AMMUNITION</b>	<b>11,862</b>	<b>11,862</b>
<b>5 PRACTICE BOMBS</b>	<b>52,481</b>	<b>44,524</b>
Unjustified growth		-7,957
<b>6 CARTRIDGES &amp; CART ACTUATED DEVICES</b>	<b>72,426</b>	<b>72,426</b>
<b>7 AIR EXPENDABLE COUNTERMEASURES</b>	<b>104,529</b>	<b>89,369</b>
Dual band decoy contract award delay		-15,160
<b>8 JATOS</b>	<b>7,433</b>	<b>7,433</b>
<b>9 5 INCH/54 GUN AMMUNITION</b>	<b>30,871</b>	<b>10,871</b>
Insufficient justification		-20,000
<b>10 INTERMEDIATE CALIBER GUN AMMUNITION</b>	<b>41,261</b>	<b>27,870</b>
Unjustified growth		-13,391
<b>11 OTHER SHIP GUN AMMUNITION</b>	<b>44,044</b>	<b>39,595</b>
Unjustified growth		-4,449
<b>12 SMALL ARMS &amp; LANDING PARTY AMMO</b>	<b>48,478</b>	<b>48,478</b>
<b>13 PYROTECHNIC AND DEMOLITION</b>	<b>9,521</b>	<b>9,498</b>
Unjustified unit cost increase - Sig Kit MK 189, MOD 0		-23
<b>14 AMMUNITION LESS THAN \$5 MILLION</b>	<b>1,679</b>	<b>1,679</b>
<b>15 EXPEDITIONARY LOITERING MUNITIONS</b>	<b>249,575</b>	<b>249,575</b>
<b>16 MORTARS</b>	<b>61,274</b>	<b>54,851</b>
CA63 CTG mortar 81MM HE frag unit cost growth		-4,778
BA44 CTG mortar 60MM hardware unit cost growth		-1,645
<b>17 DIRECT SUPPORT MUNITIONS</b>	<b>73,338</b>	<b>53,898</b>
7.62mm training round excess to need		-435
Cartridge, 30mm 1 HEI-T MK266 / 1 MPLD-T MK264 linked excess to need		-4,619
Cartridge, 30mm APFSDS-T MK258 Mod 1 linked excess to need		-3,160
20mm training round excess to need		-994
84mm TPT (700) excess to need		-693
84mm anti structure unjustified unit cost growth		-5,954
Excess to need		-3,585

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P-1	Budget Request	Final Bill
<b>18 INFANTRY WEAPONS AMMUNITION</b>	<b>178,240</b>	<b>168,512</b>
B542, CTG, 40MM LNKD high explosive dual purpose hardware unit cost growth		-1,808
AB39, CTG, 7.62 millimeter, MK 316 mod contract award delay		-602
AC15, CAL .50 4 & 1 contract award delay		-3,315
Cartridge, 7.62mm ball M80 linked excess to need		-1,543
Cartridge, 9mm ball M882 excess to need		-225
Cartridge, caliber .50 4 API M8/1 API-T M20 linked excess to need		-157
Cartridge, 25mm TPDS-T M910 linked excess to need		-4,581
Cartridge, 5.56mm short range training M862 excess to need		-380
Cartridge, 9mm blank single round excess to need		-118
Cartridge, Caliber .50 Linked MK322 Mod 1/Ball (1000m cap) excess to need		-1,226
M1041 9mm marking (blue) excess to need		-95
M1041 9mm marking (red) excess to need		-90
Cartridge, 5.56mm M1042 practice ammunition rifle (blue) excess to need		-981
Cartridge, 5.56mm M1042 practice ammunition rifle (red) excess to need		-981
Excess to need		-626
Program increase - 40mm, Day/Night marker M1110		7,000
<b>19 COMBAT SUPPORT MUNITIONS</b>	<b>15,897</b>	<b>11,133</b>
GG20 Grenade, Hand Diversionary MK13 MOD excess to need		-894
G963 Grenade, Hand Riot CS M7A3 excess to need		-307
DWDN lightweight disposable disrupter excess to need		-467
Ground burst projectile simulator M115A2 excess to need		-3,096
<b>20 AMMO MODERNIZATION</b>	<b>17,941</b>	<b>17,941</b>
<b>21 ARTILLERY MUNITIONS</b>	<b>82,452</b>	<b>79,096</b>
M795 metal parts unjustified cost growth		-3,356
<b>22 ITEMS LESS THAN \$5 MILLION</b>	<b>5,340</b>	<b>5,340</b>
<b>TOTAL, PROCUREMENT OF AMMUNITION, NAVY AND MARINE CORPS</b>	<b>1,293,273</b>	<b>1,161,205</b>

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## SHIPBUILDING AND CONVERSION, NAVY

The agreement provides \$33,665,493,000 for Shipbuilding and Conversion, Navy, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 75A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 COLUMBIA CLASS SUBMARINE</b>	<b>2,443,598</b>	<b>2,443,598</b>
<b>2 COLUMBIA CLASS SUBMARINE (AP-CY)</b>	<b>3,390,734</b>	<b>3,390,734</b>
SSBN 828 AP (FF FY26)	[949,654]	[949,654]
SSBN 829 AP (FF FY27)	[1,299,280]	[1,299,280]
SSBN 830 AP (FF FY28)	[306,938]	[306,938]
SSBN 831 AP (FF FY29)	[134,009]	[134,009]
SSBN 832 AP (FF FY30)	[110,841]	[110,841]
SSBN 833 AP (FF FY31)	[7,953]	[7,953]
SSBN 834 AP (FF FY32)	[2,708]	[2,708]
SSBN 835 AP (FF FY33)	[4,930]	[4,930]
SSBN 836 AP (FF FY34)	[4,930]	[4,930]
SSBN 837 AP (FF FY35)	[569,491]	[569,491]
<b>3 CARRIER REPLACEMENT PROGRAM (CVN-80)</b>	<b>1,115,296</b>	<b>1,104,421</b>
Joint precision aircraft landing system early to need		-10,875
<b>4 CARRIER REPLACEMENT PROGRAM (CVN-81)</b>	<b>800,492</b>	<b>800,492</b>
<b>5 VIRGINIA CLASS SUBMARINE</b>	<b>7,129,965</b>	<b>7,129,965</b>
<b>6 VIRGINIA CLASS SUBMARINE (AP-CY)</b>	<b>3,215,539</b>	<b>3,158,782</b>
Long lead time CFE AP prior year execution delays		-56,757
<b>8 CVN REFUELING OVERHAULS (AP-CY)</b>	<b>817,646</b>	<b>488,446</b>
CVN 75 RCOH prior year execution delays		-329,200
<b>9 DDG 1000</b>	<b>410,400</b>	<b>392,892</b>
Mission systems activation unjustified growth		-17,508
<b>10 DDG-51</b>	<b>4,199,179</b>	<b>4,499,179</b>
Program increase - large surface combatant shipyard infrastructure		300,000
<b>11 DDG-51 (AP-CY)</b>	<b>284,035</b>	<b>1,641,335</b>
Program increase - advance procurement for additional FY25 DDG 51		1,280,000
Realignment of fiscal year 2023 funds for advance procurement of additional FY25 DDG 51		77,300
<b>13 FFG-FRIGATE</b>	<b>2,173,698</b>	<b>2,183,861</b>
GFE unjustified growth		-30,287
Change orders unjustified growth		-9,550
Program increase - frigate industrial base and workforce development		50,000
<b>15 LPD FLIGHT II (AP-CY)</b>	<b>0</b>	<b>500,000</b>
Program increase - advance procurement of LPD 33		250,000
Realignment of fiscal year 2023 funds for advance procurement of LPD 33		250,000
<b>18 LHA REPLACEMENT</b>	<b>1,830,149</b>	<b>1,830,149</b>
<b>21 AS SUBMARINE TENDER</b>	<b>1,733,234</b>	<b>0</b>
Program adjustment		-1,633,234
Transfer to RDN, line 45 for AS(X) design		-100,000

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<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>22 TAO FLEET OILER</b>	<b>815,420</b>	<b>815,420</b>
<b>23 TAGOS SURTASS SHIPS</b>	<b>0</b>	<b>513,466</b>
Transfer from line 32 - T-AGOS		355,166
Realignment of fiscal year 2022 funds for full funding of T-AGOS construction		158,300
<b>25 LCU 1700</b>	<b>62,532</b>	<b>62,532</b>
<b>26 OUTFITTING</b>	<b>557,365</b>	<b>512,019</b>
Outfitting early to need		-1,918
CVN 80 outfitting early to need		-4,096
CVN 74 RCOH outfitting excess growth		-17,862
DDG 129 outfitting early to need		-11,670
EPF 16 outfitting early to need		-3,822
T-AGS outfitting early to need		-5,978
<b>27 SHIP TO SHORE CONNECTOR</b>	<b>0</b>	<b>585,000</b>
Program increase - four additional SSC		585,000
<b>28 SERVICE CRAFT</b>	<b>63,815</b>	<b>93,815</b>
Program increase - one additional YRBM		30,000
<b>29 AUXILIARY PERSONNEL LIGHTER</b>	<b>0</b>	<b>72,000</b>
Program increase - one additional APL		72,000
<b>30 LCAC SLEP</b>	<b>15,286</b>	<b>15,286</b>
<b>31 AUXILIARY VESSELS (USED SEALIFT)</b>	<b>142,008</b>	<b>142,008</b>
<b>32 COMPLETION OF PY SHIPBUILDING PROGRAMS</b>	<b>1,648,559</b>	<b>1,290,093</b>
Transfer to line 23 - T-AGOS		-355,166
FY 2022 T-ATS CTC early to need		-3,300
<b>TOTAL, SHIPBUILDING AND CONVERSION, NAVY</b>	<b>32,848,950</b>	<b>33,665,493</b>

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## SUBMARINE CONSTRUCTION PERFORMANCE

Concerns remain about the VIRGINIA Class Submarine (VCS) construction cost and schedule performance, which impact not only the construction and delivery to the fleet of VCS, but also affect the COLUMBIA Class Submarine (COL) construction schedule. It is noted that the fiscal year 2024 President's budget request includes funds for cost overruns of VCSs procured in fiscal years 2015, 2016, and 2017, and that cost overruns on additional ongoing new VCS construction programs are expected to exceed \$3,000,000,000 in future years. The Secretary of the Navy is directed to submit to the congressional defense committees the most current cost and schedule estimates, by VCS and COL, with the submission of each annual President's budget request until delivery of the twelfth and final COLUMBIA hull. The report shall identify changes from the previous year, and include detailed explanations for all submarines not fully resourced to the Navy's cost estimate, as well as all projected cost-to-complete requirements for previously appropriated submarines.

Additionally, it is noted that in directing a comprehensive Navy shipbuilding review in January, the Secretary of the Navy stated, "I remain concerned with the lingering effects of post-pandemic conditions on our shipbuilders and their suppliers that continue to affect our shipbuilding programs, particularly our COLUMBIA Class Ballistic Missile Submarines...." The Secretary is directed to brief the congressional defense committees on the findings of this review within 30 days of completion. As part of this briefing, the Secretary is directed to identify the Department of the Navy's proposed near-term actions to prevent further SSBN-826 schedule delays, mid-term actions to stabilize production and enable on-time delivery of SSBN-827, and long-term actions to enable the on-time and on-budget delivery of SSBN-828 through SSBN-837.

Further, concerns remain with the technology maturity of certain COL subsystems, which could affect the construction and delivery timelines. Accordingly, the Senior Technical Authority for COL, as designated under section 8669b of title 10, United States Code, is directed to provide directly to the congressional defense committees quarterly updates on the technology readiness of key COL subsystems and components until SSBN-826 completes its first strategic deterrent patrol. These updates shall include, at a minimum, technology maturation metrics and identification of technical, schedule, or other significant issues for the following subsystems: stern area system, advanced carbon dioxide removal unit, integrated power system (including turbine generators), torpedo tubes, strategic weapons system, and such other subsystems or components as the Senior Technical Authority may designate.

Finally, the Comptroller General is directed to conduct a comprehensive review of the VCS program, including: (1) the current status of Block V construction relative to cost, schedule, quality and performance expectations as well as risks to successfully constructing future submarines; (2) the Navy's approach to contracting and funding for Block VI, including expected savings from a multiyear procurement strategy; (3) the Navy's ability to efficiently manage VCS construction during concurrent COL construction; (4) the Navy's strategy for providing VCS to Australia; and (5) the Navy's plans for SSN(X) development. The Comptroller General is directed to provide an update briefing on this comprehensive review to the congressional defense committees not later than October 1, 2024, to be followed with quarterly updates and the final report.



## OTHER PROCUREMENT, NAVY

The agreement provides \$14,385,665,000 for Other Procurement, Navy, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ Insert 78A-F

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 SURFACE POWER EQUIPMENT</b>	<b>14,003</b>	<b>12,864</b>
Propellers and shafts – DDG 1000 blade set cost growth		-1,139
<b>2 SURFACE COMBATANT HM&amp;E</b>	<b>105,441</b>	<b>99,337</b>
Ship control systems DDG 51 class cost growth		-6,104
<b>3 OTHER NAVIGATION EQUIPMENT</b>	<b>110,286</b>	<b>105,245</b>
Unjustified request		-5,041
<b>4 SUB PERISCOPE, IMAGING AND SUPT EQUIP PROG</b>	<b>262,951</b>	<b>262,951</b>
<b>5 DDG MOD</b>	<b>628,532</b>	<b>637,092</b>
Solid state radar equipment support costs excess growth		-2,940
Program increase - bromine free water systems		9,000
Program increase - artificial intelligence for ready relevant learning		2,500
<b>6 FIREFIGHTING EQUIPMENT</b>	<b>34,782</b>	<b>34,782</b>
<b>7 COMMAND AND CONTROL SWITCHBOARD</b>	<b>2,458</b>	<b>2,458</b>
<b>8 LHA/LHD MIDLIFE</b>	<b>104,369</b>	<b>102,403</b>
Amplified announcing system installation unjustified request		-1,966
<b>9 LCC 19/20 EXTENDED SERVICE LIFE PROGRAM</b>	<b>10,529</b>	<b>10,529</b>
<b>10 POLLUTION CONTROL EQUIPMENT</b>	<b>23,272</b>	<b>23,272</b>
<b>11 SUBMARINE SUPPORT EQUIPMENT</b>	<b>112,526</b>	<b>112,526</b>
<b>12 VIRGINIA CLASS SUPPORT EQUIPMENT</b>	<b>32,076</b>	<b>32,076</b>
<b>13 LCS CLASS SUPPORT EQUIPMENT</b>	<b>18,832</b>	<b>18,832</b>
<b>14 SUBMARINE BATTERIES</b>	<b>28,221</b>	<b>28,221</b>
<b>15 LPD CLASS SUPPORT EQUIPMENT</b>	<b>91,890</b>	<b>80,994</b>
Mid-life modernization NRE early to need		-4,156
HW/SW obsolescence installation cost growth		-6,740
<b>16 DDG 1000 CLASS SUPPORT EQUIPMENT</b>	<b>232,124</b>	<b>220,924</b>
SPECTRAL integration previously funded		-11,200
<b>17 STRATEGIC PLATFORM SUPPORT EQUIP</b>	<b>25,058</b>	<b>23,403</b>
SWSS (VAMP MOD 3) unjustified growth		-1,655
<b>18 DSSP EQUIPMENT</b>	<b>4,623</b>	<b>4,623</b>
<b>20 LCAC</b>	<b>10,794</b>	<b>10,794</b>
<b>21 UNDERWATER EOD EQUIPMENT</b>	<b>19,549</b>	<b>19,549</b>
<b>22 ITEMS LESS THAN \$5 MILLION</b>	<b>86,001</b>	<b>86,001</b>

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>23 CHEMICAL WARFARE DETECTORS</b>	<b>3,288</b>	<b>3,288</b>
<b>24 SHIP MAINTENANCE, REPAIR AND MODERNIZATION</b>	<b>2,746,313</b>	<b>2,514,988</b>
Early to need		-231,325
<b>25 REACTOR POWER UNITS</b>	<b>2,016</b>	<b>2,016</b>
<b>26 REACTOR COMPONENTS</b>	<b>390,148</b>	<b>390,148</b>
<b>27 DIVING AND SALVAGE EQUIPMENT</b>	<b>18,086</b>	<b>18,086</b>
<b>28 STANDARD BOATS</b>	<b>74,963</b>	<b>208,578</b>
Program increase - diesel fuel outboard motor testing		9,000
Program increase		124,615
<b>29 OPERATING FORCES IPE</b>	<b>187,495</b>	<b>210,888</b>
Prior year under execution		-6,607
Program increase - oily waste treatment systems		10,000
Program increase - submarine cradles to mitigate seismic risk during dry-docking availabilities		20,000
<b>30 LCS COMMON MISSION MODULES EQUIPMENT</b>	<b>49,060</b>	<b>49,060</b>
<b>31 LCS MCM MISSION MODULES</b>	<b>93,961</b>	<b>91,670</b>
Electromagnetic sweep cables contract award delay		-2,291
<b>33 LCS SUW MISSION MODULES</b>	<b>12,102</b>	<b>12,102</b>
<b>34 LCS IN-SERVICE MODERNIZATION</b>	<b>171,704</b>	<b>154,674</b>
Combat system installation excess growth		-17,030
<b>35 SMALL &amp; MEDIUM UUV</b>	<b>61,951</b>	<b>56,856</b>
MK 18 advanced sensor package previously funded		-5,095
<b>36 LSD MIDLIFE &amp; MODERNIZATION</b>	<b>7,594</b>	<b>7,594</b>
<b>37 SPQ-9B RADAR</b>	<b>7,267</b>	<b>7,267</b>
<b>38 AN/SQQ-89 SURF ASW COMBAT SYSTEM</b>	<b>138,065</b>	<b>138,065</b>
<b>39 SSN ACOUSTIC EQUIPMENT</b>	<b>463,577</b>	<b>463,577</b>
<b>40 UNDERSEA WARFARE SUPPORT EQUIPMENT</b>	<b>23,452</b>	<b>23,452</b>
<b>41 SUBMARINE ACOUSTIC WARFARE SYSTEM</b>	<b>46,726</b>	<b>41,726</b>
ADC MK3 non recurring unjustified request		-5,000
<b>42 SSTD</b>	<b>14,560</b>	<b>14,560</b>
<b>43 FIXED SURVEILLANCE SYSTEM</b>	<b>420,069</b>	<b>420,069</b>
<b>44 SURTASS</b>	<b>33,910</b>	<b>33,910</b>
<b>45 AN/SLQ-32</b>	<b>329,513</b>	<b>329,513</b>

P-1	Budget Request	Final Bill
46 SHIPBOARD IW EXPLOIT Modis ECP excess support growth	379,230	376,000 -3,230
47 AUTOMATED IDENTIFICATION SYSTEM (AIS)	4,082	4,082
48 COOPERATIVE ENGAGEMENT CAPABILITY	37,677	37,677
49 NAVAL TACTICAL COMMAND SUPPORT SYSTEM	15,374	15,374
50 ATDLS	50,148	50,148
51 NAVY COMMAND AND CONTROL SYSTEM	3,918	3,918
52 MINESWEEPING SYSTEM REPLACEMENT	16,814	16,814
54 NAVSTAR GPS RECEIVERS (SPACE)	37,319	37,319
55 AMERICAN FORCES RADIO AND TV SERVICE	2,750	2,750
56 STRATEGIC PLATFORM SUPPORT EQUIP	6,437	6,437
57 ASHORE ATC EQUIPMENT ATNAVICS precision approach radar replacement unit cost growth	89,237	88,173 -1,064
58 AFLOAT ATC EQUIPMENT AN/SPN-50(V)1 excess support costs	90,487	88,369 -2,118
59 ID SYSTEMS	59,234	59,234
60 JOINT PRECISION APPROACH AND LANDING SYSTEM	3,343	3,343
61 NAVAL MISSION PLANNING SYSTEMS Next generation naval mission planning system unjustified growth	39,180	34,750 -4,430
62 MARITIME INTEGRATED BROADCAST SYSTEM	6,994	6,994
63 TACTICAL/MOBILE C4I SYSTEMS	52,026	52,026
64 DCGS-N	16,579	16,579
65 CANES	467,587	467,587
66 RADIAC	16,475	16,475
67 CANES-INTELL	48,207	48,207
68 GPETE	25,761	25,761
69 MASF	16,475	16,475
70 INTEG COMBAT SYSTEM TEST FACILITY	6,345	6,345
71 EMI CONTROL INSTRUMENTATION	4,282	4,282

P-1	Budget Request	Final Bill
<b>73 IN-SERVICE RADARS AND SENSORS</b>	<b>255,256</b>	<b>290,413</b>
I-Stalker install cost excess growth		-2,054
Program increase - next generation surface search radar additional units		58,000
SPEIR Block I early to need		-20,789
<b>74 BATTLE FORCE TACTICAL NETWORK</b>	<b>74,180</b>	<b>74,180</b>
<b>75 SHIPBOARD TACTICAL COMMUNICATIONS</b>	<b>29,776</b>	<b>29,776</b>
<b>76 SHIP COMMUNICATIONS AUTOMATION</b>	<b>96,916</b>	<b>96,916</b>
<b>77 COMMUNICATIONS ITEMS UNDER \$5M</b>	<b>14,107</b>	<b>14,107</b>
<b>78 SUBMARINE BROADCAST SUPPORT</b>	<b>73,791</b>	<b>73,791</b>
<b>79 SUBMARINE COMMUNICATION EQUIPMENT</b>	<b>83,178</b>	<b>83,178</b>
<b>80 SATELLITE COMMUNICATIONS SYSTEMS</b>	<b>72,871</b>	<b>72,903</b>
Commercial broadband satellite program support costs growth		-2,668
Program increase - concurrent multi-link antenna		2,700
<b>81 NAVY MULTIBAND TERMINAL (NMT)</b>	<b>37,921</b>	<b>37,921</b>
<b>82 JOINT COMMUNICATIONS SUPPORT ELEMENT</b>	<b>5,065</b>	<b>3,858</b>
Unjustified growth		-1,207
<b>83 INFO SYSTEMS SECURITY PROGRAM (ISSP)</b>	<b>154,890</b>	<b>153,716</b>
Key management afloat support costs growth		-1,174
<b>84 MIO INTEL EXPLOITATION TEAM</b>	<b>1,079</b>	<b>1,079</b>
<b>85 CRYPTOLOGIC COMMUNICATIONS EQUIP</b>	<b>17,483</b>	<b>17,483</b>
<b>86 COAST GUARD EQUIPMENT</b>	<b>77,458</b>	<b>73,458</b>
Historical underexecution		-4,000
<b>88 SONOBUOYS - ALL TYPES</b>	<b>311,177</b>	<b>311,177</b>
<b>89 MINOTAUR</b>	<b>5,396</b>	<b>5,396</b>
<b>90 WEAPONS RANGE SUPPORT EQUIPMENT</b>	<b>147,556</b>	<b>147,556</b>
<b>91 AIRCRAFT SUPPORT EQUIPMENT</b>	<b>162,273</b>	<b>161,203</b>
Lightweight matting contract award delay		-1,070
<b>92 ADVANCED ARRESTING GEAR (AAG)</b>	<b>11,930</b>	<b>11,930</b>
<b>93 ELECTROMAGNETIC AIRCRAFT LAUNCH SYSTEM</b>	<b>17,836</b>	<b>17,836</b>
<b>94 METEOROLOGICAL EQUIPMENT</b>	<b>19,703</b>	<b>19,703</b>
<b>95 LEGACY AIRBORNE MCM</b>	<b>12,202</b>	<b>8,452</b>
Modifications insufficient justification		-3,750
<b>97 AVIATION SUPPORT EQUIPMENT</b>	<b>82,115</b>	<b>82,115</b>
<b>98 UMCS-UNMAN CARRIER AVIATION MISSION CNTRL</b>	<b>152,687</b>	<b>143,713</b>
UCA transport system unit cost growth		-1,974
Historical underexecution		-7,000

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>99 ARCHITECT &amp; CAP FOR AUTONOMY IN NAV ENTER</b>	<b>1,612</b>	<b>1,612</b>
<b>100 SHIP GUN SYSTEMS EQUIPMENT</b>	<b>6,404</b>	<b>6,404</b>
<b>101 HARPOON SUPPORT EQUIPMENT</b>	<b>227</b>	<b>227</b>
<b>102 SHIP MISSILE SUPPORT EQUIPMENT</b>	<b>294,511</b>	<b>280,563</b>
SPY radar refurbishment excess growth		-9,432
NATO SEASPARROW acquisition strategy adjustment		-1,134
SSDS ship unit cost savings		-3,382
<b>103 TOMAHAWK SUPPORT EQUIPMENT</b>	<b>92,432</b>	<b>92,432</b>
<b>104 STRATEGIC MISSILE SYSTEMS EQUIP</b>	<b>325,318</b>	<b>322,738</b>
Fire control SSI increment 15 production unit cost growth		-2,580
<b>105 SSN COMBAT CONTROL SYSTEMS</b>	<b>133,063</b>	<b>133,063</b>
<b>106 ASW SUPPORT EQUIPMENT</b>	<b>27,469</b>	<b>37,319</b>
Program increase - Secure Autonomous Data Link for Undersea Warfare (USW) Portable Ranges (SADL-UP)		9,850
<b>107 EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT</b>	<b>27,864</b>	<b>27,864</b>
<b>108 ITEMS LESS THAN \$5 MILLION</b>	<b>6,171</b>	<b>6,171</b>
<b>109 ANTI-SHIP MISSILE DECOY SYSTEM</b>	<b>56,630</b>	<b>56,630</b>
<b>110 SUBMARINE TRAINING DEVICE MODS</b>	<b>76,954</b>	<b>76,954</b>
<b>111 SURFACE TRAINING EQUIPMENT</b>	<b>209,487</b>	<b>207,369</b>
MB040 BFTT/ATD/TSTC installation excess growth		-2,118
<b>112 PASSENGER CARRYING VEHICLES</b>	<b>3,827</b>	<b>3,827</b>
<b>113 GENERAL PURPOSE TRUCKS</b>	<b>4,570</b>	<b>4,570</b>
<b>114 CONSTRUCTION &amp; MAINTENANCE EQUIP</b>	<b>56,829</b>	<b>60,829</b>
Program increase - GPS-based machine control systems		4,000
<b>115 FIRE FIGHTING EQUIPMENT</b>	<b>16,583</b>	<b>16,583</b>
<b>116 TACTICAL VEHICLES</b>	<b>24,236</b>	<b>24,236</b>
<b>117 AMPHIBIOUS EQUIPMENT</b>	<b>4,504</b>	<b>4,504</b>
<b>118 POLLUTION CONTROL EQUIPMENT</b>	<b>3,898</b>	<b>3,898</b>
<b>119 ITEMS LESS THAN \$5 MILLION</b>	<b>67,286</b>	<b>67,286</b>
<b>120 PHYSICAL SECURITY VEHICLES</b>	<b>1,286</b>	<b>1,286</b>
<b>121 SUPPLY EQUIPMENT</b>	<b>33,258</b>	<b>33,258</b>
<b>122 FIRST DESTINATION TRANSPORTATION</b>	<b>6,977</b>	<b>6,977</b>
<b>123 SPECIAL PURPOSE SUPPLY SYSTEMS</b>	<b>659,529</b>	<b>659,529</b>

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>124 TRAINING SUPPORT EQUIPMENT</b>	<b>2,083</b>	<b>2,083</b>
<b>125 TRAINING AND EDUCATION EQUIPMENT</b>	<b>106,542</b>	<b>106,542</b>
<b>126 COMMAND SUPPORT EQUIPMENT</b>	<b>44,448</b>	<b>44,448</b>
<b>127 MEDICAL SUPPORT EQUIPMENT</b> Program increase - fleet hospital program	<b>12,529</b>	<b>17,529</b> 5,000
<b>129 NAVAL MIP SUPPORT EQUIPMENT</b>	<b>5,408</b>	<b>5,408</b>
<b>130 OPERATING FORCES SUPPORT EQUIPMENT</b>	<b>12,105</b>	<b>12,105</b>
<b>131 C4ISR EQUIPMENT</b>	<b>7,670</b>	<b>7,670</b>
<b>132 ENVIRONMENTAL SUPPORT EQUIPMENT</b>	<b>52,597</b>	<b>52,597</b>
<b>133 PHYSICAL SECURITY EQUIPMENT</b> C-UAS unjustified growth	<b>108,901</b>	<b>104,973</b> -3,928
<b>134 ENTERPRISE INFORMATION TECHNOLOGY</b>	<b>42,154</b>	<b>42,154</b>
<b>139 NEXT GENERATION ENTERPRISE SERVICE</b>	<b>177,585</b>	<b>177,585</b>
<b>140 CYBERSPACE ACTIVITIES</b> Persistent cyber training environment unjustified request	<b>23,176</b>	<b>14,176</b> -9,000
<b>142 SPARES AND REPAIR PARTS</b>	<b>645,900</b>	<b>645,900</b>
<b>143 VIRGINIA CLASS (VACL) SPARES AND REPAIR PARTS</b>	<b>470,000</b>	<b>470,000</b>
<b>999 CLASSIFIED PROGRAMS</b> Classified adjustment	<b>16,290</b>	<b>17,990</b> 1,700
<b>UNDISTRIBUTED REDUCTION</b>	<b>0</b>	<b>-9,566</b>
<b>TOTAL, OTHER PROCUREMENT, NAVY</b>	<b>14,535,257</b>	<b>14,385,665</b>

## PROCUREMENT, MARINE CORPS

The agreement provides \$3,904,532,000 for Procurement, Marine Corps, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 79A-C



**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 AAV7A1 PIP</b>	<b>3,353</b>	<b>3,353</b>
<b>2 AMPHIBIOUS COMBAT VEHICLE FAMILY OF VEHICLES</b> Production support excess growth	<b>557,564</b>	<b>554,009</b> -3,555
<b>3 LAV PIP</b>	<b>42,052</b>	<b>42,052</b>
<b>4 155MM LIGHTWEIGHT TOWED HOWITZER</b>	<b>489</b>	<b>489</b>
<b>5 ARTILLERY WEAPONS SYSTEM</b> Unit cost growth unjustified	<b>165,268</b>	<b>160,060</b> -5,208
<b>6 WEAPONS AND COMBAT VEHICLES UNDER \$5 MILLION</b>	<b>14,004</b>	<b>14,004</b>
<b>7 TOMAHAWK</b> Carryover	<b>105,192</b>	<b>93,648</b> -11,544
<b>8 NAVAL STRIKE MISSILE (NSM)</b>	<b>169,726</b>	<b>169,726</b>
<b>9 NAVAL STRIKE MISSILE (NSM) (AP-CY)</b>	<b>39,244</b>	<b>39,244</b>
<b>10 GROUND BASED AIR DEFENSE</b> Lightweight marine air defense system contract award delay Program increase - medium range intercept capability Program increase	<b>249,103</b>	<b>280,018</b> -4,585 4,500 31,000
<b>11 ANTI-ARMOR MISSILE-JAVELIN</b> LWCLU surcharge unjustified	<b>54,883</b>	<b>53,640</b> -1,243
<b>12 FAMILY ANTI-ARMOR WEAPON SYSTEMS (FOAAWS)</b> Unit cost growth	<b>23,627</b>	<b>20,608</b> -3,019
<b>13 ANTI-ARMOR MISSILE-TOW</b>	<b>2,007</b>	<b>2,007</b>
<b>14 GUIDED MLRS ROCKET (GMLRS)</b>	<b>8,867</b>	<b>8,867</b>
<b>15 COMMON AVIATION COMMAND AND CONTROL SYSTEM</b> Engineering/fielding support excess growth AN/TSQ-297 small form factor unit cost growth	<b>75,382</b>	<b>72,214</b> -2,474 -694
<b>16 REPAIR AND TEST EQUIPMENT</b>	<b>53,590</b>	<b>53,590</b>
<b>17 MODIFICATION KITS</b>	<b>1,782</b>	<b>1,782</b>
<b>18 ITEMS UNDER \$5 MILLION (COMM &amp; ELEC)</b> SBNVG unit cost growth	<b>122,917</b>	<b>115,016</b> -7,901
<b>19 AIR OPERATIONS C2 SYSTEMS</b> CTN system production cost growth ECPs excess growth	<b>23,744</b>	<b>18,714</b> -2,786 -2,244
<b>20 GROUND/AIR TASK ORIENTED RADAR (G/ATOR)</b>	<b>66,291</b>	<b>66,291</b>
<b>21 ELECTRO MAGNETIC SPECTRUM OPERATIONS (EMSO)</b> MEGFoS dismounted backpackable systems early to need MEGFoS dismounted small form factor early to need Transfer to RDTE, N line 218 for small form factor acceleration	<b>177,270</b>	<b>133,117</b> -34,637 -6,516 -3,000

P-1	Budget Request	Final Bill
22 GCSS-MC	4,144	4,144
23 FIRE SUPPORT SYSTEM Mobile shelter modernization contract award delay	58,483	55,308 -3,175
24 INTELLIGENCE SUPPORT EQUIPMENT	148,062	148,062
26 UNMANNED AIR SYSTEMS (INTEL) Long range/ long endurance unit cost growth Short range/ short endurance unit cost growth	52,273	48,252 -2,302 -1,719
27 DCGS-MC Program increase - Distributed Common Ground/Surface System- Marine Corps All-Source SCI workstations	68,289	73,419 5,130
28 UAS PAYLOADS	19,088	19,088
31 EXPEDITIONARY SUPPORT EQUIPMENT	2,010	2,010
32 MARINE CORPS ENTERPRISE NETWORK (MCEN) Network transport excess growth	259,044	238,358 -20,686
33 COMMON COMPUTER RESOURCES	27,966	27,966
34 COMMAND POST SYSTEMS Unit cost growth	71,109	69,143 -1,966
35 RADIO SYSTEMS LRS FoS TEAMS II independent mast contract award delay	544,059	512,512 -31,547
36 COMM SWITCHING & CONTROL SYSTEMS	46,276	46,276
37 COMM & ELEC INFRASTRUCTURE SUPPORT	27,111	27,111
38 CYBERSPACE ACTIVITIES	27,583	27,583
40 UNMANNED EXPEDITIONARY SYSTEMS	13,564	13,564
43 COMMERCIAL CARGO VEHICLES	34,169	34,169
44 MOTOR TRANSPORT MODIFICATIONS	17,299	17,299
45 JOINT LIGHT TACTICAL VEHICLE Vehicle kits previously funded Test support excess to need	232,501	221,657 -6,600 -4,244
46 TRAILERS Program increase - Project 7/11 modular operations cells	2,034	17,034 15,000
47 TACTICAL FUEL SYSTEMS	12,956	12,956
48 POWER EQUIPMENT ASSORTED Lack of requirement	28,899	26,449 -2,450
49 AMPHIBIOUS SUPPORT EQUIPMENT	15,691	15,691
50 EOD SYSTEMS Program increase - demolition equipment set	41,200	44,200 3,000
51 PHYSICAL SECURITY EQUIPMENT	53,949	53,949

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>52 FIELD MEDICAL EQUIPMENT</b>	<b>5,457</b>	<b>13,957</b>
Program increase - damage control resuscitation and damage control surgery equipment		8,500
<b>53 TRAINING DEVICES</b>	<b>96,577</b>	<b>101,577</b>
Program increase - individual combat aircrew display system		5,000
<b>54 FAMILY OF CONSTRUCTION EQUIPMENT</b>	<b>29,883</b>	<b>29,883</b>
<b>55 ULTRA-LIGHT TACTICAL VEHICLE (ULTV)</b>	<b>17,034</b>	<b>13,319</b>
Hardware and support costs previously funded		-3,715
<b>56 ITEMS LESS THAN \$5 MILLION</b>	<b>27,691</b>	<b>48,691</b>
Program increase - Ultra-Lightweight Camouflage Net System		21,000
<b>57 SPARES AND REPAIR PARTS</b>	<b>35,657</b>	<b>35,657</b>
<b>999 CLASSIFIED PROGRAMS</b>	<b>2,799</b>	<b>2,799</b>
<b>TOTAL, PROCUREMENT MARINE CORPS</b>	<b>3,979,212</b>	<b>3,904,532</b>

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## AIRCRAFT PROCUREMENT, AIR FORCE

The agreement provides \$20,828,306,000 for Aircraft Procurement, Air Force, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 80A-D

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 B-21 RAIDER</b>	<b>1,617,093</b>	<b>1,562,693</b>
Classified adjustment		-54,400
<b>2 B-21 RAIDER (AP-CY)</b>	<b>708,000</b>	<b>708,000</b>
<b>3 F-35</b>	<b>4,877,121</b>	<b>5,237,889</b>
Program increase - three F-35A aircraft		277,353
JPO requested functional transfer from line 4		83,415
Unit cost shortfalls		103,740
Excess to need - NRE		-63,371
Excess to need - AME		-40,369
<b>4 F-35 (AP-CY)</b>	<b>402,000</b>	<b>318,585</b>
JPO requested functional transfer to line 3		-83,415
<b>5 F-15EX</b>	<b>2,670,039</b>	<b>2,431,261</b>
Unjustified growth		-38,420
Air Force requested transfer to line 81 for F-15EX depot activation		-36,460
Early to need - depot activation		-43,450
Early to need - retrofit funding		-40,648
Air Force requested technical adjustment to line 25A for F-15EX		-79,800
<b>6 F-15EX (AP-CY)</b>	<b>228,000</b>	<b>228,000</b>
<b>7 KC-46A MDAP</b>	<b>2,882,590</b>	<b>2,783,927</b>
GFE (LAIRCM) previously funded		-4,821
Cost overestimation - other government costs		-9,071
Phase program growth - commodities activation		-48,110
Excess to need		-36,661
<b>8 C-130J</b>	<b>34,921</b>	<b>1,153,521</b>
Program increase - eight additional aircraft for the Air National Guard		840,000
Program increase - shortfall adjustment		278,600
<b>11 MH-139A</b>	<b>228,807</b>	<b>223,201</b>
Unjustified growth		-5,606
<b>12 COMBAT RESCUE HELICOPTER</b>	<b>282,533</b>	<b>597,408</b>
Program increase - ten aircraft		400,000
Reduce carryover - obsolescence		-34,175
Reduce duplicative funding - sustaining engineering and program management		-32,600
Unjustified growth - training systems		-18,350
<b>13 CIVIL AIR PATROL A/C</b>	<b>3,013</b>	<b>11,900</b>
Program increase		8,887
<b>15 TARGET DRONES</b>	<b>42,226</b>	<b>34,526</b>
Excess to need - QF-16		-7,700

80 A

P-1	Budget Request	Final Bill
17 E-11 BACN/HAG	67,367	67,367
19 B-2A	107,980	92,400
LO signature mods previously funded		-2,565
IFF mode 5/S installation ahead of need		-6,215
Contract savings - display modernization		-4,700
Early to need		-2,100
20 B-1B	12,757	9,782
Early to need - radio crypto modernization		-2,975
21 B-52	65,815	26,936
VLF/LF delays		-10,383
Air Force requested transfer to RDT&E, AF line 145		-14,017
Reduce carryover		-3,417
Tactical data link unjustified growth		-11,062
22 LARGE AIRCRAFT INFRARED COUNTERMEASURES	21,723	21,723
24 E-11 BACN/HAG	58,923	56,923
Other government costs unjustified request		-1,000
FFRDC support unjustified request		-1,000
25 F-15	34,830	28,580
Reduce carryover - advanced display core processor		-6,250
25A F-15EX	0	79,800
Air Force requested technical adjustment from line 5		79,800
26 F-16	297,342	250,548
Overestimation of SLEP induction rate		-30,393
Reduce carryover - communication suite upgrades		-16,401
27 F-22A	794,676	359,679
Sensor enhancement contract award delays		-434,997
28 F-35 MODIFICATIONS	451,798	329,398
Early to need - Lot 19 modifications		-122,400
29 F-15 EPAW	280,658	221,339
Depot activation ahead of need		-12,000
Installation excess to need		-22,010
Unjustified growth - program management		-16,100
Cost overestimation - production kits		-9,209
31 C-5	24,377	22,187
Lavatory installation unjustified growth		-2,190
32 C-17A	140,560	120,710
Schedule delays - beyond line of sight		-19,850
33 C-32A	19,060	19,060
34 C-37A	13,454	13,454

8013

P-1	Budget Request	Final Bill
35 GLIDER MODS	5,270	5,270
36 T-6	2,942	2,942
37 T-1	10,950	10,950
38 T-38	125,340	115,340
Installs ahead of need		-10,000
40 U-2 MODS	54,727	54,727
42 C-12	446	446
44 VC-25A MOD	29,707	29,707
45 C-40	8,921	8,921
46 C-130	71,177	91,177
Program increase - improved modular airborne firefighting system		20,000
47 C-130J MODS	121,258	111,958
CWR ahead of need		-4,000
Block 8.1 other government costs unjustified growth		-5,300
48 C-135	153,595	117,591
Ahead of need		-11,744
Unjustified growth		-24,260
49 COMPASS CALL	144,686	144,686
50 COMBAT FLIGHT INSPECTION - CFIN	446	446
51 RC-135	220,138	220,138
52 E-3	1,350	1,350
53 E-4	13,055	13,055
56 H-1	816	816
57 H-60	4,207	4,207
60 HC/MC-130 MODIFICATIONS	101,055	101,055
61 OTHER AIRCRAFT	54,134	73,403
Air Force requested transfer from line 66 for full combat mission trainers		11,619
Air Force requested transfer from RDT&E,AF Line 95 for Sentinel		7,650
62 MQ-9 MODS	98,063	98,063
64 SENIOR LEADER C3 SYSTEM - AIRCRAFT	24,847	24,347
C-37 installation cost adjustment		-500

80C

P-1	Budget Request	Final Bill
65 CV-22 MODS	153,006	153,006
66 INITIAL SPARES/REPAIR PARTS	781,521	865,790
Air Force requested transfer to line 61 for full combat mission trainers		-11,619
Program increase - F-35A engine spares		132,000
Contract delays - KC-46A spares		-36,112
67 AIRCRAFT REPLACEMENT SUPPORT EQUIPMENT	157,664	172,347
Program increase - future pilot training center beddown (MUNS equipment)		2,683
Program increase - training and equipment for KC-135 classic associations		12,000
68 B-2A	1,838	1,838
69 B-2B	15,207	15,207
72 MC-130J	10,117	10,117
74 F-16	1,075	6,984
Program increase - future pilot training center beddown (F-16 post production support)		5,909
75 F-22A	38,418	38,418
79 INDUSTRIAL RESPONSIVENESS	18,874	18,874
80 WAR CONSUMABLES	27,482	23,126
ALE-70 towed decoy unit cost adjustment		-4,356
81 OTHER PRODUCTION CHARGES	1,478,044	1,264,042
Combat training range system pods unit cost adjustment		-1,951
Air Force requested transfer from line 5 for F-15EX depot activation		36,460
Classified adjustment		-204,102
Early to need - T-7 depot activation funding		-44,409
999 CLASSIFIED PROGRAMS	17,165	17,165
<b>TOTAL, AIRCRAFT PROCUREMENT, AIR FORCE</b>	<b>20,315,204</b>	<b>20,828,306</b>

80 D



#### AIR FORCE DIVESTMENTS

It is understood that the Air Force intends to replace fighter air wings selected for legacy divestitures with a flying mission when possible. However, it is further understood that in some instances, a non-flying replacement mission has been identified to replace legacy divestitures, and that resources must be budgeted effectively to ensure the success of such follow-on missions.

Therefore, the Secretary of the Air Force is directed to submit a report to the congressional defense committees, not later than 60 days after the enactment of this Act, identifying the resources requested in the fiscal year 2025 President's budget request and the associated future years defense program that support the stand-up of new capabilities at air wings slated for divestiture of legacy platforms.

#### C-130J RECAPITALIZATION

The agreement includes an increase of \$840,000,000 for eight additional C-130J aircraft for the Air National Guard, to replace existing C-130H aircraft. There is concern that if air wings are directed to operate a mixed fleet of C-130Hs and C-130Js, that could increase local maintenance burdens and decrease the overall readiness of the force. Therefore, the Secretary of the Air Force is directed to, through the existing Strategic Basing Process, prioritize upgrading existing C-130H squadrons with C-130J aircraft at a one-to-one ratio.

## MISSILE PROCUREMENT, AIR FORCE

The agreement provides \$4,693,647,000 for Missile Procurement, Air Force, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 82A-B

# EXPLANATION OF PROJECT LEVEL ADJUSTMENTS

[In thousands of dollars]

P-1	Budget Request	Final Bill
1 MISSILE REPLACEMENT EQUIPMENT-BALLISTIC (M30GLG) PTR unjustified unit cost growth	69,319	63,059 -6,260
3 GROUND BASED STRATEGIC DETERRENT Transfer to RDT&E,AF line 95	539,300	0 -539,300
4 LONG RANGE STAND-OFF WEAPON	66,816	66,816
5 REPLACEMENT EQUIPMENT & WAR CONSUMABLES DCSA production units unjustified cost growth Program increase - future pilot training center beddown (MUNS equipment) Program increase - future pilot training center beddown (F-16 support equipment)	37,318	33,844 -6,367 1,478 1,415
6 JOINT AIR-SURFACE STANDOFF MISSILE Contract modification phasing	915,996	868,596 -47,400
7 JOINT AIR-SURFACE STANDOFF MISSILE	769,672	769,672
8 JOINT STRIKE MISSILE F-35 integration ahead of need	161,011	159,511 -1,500
9 LRASM0	87,796	87,796
10 LRASM0 (AP-CY)	99,871	99,871
11 SIDEWINDER (AIM-9X)	95,643	95,643
12 AMRAAM	489,049	489,049
13 AMRAAM (AP-CY) Unjustified request	212,410	53,103 -159,307
14 PREDATOR HELLFIRE MISSILE	1,049	1,049
15 SMALL DIAMETER BOMB	48,734	48,734
16 SMALL DIAMETER BOMB II	291,553	291,553
17 STAND-IN ATTACK WEAPON (SIAW)	41,947	41,947
18 INDUSTRIAL PREPAREDNESS	793	793
19 ICBM FUZE MOD	115,745	115,745
20 ICBM FUZE MOD (AP-CY)	43,044	43,044
21 MINUTEMAN III MODIFICATIONS Ahead of need	48,639	43,239 -5,400

82 A

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>22 AIR LAUNCH CRUISE MISSILE</b>	<b>41,494</b>	<b>38,930</b>
CATIKS unjustified cost growth		-968
GMFC equipment unjustified cost growth		-1,596
<b>23 MISSILE SPARES / REPAIR PARTS (INITIAL)</b>	<b>6,840</b>	<b>6,840</b>
<b>24 MISSILE SPARES / REPAIR PARTS (REPLEN)</b>	<b>75,191</b>	<b>75,191</b>
<b>29 SPECIAL UPDATE PROGRAMS</b>	<b>419,498</b>	<b>347,904</b>
Classified adjustment		-71,594
<b>999 CLASSIFIED PROGRAMS</b>	<b>851,718</b>	<b>851,718</b>
<b>TOTAL, MISSILE PROCUREMENT, AIR FORCE</b>	<b>5,530,446</b>	<b>4,693,647</b>

42B

## PROCUREMENT OF AMMUNITION, AIR FORCE

The agreement provides \$589,943,000 for Procurement of Ammunition, Air Force, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 83A

# EXPLANATION OF PROJECT LEVEL ADJUSTMENTS

[In thousands of dollars]

P-1	Budget Request	Final Bill
<b>1 ROCKETS</b>	<b>18,483</b>	<b>18,483</b>
<b>2 CARTRIDGES</b>	<b>101,104</b>	<b>94,773</b>
Unjustified increase - small cal/ground munitions		-2,863
Excess to need - Ctg, 25mm, TP (PGU-23/U)		-3,468
<b>4 GENERAL PURPOSE BOMBS</b>	<b>142,118</b>	<b>107,154</b>
Previously funded items		-14,855
Excess to need - MK84 fin assembly		-500
Excess to need - BDU-50/B		-18,859
Excess to need - BDU-33		-750
<b>5 MASSIVE ORDNANCE PENETRATOR</b>	<b>14,074</b>	<b>1,250</b>
Excess to need - Massive Ordnance Penetrator		-12,824
<b>6 JOINT DIRECT ATTACK MUNITION</b>	<b>132,364</b>	<b>100,672</b>
PSC other government costs unjustified growth		-3,877
Excess to need - JDAM tail kit		-27,815
<b>7 B-61</b>	<b>68</b>	<b>0</b>
Program adjustment		-68
<b>8 B-61 TRAINER</b>	<b>10,100</b>	<b>10,100</b>
<b>9 CAD/PAD</b>	<b>51,487</b>	<b>51,487</b>
<b>10 EXPLOSIVE ORDNANCE DISPOSAL</b>	<b>6,707</b>	<b>6,707</b>
<b>11 SPARES AND REPAIR PARTS</b>	<b>585</b>	<b>585</b>
<b>13 FIRST DESTINATION TRANSPORTATION</b>	<b>2,299</b>	<b>2,299</b>
<b>14 ITEMS LESS THAN \$5,000,000</b>	<b>5,115</b>	<b>5,115</b>
<b>15 EXPENDABLE COUNTERMEASURES</b>	<b>79,786</b>	<b>79,786</b>
<b>16 FUZES</b>	<b>109,562</b>	<b>82,226</b>
Historic underexecution		-27,336
<b>17 SMALL ARMS</b>	<b>29,306</b>	<b>29,306</b>
<b>TOTAL, PROCUREMENT OF AMMUNITION, AIR FORCE</b>	<b>703,158</b>	<b>589,943</b>

## OTHER PROCUREMENT, AIR FORCE

The agreement provides \$31,327,131,000 for Other Procurement, Air Force, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 84A-D

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 PASSENGER CARRYING VEHICLES</b>	<b>6,123</b>	<b>6,123</b>
<b>2 MEDIUM TACTICAL VEHICLE</b>	<b>3,961</b>	<b>3,961</b>
<b>3 CAP VEHICLES</b>	<b>1,027</b>	<b>2,000</b>
Program increase		973
<b>4 CARGO AND UTILITY VEHICLES</b>	<b>45,036</b>	<b>47,910</b>
Air Force requested transfer from line 11		328
Air Force requested transfer from OM,AF line 11R		1,974
Program increase - future pilot training center beddown (BOST vehicles)		269
Program increase - future pilot training center beddown (F-35 support)		184
Program increase - future pilot training center beddown (F-16 support)		119
<b>5 JOINT LIGHT TACTICAL VEHICLE</b>	<b>57,780</b>	<b>42,615</b>
Unjustified unit cost growth		-15,165
<b>6 SECURITY AND TACTICAL VEHICLES</b>	<b>390</b>	<b>390</b>
<b>7 SPECIAL PURPOSE VEHICLES</b>	<b>79,023</b>	<b>82,560</b>
Truck tank fuels 1200 gal unjustified unit cost growth		-7,628
Air Force requested transfer from line 11		340
Air Force requested transfer from OM,AF line 11R		3,440
Program increase - future pilot training center beddown (BOST vehicles)		1,769
Program increase - future pilot training center beddown (F-35 support)		221
Program increase - future pilot training center beddown (F-16 support)		395
Program increase - R-11 refuelers for arctic operations		5,000
<b>8 FIRE FIGHTING/CRASH RESCUE VEHICLES</b>	<b>70,252</b>	<b>71,412</b>
Program increase - future pilot training center beddown (BOST vehicles)		1,160
<b>9 MATERIALS HANDLING VEHICLES</b>	<b>73,805</b>	<b>76,000</b>
Air Force requested transfer from line 11		285
Air Force requested transfer from OM,AF line 11R		1,805
Program increase - future pilot training center beddown (BOST vehicles)		105
<b>10 RUNWAY SNOW REMOV AND CLEANING EQU</b>	<b>22,030</b>	<b>34,375</b>
Program increase - future pilot training center beddown (BOST vehicles)		345
Program increase - snow removal equipment for arctic operations		12,000
<b>11 BASE MAINTENANCE SUPPORT VEHICLES</b>	<b>223,354</b>	<b>245,634</b>
Air Force requested transfer to line 4		-328
Air Force requested transfer to line 7		-340
Air Force requested transfer to line 9		-285
Air Force requested transfer from OM,AF line 11R		18,233
Program increase - base maintenance vehicles for arctic operations		5,000
<b>13 COMSEC EQUIPMENT</b>	<b>98,600</b>	<b>86,836</b>
KIV-78 ahead of need		-11,764

(84 A)



<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>15 INTERNATIONAL INTEL TECH &amp; ARCHITECTURES</b>	<b>5,393</b>	<b>5,393</b>
<b>16 INTELLIGENCE TRAINING EQUIPMENT</b>	<b>5,012</b>	<b>5,012</b>
<b>17 INTELLIGENCE COMM EQUIPMENT</b>	<b>40,042</b>	<b>40,042</b>
<b>18 AIR TRAFFIC CONTROL &amp; LANDING SYS</b> Manportable TACAN readiness support costs unjustified	<b>67,581</b>	<b>65,578</b> -2,003
<b>19 NATIONAL AIRSPACE SYSTEM</b>	<b>3,841</b>	<b>3,841</b>
<b>20 BATTLE CONTROL SYSTEM - FIXED</b>	<b>1,867</b>	<b>1,867</b>
<b>22 3D EXPEDITIONARY LONG-RANGE RADAR</b> Unjustified growth Program increase - additional three-dimensional expeditionary long range radars and spares	<b>83,735</b>	<b>178,723</b> -5,012  100,000
<b>23 WEATHER OBSERVATION FORECAST</b> Numerical weather modeling previously funded	<b>28,530</b>	<b>27,530</b> -1,000
<b>24 STRATEGIC COMMAND AND CONTROL</b>	<b>73,593</b>	<b>73,593</b>
<b>25 CHEYENNE MOUNTAIN COMPLEX</b>	<b>8,221</b>	<b>8,221</b>
<b>26 MISSION PLANNING SYSTEMS</b> Unjustified cost growth	<b>17,078</b>	<b>14,254</b> -2,824
<b>29 STRATEGIC MISSION PLANNING &amp; EXECUTION SYSTEM</b>	<b>3,861</b>	<b>3,861</b>
<b>30 GENERAL INFORMATION TECHNOLOGY</b> Program increase - four remote simulator instructor stations Full combat mission training unjustified request Air Force requested transfer from OM,AF line 12A for mission partner environment nodes Tactical Data Networks Enterprise - high capacity backbone contract termination	<b>206,142</b>	<b>175,093</b> 3,000 -28,800  30,951 -36,200
<b>31 AF GLOBAL COMMAND &amp; CONTROL SYS</b>	<b>2,582</b>	<b>2,582</b>
<b>32 BATTLEFIELD AIRBORNE CONTROL NODE (BACN)</b> Program adjustment	<b>30</b>	<b>0</b> -30
<b>33 MOBILITY COMMAND AND CONTROL</b>	<b>3,768</b>	<b>3,768</b>
<b>34 AIR FORCE PHYSICAL SECURITY SYSTEM</b> Program delays OSD requested transfer from P,DW line 2 Program increase - integrated base defense security system community cybersecurity	<b>208,704</b>	<b>256,311</b> -2,893 46,500  4,000
<b>35 COMBAT TRAINING RANGES</b> P6 combat training system ahead of need	<b>346,340</b>	<b>332,543</b> -13,797

P-1	Budget Request	Final Bill
<b>36 MINIMUM ESSENTIAL EMERGENCY COMM</b>	<b>84,102</b>	<b>74,909</b>
GASNTi2 FFRDC support unjustified		-2,470
GASNTi2 HEMP contract award delay		-5,546
GASNTi2 non-HEMP contract award delay		-2,714
Program increase - future pilot training center beddown (MUNS equipment)		1,537
<b>37 WIDE AREA SURVEILLANCE (WAS)</b>	<b>11,594</b>	<b>11,594</b>
<b>38 C3 COUNTERMEASURES</b>	<b>148,818</b>	<b>148,818</b>
<b>44 AIR &amp; SPACE OPERATIONS CENTER (AOC)</b>	<b>5,032</b>	<b>5,032</b>
<b>46 BASE INFORMATION TRANSPT INFRAST (BITI) WIRED</b>	<b>108,532</b>	<b>322,704</b>
Air Force requested transfer from OM,AF line 11Z		214,172
<b>47 AFNET</b>	<b>154,911</b>	<b>152,618</b>
CSCS PMA previously funded		-2,293
<b>48 JOINT COMMUNICATIONS SUPPORT ELEMENT</b>	<b>5,381</b>	<b>5,381</b>
<b>49 USCENTCOM</b>	<b>18,025</b>	<b>11,896</b>
Unjustified growth		-6,129
<b>50 USSTRATCOM</b>	<b>4,436</b>	<b>4,436</b>
<b>51 USSPACECOM</b>	<b>27,073</b>	<b>20,773</b>
Ahead of need		-6,300
<b>52 TACTICAL C-E EQUIPMENT</b>	<b>226,819</b>	<b>220,348</b>
Early to need - operational control system (BAO Kit)		-55
Unjustified growth - mobile communications system		-6,416
<b>53 RADIO EQUIPMENT</b>	<b>30,407</b>	<b>31,607</b>
Program increase - future pilot training center beddown (ELMR)		1,200
<b>54 BASE COMM INFRASTRUCTURE</b>	<b>113,563</b>	<b>103,945</b>
Unjustified growth		-9,618
<b>55 COMM ELECT MODS</b>	<b>98,224</b>	<b>115,224</b>
Program increase - ARCHER North Warning System		17,000
<b>56 PERSONAL SAFETY AND RESCUE EQUIPMENT</b>	<b>60,473</b>	<b>61,473</b>
Program increase - in-flight pilot physiological monitoring		1,000
<b>57 POWER CONDITIONING EQUIPMENT</b>	<b>9,235</b>	<b>9,235</b>
<b>58 MECHANIZED MATERIAL HANDLING EQUIPMENT</b>	<b>15,662</b>	<b>12,181</b>
Storage aid system unjustified unit cost growth		-1,521
Material storage and distribution system unjustified unit cost growth		-1,960

(84C)

P-1	Budget Request	Final Bill
<b>59 BASE PROCURED EQUIPMENT</b>	<b>77,875</b>	<b>60,526</b>
Program increase - critical arctic munitions storage		4,300
Projects funded out of cycle		-26,916
Unjustified growth		-10,733
Program increase - civil engineering survey equipment		10,000
Program increase - disaster relief mobile kitchen trailer		5,000
Program increase - training and equipment for KC-135 classic association		1,000
<b>60 ENGINEERING AND EOD EQUIPMENT</b>	<b>280,734</b>	<b>293,968</b>
Air Force requested transfer from OM,AF line 12Q for RDS and RIIDS		2,284
Air Force requested transfer from OM,AF line 11R		5,950
Program increase - EOD directed energy systems (RADBO)		5,000
<b>61 MOBILITY EQUIPMENT</b>	<b>207,071</b>	<b>161,338</b>
Air Force requested transfer from OM,AF line 11R		25,200
Lack of justification		-70,933
<b>62 FUELS SUPPORT EQUIPMENT</b>	<b>218,790</b>	<b>144,271</b>
Cost growth		-11,257
Schedule discrepancies		-63,262
<b>63 BASE MAINTENANCE AND SUPPORT EQUIPMENT</b>	<b>51,914</b>	<b>58,597</b>
Program increase - future pilot training center beddown (F-16 support equipment)		1,683
Program increase - long-range radar site battery energy storage system		5,000
<b>65 DARP RC135</b>	<b>28,882</b>	<b>28,882</b>
<b>66 DCGS-AF</b>	<b>129,655</b>	<b>129,655</b>
<b>70 SPECIAL UPDATE PROGRAM</b>	<b>1,042,833</b>	<b>1,042,833</b>
<b>999 CLASSIFIED PROGRAMS</b>	<b>25,456,490</b>	<b>26,183,199</b>
Classified adjustment		726,709
<b>71 SPARES AND REPAIR PARTS (CYBER)</b>	<b>1,032</b>	<b>1,032</b>
<b>72 SPARES AND REPAIR PARTS</b>	<b>12,628</b>	<b>12,628</b>
<b>TOTAL, OTHER PROCUREMENT, AIR FORCE</b>	<b>30,417,892</b>	<b>31,327,131</b>

(84D)

## PROCUREMENT, SPACE FORCE

The agreement provides \$4,064,948,000 for Procurement, Space Force, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 85A-B

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 AF SATELLITE COMM SYSTEM</b>	<b>64,345</b>	<b>64,345</b>
<b>3 COUNTERSPACE SYSTEMS</b>	<b>52,665</b>	<b>50,165</b>
Underexecution		-2,500
<b>4 FAMILY OF BEYOND LINE-OF-SIGHT TERMINALS</b>	<b>25,057</b>	<b>25,057</b>
<b>5 FABT FORCE ELEMENT TERMINAL</b>	<b>121,634</b>	<b>113,084</b>
Management services excess to need		-8,550
<b>7 GENERAL INFORMATION TECH - SPACE</b>	<b>3,451</b>	<b>3,451</b>
<b>8 GPSIII FOLLOW ON</b>	<b>119,700</b>	<b>59,148</b>
Underexecution		-11,252
Unjustified request		-49,300
<b>9 GPS III SPACE SEGMENT</b>	<b>121,770</b>	<b>103,670</b>
Unjustified growth - SV03-10 production		-18,100
<b>10 GLOBAL POSTIONING (SPACE)</b>	<b>893</b>	<b>893</b>
<b>11 HERITAGE TRANSITION</b>	<b>6,110</b>	<b>0</b>
Contract award delay		-6,110
<b>12 JOINT TACTICAL GROUND STATIONS</b>	<b>580</b>	<b>580</b>
<b>13 SPACEBORNE EQUIP (COMSEC)</b>	<b>83,168</b>	<b>50,766</b>
Excess to need		-32,402
<b>14 MILSATCOM</b>	<b>44,672</b>	<b>44,672</b>
<b>15 SBIR HIGH (SPACE)</b>	<b>39,438</b>	<b>34,589</b>
Underexecution		-4,849
<b>16 SPECIAL SPACE ACTIVITIES</b>	<b>840,913</b>	<b>379,578</b>
Classified adjustment		-461,335
<b>17 MOBILE USER OBJECTIVE SYSTEM</b>	<b>101,147</b>	<b>101,147</b>
<b>18 NATIONAL SECURITY SPACE LAUNCH</b>	<b>2,142,846</b>	<b>2,097,246</b>
Cost savings		-45,600
<b>20 PTES HUB</b>	<b>56,482</b>	<b>50,225</b>
Underexecution		-6,257
<b>21 ROCKET SYSTEMS LAUNCH PROGRAM</b>	<b>74,848</b>	<b>71,757</b>
Historical underexecution		-3,091

P-1	Budget Request	Final Bill
22 SPACE DEVELOPMENT AGENCY LAUNCH	529,468	529,468
23 SPACE MODS	166,596	166,596
24 SPACELIFT RANGE SYSTEM SPACE	114,505	114,505
25 SPARES AND REPAIR PARTS	906	906
26 POWER CONDITIONING EQUIPMENT	3,100	3,100
TOTAL, PROCUREMENT, SPACE FORCE	4,714,294	4,064,948

#### NATIONAL SECURITY SPACE LAUNCH

The agreement directs the Secretary of Defense and the Director of National Intelligence to utilize the Space Force launch enterprise phase 2 contract or phase 3 contract upon award for all National Security Space Launch class missions unless they certify to the congressional defense and intelligence committees that commercial launch or delivery on orbit procurement for a designated mission is in the national security interest of the United States government and outline the rationale for such a determination.

## PROCUREMENT, DEFENSE-WIDE

The agreement provides \$6,392,675,000 for Procurement, Defense-Wide, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 87 A-D



**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

P-1	Budget Request	Final Bill
1 MAJOR EQUIPMENT, DPAA	516	516
2 MAJOR EQUIPMENT, OSD	286,006	408,006
Program increase - APFIT		200,000
Program increase - hearing protection		30,000
Program decrease - Mentor Protégé Program underexecution		-8,000
Air Force physical security systems - OSD requested transfer to OP,AF line 34		-46,500
Counter small unmanned aerial system - OSD requested transfer to OP,A line 76		-21,250
Warrior systems <\$5M - OSD requested transfer to P,DW line 75		-32,250
11 INFORMATION SYSTEMS SECURITY	12,275	10,012
Thunderdome ahead of need		-2,263
12 TELEPORT PROGRAM	42,399	34,399
SOMSAT insufficient justification		-8,000
14 ITEMS LESS THAN \$5 MILLION	47,538	47,538
15 DEFENSE INFORMATION SYSTEM NETWORK	39,472	44,172
Program increase - unified video dissemination system for INDOPACOM		4,700
16 WHITE HOUSE COMMUNICATION AGENCY	118,523	111,123
Ahead of need		-7,400
17 SENIOR LEADERSHIP ENTERPRISE	94,591	94,591
18 JOINT REGIONAL SECURITY STACKS (JRSS)	22,714	22,714
19 JOINT SERVICE PROVIDER	107,637	102,637
Program growth insufficient justification		-5,000
20 FOURTH ESTATE NETWORK OPTIMIZATION (4ENO)	33,047	29,677
Agency migrations late contract awards		-3,370
28 MAJOR EQUIPMENT	30,355	30,134
PCMV lack of acquisition plan		-221
29 MAJOR EQUIPMENT	2,135	2,135
30 MAJOR EQUIPMENT, TJS	3,747	3,747
31 THAAD	216,782	216,782
33 AEGIS BMD	374,756	374,756
35 BMDS AN/TPY-2 RADARS	29,108	29,108
36 SM-3 IAS	432,824	432,824
37 ARROW 3 UPPER TIER SYSTEMS	80,000	80,000
38 SHORT RANGE BALLISTIC MISSILE DEFENSE (SRBMD)	40,000	40,000

P-1	Budget Request	Final Bill
39 DEFENSE OF GUAM PROCUREMENT	169,627	169,627
40 AEGIS ASHORE PHASE III	2,390	2,390
41 IRON DOME	80,000	80,000
42 AEGIS BMD HARDWARE AND SOFTWARE	27,825	27,825
43 PERSONNEL ADMINISTRATION	3,704	3,704
46 VEHICLES	366	356
Early to need		-10
47 OTHER MAJOR EQUIPMENT	12,787	12,787
48 DTRA CYBER ACTIVITIES	21,413	19,964
Ahead of need		-1,449
49 AUTOMATION/EDUCATIONAL SUPPORT & LOGISTICS	1,358	1,358
50 MAJOR EQUIPMENT	13,012	13,012
51 CYBERSPACE OPERATIONS	129,082	93,980
Unjustified growth - DMSS		-4,445
Unjustified growth - joint common access platform		-22,159
Unjustified growth - training		-8,498
53 ARMED OVERWATCH/TARGETING	266,846	264,688
Support equipment previously funded		-2,158
54 MANNED ISR	7,000	6,000
Low cost modifications carryover		-1,000
55 MC-12	600	600
57 ROTARY WING UPGRADES AND SUSTAINMENT	261,012	270,366
Program increase - degraded visual environment pilotage system		15,000
ASE B-kits early to need		-5,646
58 UNMANNED ISR	26,997	29,497
Program increase - SOCOM ISR		2,500
59 NON-STANDARD AVIATION	25,782	20,782
Unjustified request - theater basing initiatives		-5,000
60 U-28	7,198	5,915
Low cost modifications unjustified growth		-1,283
61 MH-47 CHINOOK	149,883	224,283
Program increase - SOCOM operational loss		74,400
62 CV-22 MODIFICATION	75,981	75,981
63 MQ-9 UNMANNED AERIAL VEHICLE	17,684	17,684
64 PRECISION STRIKE PACKAGE	108,497	104,380
B-kits unit cost growth		-4,117

<b>P-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>65 AC/MC-130J</b>	<b>319,754</b>	<b>312,921</b>
Program increase - MC-130J airborne mission networking upgrades		10,000
RFCM A-kit unit cost growth		-833
RFCM interim contractor support previously funded		-1,000
RFCM tech refresh early to need		-15,000
<b>66 C-130 MODIFICATIONS</b>	<b>18,796</b>	<b>18,796</b>
<b>67 UNDERWATER SYSTEMS</b>	<b>66,111</b>	<b>73,111</b>
Program increase - deep submergence collective propulsion		7,000
<b>68 ORDNANCE ITEMS &lt;\$5M</b>	<b>147,831</b>	<b>147,033</b>
GOPSS man-packable PSS munitions unit cost growth		-798
<b>69 INTELLIGENCE SYSTEMS</b>	<b>203,400</b>	<b>208,400</b>
Program increase - family of unmanned ground systems		5,000
<b>70 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS</b>	<b>5,718</b>	<b>5,718</b>
<b>71 OTHER ITEMS &lt;\$5M</b>	<b>108,816</b>	<b>106,131</b>
BDP light early to need		-1,685
Integration excess growth		-1,000
<b>72 COMBATANT CRAFT SYSTEMS</b>	<b>55,064</b>	<b>55,064</b>
<b>73 SPECIAL PROGRAMS</b>	<b>20,412</b>	<b>20,412</b>
<b>74 TACTICAL VEHICLES</b>	<b>56,561</b>	<b>66,561</b>
Program increase - GMV 1.1		10,000
<b>75 WARRIOR SYSTEMS &lt;\$5M</b>	<b>329,837</b>	<b>408,700</b>
Program increase - CUAS group 3 defeat acceleration		40,613
Program increase - enhanced night vision devices		1,000
Program increase - resilient waveform communications		5,000
Program increase - OSD requested transfer from line 2		32,250
<b>76 COMBAT MISSION REQUIREMENTS</b>	<b>4,987</b>	<b>4,987</b>
<b>77 OPERATIONAL ENHANCEMENTS INTELLIGENCE</b>	<b>23,639</b>	<b>23,639</b>
<b>78 OPERATIONAL ENHANCEMENTS</b>	<b>322,341</b>	<b>322,341</b>
<b>79 CHEMICAL BIOLOGICAL SITUATIONAL AWARENESS</b>	<b>159,884</b>	<b>149,631</b>
Aerosol and vapor chemical agent detector early to need		-2,458
Joint bio tactical detection system early to need		-7,025
Joint chemical agent detector solid liquid adaptor unit cost savings		-770
<b>80 CB PROTECTION &amp; HAZARD MITIGATION</b>	<b>231,826</b>	<b>239,255</b>
Program increase - protective clothing		2,000
Program increase - smallpox antiviral treatment		10,000
Advanced anticonvulsant system support cost excess growth		-432
Special purpose unit rapid capability development and deployment early to need		-3,756
Uniform integrated protective ensemble family of systems air excess engineering support growth		-383

P-1	Budget Request	Final Bill
999 CLASSIFIED PROGRAMS Classified adjustment	658,529	669,925 11,396
TOTAL, PROCUREMENT, DEFENSE-WIDE	6,156,975	6,392,675

87D

## DEFENSE PRODUCTION ACT PURCHASES

The agreement provides \$587,905,000 for Defense Production Act Purchases, as follows:

### EXPLANATION OF PROJECT LEVEL ADJUSTMENTS [In thousands of dollars]

	Budget Request	Final Bill
<b>DEFENSE PRODUCTION ACT PURCHASES</b>	<b>968,605</b>	<b>578,905</b>
Program increase - aluminum-scandium master alloy production		10,000
Program increase - domestic aluminum casting		23,000
Program increase - heavy forging capacity improvement program		8,000
Program increase - manufacturing of hypersonic components		5,000
Program increase - new domestic source of solid rocket motor production and modernization at scale		14,300
Program increase - secure composite shipping containers		9,000
Execution risk		-450,000
<b>TOTAL, DEFENSE PRODUCTION ACT PURCHASES</b>	<b>968,605</b>	<b>587,905</b>

### DEFENSE PRODUCTION ACT EXECUTABILITY AND OVERSIGHT

The agreement notes that unobligated balances for the Defense Production Act have significantly increased in the past four fiscal years, which results in delayed industrial capacity expansion and uncertainty to the defense industrial base regarding the Department's plans. It is expected that funding appropriated to the Defense Production Act Purchases account continue to conform to the purposes communicated to the House and Senate Defense Appropriations Subcommittees during review of the fiscal year 2024 President's budget request, and that any changes to the Department's plans be communicated to the same Subcommittees not less than 30 days prior to execution of funds.

### PRINTED CIRCUIT BOARDS

It is noted that printed circuit boards are key components of advanced defense technologies and that a strong domestic defense industrial base includes the ability to fabricate printed circuit boards. It is understood that the Department of Defense intends to use the Defense Production Act Purchases account to address domestic industrial base shortfalls for printed circuit boards in fiscal year 2024. The Secretary of Defense is encouraged to prioritize Defense Production Act investments in support of domestic printed circuit board fabrication.

## NATIONAL GUARD AND RESERVE EQUIPMENT

The agreement provides \$1,000,000,000 for National Guard and Reserve Equipment, as follows:

### EXPLANATION OF PROJECT LEVEL ADJUSTMENTS (In thousands of dollars)

	Budget Request	Final Bill
<b>ARMY NATIONAL GUARD</b>	<b>0</b>	<b>310,000</b>
Program increase - miscellaneous equipment		310,000
<b>AIR NATIONAL GUARD</b>	<b>0</b>	<b>300,000</b>
Program increase - miscellaneous equipment		300,000
<b>ARMY RESERVE</b>	<b>0</b>	<b>155,000</b>
Program increase - miscellaneous equipment		155,000
<b>NAVY RESERVE</b>	<b>0</b>	<b>57,000</b>
Program increase - miscellaneous equipment		57,000
<b>MARINE CORPS RESERVE</b>	<b>0</b>	<b>23,000</b>
Program increase - miscellaneous equipment		23,000
<b>AIR FORCE RESERVE</b>	<b>0</b>	<b>155,000</b>
Program increase - miscellaneous equipment		155,000
<b>TOTAL, NATIONAL GUARD AND RESERVE EQUIPMENT</b>	<b>0</b>	<b>1,000,000</b>

## NATIONAL GUARD AND RESERVE EQUIPMENT

The agreement includes an appropriation of \$1,000,000,000 for the National Guard and Reserve Equipment Account. Of that amount, \$310,000,000 is for the Army National Guard; \$300,000,000 is for the Air National Guard; \$155,000,000 is for the Army Reserve; \$57,000,000 is for the Navy Reserve; \$23,000,000 is for the Marine Corps Reserve; and \$155,000,000 is for the Air Force Reserve to meet urgent equipment needs in the coming fiscal year. The agreement includes direction for the component commanders of the Army Reserve, Navy Reserve, Marine Forces Reserve, Air Force Reserve, Army National Guard, and Air National Guard to submit to the congressional defense committees a detailed assessment of their component's modernization priorities, not later than 30 days after the enactment of this Act.

The Secretary of Defense is directed to ensure that the National Guard and Reserve Equipment Account is executed by the Chiefs of the National Guard and reserve components with priority consideration given to the following items: acoustic hailing devices; aircraft survivability equipment and weapons training aids; aircraft wash systems; aviation fleet management dashboard software; crash-worthy, ballistically tolerant auxiliary fuel systems for UH-60 helicopters; degraded visual environment systems; F-16 simulators; high mobility multi-purpose wheeled vehicle modernization; KC-135 aircraft emergency response refuel equipment kits; KC-135 aircrew ground cooling units; land surveying systems; laser chemical threat detection systems; lightweight, rapidly deployable, computer-based artillery call for fire training and simulation; litter stabilization systems; M917A3 heavy dump trucks; modern acoustic and thermal aviation blankets; modular small arms ranges and small arms training simulators and tools; secure enterprise, emergency, and social communication; software defined radios; UH-72A/B mission equipment modernization; upgraded commercial-off-the-shelf ground mapping for C-130 aircraft; and vehicle-mounted, man-portable radiological nuclear detection systems.

#### AIRCRAFT TRAINING SIMULATORS

Not later than 30 days after the submission of the fiscal year 2025 President's budget request, the Chief of Staff of the Air Force, in coordination with the Chief of the National Guard Bureau, shall provide documentation to the congressional defense committees, illustrating how they have programmed appropriately for the sufficient resourcing of aircraft training simulators, to include simulators for F-16s, for the Air National Guard in accordance with current Department of the Air Force policy regarding concurrent and proportional modernization to ensure total force readiness.

#### **TITLE IV - RESEARCH, DEVELOPMENT, TEST AND EVALUATION**

The agreement provides \$148,320,479,000 in Title IV, Research, Development, Test and Evaluation, as follows:

~~(INSERT RDTE SUMMARY TABLE)~~ (Insert 91A



(DOLLARS IN THOUSANDS)

	BUDGET REQUEST	FINAL BILL
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RECAPITULATION		
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY.....	15,775,381	17,115,037
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY.....	26,922,225	27,964,807
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE.	46,565,356	47,340,416
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, SPACE FORCE.....	19,199,340	18,669,844
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE.....	36,085,834	36,892,886
OPERATIONAL TEST AND EVALUATION, DEFENSE.....	331,489	337,489
	=====	=====
GRAND TOTAL, RESEARCH, DEVELOPMENT, TEST AND EVALUATION.....	144,879,625	148,320,479

#### REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

The Secretary of Defense is directed to continue to follow the reprogramming guidance as specified in the report accompanying the House version of the Department of Defense Appropriations bill for Fiscal Year 2008 (House Report 110-279). Specifically, the dollar threshold for reprogramming funds shall be \$15,000,000 for procurement and research, development, test and evaluation.

Also, the Under Secretary of Defense (Comptroller) is directed to continue to provide the congressional defense committees quarterly, spreadsheet-based DD Form 1416 reports for Service and defense-wide accounts in titles III and IV of this Act. Reports for titles III and IV shall comply with the guidance specified in the explanatory statement accompanying the Department of Defense Appropriations Act, 2006. The Department shall continue to follow the limitation that prior approval reprogrammings are set at either the specified dollar threshold or 20 percent of the procurement or research, development, test and evaluation line, whichever is less. These thresholds are cumulative from the base for reprogramming value as modified by any adjustments. Therefore, if the combined value of transfers into or out of a procurement (P-1) or research, development, test and evaluation (R-1) line exceeds the identified threshold, the Secretary of Defense must submit a prior approval reprogramming to the congressional defense committees. In addition, guidelines on the application of prior approval reprogramming procedures for congressional special interest items are established elsewhere in this statement.

#### FUNDING INCREASES

The funding increases outlined in these tables shall be provided only for the specific purposes indicated in the tables. Additional guidance is provided in the overview of this explanatory statement.

#### RESEARCH, DEVELOPMENT, TEST AND EVALUATION SPECIAL INTEREST ITEMS

Items for which additional funds have been recommended or items for which funding is specifically reduced as shown in the project level tables detailing recommended adjustments or in paragraphs using the phrase "only for" or "only to" in the joint explanatory statement are congressional special interest items for the purpose of the Base for Reprogramming (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the stated amount, as specifically addressed elsewhere in the joint explanatory statement.

#### RAPID ACQUISITION AUTHORITY

Section 229 of the National Defense Authorization Act for Fiscal Year 2024 (Public Law 118-31) provided new rapid acquisition authorities to the Secretaries of the military departments. Section 8139 of this Act restates the applicable funding limitations from section 3601 of title 10, United States Code. The agreement notes that, over the past fiscal year, Rapid Acquisition Authority notifications required by law have not been timely or comprehensive. The Secretary of Defense is directed to provide a briefing to the House and Senate Defense Appropriations Subcommittees, not later than 30 days after the enactment of this Act, that describes how the utilization of Rapid Acquisition Authority will be communicated in a more complete and timely fashion in fiscal year 2024 and thereafter.

## RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

The agreement provides \$17,115,037,000 for Research, Development, Test and Evaluation, Army, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 94A-P)

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 DEFENSE RESEARCH SCIENCES</b>	<b>296,670</b>	<b>334,670</b>
Program increase - joint research laboratories		18,000
Program increase - quantum computing center		10,000
Program increase - development of crystalline porous materials		5,000
Program increase - unmanned aerial systems hybrid propulsion		5,000
<b>2 UNIVERSITY RESEARCH INITIATIVES</b>	<b>75,672</b>	<b>85,672</b>
Program increase - cyber autonomy range		3,000
Program increase - soldier touchpoint center		7,000
<b>3 UNIVERSITY AND INDUSTRY RESEARCH CENTERS</b>	<b>108,946</b>	<b>124,946</b>
Program increase - renewable energy technologies		5,000
Program increase - biotechnology advancements		1,000
Program increase - materials in extreme dynamic environments		5,000
Program increase - quantum and photonics research		5,000
<b>4 CYBER COLLABORATIVE RESEARCH ALLIANCE</b>	<b>5,459</b>	<b>5,459</b>
<b>ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING BASIC</b>	<b>10,708</b>	<b>10,708</b>
<b>5 RESEARCH</b>		
<b>ARMY AGILE INNOVATION AND DEVELOPMENT-APPLIED</b>	<b>5,613</b>	<b>1,000</b>
<b>6 RESEARCH</b>		
Undefined requirement		-4,613
<b>8 COUNTER IMPROVISED-THREAT ADVANCED STUDIES</b>	<b>6,242</b>	<b>6,242</b>
<b>9 LETHALITY TECHNOLOGY</b>	<b>85,578</b>	<b>152,578</b>
Program increase - advanced semiconductor power devices		12,500
Program increase - advanced materials and manufacturing for modernization		20,000
Program increase - armaments technology of unmanned systems		1,000
Program increase - carbon composites for hypersonic weapons		10,000
Program increase - tactical organic fire support		5,000
Program increase - advanced materials research and development		9,000
Program increase - ceramic protection materials		2,500
Program increase - digital technologies for armament systems		2,000
Program increase - quantum technologies for armament systems		5,000
<b>10 ARMY APPLIED RESEARCH</b>	<b>34,572</b>	<b>34,572</b>

<b>11 SOLDIER LETHALITY TECHNOLOGY</b>	<b>104,470</b>	<b>210,770</b>
Program increase - future force requirements experimentation - advanced dynamic spectrum reconnaissance		10,000
Program increase - HEROES		5,000
Program increase - material development for personal protection systems		5,000
Program increase - nanolayered polymer optics		5,000
Program increase - Pathfinder Air Assault		10,000
Program increase - Pathfinder Airborne		8,000
Program increase - Pathfinder multidomain operations ready ranger initiative		10,000
Program increase - academic accelerator program		17,000
Program increase - advanced textiles and shelters		6,000
Program increase - digital night vision technology		8,800
Program increase - enhanced ballistic protective eyewear		1,000
Program increase - enhanced soldier ballistic protection		2,000
Program increase - Pathfinder adaptive experimentation force		3,000
Program increase - Pathfinder arctic warfare		5,000
Program increase - Perovskite-based energy generation		2,500
Program increase - sustainability of soldier-borne equipment through synthetic biology		2,500
Program increase - wafer-level vacuum packaging		5,500
<b>12 GROUND TECHNOLOGY</b>	<b>60,005</b>	<b>269,505</b>
Program increase - additive manufacturing for weapons and armaments components		5,000
Program increase - advanced ceramic technologies		5,000
Program increase - autonomous digital design		6,000
Program increase - carbon nanomaterials as functional additives		10,000
Program increase - coastal hydraulics laboratory project		4,000
Program increase - environmental quality enhanced coatings		5,000
Program increase - extreme battery technology		10,000
Program increase - flexible hybrid electronics		10,000
Program increase - high performance polymer composites		3,500
Program increase - integrity of transparent armor		5,000
Program increase - pavement preservation		3,500
Program increase - quadruped unmanned ground vehicles		4,000
Program increase - rapid advanced deposition		15,000
Program increase - rapid ultra-lightweight infrastructure manufacturing		6,000
Program increase - stainless steel applications for defense use		10,000
Program increase - artificial intelligence framework for adaptive polymer composites		5,000
Program increase - autonomous rough terrain container handler		3,000
Program increase - ceramic materials for extreme environments		3,000
Program increase - critical hybrid advanced materials processing		5,000
Program increase - convergent manufacturing for microfactories		2,000
Program increase - defense resiliency against extreme cold weather		8,000
Program increase - electrolyzer technology		3,500
Program increase - forecasting development of arctic maritime and permafrost conditions		2,000
Program increase - high temperature alloy powders		10,000
Program increase - materials technology for rare earth elements		10,000
Program increase - metal forging innovation		5,000
Program increase - mine and improvised explosive device detection research		2,000
Program increase - novel material solutions in austere operating environments		10,000
Program increase - PFAS predictive modeling		5,000
Program increase - polar proving ground		10,000
Program increase - predictive development of water-related hazards		6,000
Program increase - protective coatings		10,000
Program increase - research for hydrogen energy from galvanic aluminum		5,000
Program increase - scaling of lightweight metallurgical development		1,500
Program increase - verified inherent control		1,500

R-1	Budget Request	Final Bill
<b>13 NEXT GENERATION COMBAT VEHICLE TECHNOLOGY</b>	<b>166,500</b>	<b>260,200</b>
Program increase - active protection systems		10,000
Program increase - advanced materials development for survivability		10,000
Program increase - advanced technologies for autonomous ground vehicles and warfighter survivability		6,000
Program increase - gunner restraint system		2,200
Program increase - highly electrified vehicles		5,000
Program increase - machine learning optimized power electronics		5,000
Program increase - prototyping energy smart autonomous ground systems		5,000
Program increase - silicon carbide electronics		8,000
Program increase - fast-refueling fuel cell engines		3,500
Program increase - hydrogen technologies		10,000
Program increase - hyperspectral sensors for autonomous operations		2,000
Program increase - large metal additive manufacturing for ground vehicles		10,000
Program increase - mobility materials research		10,000
Program increase - small unit technology advancements		7,000
<b>14 NETWORK C3I TECHNOLOGY</b>	<b>81,618</b>	<b>162,618</b>
Program increase - advanced packaging technologies for hardware security		10,000
Program increase - Collaborative for Hierarchical and Agile Responsive Materials		5,000
Program increase - distributed radio frequency sensor/effector technology		10,000
Program increase - low-cost counter-drone EW force protection		5,000
Program increase - PNT for inertial systems		10,000
Program increase - secure microelectronic interposer technology for hardware assurance		5,000
Program increase - agile sensing for radio frequency and radar capabilities		5,000
Program increase - detection of unexploded ordnance technology		6,000
Program increase - integrated photonics for contested RF environments		10,000
Program increase - multi-static radar system		8,000
Program increase - social network analysis		5,000
Program increase - urban subterranean mapping technology		2,000
<b>15 LONG RANGE PRECISION FIRES TECHNOLOGY</b>	<b>34,683</b>	<b>83,183</b>
Program increase - design for additive manufacturing for missile applications		5,000
Program increase - extended range projectiles		5,000
Program increase - reactive alloy munition with enhanced blast for force modernization		10,500
Program increase - advanced manufacturing for refractory alloys		5,000
Program increase - high speed missile materials		18,000
Program increase - hypersonic wind tunnel development		5,000
<b>16 FUTURE VERTICAL LIFT TECHNOLOGY</b>	<b>73,844</b>	<b>99,344</b>
Program increase - high density eVTOL power source		10,000
Program increase - high strength functional composites		5,000
Program increase - robotic operating system		5,000
Program increase - adaptive flight control technology		3,000
Program increase - future vertical lift technologies		2,500
<b>17 AIR AND MISSILE DEFENSE TECHNOLOGY</b>	<b>33,301</b>	<b>87,801</b>
Program increase - counter-UAS center of excellence		5,000
Program increase - high energy laser range in a box		20,000
Program increase - low SWAP-C next generation HEL		7,000
Program increase - unmanned aircraft systems testing and research center		5,000
Program increase - Army missile risk-based mission assurance		2,500
Program increase - beam control systems and industry grade optical fiber fabrication for energy laser		15,000
<b>18 ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING TECHNOLOGIES</b>	<b>24,142</b>	<b>27,142</b>
Program increase - automated battle damage assessment and adjust fire		3,000

R-1	Budget Request	Final Bill
19 ALL DOMAIN CONVERGENCE APPLIED RESEARCH	14,297	14,297
20 C3I APPLIED RESEARCH	30,659	32,659
Program increase - sensor development for detection of chemical and biological threats		2,000
21 AIR PLATFORM APPLIED RESEARCH	48,163	54,663
Program increase - manufacturing technology for reverse engineering		5,000
Program increase - multispectral sensors for unmanned aerial systems		1,500
22 SOLDIER APPLIED RESEARCH	18,986	18,986
23 C3I APPLIED CYBER	22,714	22,714
24 BIOTECHNOLOGY FOR MATERIALS - APPLIED RESEARCH	16,736	16,736
25 MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	19,969	19,969
26 MEDICAL TECHNOLOGY	66,266	141,500
Program increase - human performance optimization		15,000
Program increase - nutrition impacts on military health and performance		5,000
Program increase - bioelectronic device program		5,000
Program increase - biomaterials for combat wound care		3,000
Program increase - biomedical research for the improvement of cartilage healing		1,000
Program increase - development of combat-ready antimicrobial hemostatic wound dressing		5,000
Program increase - multiplexed assay for immune responses to infectious diseases		2,000
Program increase - musculoskeletal health and performance research		2,500
Program increase - nanomaterials for bone regeneration		5,000
Program increase - trauma immunology		10,000
Program increase - physiological study of female warfighters to improve training		15,000
Program increase - RNA therapeutics for infectious disease threats		4,000
Program increase - treatment research for osseointegrated implants		2,734
27 MEDICAL ADVANCED TECHNOLOGY	4,147	23,881
Program increase - prophylactic medical countermeasure for acute radiation syndrome		5,000
Program increase - hearing protection for communications		8,000
Program increase - novel strategies to prevent infection in severe fractures		4,734
Program increase - suicide prevention with a focus on rural, remote, isolated, and OCONUS installations		2,000
28 MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	16,316	16,316
29 ARMY AGILE INNOVATION AND DEMONSTRATION	23,156	23,156
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	13,187	24,687
30 ADVANCED TECHNOLOGIES		
Program increase - cognitive computing architecture for military systems		11,500
31 ALL DOMAIN CONVERGENCE ADVANCED TECHNOLOGY	33,332	33,332
32 C3I ADVANCED TECHNOLOGY	19,225	19,225
33 AIR PLATFORM ADVANCED TECHNOLOGY	14,165	14,165
34 SOLDIER ADVANCED TECHNOLOGY	1,214	1,214



R-1	Budget Request	Final Bill
<b>36 LETHALITY ADVANCED TECHNOLOGY</b>	<b>20,582</b>	<b>69,582</b>
Program increase - hypersonic test range infrastructure		35,000
Program increase - robotic electric submersible vehicles		14,000
<b>37 ARMY ADVANCED TECHNOLOGY DEVELOPMENT</b>	<b>136,280</b>	<b>136,280</b>
<b>38 SOLDIER LETHALITY ADVANCED TECHNOLOGY</b>	<b>102,778</b>	<b>129,278</b>
Program increase - advanced female body armor		7,000
Program increase - squad operations advanced resupply		5,000
Program increase - personal air mobility capability		2,500
Program increase - inspection scanners with computing machine learning		2,000
Program increase - military footwear research		10,000
<b>39 GROUND ADVANCED TECHNOLOGY</b>	<b>40,597</b>	<b>281,097</b>
Program increase - additive manufacturing with indigenous materials		8,000
Program increase - anticipating threats to natural systems		6,000
Program increase - binder jet additive components		10,000
Program increase - clean modular hydropower		14,000
Program increase - cross laminated timber		5,500
Program increase - developing engineering practices for ecosystem design solutions		8,000
Program increase - electrochemical conversion of waste streams for on-site fuel generation		5,000
Program increase - geoengineering material solutions		10,000
Program increase - high power fast charging for fleet modernization		5,000
Program increase - methane capture and conversion		5,000
Program increase - microgrid reliability and resiliency		10,000
Program increase - novel materials for smart infrastructure systems		6,000
Program increase - OLED micro displays		4,000
Program increase - ruggedized deployable solar generator		8,000
Program increase - secure management of energy generation and storage		6,000
Program increase - self contained power for towers and sensors		5,000
Program increase - ultra-high strength steel construction material		8,000
Program increase - water reuse consortium		10,000
Program increase - accelerator technology for ground maneuver		4,000
Program increase - alternative cement solutions		5,000
Program increase - Army visual and tactical arctic reconnaissance		2,000
Program increase - assessments and monitoring systems for historic structures		3,000
Program increase - autonomous combat engineering program		2,000
Program increase - cold weather military research		4,000
Program increase - counter-UAS silent passive radar system		5,000
Program increase - deep strength pavement		5,000
Program increase - entry control points at installations		2,500
Program increase - extreme temperatures energy resilience research		5,000
Program increase - graphene applications for military engineering		2,500
Program increase - hydrogen fuel cell back-up power system development		5,000
Program increase - impacts of soil structures on hydrology		4,000
Program increase - innovative design and manufacturing of advanced composites/multi material protective systems		5,000
Program increase - mass timber applications for military construction projects		2,500
Program increase - materials and manufacturing technology for cold environments		6,000
Program increase - mobile micro-reactor program		5,000
Program increase - rechargeable lithium batteries		5,000
Program increase - reconfigurable underground test and evaluation		5,000
Program increase - reusable polymer technology		2,500
Program increase - soft target protection		5,000
Program increase - synthetic fuel research		3,000
Program increase - rapid entry and sustainment for the arctic		7,000
Program increase - weapon terminal effects in extreme temperatures		6,000
Program increase - virtual environment for cold weather mobility testing		6,000

R-1	Budget Request	Final Bill
40 COUNTER IMPROVISED-THREAT SIMULATION	21,672	21,672
41 BIOTECHNOLOGY FOR MATERIALS - ADVANCED RESEARCH	59,871	59,871
42 C3I CYBER ADVANCED DEVELOPMENT	28,847	48,847
Program increase - high bandwidth cryptomodule		20,000
HIGH PERFORMANCE COMPUTING MODERNIZATION	255,772	255,772
43 PROGRAM		
NEXT GENERATION COMBAT VEHICLE ADVANCED	217,394	452,028
44 TECHNOLOGY		
Program increase - additive manufacturing of critical components		5,000
Program increase - advanced adhesives		5,000
Program increase - advanced manufacturing center of excellence		12,500
Program increase - autonomous vehicle mobility		5,500
Program increase - casting to additive manufacturing		6,000
Program increase - chrome elimination and lethality for medium caliber ground weapons systems barrels		3,000
Program increase - composite components for medium caliber armament systems		5,000
Program increase - C-UAS for 5G-enabled drones		5,000
Program increase - digital twin		7,000
Program increase - driver vision enhancement with sensor fusion technology		15,000
Program increase - highly engineered rotating components		5,000
Program increase - maneuverable lightweight electric weight reducer		7,500
Program increase - multi-national contested logistics system		5,000
Program increase - off-road maneuver		7,000
Program increase - operational energy platform testing		10,000
Program increase - silent watch hydrogen fuel cell		10,000
Program increase - synthetic graphite battery technology		10,000
Program increase - titanium armor and joining techniques		5,000
Program increase - advanced materials applications		12,000
Program increase - advanced nickel-cobalt alloy armor protection		8,000
Program increase - augmented reality for denied environments		3,500
Program increase - autonomous ground vehicle research		3,000
Program increase - autonomous minefield clearance		8,134
Program increase - blast resistant fuel systems		2,500
Program increase - cybersecurity for autonomous ground vehicles		5,500
Program increase - digital enterprise management for OMFV		10,000
Program increase - dual chemistry battery pack demonstration		5,000
Program increase - human digital twin and human-machine interaction		3,000
Program increase - hydrogen storage solution		5,000
Program increase - lithium-ion batteries for military vehicles		8,000
Program increase - medium caliber hybrid composite barrel		3,000
Program increase - modular electric motors		5,000
Program increase		8,000
Program increase - predictive maintenance system		2,000
Program increase - radio frequency photonic systems		4,000
Program increase - threat detection for 5G-enabled drones		2,500
Program increase - virtual and physical prototyping		8,000

R-1	Budget Request	Final Bill
<b>45 NETWORK C3I ADVANCED TECHNOLOGY</b>	<b>105,549</b>	<b>172,549</b>
Program increase - C5ISR next generation flexible digital antenna		21,000
Program increase - advanced encryption technology		7,000
Program increase - denied area monitoring and exploitation		2,500
Program increase - advanced dynamic spectrum reconnaissance		1,500
Program increase - C5ISR modular open suite of standards integration		15,000
Program increase - inter-satellite links for space operations		3,000
Program increase - modular open systems architecture		
development for radio frequency systems		10,000
Program increase - next generation command platform		7,000
<b>46 LONG RANGE PRECISION FIRES ADVANCED TECHNOLOGY</b>	<b>153,024</b>	<b>235,524</b>
Army requested transfer from line 212		30,000
Program increase - advanced caliber munitions demonstration		10,000
Program increase - joined tandem wing steerable munition		5,000
Program increase - XM1155 glide flight projectile		20,000
Program increase - hypersonic metal alloys		7,500
Program increase - aluminum lithium alloy solid rocket flight demonstration		5,000
Program increase - digital engineering for missile technology		5,000
<b>47 FUTURE VERTICAL LIFT ADVANCED TECHNOLOGY</b>	<b>158,795</b>	<b>223,545</b>
Program increase - additive manufacturing for maintenance, repair, and overhaul operations		8,000
Program increase - advanced air mobility		5,000
Program increase - autonomous configuration management and aviation records		2,000
Program increase - data refinement and optimization for aviation sustainment		4,500
Program increase - FLEETSPACE helicopter maintenance management tool		4,750
Program increase - surface tolerant adhesives		6,000
Program increase - VTOL rotor blade efficiency enhancements		20,000
Program increase - composite structure research for aircraft		5,000
Program increase - high performance steels for improved drive system		3,000
Program increase - multi mission capability for unmanned aircraft		1,000
Program increase - platform digitization and maintenance		5,500
<b>48 AIR AND MISSILE DEFENSE ADVANCED TECHNOLOGY</b>	<b>21,015</b>	<b>87,015</b>
Program increase - advanced multilayered mobile force protection		20,000
Program increase - HEL power and thermal subsystem		10,000
Program increase - distributed gain 300kW-class laser weapons system		10,000
Program increase - future interceptor		10,000
Program increase - physics-based hardware and software algorithms		5,000
Program increase - SHORAD integration and evaluation		2,500
Program increase - silicon carbide electronics		8,500
<b>49 HUMANITARIAN DEMINING</b>	<b>9,068</b>	<b>23,068</b>
Program increase		14,000
<b>51 ARMY MISSILE DEFENSE SYSTEMS INTEGRATION</b>	<b>12,904</b>	<b>48,904</b>
Program increase - AI decision aids for all domain operations		5,000
Program increase - capability for advanced protective technologies assessment and integration		11,000
Program increase - integrated environmental control and power development		10,000
Program increase - testing of gun launched interceptors		5,000
Program increase - weather impacts toolkit		5,000
<b>52 ARMY SPACE SYSTEMS INTEGRATION</b>	<b>19,120</b>	<b>29,120</b>
Program increase - AI anomalous cyber intrusion defender		5,000
Program increase - multi-mission synthetic aperture radar payload development		5,000

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R-1	Budget Request	Final Bill
<b>53 AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING</b>	<b>0</b>	<b>13,000</b>
Program increase - machine learning for Army integrated fires		10,000
Program increase - software memory protection methods		3,000
<b>54 LANDMINE WARFARE AND BARRIER - ADV DEV</b>	<b>47,537</b>	<b>47,537</b>
<b>55 TANK AND MEDIUM CALIBER AMMUNITION</b>	<b>91,323</b>	<b>106,323</b>
Carryover		-2,000
Program increase - 30mm proximity ammunition qualification for AH-64		15,000
Program increase - multi-mode proximity airburst for counter-UAS		2,000
<b>56 ARMORED SYSTEM MODERNIZATION - ADV DEV</b>	<b>43,026</b>	<b>58,026</b>
Program increase - advanced combat engine		13,000
Program increase - next generation fuel cell truck		2,000
<b>57 SOLDIER SUPPORT AND SURVIVABILITY</b>	<b>3,550</b>	<b>3,550</b>
<b>58 TACTICAL ELECTRONIC SURVEILLANCE SYSTEM - ADV DEV</b>	<b>65,567</b>	<b>65,567</b>
<b>59 NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT</b>	<b>73,675</b>	<b>43,075</b>
Program increase - wafer-scale image intensifier technology		5,000
Army requested transfer to line 101 for IVAS 1.2		-42,600
Program increase - immersive AR/VR for UAS		7,000
<b>60 ENVIRONMENTAL QUALITY TECHNOLOGY - DEM/VAL</b>	<b>31,720</b>	<b>19,720</b>
Carryover		-2,500
Program increase - underwater cut and capture		5,000
Program decrease		-19,500
Program increase - friction stir additive manufacturing		5,000
<b>61 NATO RESEARCH AND DEVELOPMENT</b>	<b>4,143</b>	<b>4,143</b>
<b>62 AVIATION - ADV DEV</b>	<b>1,502,160</b>	<b>1,507,160</b>
Program increase - all-electric flight control system		5,000
<b>63 LOGISTICS AND ENGINEER EQUIPMENT - ADV DEV</b>	<b>7,604</b>	<b>19,604</b>
Program increase - Army executive agent program, microreactors		12,000
<b>64 MEDICAL SYSTEMS - ADV DEV</b>	<b>1,602</b>	<b>6,102</b>
Program increase - arctic medical evacuation and treatment system		2,000
Program increase - wearable medical device for TBI prevention		2,500
<b>65 SOLDIER SYSTEMS - ADVANCED DEVELOPMENT</b>	<b>27,681</b>	<b>42,481</b>
Program increase - rifle integrated controller		5,000
Program increase - tactical hearing protection		3,000
Soldier protective equipment excess to need		-2,200
Program increase - development of fully integrated sight		5,000
Program increase - laser range finder		4,000
<b>66 ROBOTICS DEVELOPMENT</b>	<b>3,024</b>	<b>3,024</b>
<b>67 EXPANDED MISSION AREA MISSILE (EMAM)</b>	<b>97,018</b>	<b>112,394</b>
IFPC-HEL ahead of need		-24,624
Program increase - IFPC-HPM		40,000
<b>CROSS FUNCTIONAL TEAM (CFT) ADVANCED DEVELOPMENT</b>	<b>117,557</b>	<b>64,119</b>
<b>68 &amp; PROTOTYPING</b>		
Program decrease		-53,438

R-1	Budget Request	Final Bill
69 LOW EARTH ORBIT (LEO) SATELLITE CAPABILITY	38,851	38,851
70 MULTI-DOMAIN SENSING SYSTEM (MDSS) ADV DEV	191,394	191,394
71 TACTICAL INTEL TARGETING ACCESS NODE (TITAN) ADV DEV	10,626	10,626
72 ANALYSIS OF ALTERNATIVES	11,095	11,095
73 SMALL UNMANNED AERIAL VEHICLE (SUAV) (6.4)	5,144	5,144
ELECTRONIC WARFARE PLANNING AND MANAGEMENT TOOL	2,260	2,260
74 (EWPMT)		
75 FUTURE TACTICAL UNMANNED AIRCRAFT SYSTEM (FTUAS)	53,143	67,143
Program increase - resilient battlefield communication		10,000
Program increase - secure APNT for FTUAS		4,000
76 LOWER TIER AIR MISSILE DEFENSE (LTAMD) SENSOR	816,663	530,373
Field sensors early to need		-286,290
77 TECHNOLOGY MATURATION INITIATIVES	281,314	257,977
Unjustified growth		-23,337
78 MANEUVER - SHORT RANGE AIR DEFENSE (M-SHORAD)	281,239	300,257
Program increase - C-UAS enhancements		26,263
Increment II prototype delay		-7,245
79 ARMY ADVANCED COMPONENT DEVELOPMENT & PROTOTYPING	204,914	204,914
80 ASSURED POSITIONING, NAVIGATION AND TIMING (PNT)	40,930	55,930
Program increase - AltNav capability		15,000
SYNTHETIC TRAINING ENVIRONMENT REFINEMENT & PROTOTYPING	109,714	109,714
81		
COUNTER IMPROVISED-THREAT DEMONSTRATION, PROTOTYPE DEVELOPMENT, AND TESTING	16,426	16,426
82		
83 STRATEGIC MID-RANGE FIRES	31,559	31,559
84 HYPERSONICS	43,435	202,778
Army-requested transfer from line 147		130,630
Army-requested transfer from MiPA line 12		23,713
Program increase - near net shape materials		5,000
85 FUTURE INTERCEPTOR	8,040	8,040
COUNTER - SMALL UNMANNED AIRCRAFT SYSTEMS	64,242	56,932
86 ADVANCED DEVELOPMENT		
Unjustified request		-7,310
87 UNIFIED NETWORK TRANSPORT	40,915	40,915
91 AIRCRAFT AVIONICS	13,673	13,673
92 ELECTRONIC WARFARE DEVELOPMENT	12,789	12,789

R-1	Budget Request	Final Bill
<b>93 INFANTRY SUPPORT WEAPONS</b>	<b>64,076</b>	<b>83,176</b>
Program increase - arctic mobility dismounted domestic boot		600
Program increase - cannon life extension program		1,500
Program increase - cannon life extension program reduction of hexavalent chromium		3,000
Program increase - crew served weapons fire control sensor development		6,000
Program increase - CROWS-AHD		5,000
Program increase - secure-mode personnel recovery device		3,000
<b>94 MEDIUM TACTICAL VEHICLES</b>	<b>28,226</b>	<b>18,226</b>
Program decrease		-10,000
<b>95 JAVELIN</b>	<b>7,827</b>	<b>7,827</b>
<b>96 FAMILY OF HEAVY TACTICAL VEHICLES</b>	<b>44,197</b>	<b>41,697</b>
Predictive logistics RSIP early to need		-2,500
<b>97 AIR TRAFFIC CONTROL</b>	<b>1,134</b>	<b>11,134</b>
Program increase - integrated mission planning and airspace control tools		10,000
<b>98 TACTICAL UNMANNED GROUND VEHICLE (TUGV)</b>	<b>142,125</b>	<b>142,125</b>
<b>99 LIGHT TACTICAL WHEELED VEHICLES</b>	<b>53,564</b>	<b>9,864</b>
Program decrease		-43,700
<b>100 ARMORED SYSTEMS MODERNIZATION (ASM) - ENG DEV</b>	<b>102,201</b>	<b>99,201</b>
Funding excess to need		-3,000
<b>101 NIGHT VISION SYSTEMS - ENG DEV</b>	<b>48,720</b>	<b>146,804</b>
Soldier night vision device - historical underexecution		-2,000
Maintain soldier night vision device level of effort		-1,000
Army-requested transfer from line 59 for IVAS 1.2		42,600
Transfer from OP.A line 70 for IVAS 1.2		20,055
Program increase - additional systems only to conduct scaled operational demonstration		38,429
<b>102 COMBAT FEEDING, CLOTHING, AND EQUIPMENT</b>	<b>2,223</b>	<b>2,223</b>
<b>103 NON-SYSTEM TRAINING DEVICES - ENG DEV</b>	<b>21,441</b>	<b>21,441</b>
<b>AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE -</b>	<b>74,738</b>	<b>89,738</b>
<b>104 ENG DEV</b>		
Program increase - C-UAS enhancements		5,000
Program increase - software integration digital ecosystem		10,000
<b>105 CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT</b>	<b>30,985</b>	<b>30,985</b>
<b>106 AUTOMATIC TEST EQUIPMENT DEVELOPMENT</b>	<b>13,626</b>	<b>13,626</b>
<b>107 DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) - ENG DEV</b>	<b>8,802</b>	<b>8,802</b>
<b>108 BRIGADE ANALYSIS, INTEGRATION AND EVALUATION</b>	<b>20,828</b>	<b>20,828</b>
<b>109 WEAPONS AND MUNITIONS - ENG DEV</b>	<b>243,851</b>	<b>266,851</b>
Program increase - lightweight ammunition manufacturing resilience		5,000
Program increase - low drag artillery guidance kit		5,000
Program increase - LR-PGK acceleration		10,000
Program increase - OMFV ammunition		3,000

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R-1	Budget Request	Final Bill
110 LOGISTICS AND ENGINEER EQUIPMENT - ENG DEV	37,420	59,920
Program increase - mobile ULCANS		5,000
Program increase - arctic campaigning logistics and engineer equipment		1,000
Program increase - arctic capable expeditionary shelters		4,500
Program increase - deployable, energy efficient, rigid wall shelter		12,000
COMMAND, CONTROL, COMMUNICATIONS SYSTEMS - ENG	34,214	49,214
111 DEV		
Program increase - mounted mission command-transport		15,000
MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE	6,496	6,496
112 EQUIPMENT - ENG DEV		
113 LANDMINE WARFARE/BARRIER - ENG DEV	13,581	33,581
Program increase - prototype integration		20,000
ARMY TACTICAL COMMAND & CONTROL HARDWARE &	168,574	168,574
114 SOFTWARE		
115 RADAR DEVELOPMENT	94,944	81,332
Carryover		-13,612
116 GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBS)	2,965	2,965
117 SOLDIER SYSTEMS - WARRIOR DEM/VAL	11,333	19,333
Program increase - conformal wearable battery		5,000
Program increase - wearable fuel cell development		3,000
118 SUITE OF SURVIVABILITY ENHANCEMENT SYSTEMS - EMD	79,250	73,050
Carryover		-5,000
Maintain program management level of effort		-1,200
119 ARTILLERY SYSTEMS - EMD	42,490	47,490
Program increase - soft recoil for 105mm extended range artillery systems		5,000
120 INFORMATION TECHNOLOGY DEVELOPMENT	104,024	89,151
Phase EBS-C program growth		-9,750
ArmyIgnitED historical underexecution		-5,123
121 INTEGRATED PERSONNEL AND PAY SYSTEM-ARMY (IPPS-A)	102,084	90,207
Program decrease		-11,877
123 JOINT TACTICAL NETWORK CENTER (JTNC)	18,662	18,662
124 JOINT TACTICAL NETWORK (JTN)	30,328	30,328
125 COMMON INFRARED COUNTERMEASURES (CIRCM)	11,509	11,509
126 COMBATING WEAPONS OF MASS DESTRUCTION (CWMD)	1,050	1,050
128 DEFENSIVE CYBER TOOL DEVELOPMENT	27,714	30,586
Transfer to line 228 for BA-08 execution		-5,128
Program increase - multi-factor authentication for cyber security		8,000
129 TACTICAL NETWORK RADIO SYSTEMS (LOW-TIER)	4,318	4,318
130 CONTRACT WRITING SYSTEM	16,355	12,859
Program decrease		-3,496

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R-1	Budget Request	Final Bill
131 MISSILE WARNING SYSTEM MODERNIZATION (MWSM) Excess PM request	27,571	20,247 -7,324
132 AIRCRAFT SURVIVABILITY DEVELOPMENT	24,900	24,900
133 INDIRECT FIRE PROTECTION CAPABILITY INC 2 - BLOCK 1 Program decrease	196,248	179,248 -17,000
134 GROUND ROBOTICS Program increase - common robotic controller SMET Inc II early to need	35,319	27,337 10,000 -17,982
135 EMERGING TECHNOLOGY INITIATIVES Program decrease Program increase - C-UAS and C-CM high energy laser atmospheric study and prototype systems Program increase - visualization and intelligence planning for enhanced readiness	201,274	118,874 -94,600 5,000 7,200
137 NEXT GENERATION LOAD DEVICE - MEDIUM	36,970	36,970
139 TACTICAL INTEL TARGETING ACCESS NODE (TITAN) EMD	132,136	132,136
140 ARMY SYSTEM DEVELOPMENT & DEMONSTRATION	81,657	81,657
141 SMALL UNMANNED AERIAL VEHICLE (SUAV) (6.5) LRR insufficient justification	31,284	24,769 -6,515
142 CI AND HUMINT EQUIPMENT PROGRAM-ARMY	2,170	2,170
143 JOINT TARGETING INTEGRATED COMMAND AND COORDINATION SUITE (JTIC2S)	9,290	9,290
144 MULTI-DOMAIN INTELLIGENCE Phase program growth	41,003	23,605 -17,398
146 PRECISION STRIKE MISSILE (PRSM)	272,786	272,786
147 HYPERSONICS EMD Army-requested transfer to line 84 Program increase - common hypersonic glide body	900,920	800,290 -130,630 30,000
148 ACCESSIONS INFORMATION ENVIRONMENT (AIE)	27,361	27,361
149 STRATEGIC MID-RANGE CAPABILITY Carryover	348,855	336,355 -12,500
150 INTEGRATED TACTICAL COMMUNICATIONS	22,901	22,901
151 JOINT AIR-TO-GROUND MISSILE (JAGM)	3,014	3,014
152 ARMY INTEGRATED AIR AND MISSILE DEFENSE (AIAMD) Program increase - intelligent multi-platform swarm defeat	284,095	296,095 12,000
153 COUNTER - SMALL UNMANNED AIRCRAFT SYSTEMS SYS DEV & DEMONSTRATION	36,016	36,016
154 MANNED GROUND VEHICLE Contract savings	996,653	586,453 -410,200



R-1	Budget Request	Final Bill
155 NATIONAL CAPABILITIES INTEGRATION (MIP)	15,129	15,129
JOINT LIGHT TACTICAL VEHICLE (JLTV) ENGINEERING AND	27,243	0
156 MANUFACTURING DEVELOPMENT		
Program decrease		-27,243
157 AVIATION GROUND SUPPORT EQUIPMENT	1,167	1,167
158 TROJAN - RH12	3,879	3,879
159 ELECTRONIC WARFARE DEVELOPMENT	137,186	137,186
160 THREAT SIMULATOR DEVELOPMENT	38,492	72,992
Program increase - CSOC extended regional cyber spoke		12,500
Program increase - threat counter-artificial intelligence		10,000
Program increase - CSOC for contested logistics		5,000
Program increase - UAS swarm threat representation, detection, and mitigation		7,000
161 TARGET SYSTEMS DEVELOPMENT	11,873	34,373
Program increase - replacement of foreign engines for aerial targets		12,500
Program increase - UAS 5G, AI, and cyber detection and mitigation		10,000
162 MAJOR T&E INVESTMENT	76,167	90,467
Program increase - advancing operational test infrastructure		14,300
163 RAND ARROYO CENTER	37,078	37,078
164 ARMY KWAJALEIN ATOLL	314,872	314,872
165 CONCEPTS EXPERIMENTATION PROGRAM	95,551	90,351
Maintain Project Convergence level of effort		-10,200
Program increase - Army Expeditionary Warrior Experiment		5,000
167 ARMY TEST RANGES AND FACILITIES	439,118	447,118
Program increase - WDTC		8,000
168 ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	42,220	47,220
Program increase - rapid assurance modernization program - test		5,000
169 SURVIVABILITY/LETHALITY ANALYSIS	37,518	37,518
170 AIRCRAFT CERTIFICATION	2,718	2,718
172 MATERIEL SYSTEMS ANALYSIS	26,902	23,402
Program decrease		-3,500
173 EXPLOITATION OF FOREIGN ITEMS	7,805	7,805
174 SUPPORT OF OPERATIONAL TESTING	75,133	75,133
175 ARMY EVALUATION CENTER	71,118	71,118
ARMY MODELING & SIM X-CMD COLLABORATION &	11,204	11,204
176 INTEGRATION		
177 PROGRAMWIDE ACTIVITIES	93,895	93,895
178 TECHNICAL INFORMATION ACTIVITIES	31,327	31,327

R-1	Budget Request	Final Bill
MUNITIONS STANDARDIZATION, EFFECTIVENESS AND	50,409	52,909
179 SAFETY		
Program increase - industrial base resiliency		2,500
180 ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	1,629	1,629
181 ARMY DIRECT REPORT HEADQUARTERS - R&D - MHA	55,843	55,843
182 RONALD REAGAN BALLISTIC MISSILE DEFENSE TEST SITE	91,340	91,340
183 COUNTERINTEL AND HUMAN INTEL MODERNIZATION	6,348	6,348
185 ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	6,025	6,025
187 MLRS PRODUCT IMPROVEMENT PROGRAM	14,465	14,465
188 ANTI-TAMPER TECHNOLOGY SUPPORT	7,472	7,472
WEAPONS AND MUNITIONS PRODUCT IMPROVEMENT	8,425	75,206
189 PROGRAMS		
Program increase - digital engineering for tungsten carbide ammunition		5,100
Program increase - printed electronics		9,000
Program increase - stibnite and antimony for ammunition production		10,500
Program increase - agile manufacturing for advanced armament systems		5,000
Program increase - development and testing software for 155 mm round production		12,000
Program increase - hybrid ammunition manufacturing for next-generation squad weapons		10,181
Program increase - refractory metal alloys for hypersonics		10,000
Program increase - smart manufacturing for armaments		5,000
190 BLACKHAWK PRODUCT IMPROVEMENT PROGRAM	1,507	41,014
Program increase - Block II development		21,500
Program increase - UH-60 BlackHawk main rotor blade modernization		10,507
Program increase - blade integrity		7,500
191 CHINOOK PRODUCT IMPROVEMENT PROGRAM	9,265	20,765
Program increase - reliability, availability, and maintainability improvements		5,000
Test and evaluation underexecution		-3,000
Program increase - engine enhancement		7,500
Program increase - CH-47 qualification		2,000
192 IMPROVED TURBINE ENGINE PROGRAM	201,247	189,106
Program delays		-12,141
AVIATION ROCKET SYSTEM PRODUCT IMPROVEMENT AND	3,014	3,014
193 DEVELOPMENT		
194 UNMANNED AIRCRAFT SYSTEM UNIVERSAL PRODUCTS	25,393	25,393
195 APACHE FUTURE DEVELOPMENT	10,547	23,047
Program increase - strap-down pilotage Apache		5,000
Program increase - AH-64 modernization		7,500
AN/TPQ-53 COUNTERFIRE TARGET ACQUISITION RADAR	54,167	54,167
196 SYSTEM		
197 INTEL CYBER DEVELOPMENT	4,345	4,345
198 ARMY OPERATIONAL SYSTEMS DEVELOPMENT	19,000	19,000

R-1	Budget Request	Final Bill
199 ELECTRONIC WARFARE DEVELOPMENT	6,389	6,389
200 ENDURING TURBINE ENGINES AND POWER SYSTEMS Program decrease	2,411	0 -2,411
201 FAMILY OF BIOMETRICS	797	797
202 PATRIOT PRODUCT IMPROVEMENT	177,197	177,197
JOINT AUTOMATED DEEP OPERATION COORDINATION	42,177	38,957
203 SYSTEM (JADOCs) AFATDS carryover		-3,220
204 COMBAT VEHICLE IMPROVEMENT PROGRAMS Stryker carryover Program increase - Abrams modernization Program increase - Stryker driver-assistance systems	146,635	228,690 -10,445 88,300 4,200
205 155MM SELF-PROPELLED HOWITZER IMPROVEMENTS Program delays	122,902	22,902 -100,000
207 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	146	146
208 DIGITIZATION	1,515	1,515
209 MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	4,520	4,520
210 OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	10,044	10,044
ENVIRONMENTAL QUALITY TECHNOLOGY - OPERATIONAL	281	281
211 SYSTEM DEV		
212 GUIDED MULTIPLE-LAUNCH ROCKET SYSTEM (GMLRS) Army requested transfer to line 46 Test support for EAW early to need	75,952	45,052 -30,000 -900
213 JOINT TACTICAL GROUND SYSTEM	203	203
216 SECURITY AND INTELLIGENCE ACTIVITIES Program increase - all source data fusion platform	301	16,301 16,000
217 INFORMATION SYSTEMS SECURITY PROGRAM	15,323	15,323
218 GLOBAL COMBAT SUPPORT SYSTEM	13,082	13,082
219 SATCOM GROUND ENVIRONMENT (SPACE)	26,838	26,838
222 INTEGRATED BROADCAST SERVICE (IBS)	9,456	9,456
224 AIRBORNE RECONNAISSANCE SYSTEMS Program increase - imaging cold environments using multispectral airborne networks	0	5,000 5,000
225 MQ-1C GRAY EAGLE UAS	6,629	6,629

R-1	Budget Request	Final Bill
<b>227 END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES</b>	<b>75,317</b>	<b>116,317</b>
Program increase - 3D printing of ballistic ceramics		13,000
Program increase - advanced pressing applications for optimization of hard armor		10,000
Program increase - domestic manufacturing for energetic material		5,000
Program increase - processing of refractory alloys		5,000
Program increase - advanced manufacturing for missile, radar and ground support equipment		4,000
Program increase - advanced manufacturing cell for missile fins		4,000
<b>228 DEFENSIVE CYBER - SOFTWARE PROTOTYPE DEVELOPMENT</b>	<b>83,570</b>	<b>104,048</b>
Transfer from line 128 for BA-08 execution		5,128
Transfer from OPA line 44 for BA-08 execution		13,848
Transfer from OPA line 45 for BA-08 execution		1,502
<b>999 CLASSIFIED PROGRAMS</b>	<b>8,786</b>	<b>8,786</b>
<b>999 CLASSIFIED PROGRAMS</b>	<b>19,200</b>	<b>19,200</b>
<b>TOTAL, RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY</b>	<b>15,775,381</b>	<b>17,115,037</b>

#### SOLDIER ENHANCEMENT PROGRAM

The agreement supports the Army's Soldier Enhancement Program (SEP) and understands the SEP provides soldiers with modernized individual equipment using a rapid acquisition approach that has resulted in proven cost savings and accelerated fielding of needed capability. Additionally, the agreement encourages the Secretary of the Army to resource the SEP across the future years defense program and notes with concern that prior year President's budget requests did not fully support SEP requirements. Further, the agreement directs the Secretary of the Army to provide a briefing to the House and Senate Defense Appropriations Subcommittees, not later than 30 days after enactment of this Act, on the plan to address SEP funding requirements in future President's budget requests.

## RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

The agreement provides \$27,964,807,000 for Research, Development, Test and Evaluation, Navy, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 96A-M)

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 UNIVERSITY RESEARCH INITIATIVES</b>	<b>96,355</b>	<b>106,355</b>
Program increase - defense university research instrumentation program		10,000
<b>2 DEFENSE RESEARCH SCIENCES</b>	<b>540,908</b>	<b>557,158</b>
Program increase - silicon-germanium-tin alloy research		5,000
Program increase - hypersonics workforce development		5,000
Program increase - shaping metallic surfaces for thermal system management		3,250
Program increase - UUV next generation sensing and maneuverability		3,000
<b>3 POWER PROJECTION APPLIED RESEARCH</b>	<b>23,982</b>	<b>23,982</b>
<b>4 FORCE PROTECTION APPLIED RESEARCH</b>	<b>142,148</b>	<b>289,748</b>
Program increase - seawater to jet fuel demo		10,000
Program increase - relative positioning of autonomous platforms		6,250
Program increase - underwater electromagnetic theory and ocean hydrodynamics		5,600
Program increase - direct air capture and blue carbon removal technology		10,000
Program increase - resilient autonomous systems research and diversity programs		9,500
Program increase - talent and technology for Navy power and energy systems		12,500
Program increase - additive manufacturing of unmanned maritime systems		10,000
Program increase - autonomous collaboration in confined maritime environments		5,000
Program increase - cavitation erosion		2,500
Program increase - corrosion control coatings and material		5,000
Program increase - energy resilience		7,000
Program increase - multi-material flexible automated manufacturing		12,000
Program increase - resilient innovative sustainable economies via university partnerships		9,000
Program increase - sUAS degraded environment testing		10,250
Program increase - titanium refinement process		8,000
Program increase - alternative energy research		25,000
<b>5 MARINE CORPS LANDING FORCE TECHNOLOGY</b>	<b>59,208</b>	<b>68,708</b>
Program increase - unmanned logistics solutions		9,500
<b>6 COMMON PICTURE APPLIED RESEARCH</b>	<b>52,090</b>	<b>52,090</b>
<b>7 WARFIGHTER SUSTAINMENT APPLIED RESEARCH</b>	<b>74,722</b>	<b>170,722</b>
Program increase - hypersonic rocket skin		25,000
Program increase - rapid applied materials processing lab development		6,000
Program increase - human performance and injury rehabilitation assessment tool		4,000
Program increase - high mobility ground robots		5,000
Program increase - conductive pigments and coatings in batteries		8,500
Program increase - anti-corrosion nanotechnology		9,000
Program increase - augmented reality robotic surgery		5,000
Program increase - engineered systems to restore skin and tactile sensory in Navy burn victims		2,500
Program increase - health and safety of underground fuel storage		10,000
Program increase - long-term autonomy for underwater surveillance and manipulation		3,000
Program increase - remote vestibular assessment technology		5,000
Program increase - warfighter protection against directed energy -		
physics-based neutralization to human tissues and organs		10,000
Program increase - foreign malign information operations		3,000
<b>8 ELECTROMAGNETIC SYSTEMS APPLIED RESEARCH</b>	<b>92,473</b>	<b>107,973</b>
Program increase - advanced antenna technology		7,000
Program increase - dark swarm in denied environments		6,000
Program increase - heterogeneous photonic integrated circuit platforms		2,500

96A

R-1	Budget Request	Final Bill
<b>9 OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH</b>	<b>80,806</b>	<b>134,156</b>
Program increase - enhanced weather prediction and atmospheric rivers research		5,000
Program increase - task force ocean		5,000
Program increase - pushbroom imaging next generation system		9,850
Program increase - arctic geospatial monitoring		7,500
Program increase - intelligent autonomous systems for seabed warfare		5,000
Program increase - ocean acoustics for monitoring		4,000
Program increase - ocean-ice-atmosphere observation		2,000
Program increase - oceanographic research for Naval Special Warfare		5,000
Program increase - SAPF/SCIF university facility upgrades		10,000
<b>10 JOINT NON-LETHAL WEAPONS APPLIED RESEARCH</b>	<b>7,419</b>	<b>7,419</b>
<b>11 UNDERSEA WARFARE APPLIED RESEARCH</b>	<b>61,503</b>	<b>101,003</b>
Program increase - persistent maritime surveillance		5,000
Program increase - distributed sensing for shipboard fire detection and localization		5,000
Program increase - mobile testbed for UUVs		2,000
Program increase - partnerships for submarine and undersea vehicle programs		20,000
Program increase - undersea sensing and communications		5,000
Program increase - autonomous underwater vehicle		2,500
<b>12 FUTURE NAVAL CAPABILITIES APPLIED RESEARCH</b>	<b>182,662</b>	<b>182,662</b>
<b>13 MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH</b>	<b>30,435</b>	<b>30,435</b>
<b>14 INNOVATIVE NAVAL PROTOTYPES (INP) APPLIED RESEARCH</b>	<b>133,828</b>	<b>148,828</b>
Program increase - ATRT enterprise		15,000
<b>SCIENCE AND TECHNOLOGY MANAGEMENT -</b>	<b>85,063</b>	<b>85,063</b>
<b>15 ONR FIELD ACTIVITIES</b>		
<b>16 FORCE PROTECTION ADVANCED TECHNOLOGY</b>	<b>29,512</b>	<b>69,512</b>
Program increase - modular missile system technology		25,000
Program increase - power electronics building block		11,000
Program increase - deployable additive manufacturing of composite UUVs		4,000
<b>17 ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY</b>	<b>8,418</b>	<b>13,418</b>
Program increase - augmented, context-based identity awareness		5,000
<b>SCIENCE &amp; TECHNOLOGY FOR NUCLEAR</b>	<b>112,329</b>	<b>112,329</b>
<b>18 RE-ENTRY SYSTEMS</b>		
<b>19 USMC ADVANCED TECHNOLOGY DEMONSTRATION (ATD)</b>	<b>308,217</b>	<b>467,517</b>
Program increase - multi-spectral camouflage expeditionary large targets and structures		5,000
Program increase - low-cost attritable aircraft technology		32,500
Program increase - AI/ML for automated EW sensors		20,000
Program increase - MCWL ground-based ESM		20,000
Program increase - hybrid-electric engine development		9,800
Program increase - common sensor platform for strategic and distributed autonomous cyber-EW		10,000
Program increase - extended range high speed aerial loitering munitions		21,000
Program increase - MCWL multi-int targeting pod		12,500
Program increase - long range maneuvering projectile		10,000
Program increase - adaptive future force		5,000
Program increase - HWIL for unmanned system development		8,000
Program increase - MCWL partnership intermediary assistance		2,500
Program increase - composite shelters		3,000
<b>20 JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT</b>	<b>15,556</b>	<b>15,556</b>



R-1	Budget Request	Final Bill
<b>FUTURE NAVAL CAPABILITIES ADVANCED</b>	<b>264,700</b>	<b>292,200</b>
<b>21 TECHNOLOGY DEVELOPMENT</b>		
Program increase - advanced energetics research and development		10,000
Program increase - automated acoustic signal classifier		6,000
Program increase - electronic maneuver warfare unmanned sensor		8,000
Program increase - real-time undersea monitoring for shipping channels		3,500
<b>22 MANUFACTURING TECHNOLOGY PROGRAM</b>	<b>61,843</b>	<b>83,843</b>
Program increase - national energetics plan		8,000
Program increase - sustainable energetic materials manufacturing		4,000
Program increase - textile industry of the future		10,000
<b>23 WARFIGHTER PROTECTION ADVANCED TECHNOLOGY</b>	<b>5,100</b>	<b>36,600</b>
Program increase - laser protective eyewear research		10,000
Program increase - omniblast water sensor technology		7,000
Program increase - bone marrow registry program		5,000
Program increase - warfighter resilience and readiness		5,000
Program increase - automated resuscitation catheter for hemorrhage control		1,500
Program increase - remote advanced medical care		3,000
<b>24 NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS</b>	<b>75,898</b>	<b>105,398</b>
Program increase - naval tech bridges		15,000
Program increase - USV cUAS		6,500
Program increase - warfighter experience lab		8,000
<b>MINE AND EXPEDITIONARY WARFARE</b>	<b>2,048</b>	<b>2,048</b>
<b>25 ADVANCED TECHNOLOGY</b>		
<b>INNOVATIVE NAVAL PROTOTYPES (INP) ADVANCED</b>	<b>132,931</b>	<b>149,431</b>
<b>26 TECHNOLOGY DEVELOPMENT</b>		
Program increase - advanced missile seeker		9,000
Program increase - HEL testing and maturation for production		1,500
Program increase - combined fiber laser arrays without wavefront sensing		6,000
<b>27 UNMANNED AERIAL SYSTEM</b>	<b>108,225</b>	<b>101,947</b>
Overestimation of ILS		-3,172
Management services previously funded		-3,040
Program increase - autonomous maritime patrol aircraft		10,000
ANE delays		-10,066
<b>28 LARGE UNMANNED SURFACE VEHICLES (LUSV)</b>	<b>117,400</b>	<b>113,080</b>
Prior year underexecution		-4,320
<b>29 AIR/OCEAN TACTICAL APPLICATIONS</b>	<b>40,653</b>	<b>43,653</b>
Program increase - autonomous dual-modality surface and underwater vehicles		3,000
<b>30 AVIATION SURVIVABILITY</b>	<b>20,874</b>	<b>20,874</b>
<b>31 NAVAL CONSTRUCTION FORCES</b>	<b>7,821</b>	<b>7,821</b>
<b>32 ASW SYSTEMS DEVELOPMENT</b>	<b>17,090</b>	<b>17,090</b>
<b>33 TACTICAL AIRBORNE RECONNAISSANCE</b>	<b>3,721</b>	<b>3,721</b>
<b>34 ADVANCED COMBAT SYSTEMS TECHNOLOGY</b>	<b>6,216</b>	<b>25,216</b>
Program increase - minotaur data dissemination and interoperability services		12,000
Program increase - tier 2.5 LO platform inspection system		3,000
Program increase - universal AI/ML core environment		4,000
<b>35 SURFACE AND SHALLOW WATER MINE COUNTERMEASURES</b>	<b>34,690</b>	<b>34,690</b>

96C

R-1	Budget Request	Final Bill
36 SURFACE SHIP TORPEDO DEFENSE	730	730
37 CARRIER SYSTEMS DEVELOPMENT Program increase - digital component certification center	6,095	10,095 4,000
38 PILOT FISH	916,208	916,208
39 RETRACT LARCH	7,545	7,545
40 RETRACT JUNIPER Classified adjustment	271,109	217,309 -53,800
41 RADIOLOGICAL CONTROL	811	811
42 SURFACE ASW	1,189	1,189
43 ADVANCED SUBMARINE SYSTEM DEVELOPMENT	88,415	88,415
44 SUBMARINE TACTICAL WARFARE SYSTEMS	15,119	15,119
45 SHIP CONCEPT ADVANCED DESIGN Program increase - critical protection technology for cybersecurity engineering Program increase - forward-deployed 3D printing materials Program increase - naval expeditionary sustainment and repair Program increase - maintenance technologies supporting operational readiness Transfer from SCN line 21 for AS(X) design	89,939	206,539 9,600 2,000 2,000 3,000 100,000
46 SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES Medium landing ship DT&E ahead of need Program increase - DDG(X) design tool	121,402	162,460 -2,142 43,200
47 ADVANCED NUCLEAR POWER SYSTEMS Overestimation of SSN(X) expenditures	319,656	292,656 -27,000
48 ADVANCED SURFACE MACHINERY SYSTEMS Program increase - silicon carbide flexible bus node Program increase - tactical energy management controller Program increase - high temperature superconducting main propulsion electric motor technology Program increase - large format lithium ion batteries	133,911	161,711 11,800 5,000 5,000 6,000
49 CHALK EAGLE	116,078	116,078
50 LITTORAL COMBAT SHIP (LCS) Prior year underexecution	32,615	21,339 -11,276
51 COMBAT SYSTEM INTEGRATION	18,610	18,610
52 OHIO REPLACEMENT Program increase - advanced composite shaft design	257,076	282,076 25,000
53 LCS MISSION MODULES	31,464	31,464
54 AUTOMATED TEST AND RE-TEST (ATRT) Program increase - Overmatch	10,809	25,809 15,000
54A ATRT ENTERPRISE RAPID CAPABILITY Program increase	0	90,000 90,000

96P

R-1	Budget Request	Final Bill
<b>55 FRIGATE DEVELOPMENT</b>	<b>112,972</b>	<b>100,060</b>
Live fire test and evaluation early to need		-2,800
Unjustified growth		-10,112
<b>56 CONVENTIONAL MUNITIONS</b>	<b>9,030</b>	<b>9,030</b>
<b>57 MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM</b>	<b>128,782</b>	<b>119,189</b>
Support costs unjustified growth		-3,368
Prior year underexecution		-6,225
<b>58 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT</b>	<b>44,766</b>	<b>44,766</b>
<b>59 OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT</b>	<b>10,751</b>	<b>10,751</b>
<b>60 ENVIRONMENTAL PROTECTION</b>	<b>24,457</b>	<b>24,457</b>
<b>61 NAVY ENERGY PROGRAM</b>	<b>72,214</b>	<b>95,214</b>
Program increase - wave energy converters		13,000
Program increase - marine energy systems for sensors and microgrids		10,000
<b>62 FACILITIES IMPROVEMENT</b>	<b>10,149</b>	<b>12,149</b>
Program increase - groundwater storage analysis		2,000
<b>63 CHALK CORAL</b>	<b>687,841</b>	<b>587,841</b>
Classified adjustment		-100,000
<b>64 NAVY LOGISTIC PRODUCTIVITY</b>	<b>4,712</b>	<b>4,712</b>
<b>65 RETRACT MAPLE</b>	<b>420,455</b>	<b>390,455</b>
Classified adjustment		-30,000
<b>66 LINK PLUMERIA</b>	<b>2,100,474</b>	<b>2,010,474</b>
Classified adjustment		-90,000
<b>67 RETRACT ELM</b>	<b>88,036</b>	<b>88,036</b>
<b>68 LINK EVERGREEN</b>	<b>547,005</b>	<b>516,005</b>
Classified adjustment		-31,000
<b>69 NATO RESEARCH AND DEVELOPMENT</b>	<b>6,265</b>	<b>6,265</b>
<b>70 LAND ATTACK TECHNOLOGY</b>	<b>1,624</b>	<b>1,624</b>
<b>71 JOINT NON-LETHAL WEAPONS TESTING</b>	<b>31,058</b>	<b>31,058</b>
<b>72 JOINT PRECISION APPROACH AND LANDING SYSTEMS</b>	<b>22,590</b>	<b>22,590</b>
<b>73 DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS</b>	<b>52,129</b>	<b>62,129</b>
SNLWS support excess to need		-5,000
Program increase - 100KW directed energy production		15,000
<b>74 F/A-18 INFRARED SEARCH AND TRACK (IRST)</b>	<b>32,127</b>	<b>32,127</b>
<b>75 DIGITAL WARFARE OFFICE</b>	<b>181,001</b>	<b>183,501</b>
Program increase - Software Radio for Weapons and Autonomous Vehicle Enablement		2,500

96E

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>76 SMALL AND MEDIUM UNMANNED UNDERSEA VEHICLES</b>	<b>110,506</b>	<b>90,516</b>
MEDUSA prototype award delay		-14,454
Maintain MEDUSA support level of effort		-2,061
Razorback staffing delays		-1,050
Knifefish stand-down		-2,425
<b>77 UNMANNED UNDERSEA VEHICLE CORE TECHNOLOGIES</b>	<b>71,156</b>	<b>71,156</b>
Prior year carryover		-4,000
Program increase - tactical data links and networks		4,000
<b>RAPID PROTOTYPING, EXPERIMENTATION</b>	<b>214,100</b>	<b>124,951</b>
<b>78 AND DEMONSTRATION</b>		
Program increase - commercially available large diameter unmanned undersea vehicle technology		35,000
Program decrease		-124,149
<b>79 LARGE UNMANNED UNDERSEA VEHICLES</b>	<b>6,900</b>	<b>6,900</b>
<b>GERALD R. FORD CLASS NUCLEAR AIRCRAFT</b>	<b>118,182</b>	<b>118,182</b>
<b>80 CARRIER (CVN 78 - 80)</b>		
<b>82 SURFACE MINE COUNTERMEASURES</b>	<b>16,127</b>	<b>16,127</b>
<b>TACTICAL AIR DIRECTIONAL INFRARED</b>		
<b>83 COUNTERMEASURES (TADIRCM)</b>	<b>34,684</b>	<b>34,684</b>
<b>84 NEXT GENERATION LOGISTICS</b>	<b>5,991</b>	<b>5,991</b>
<b>85 FUTURE VERTICAL LIFT (MARITIME STRIKE)</b>	<b>2,100</b>	<b>4,100</b>
Program increase - advanced vertical lift rotor technology		2,000
<b>86 RAPID TECHNOLOGY CAPABILITY PROTOTYPE</b>	<b>131,763</b>	<b>55,358</b>
Program decrease		-76,405
<b>87 LX (R)</b>	<b>21,319</b>	<b>21,319</b>
<b>88 ADVANCED UNDERSEA PROTOTYPING</b>	<b>104,328</b>	<b>69,723</b>
Basing equipment ahead of need		-20,700
XLUUV spares maintenance ahead of need		-3,338
DT&E ahead of need		-10,567
<b>89 COUNTER UNMANNED AIRCRAFT SYSTEMS (C-UAS)</b>	<b>11,567</b>	<b>16,567</b>
Program increase - backpackable EA module		5,000
<b>90 PRECISION STRIKE WEAPONS DEVELOPMENT PROGRAM</b>	<b>5,976</b>	<b>145,276</b>
Program increase - advanced rocket fuel density		2,500
Program increase - CAD/PAD technology		6,800
Program increase - SLCM-N		90,000
Program increase - common use technology maturation		40,000
<b>SPACE AND ELECTRONIC WARFARE (SEW)</b>	<b>9,993</b>	<b>9,993</b>
<b>91 ARCHITECTURE/ENGINEERING SUPPORT</b>		
<b>OFFENSIVE ANTI-SURFACE WARFARE WEAPON</b>	<b>237,655</b>	<b>258,948</b>
<b>92 DEVELOPMENT</b>		
OASuW Increment II Phase 1 previously funded		-18,707
Navy-requested transfer from WPN line 15 for LRASM C-3		40,000

96F

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>93 MEDIUM UNMANNED SURFACE VEHICLES (MUSVS)</b>	<b>85,800</b>	<b>149,130</b>
MUSV prototype delays		-3,918
MUSV requirements development excess to need		-4,700
Dock and sea trials ahead of need		-7,052
Program increase		79,000
<b>94 UNMANNED SURFACE VEHICLE ENABLING CAPABILITIES</b>	<b>176,261</b>	<b>161,712</b>
Overestimation of product development		-7,000
Overestimation of support and management		-7,549
<b>95 GROUND BASED ANTI-SHIP MISSILE</b>	<b>36,383</b>	<b>35,144</b>
IOT&E delays		-1,239
<b>96 LONG RANGE FIRES</b>	<b>36,763</b>	<b>30,563</b>
Test and evaluation delays		-6,200
<b>97 CONVENTIONAL PROMPT STRIKE (CPS)</b>	<b>901,064</b>	<b>1,101,064</b>
Transfer from WP,N line 1 for additional testing		200,000
<b>98 ASW SYSTEMS DEVELOPMENT - MIP</b>	<b>10,167</b>	<b>10,167</b>
<b>99 ADVANCED TACTICAL UNMANNED AIRCRAFT SYSTEM</b>	<b>539</b>	<b>10,539</b>
Program increase - mobile manned/unmanned distributed lethality airborne network		10,000
<b>100 ELECTRONIC WARFARE DEVELOPMENT - MIP</b>	<b>1,250</b>	<b>1,250</b>
<b>101 TRAINING SYSTEM AIRCRAFT</b>	<b>44,120</b>	<b>44,120</b>
<b>102 MARITIME TARGETING CELL</b>	<b>30,922</b>	<b>50,922</b>
Program increase - Maritime Targeting Cell-Afloat development		20,000
<b>103 OTHER HELO DEVELOPMENT (MARINE CORPS)</b>	<b>101,209</b>	<b>54,739</b>
Product development excess to need		-40,000
Development support excess to need		-6,470
<b>104 OTHER HELO DEVELOPMENT (NAVY)</b>	<b>2,604</b>	<b>2,604</b>
<b>105 AV-8B AIRCRAFT - ENG DEV</b>	<b>8,263</b>	<b>8,263</b>
<b>106 STANDARDS DEVELOPMENT</b>	<b>4,039</b>	<b>4,039</b>
<b>107 MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT</b>	<b>62,350</b>	<b>72,350</b>
Program increase - MH-60 upgrades		10,000
<b>108 P-3 MODERNIZATION PROGRAM</b>	<b>771</b>	<b>771</b>
<b>109 WARFARE SUPPORT SYSTEM</b>	<b>109,485</b>	<b>137,985</b>
Program increase - sea-based UAS logistics demonstration		15,000
Program increase		13,500
<b>110 COMMAND AND CONTROL SYSTEMS</b>	<b>87,457</b>	<b>87,457</b>
<b>111 ADVANCED HAWKEYE</b>	<b>399,919</b>	<b>407,631</b>
Overestimation of TCID		-12,288
Program increase - enhanced L-band and UHF for E-2D		20,000
<b>112 H-1 UPGRADES</b>	<b>29,766</b>	<b>29,766</b>
<b>113 ACOUSTIC SEARCH SENSORS</b>	<b>51,531</b>	<b>62,031</b>
Program increase - sonobuoy modernization for high altitude anti-submarine warfare		10,500

96G

R-1	Budget Request	Final Bill
114 V-22A Program increase - thermoplastics ice protection demonstration	137,597	147,597 10,000
115 AIR CREW SYSTEMS DEVELOPMENT	42,155	42,155
116 EA-18 Overestimation of warfare center REAM development Overestimation of contracted REAM development Block 2 development support unjustified growth	172,507	151,008 -8,066 -10,376 -3,057
117 ELECTRONIC WARFARE DEVELOPMENT DBD EMD delays	171,384	159,707 -11,677
118 EXECUTIVE HELO DEVELOPMENT	35,376	35,376
119 NEXT GENERATION JAMMER (NGJ)	40,477	40,477
120 JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY) Program increase - advanced tactical data link Program increase - open modular navy multiband terminal	451,397	464,397 5,000 8,000
121 NEXT GENERATION JAMMER (NGJ) INCREMENT II Test and evaluation excess to need Rephase annualized program costs due to EMD delay Rephase EMD costs due to contract delay	250,577	170,002 -6,100 -10,000 -64,475
122 SURFACE COMBATANT COMBAT SYSTEM ENGINEERING Overestimation of prime systems engineering contract	453,311	440,898 -12,413
124 SMALL DIAMETER BOMB (SDB)	52,211	52,211
125 STANDARD MISSILE IMPROVEMENTS Navy requested realignment from WP,N line 7 for electronics unit obsolescence SM-6 Blk 1B EMD delay Unjustified request Overestimation of SM-6 Blk 1B management services Unjustified support cost growth due to prior-year realignments	418,187	358,450 12,600 -23,000 -21,500 -11,846 -15,991
126 AIRBORNE MCM	11,368	11,368
NAVAL INTEGRATED FIRE CONTROL - COUNTER AIR	66,445	80,445
127 SYSTEMS ENGINEERING Program increase - stratospheric balloon research		14,000
128 ADVANCED SENSORS APPLICATION PROGRAM (ASAP) Program increase	0	10,000 10,000
129 ADVANCED ABOVE WATER SENSORS Combat system integration ahead of need	115,396	110,293 -5,103
130 SSN-688 AND TRIDENT MODERNIZATION	93,435	93,435
131 AIR CONTROL	42,656	42,656
132 SHIPBOARD AVIATION SYSTEMS	10,442	10,442
133 COMBAT INFORMATION CENTER CONVERSION	11,359	11,359
134 AIR AND MISSILE DEFENSE RADAR (AMDR) SYSTEM	90,307	90,307
135 ADVANCED ARRESTING GEAR (AAG)	10,658	10,658

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R-1	Budget Request	Final Bill
136 NEW DESIGN SSN Program increase - precision maneuvering unit	234,356	241,356 7,000
137 SUBMARINE TACTICAL WARFARE SYSTEM	71,516	71,516
138 SHIP CONTRACT DESIGN/ LIVE FIRE T&E	22,462	22,462
139 NAVY TACTICAL COMPUTER RESOURCES	4,279	4,279
140 MINE DEVELOPMENT	104,731	104,731
141 LIGHTWEIGHT TORPEDO DEVELOPMENT Project 3418 testing ahead of need Mod 2 phase II program delay Software Development - platform integration delay	229,668	196,294 -8,500 -15,559 -9,315
142 JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	9,064	9,064
143 USMC GROUND COMBAT/SUPPORTING ARMS SYSTEMS OPF-M termination Marine Corps-requested transfer to line 155 for MCRISS II	62,329	34,337 -20,181 -7,811
144 PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS	9,319	9,319
145 JOINT STANDOFF WEAPON SYSTEMS	1,964	1,964
146 SHIP SELF DEFENSE (DETECT & CONTROL)	158,426	158,426
147 SHIP SELF DEFENSE (ENGAGE: HARD KILL)	47,492	47,492
148 SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	125,206	125,206
149 INTELLIGENCE ENGINEERING	19,969	19,969
150 MEDICAL DEVELOPMENT Program increase - military dental research	6,061	18,061 12,000
151 NAVIGATION/ID SYSTEM Program increase - encrypted IFF for mode 5 deconfliction	45,262	53,262 8,000
154 SSN(X) Shipbuilder studies unjustified growth NSWC studies unjustified growth Management and support costs unjustified growth	361,582	321,828 -18,000 -13,804 -7,950
155 INFORMATION TECHNOLOGY DEVELOPMENT Marine Corps-requested transfer from line 143 for MCRISS II	22,663	30,474 7,811
156 INFORMATION TECHNOLOGY DEVELOPMENT Program increase - cyber digital twin development Program increase - actionable analytics and services for reliable maintenance Program increase - cyber supply chain risk management	282,138	298,638 5,000 5,000 6,500
157 ANTI-TAMPER TECHNOLOGY SUPPORT	8,340	8,340
158 TACAMO MODERNIZATION Overestimation of support	213,743	207,331 -6,412
159 CH-53K RDTE Expenditures below plan SDD actuals below plan	222,288	186,269 -24,499 -11,520

R-1	Budget Request	Final Bill
160 MISSION PLANNING	86,448	86,448
161 COMMON AVIONICS	81,076	81,076
162 SHIP TO SHORE CONNECTOR (SSC)	1,343	1,343
163 T-AO 205 CLASS	71	71
164 UNMANNED CARRIER AVIATION (UCA)	220,404	264,853
Test and evaluation excess to need due to EDM delivery delays		-20,403
Prior year carryover		-25,000
Transfer from AP,N line 21 for two SDTA aircraft due to milestone C delays		89,852
165 JOINT AIR-TO-GROUND MISSILE (JAGM)	384	384
166 MULTI-MISSION MARITIME AIRCRAFT (MMA)	36,027	36,027
167 MULTI-MISSION MARITIME (MMA) INCREMENT III	132,449	132,449
MARINE CORPS ASSAULT VEHICLES SYSTEM	103,236	90,898
168 DEVELOPMENT & DEMONSTRATION		
ACV-R Phase II contract delay		-13,055
ACV-R test support ahead of need		-1,283
Program increase - advanced brake technology		2,000
JOINT LIGHT TACTICAL VEHICLE (JLTV) SYSTEM	2,609	2,609
169 DEVELOPMENT & DEMONSTRATION		
170 DDG-1000	231,778	223,444
Prior year underexecution		-8,334
171 COUNTERING ADVANCED CONVENTIONAL WEAPONS (CACW)	17,531	17,531
172 ISR & INFO OPERATIONS	174,271	171,204
Prior year underexecution		-3,067
173 CYBER OPERATIONS TECHNOLOGY DEVELOPMENT	2,068	2,068
174 THREAT SIMULATOR DEVELOPMENT	22,918	22,918
175 TARGET SYSTEMS DEVELOPMENT	18,623	18,623
176 MAJOR T&E INVESTMENT	74,221	90,721
Program increase - data security improvements		16,500
177 STUDIES AND ANALYSIS SUPPORT - NAVY	3,229	3,229
178 CENTER FOR NAVAL ANALYSES	45,672	45,672
180 TECHNICAL INFORMATION SERVICES	1,000	1,000
181 MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	124,328	144,328
Program increase - naval research laboratory facilities SRM		20,000
182 STRATEGIC TECHNICAL SUPPORT	4,053	4,053
183 RDT&E SHIP AND AIRCRAFT SUPPORT	203,447	203,447
184 TEST AND EVALUATION SUPPORT	481,975	492,975
Program increase - tactical edge networking payloads		10,000
Program increase - future workforce innovation		1,000

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R-1	Budget Request	Final Bill
185 OPERATIONAL TEST AND EVALUATION CAPABILITY	29,399	29,399
186 NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT	27,504	27,504
187 SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	9,183	9,183
188 MARINE CORPS PROGRAM WIDE SUPPORT	34,976	34,976
189 MANAGEMENT HQ - R&D	41,331	41,331
190 WARFARE INNOVATION MANAGEMENT	37,340	37,340
191 INSIDER THREAT	2,246	2,246
MANAGEMENT HEADQUARTERS (DEPARTMENTAL 192 SUPPORT ACTIVITIES)	2,168	2,168
196 F-35 C2D2	544,625	509,122
Prior year carryover for blk 4, test and evaluation		-35,503
197 F-35 C2D2	543,834	512,266
Prior year carryover for blk 4, test and evaluation		-31,568
198 MARINE CORPS AIR DEFENSE WEAPONS SYSTEMS	99,860	99,209
Prior year underexecution		-1,360
Blk 2 integration ahead of need		-4,134
Blk 2 testing ahead of need		-3,550
Blk 2 ILS ahead of need		-2,007
Program increase - MADIS radar		5,000
Program increase - medium range intercept capability		3,800
Program increase		1,600
199 COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	153,440	140,331
Antenna development unjustified growth		-13,109
200 STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	321,648	336,648
Program increase - next generation strategic inertial measurement unit		10,000
Program increase - multimodal biometric authentication		5,000
201 SSBN SECURITY TECHNOLOGY PROGRAM	62,694	62,694
202 SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	92,869	97,869
Program increase - integration of four-tube launch system		5,000
203 NAVY STRATEGIC COMMUNICATIONS	51,919	51,919
204 F/A-18 SQUADRONS	333,783	296,323
Next generation naval mission planning system insufficient justification		-10,000
Program increase - advanced digital video map computer		10,000
Program increase - noise reduction technology		4,000
Overestimation of DVMC-U		-9,817
Support costs excess to need		-20,000
ADVEW carryover		-11,643
205 SURFACE SUPPORT	8,619	10,119
Program increase - composite improvements for MK41 VLS		1,500
TOMAHAWK AND TOMAHAWK MISSION		
206 PLANNING CENTER (TMPC)	122,834	122,834

R-1	Budget Request	Final Bill
207 INTEGRATED SURVEILLANCE SYSTEM Program increase - deployable surveillance systems	76,279	80,279 4,000
208 SHIP-TOWED ARRAY SURVEILLANCE SYSTEMS	1,103	1,103
209 AMPHIBIOUS TACTICAL SUPPORT UNITS (DISPLACEMENT CRAFT)	1,991	1,991
210 GROUND/AIR TASK ORIENTED RADAR (G/ATOR) GB1 BOA task order delays	92,674	84,074 -8,600
211 CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	115,894	115,894
212 ELECTRONIC WARFARE (EW) READINESS SUPPORT	61,677	61,677
213 ANTI-RADIATION MISSILE IMPROVEMENT Program increase - solid fuel ramjet demonstration	59,555	84,555 25,000
214 SURFACE ASW COMBAT SYSTEM INTEGRATION	29,973	29,973
215 MK-48 ADCAP Program increase - MK-48 torpedo test equipment Overestimation of NUWC APB 6 software Reduce planned product development carryover	213,165	208,601 10,200 -5,764 -9,000
216 AVIATION IMPROVEMENTS	143,277	143,277
217 OPERATIONAL NUCLEAR POWER SYSTEMS	152,546	152,546
218 MARINE CORPS COMMUNICATIONS SYSTEMS Prior year underexecution Transfer from PMC Line 21 for small form factor acceleration	192,625	178,989 -16,636 3,000
219 COMMON AVIATION COMMAND AND CONTROL SYSTEM (CAC2S)	12,565	12,565
220 MARINE CORPS GROUND COMBAT/ SUPPORTING ARMS SYSTEMS Program increase - advanced batteries for cargo drones	83,900	93,700 9,800
221 MARINE CORPS COMBAT SERVICES SUPPORT Program increase - platform independent portable self-contained sensor system	27,794	30,194 2,400
222 USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP)	47,762	47,762
223 AMPHIBIOUS ASSAULT VEHICLE	373	373
224 TACTICAL AIM MISSILES	36,439	36,439
225 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	29,198	29,198
226 PLANNING AND DECISION AID SYSTEM (PDAS)	3,565	3,565
230 AFLOAT NETWORKS	49,995	49,995
231 INFORMATION SYSTEMS SECURITY PROGRAM	33,390	33,390
232 MILITARY INTELLIGENCE PROGRAM (MIP) ACTIVITIES	7,304	7,304
233 TACTICAL UNMANNED AERIAL VEHICLES	11,235	11,235

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>234 UAS INTEGRATION AND INTEROPERABILITY</b>	<b>16,409</b>	<b>16,409</b>
<b>235 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS</b>	<b>51,192</b>	<b>59,792</b>
Program increase - Marine Corps geospatial enterprise cloud capability modernization		8,600
<b>236 MQ-4C TRITON</b>	<b>12,094</b>	<b>12,094</b>
<b>237 MQ-8 UAV</b>	<b>29,700</b>	<b>39,700</b>
Program increase - passive ELINT targeting capability		10,000
<b>238 RQ-11 UAV</b>	<b>2,107</b>	<b>2,107</b>
<b>239 SMALL (LEVEL 0) TACTICAL UAS (STUASLO)</b>	<b>2,999</b>	<b>2,999</b>
<b>240 MULTI-INTELLIGENCE SENSOR DEVELOPMENT</b>	<b>49,460</b>	<b>49,460</b>
<b>241 UNMANNED AERIAL SYSTEMS (UAS) PAYLOADS (MIP)</b>	<b>13,005</b>	<b>13,005</b>
<b>242 CYBERSPACE OPERATIONS FORCES AND FORCE SUPPORT</b>	<b>2,000</b>	<b>2,000</b>
<b>243 RQ-4 MODERNIZATION</b>	<b>300,378</b>	<b>217,978</b>
Classified adjustment		-41,100
IFC 4.4 ahead of need		-41,300
<b>244 INTELLIGENCE MISSION DATA (IMD)</b>	<b>788</b>	<b>788</b>
<b>245 MODELING AND SIMULATION SUPPORT</b>	<b>10,994</b>	<b>10,994</b>
<b>246 DEPOT MAINTENANCE (NON-IF)</b>	<b>23,248</b>	<b>28,248</b>
Program increase - joint enterprise data interoperability for F-35 depots		5,000
<b>247 MARITIME TECHNOLOGY (MARITECH)</b>	<b>3,284</b>	<b>3,284</b>
<b>999 CLASSIFIED PROGRAMS</b>	<b>2,021,376</b>	<b>2,407,376</b>
Classified adjustment		386,000
<b>RISK MANAGEMENT INFORMATION -</b>	<b>11,748</b>	<b>11,748</b>
<b>249 SOFTWARE PILOT PROGRAM</b>		
<b>MARITIME TACTICAL COMMAND AND CONTROL (MTC2) -</b>	<b>10,555</b>	<b>10,555</b>
<b>250 SOFTWARE PILOT PROGRAM</b>		
<b>TOTAL, RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY</b>	<b>26,922,225</b>	<b>27,964,807</b>

96M

#### OPEN AUTONOMOUS UNDERWATER VEHICLE SOFTWARE ARCHITECTURE

The agreement directs the Secretary of the Navy to assess the feasibility and advisability of: (1) establishing one or more government-reference open-system architecture standards, such as the OpenAUV and PCX architectures, and/or commercial open-system architecture standards as the Navy standard or standards for Unmanned Underwater Vehicles (UUVs) and Unmanned Surface Vessels (USVs); (2) accelerating such standard or standards on Razorback and Snakehead UUVs; (3) maximizing full-and-open competition on UUV and USV solicitations with such standard or standards prescribed; and (4) requiring USV and UUV program managers to review Navy's OpenAUV lessons learned, incorporate best practices, and engage in technical exchanges with the performers. The Secretary is directed to submit this assessment to the congressional defense committees not later than 120 days after the enactment of this Act.

#### AUTOMATED TEST AND RE-TEST

The agreement provides \$120,000,000 to accelerate implementation of the Navy's Automated Test and Re-Test (ATRT) Commercialization Plan submitted in October 2022. This activity shall support all Navy Program Executive Offices, System Commands, and Warfare Centers including Navy rapid capability offices. Funding provided under the newly created ATRT Enterprise Rapid Capability line shall be executed by Program Executive Office Integrated Warfare Support to perfect and scale virtualized systems of systems, automated test and analysis, automated certification, rapid integration, deployment of integrated warfare systems with edge analytics, and data collection as described in Navy's ATRT Commercialization Plan. The Secretary of the Navy is directed to submit to the House and Senate Defense Appropriations Subcommittees, not later than 60 days after the enactment of this Act, a detailed plan for implementation and resourcing of this capability consistent with the ATRT Commercialization Plan and in adherence to Small Business Innovation Research program regulations and requirements.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

The agreement provides \$47,340,416,000 for Research, Development, Test and Evaluation, Air Force, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 98A-0

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 DEFENSE RESEARCH SCIENCES</b>	<b>401,486</b>	<b>381,386</b>
Transfer to RDT&E,SF line 1 for space unique S&T		-20,100
<b>2 UNIVERSITY RESEARCH INITIATIVES</b>	<b>182,372</b>	<b>185,472</b>
Transfer to RDT&E,SF line 2 for space unique S&T		-14,400
Program increase - intelligent 2D sensors		5,000
Program increase - behavioral health interventions		7,500
Program increase - health and science multidomain operations		5,000
<b>3 FUTURE AF CAPABILITIES APPLIED RESEARCH</b>	<b>90,713</b>	<b>83,440</b>
Transfer to RDT&E,SF line 4 - space unique S&T		-7,273
<b>UNIVERSITY AFFILIATED RESEARCH CENTER (UARC) -</b>		
<b>4 TACTICAL AUTONOMY</b>	<b>8,018</b>	<b>8,018</b>
<b>5 MATERIALS</b>	<b>142,325</b>	<b>264,625</b>
Program increase - accelerated material development for high mach capabilities		10,000
Program increase - scale titanium additive manufacturing for critical airframe structures		10,000
Program increase - far forward human performance, sustainment, and resilience		10,000
Program increase - synthetic biology manufacturing of critical materials		9,800
Program increase - nano-bio technologies		7,500
Program increase - advanced composites in hypersonics research		5,000
Program increase - biomaterials for ground infrastructure reinforcement		5,000
Program increase - brain health biomarker and sensor technology		5,000
Program increase - composites for electromagnetic interference shielding		4,000
Program increase - continuous composite 3D printing for topologically optimized structures		3,000
Program increase - continuous fiber 3D printing for hypersonic applications		10,000
Program increase - high energy synchrotron x-ray research		9,000
Program increase - infrared meta-material coatings		2,500
Program increase - manufactured radio frequency photonic devices and systems for airborne platforms		4,000
Program increase - minority leaders research collaboration program		9,000
Program increase - multi-functional protective materials		10,000
Program increase - scanning and additive manufacturing		1,500
Program increase - thermal protection for hypersonic vehicles		7,000
<b>6 AEROSPACE VEHICLE TECHNOLOGIES</b>	<b>161,268</b>	<b>198,768</b>
Program increase - collaborative hypersonic demonstration		11,000
Program increase - low-cost rapid aerospace fabrication technology		6,500
Program increase - hypersonic air breather manufacturing industrial base expansion		10,000
Program increase - full-scale determinant assembly for hypersonic airframe structures		5,000
Program increase - aerospace engineering systems security integration		5,000
<b>7 HUMAN EFFECTIVENESS APPLIED RESEARCH</b>	<b>146,921</b>	<b>150,921</b>
Program increase - critical care air transport teams		3,000
Program increase - project refuel		1,000

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R-1	Budget Request	Final Bill
<b>8 AEROSPACE PROPULSION</b>	<b>184,867</b>	<b>246,867</b>
Program increase - rotary machines with advanced magnetic materials		10,000
Program increase - highly electrified aircraft		5,000
Program increase - battery additives		5,000
Program increase - advanced aerospace fuels for hypersonic propulsion		7,500
Program increase - compact scramjet testing		7,000
Program increase - emergency power and cooling thermal management growth		10,000
Program increase - high voltage aircraft power		2,000
Program increase - improving reliability of electrical systems for future aircraft		3,000
Program increase - low-cost small turbine engine		12,500
<b>9 AEROSPACE SENSORS</b>	<b>216,269</b>	<b>248,269</b>
Program increase - quantum optoelectronic materials and devices		6,000
Program increase - hardware and embedded systems security, assurance, and trust		9,000
Program increase - zero-trust environment for semiconductor technology		2,000
Program increase - cyber kinetic combat environment		15,000
<b>SCIENCE AND TECHNOLOGY MANAGEMENT - MAJOR</b>		
<b>11 HEADQUARTERS ACTIVITIES</b>	<b>10,303</b>	<b>10,303</b>
<b>12 CONVENTIONAL MUNITIONS</b>	<b>160,599</b>	<b>160,599</b>
Excess growth		-10,000
Program increase - convergence technology research		10,000
<b>13 DIRECTED ENERGY TECHNOLOGY</b>	<b>129,961</b>	<b>118,452</b>
Excess to need		-11,509
<b>14 DOMINANT INFORMATION SCIENCES AND METHODS</b>	<b>182,076</b>	<b>352,576</b>
Program increase - photonic chips for quantum computing		10,000
Program increase - heterogeneously integrated photonics and electronic technologies		10,000
Program increase - quantum entanglement distribution		10,000
Program increase - technology innovation collaborative		2,000
Program increase - secure quantum computing facility		20,000
Program increase - cyberspace dominance technology		10,000
Program increase - future flag JADC2 operational experimentation testbed		25,000
Program increase - quantum cryptography		10,000
Program increase - ion trap quantum computing		15,000
Program increase - internet of things living ecosystem		2,500
Program increase - C-UAS high speed imaging technology		2,000
Program increase - multi-domain RF spectrum environment		10,000
Program increase - photonic quantum computing		4,000
Program increase - quantum network testbed		10,000
Program increase - UAS traffic management advanced air mobility enhancements		10,000
Program increase - university-based quantum materials applied research		20,000
<b>15 FUTURE AF INTEGRATED TECHNOLOGY DEMOS</b>	<b>255,855</b>	<b>175,706</b>
Unjustified growth		-43,276
Program increase - automated geospatial intelligence algorithms		9,000
Program increase - mobile autonomous robotic swarms		2,500
Transfer to RDT&E,SF line 6 for space unique S&T		-48,373

98B

R-1	Budget Request	Final Bill
<b>16 ADVANCED MATERIALS FOR WEAPON SYSTEMS</b>	<b>30,372</b>	<b>61,839</b>
Transfer to RDT&E,SF line 6 for space unique S&T		-3,033
Program increase - polymer printing technology		5,000
Program increase - beryllium manufacturing		4,000
Program increase - advanced carbon materials for sensor and aerospace platform protection		5,000
Program increase - metals affordability initiative		2,500
Program increase - certification for advanced materials		18,000
<b>17 SUSTAINMENT SCIENCE AND TECHNOLOGY (S&amp;T)</b>	<b>10,478</b>	<b>10,478</b>
<b>18 ADVANCED AEROSPACE SENSORS</b>	<b>48,046</b>	<b>45,846</b>
Surface targets sense-making excess to need		-5,000
Multi-Spectrum Sensing Demonstration excess to need		-2,200
Program increase - airborne early warning pod digital radar technology		5,000
<b>19 AEROSPACE TECHNOLOGY DEV/DEMO</b>	<b>51,896</b>	<b>138,758</b>
Flight vehicle tech integration lacks air worthiness process modernization		-6,504
High speed vehicle tech design work excess to need		-3,266
Program increase - alternative PNT for hypersonics		9,500
Program increase - reentry systems test bed		5,000
Program increase - digital engineering test bed		10,000
Program increase - hybrid electric propulsion		30,000
Program increase - autonomous air to air refueling		2,000
Program increase - bonded unitized composites large scale structural demonstration		10,000
Program increase - long duration, broad-area, multi-sensor capability		28,132
Program increase - low-profile laser beam director for high speed aircraft		2,000
<b>20 AEROSPACE PROPULSION AND POWER TECHNOLOGY</b>	<b>56,789</b>	<b>97,989</b>
Program increase - infrastructure upgrade for hypersonic booster tests		6,200
Program increase - altitude chamber infrastructure upgrades		18,000
Program increase - hybrid rocket engine development		5,000
Program increase - HTPEM hydrogen fuel cells		2,000
Program increase - liquid engine for hypersonic testing initiatives		5,000
Program increase - silicon carbide research		5,000
<b>21 ELECTRONIC COMBAT TECHNOLOGY</b>	<b>32,510</b>	<b>32,510</b>
<b>22 SCIENCE &amp; TECHNOLOGY FOR NUCLEAR RE-ENTRY SYSTEMS</b>	<b>70,321</b>	<b>70,321</b>
<b>23 MAUI SPACE SURVEILLANCE SYSTEM (MSSS)</b>	<b>2</b>	<b>2</b>
<b>HUMAN EFFECTIVENESS ADVANCED TECHNOLOGY</b>		
<b>24 DEVELOPMENT</b>	<b>15,593</b>	<b>29,781</b>
Transfer to RDT&E,SF line 6 for space unique S&T		-812
Program increase - tactical personal area network		5,000
Program increase - airborne augmented reality for increased pilot training production		10,000
<b>25 CONVENTIONAL WEAPONS TECHNOLOGY</b>	<b>132,311</b>	<b>132,311</b>
<b>26 ADVANCED WEAPONS TECHNOLOGY</b>	<b>102,997</b>	<b>103,997</b>
Program increase - LIDAR CUAS automated target recognition		5,000
Unjustified growth		-4,000



<b>27 MANUFACTURING TECHNOLOGY PROGRAM</b>	<b>44,422</b>	<b>187,967</b>
Transfer to RDT&E, SF line 6 for space unique S&T		-1,955
Program increase - metal additive manufacturing		8,500
Program increase - thermoplastic flight control components for advanced manned and unmanned platforms		6,000
Program increase - rare gas cryogenic distillation and purification		5,000
Program increase - classified additive manufacturing		20,000
Program increase - vertical integration of scramjet supply chain		15,000
Program increase - gallium oxide for high power electronics		10,000
Program increase - aerospace film technology manufacturing		4,000
Program increase - aerospace films for increased operational range		5,000
Program increase - operationalizing additive manufacturing for sustainment and modernization research		19,500
Program increase - agile additive manufacturing for advanced hypersonic systems technology		5,000
Program increase - virtual, augmented, and mixed reality readiness		8,000
Program increase - alloy additive manufacturing		3,000
Program increase - additive manufactured lightweight UAV skins		3,000
Program increase - AI robotic manufacturing		5,000
Program increase - composites for advanced air mobility		7,000
Program increase - expansion of thermoplastic composites and alternatives to critical minerals		7,500
Program increase - glass packaging solutions for miniaturization		2,000
Program increase - hypersonics development to accelerate production readiness		2,000
Program increase - MRO advanced process technology development		5,000
Program increase - needled thermoplastic composite textiles for low-cost, complex aerostructures		5,000
<b>BATTLESPACE KNOWLEDGE DEVELOPMENT AND</b>		
<b>28 DEMONSTRATION</b>	<b>37,779</b>	<b>63,279</b>
Program increase - antenna form factor development for assured communications and networks		20,000
Program increase - B-52 agile pod capability		2,000
Program increase - nationwide integration of time resiliency for operations		1,000
Program increase - programmable computing fabric networks		2,500
<b>29 CONTROL AND REPORTING CENTER (CRC)</b>	<b>2,005</b>	<b>0</b>
Unjustified request		-2,005
<b>30 MODULAR ADVANCED MISSILE</b>	<b>105,238</b>	<b>0</b>
Program decrease		-105,238
<b>31 INTELLIGENCE ADVANCED DEVELOPMENT</b>	<b>6,237</b>	<b>6,237</b>
<b>32 COMBAT IDENTIFICATION TECHNOLOGY</b>	<b>21,298</b>	<b>15,922</b>
Air target identification unjustified growth		-5,376
<b>33 NATO RESEARCH AND DEVELOPMENT</b>	<b>2,208</b>	<b>2,208</b>
<b>34 INTERCONTINENTAL BALLISTIC MISSILE - DEM/VAL</b>	<b>45,319</b>	<b>54,914</b>
Long range planning unjustified growth		-405
Program increase - advanced ballistic aeroshells		3,000
Program increase - AFGSC modernization and enhancement of mission capabilities		7,000
<b>35 NC3 ADVANCED CONCEPTS</b>	<b>10,011</b>	<b>5,311</b>
NC3 underexecution		-4,700

R-1	Budget Request	Final Bill
<b>37 ADVANCED BATTLE MANAGEMENT SYSTEM (ABMS)</b>	<b>500,575</b>	<b>468,497</b>
Architecture Design and Evaluation excess to need		-7,078
CBC2 ahead of need		-15,000
AEN ahead of need		-10,000
<b>38 ADVANCED ENGINE DEVELOPMENT</b>	<b>595,352</b>	<b>280,000</b>
Program increase - engine technologies		280,000
Transfer to line 38a for NGAP		-595,352
<b>38a NEXT GENERATION ADAPTIVE PROPULSION</b>	<b>0</b>	<b>595,352</b>
Transfer from line 38 for NGAP		595,352
<b>39 NC3 COMMERCIAL DEVELOPMENT &amp; PROTOTYPING</b>	<b>78,799</b>	<b>68,799</b>
Prototype Terminals carryover		-10,000
<b>40 DEPT OF THE AIR FORCE TECH ARCHITECTURE</b>	<b>2,620</b>	<b>0</b>
Air Force requested transfer to line 57		-2,620
<b>41 E-7</b>	<b>681,039</b>	<b>881,039</b>
Program increase - E-7		200,000
<b>42 AFWERX PRIME</b>	<b>83,336</b>	<b>100,336</b>
PMA ahead of need		-3,000
Program increase - Agility Prime		20,000
<b>43 LONG RANGE STRIKE - BOMBER</b>	<b>2,984,143</b>	<b>2,984,143</b>
<b>44 RAPID DEFENSE EXPERIMENTATION RESERVE (RDER)</b>	<b>154,300</b>	<b>64,827</b>
Program decrease		-89,473
<b>45 DIRECTED ENERGY PROTOTYPING</b>	<b>1,246</b>	<b>1,246</b>
<b>46 HYPERSONICS PROTOTYPING</b>	<b>150,340</b>	<b>35,000</b>
Excess to plan		-115,340
<b>HYPERSONICS PROTOTYPING - HYPERSONIC ATTACK CRUISE</b>		
<b>47 MISSILE (HACM)</b>	<b>381,528</b>	<b>342,728</b>
Unjustified request		-41,800
Program increase - accelerate air-breathing hypersonic manufacturing AUR maturation		3,000
<b>48 PNT RESILIENCY, MODS, AND IMPROVEMENTS</b>	<b>18,041</b>	<b>18,041</b>
<b>49 ADVANCED TECHNOLOGY AND SENSORS</b>	<b>27,650</b>	<b>22,616</b>
Imaging and targeting support unjustified growth		-5,034
<b>50 SURVIVABLE AIRBORNE OPERATIONS CENTER (SAOC)</b>	<b>888,829</b>	<b>744,253</b>
Test and evaluation excess to need		-12,657
Management services overestimation		-15,919
Excess test aircraft		-116,000
<b>51 TECHNOLOGY TRANSFER</b>	<b>26,638</b>	<b>37,138</b>
Program increase - innovative solutions to enhance warfighter readiness		2,000
Program increase - laboratory technology transfer		4,000
Program increase - partnership intermediary program		2,500
Program increase - autonomous reduced-emissions supply delivery UAS		2,000

R-1	Budget Request	Final Bill
<b>HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM</b>		
<b>52 (HDBTDS) PROGRAM</b>	<b>19,266</b>	<b>19,266</b>
<b>53 CYBER RESILIENCY OF WEAPON SYSTEMS-ACS</b>	<b>37,121</b>	<b>37,121</b>
<b>55 JOINT TRANSPORTATION MANAGEMENT SYSTEM (JTMS)</b>	<b>37,026</b>	<b>37,026</b>
<b>56 DEPLOYMENT &amp; DISTRIBUTION ENTERPRISE R&amp;D</b>	<b>31,833</b>	<b>23,862</b>
Unjustified request		-7,971
<b>57 TECH TRANSITION PROGRAM</b>	<b>210,806</b>	<b>239,026</b>
Air Force requested transfer from line 40		2,620
Program decrease - AFFOA textile research		-1,000
Program increase - reconfigurable hybrid electric rotorcraft		10,000
Program increase - operational additive manufacturing capabilities		14,800
Program increase - capability for advanced air mobility		9,800
Blended Wing Body excess to need		-8,000
<b>58 OPERATIONAL ENERGY AND INSTALLATION RESILIENCE</b>	<b>46,305</b>	<b>24,100</b>
Program decrease - energy and climate resilience		-21,805
PMA costs excess to need		-400
<b>59 AIR REFUELING CAPABILITY MODERNIZATION</b>	<b>19,400</b>	<b>15,400</b>
Unjustified support cost growth		-4,000
<b>59a NEXT GENERATION AIR-REFUELING SYSTEM</b>	<b>0</b>	<b>7,928</b>
Air Force requested transfer from line 92		7,928
<b>61 NEXT GENERATION AIR DOMINANCE</b>	<b>2,326,128</b>	<b>2,326,128</b>
<b>62 AUTONOMOUS COLLABORATIVE PLATFORMS</b>	<b>118,826</b>	<b>113,513</b>
Air Force requested transfer to line 112 - VENOM test support		-17,813
Program increase - semiautonomous collaborative platforms		12,500
<b>63 COMBAT IDENTIFICATION</b>	<b>1,902</b>	<b>1,902</b>
<b>64 THREE DIMENSIONAL LONG-RANGE RADAR (3DELRR)</b>	<b>19,763</b>	<b>14,393</b>
Funding ahead of need		-5,370
<b>65 AIRBASE AIR DEFENSE SYSTEMS (ABADS)</b>	<b>78,867</b>	<b>69,302</b>
Prototype development previously funded		-9,565
<b>66 WAR RESERVE MATERIEL - AMMUNITION</b>	<b>8,175</b>	<b>8,175</b>
<b>68 COMMON DATA LINK EXECUTIVE AGENT (CDL EA)</b>	<b>25,157</b>	<b>25,157</b>
<b>69 MISSION PARTNER ENVIRONMENTS</b>	<b>17,727</b>	<b>17,727</b>
<b>72 RAPID SUSTAINMENT MODERNIZATION (RSM)</b>	<b>43,431</b>	<b>78,431</b>
Program increase - agile manufacturing robot		9,000
Program increase - additive manufacturing digital technology maturation		3,000
Program increase - 3D interactive instructions		3,000
Program increase - digital part transformation to support operational readiness		20,000
<b>73 INTEGRATED PRIMARY PREVENTION</b>	<b>9,364</b>	<b>9,364</b>

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>74 CONTRACTING INFORMATION TECHNOLOGY SYSTEM</b>	<b>28,294</b>	<b>23,710</b>
Excess growth		-4,584
<b>U.S. SPACE COMMAND RESEARCH AND DEVELOPMENT</b>		
<b>75 SUPPORT</b>	<b>14,892</b>	<b>8,892</b>
Underexecution		-6,000
<b>76 FUTURE ADVANCED WEAPON ANALYSIS &amp; PROGRAMS</b>	<b>9,757</b>	<b>9,757</b>
<b>77 PNT RESILIENCY, MODS, AND IMPROVEMENTS</b>	<b>163,156</b>	<b>161,156</b>
R-EGI FFRDC support unjustified growth		-2,000
<b>78 NUCLEAR WEAPONS SUPPORT</b>	<b>45,884</b>	<b>45,884</b>
<b>79 ELECTRONIC WARFARE DEVELOPMENT</b>	<b>13,804</b>	<b>23,804</b>
Program increase - AI and machine learning enabled electronic warfare systems		10,000
<b>80 TACTICAL DATA NETWORKS ENTERPRISE</b>	<b>74,023</b>	<b>85,523</b>
Air Force requested transfer from line 139 for SPoC radio		5,000
Program increase - software programmable open mission systems compliant radios		6,500
<b>81 PHYSICAL SECURITY EQUIPMENT</b>	<b>10,605</b>	<b>10,605</b>
<b>82 ARMAMENT/ORDNANCE DEVELOPMENT</b>	<b>5,918</b>	<b>5,202</b>
Growth exceeds inflation rate		-716
<b>83 SUBMUNITIONS</b>	<b>3,345</b>	<b>3,345</b>
<b>84 AGILE COMBAT SUPPORT</b>	<b>21,967</b>	<b>56,467</b>
Program increase - PFAS destruction technology		15,000
Program increase - arctic campaigning		4,000
Program increase - arctic capable prepositioned shelter		5,500
Program increase - automated heavy machinery		10,000
<b>85 LIFE SUPPORT SYSTEMS</b>	<b>39,301</b>	<b>39,301</b>
<b>86 COMBAT TRAINING RANGES</b>	<b>152,569</b>	<b>158,569</b>
Program increase - joint pacific Alaska range complex		6,000
<b>87 LONG RANGE STANDOFF WEAPON</b>	<b>911,406</b>	<b>882,633</b>
Air Force requested transfer to OM,AF line 11R		-20,000
Weapons Development carryover		-8,773
<b>88 ICBM FUZE MODERNIZATION</b>	<b>71,732</b>	<b>71,732</b>
<b>89 JOINT TACTICAL NETWORK CENTER (JTNC)</b>	<b>2,256</b>	<b>2,256</b>
<b>90 JOINT TACTICAL NETWORK (JTN)</b>	<b>452</b>	<b>452</b>
<b>91 OPEN ARCHITECTURE MANAGEMENT</b>	<b>36,582</b>	<b>36,582</b>
<b>92 NEXT GENERATION AIR-REFUELING SYSTEM</b>	<b>7,928</b>	<b>0</b>
Air Force requested transfer to line 59a		-7,928

R-1	Budget Request	Final Bill
93 ADVANCED PILOT TRAINING	77,252	74,980
EMD carryover		-2,272
94 HH-60W	48,268	40,976
Support costs excess to need		-892
Capability Upgrades early to need		-6,400
95 GROUND BASED STRATEGIC DETERRENT EMD	3,746,935	4,478,585
Transfer from MP,AF line 3		539,300
Air Force Requested transfer to AP,AF line 61 for SLP-A capability		-7,650
Program increase - GBSD construction and prototyping acceleration		100,000
Program increase - GBSD industrial base support		100,000
96 F-15 EPAWSS	13,982	13,982
97 ISOLATED PERSONNEL SURVIVABILITY AND RECOVERY	56,225	56,225
98 STAND IN ATTACK WEAPON	298,585	228,091
Aircraft integration delays		-13,234
SiAW Development carryover		-57,260
99 FULL COMBAT MISSION TRAINING	7,597	7,597
100 MEDICAL C-CBRNE PROGRAMS	2,006	2,006
102 ENDURANCE UNMANNED AERIAL VEHICLES	30,000	30,000
103 KC-46A TANKER SQUADRONS	124,662	86,864
TOLD execution delays		-3,214
KC-46 test funding requested ahead of need		-7,384
LTTAMS carryover		-10,000
BTAR carryover		-3,400
Trainer development funding requested ahead of need		-13,800
104 VC-25B	490,701	133,001
Funding ahead of need		-357,700
105 AUTOMATED TEST SYSTEMS	12,911	12,911
106 TRAINING DEVELOPMENTS	1,922	1,248
Management services programming error		-674
106a OVER-THE-HORIZON BACKSCATTER RADAR	0	489,855
Air Force requested transfer from line 158		424,855
Program increase - ARCHER		10,000
Program increase - over the horizon radar capability acceleration		55,000
107 THREAT SIMULATOR DEVELOPMENT	16,626	16,626
108 MAJOR T&E INVESTMENT	31,143	31,143
109 RAND PROJECT AIR FORCE	38,398	32,176
Unjustified growth		-6,222
110 SMALL BUSINESS INNOVATION RESEARCH	1,466	0
Programming error		-1,466

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R-1	Budget Request	Final Bill
111 INITIAL OPERATIONAL TEST & EVALUATION	13,736	13,736
112 TEST AND EVALUATION SUPPORT	913,213	946,026
Air Force requested transfer from line 62 for VENOM test support		17,813
Air Force requested realignment for Civ Pay		15,000
113 ACQ WORKFORCE- GLOBAL VIG & COMBAT SYS	317,901	317,901
114 ACQ WORKFORCE- GLOBAL REACH	541,677	541,677
115 ACQ WORKFORCE- CYBER, NETWORK, & BUS SYS	551,213	536,513
Air Force requested realignment for Civ Pay		-14,700
117 ACQ WORKFORCE- CAPABILITY INTEGRATION	243,780	273,780
Air Force requested realignment for Civ Pay		30,000
118 ACQ WORKFORCE- ADVANCED PRGM TECHNOLOGY	109,030	77,030
Air Force requested realignment for Civ Pay		-32,000
119 ACQ WORKFORCE- NUCLEAR SYSTEMS	336,788	336,788
120 MANAGEMENT HQ - R&D	5,005	6,705
Air Force requested realignment for Civ Pay		1,700
FACILITIES RESTORATION AND MODERNIZATION - TEST AND		
121 EVALUATION SUPPORT	87,889	116,389
Program increase - infrastructure improvements		28,500
122 FACILITIES SUSTAINMENT - TEST AND EVALUATION SUPPORT	35,065	35,065
123 REQUIREMENTS ANALYSIS AND MATURATION	89,956	111,456
Program increase - enterprise digital transformation with commercial		
physics simulation		9,000
Program increase - Global Strike Command technology transition		
and innovation		12,500
124 MANAGEMENT HQ - T&E	7,453	7,453
COMMAND, CONTROL, COMMUNICATION, AND COMPUTERS		
126 (C4) - STRATCOM	20,871	45,871
Program increase - NC3 REACH		10,000
Program increase - NC3 network sensor demonstration		15,000
127 ENTERPRISE INFORMATION SERVICES (EIS)	100,357	100,357
128 ACQUISITION AND MANAGEMENT SUPPORT	20,478	59,478
Program increase - academic cybersecurity center support		10,500
Program increase - document generation platform		11,500
Program increase - digital-first ecosystem		9,000
Program increase - file rights management		3,000
Program increase - airworthiness of safety-critical embedded software		5,000
128a DIGITAL TRANSFORMATION OFFICE	0	25,700
Program increase - digital engineering enabled workforce development		7,000
Program increase - digital transformation hub		6,000
Program increase - digital transformation office		9,700
Program increase - digital transformation digital technology		
maturity and adoption		3,000

R-1	Budget Request	Final Bill
129 GENERAL SKILL TRAINING Historic underexecution	796	0 -796
132 INTERNATIONAL ACTIVITIES	3,917	3,917
134 SPECIALIZED UNDERGRADUATE FLIGHT TRAINING ARP previously funded	41,464	26,564 -14,900
135 BATTLE MGMT COM & CTRL SENSOR DEVELOPMENT	40,000	40,000
136 WIDE AREA SURVEILLANCE	8,018	8,018
137 AGILE COMBAT SUPPORT	5,645	5,645
139 F-35 C2D2 Support costs excess to need Air Force requested transfer to line 80 for SPoC radio	1,275,268	1,268,275 -1,993 -5,000
140 AF INTEGRATED PERSONNEL AND PAY SYSTEM (AF-IPPS)	40,203	40,203
141 ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY	49,613	49,613
142 FOREIGN MATERIEL ACQUISITION AND EXPLOITATION	93,881	93,881
143 HC/MC-130 RECAP RDT&E Communications Modernization Phase II early to need	36,536	33,436 -3,100
144 NC3 INTEGRATION	22,910	22,910
145 B-52 SQUADRONS AEHF contract award delay RMP EMD previously funded Quad Crew delays Air Force requested transfer from AP,AF line 21 Program increase - B-52 in-flight networking pod Program increase - innovative projects for B-52 modernization	950,815	976,193 -9,548 -9,061 -2,030 14,017 10,000 22,000
146 AIR-LAUNCHED CRUISE MISSILE (ALCM)	290	290
147 B-1B SQUADRONS	12,619	12,619
148 B-2 SQUADRONS MDU-R execution delays	87,623	76,423 -11,200
149 MINUTEMAN SQUADRONS Program increase - multi-domain command and control Program increase - software modernization for air logistics	33,237	43,237 5,000 5,000
150 WORLDWIDE JOINT STRATEGIC COMMUNICATIONS	24,653	24,653
151 SERVICE SUPPORT TO STRATCOM - GLOBAL STRIKE	7,562	7,562
153 ICBM REENTRY VEHICLES	475,415	475,415
155 MH-139A	25,737	25,737

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R-1	Budget Request	Final Bill
<b>REGION/SECTOR OPERATION CONTROL CENTER</b>		
<b>156 MODERNIZATION PROGRAM</b>	<b>831</b>	<b>831</b>
<b>157 NORTH WARNING SYSTEM (NWS)</b>	<b>102</b>	<b>0</b>
Programming error		-102
<b>158 OVER-THE-HORIZON BACKSCATTER RADAR</b>	<b>428,754</b>	<b>0</b>
Air Force requested transfer to line 106a		-424,855
OTHR MITRE excess to need		-3,899
<b>159 VEHICLES AND SUPPORT EQUIPMENT - GENERAL</b>	<b>15,498</b>	<b>10,498</b>
Excess to need		-5,000
<b>160 MQ-9 UAV</b>	<b>81,123</b>	<b>81,123</b>
<b>161 JOINT COUNTER RCIED ELECTRONIC WARFARE</b>	<b>2,303</b>	<b>2,303</b>
<b>162 MULTI-PLATFORM ELECTRONIC WARFARE EQUIPMENT</b>	<b>7,312</b>	<b>14,312</b>
Program increase - cognitive electronic warfare machine learning		7,000
<b>164 F-16 SQUADRONS</b>	<b>98,633</b>	<b>111,753</b>
Program increase - data bus cybersecurity		10,000
STP excess to need		-100
AIFF Mode 5 excess to need		-100
AESA radar excess to need		-100
IVEWS excess to need		-100
MIDS-JTRS excess to need		-100
M-Code carryover		-1,380
Program increase - lithium battery replacement for F-16 hydrazine emergency power units		5,000
<b>165 F-15E SQUADRONS</b>	<b>50,965</b>	<b>41,815</b>
GPS M-Code ahead of need		-18,550
Program increase - electrical testing equipment		9,400
<b>166 MANNED DESTRUCTIVE SUPPRESSION</b>	<b>16,543</b>	<b>13,322</b>
Cost savings		-3,221
<b>167 F-22A SQUADRONS</b>	<b>725,889</b>	<b>715,984</b>
Program increase - cybersecurity of serial data bus		15,000
Sensor Enhancements DT/OT early to need		-12,225
IRDS excess to need		-7,180
Crypto Modernization HW development early to need		-5,500
<b>168 F-35 SQUADRONS</b>	<b>97,231</b>	<b>90,749</b>
QRIP contract award delay		-6,482
<b>169 F-15EX</b>	<b>100,006</b>	<b>104,506</b>
Program increase - aluminum microtube heat exchangers		4,500
<b>170 TACTICAL AIM MISSILES</b>	<b>41,958</b>	<b>41,958</b>
<b>171 ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)</b>	<b>53,679</b>	<b>53,679</b>
<b>172 COMBAT RESCUE - PARARESCUE</b>	<b>726</b>	<b>726</b>
<b>173 E-11A</b>	<b>64,888</b>	<b>64,888</b>



R-1	Budget Request	Final Bill
174 AF TENCAP	25,749	25,749
175 PRECISION ATTACK SYSTEMS PROCUREMENT	11,872	11,872
176 COMPASS CALL Test and evaluation underexecution	66,932	64,932 -2,000
177 AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM Program increase - additive manufacturing for aircraft sustainment	55,223	60,223 5,000
178 JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)	132,937	132,937
179 SMALL DIAMETER BOMB (SDB) Program increase - precise navigation	37,518	40,518 3,000
180 AIR & SPACE OPERATIONS CENTER (AOC)	72,059	72,059
181 CONTROL AND REPORTING CENTER (CRC)	17,498	17,498
183 AFSPECWAR - TACP	2,106	2,106
185 COMBAT AIR INTELLIGENCE SYSTEM ACTIVITIES	72,010	72,010
186 THEATER BATTLE MANAGEMENT (TBM) C4I	6,467	6,467
ELECTRONIC WARFARE INTEGRATED REPROGRAMMING		
187 (EWIR)	10,388	10,388
188 TACTICAL AIR CONTROL PARTY-MOD Program increase - man-portable tactical laser communications	10,060	25,060 15,000
189 DCAVES Increment 2B delays	8,233	6,941 -1,292
190 AIR FORCE CALIBRATION PROGRAMS	2,172	2,172
192 NATIONAL TECHNICAL NUCLEAR FORENSICS	2,049	2,049
193 SEEK EAGLE	33,478	33,478
195 WARGAMING AND SIMULATION CENTERS	11,894	11,894
197 DISTRIBUTED TRAINING AND EXERCISES	3,811	3,811
198 MISSION PLANNING SYSTEMS Excess to need	96,272	86,286 -9,986
199 TACTICAL DECEPTION Program increase - radar modeling	26,533	36,533 10,000
201 DISTRIBUTED CYBER WARFARE OPERATIONS Access/Infrastructure unjustified growth	50,122	41,622 -8,500
202 AF DEFENSIVE CYBERSPACE OPERATIONS IDCDS Development unjustified request	113,064	63,864 -49,200
208 INTEL DATA APPLICATIONS	967	967

R-1	Budget Request	Final Bill
209 GEOBASE	1,514	1,514
211 CYBER SECURITY INTELLIGENCE SUPPORT	8,476	8,476
AF MULTI-DOMAIN NON-TRADITIONAL ISR BATTLESPACE		
218 AWARENESS	2,890	2,890
219 E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC)	39,868	42,368
SIL ahead of need		-5,000
Program increase - next generation satellite communication capabilities		7,500
220 EIT CONNECT	32,900	8,225
Enterprise IT Diverse Data-Routing Network unjustified request		-24,675
221 CYBERSPACE OPERATIONS SYSTEMS	4,881	4,881
MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS		
222 NETWORK (MEECN)	33,567	31,908
Global ASNT Inc 2 previously funded		-1,659
223 HIGH FREQUENCY RADIO SYSTEMS	40,000	27,300
Program support costs unjustified request		-5,000
Test assets excess to need		-7,700
224 INFORMATION SYSTEMS SECURITY PROGRAM	95,523	95,523
226 ALL DOMAIN COMMON PLATFORM	71,296	71,296
227 JOINT MILITARY DECEPTION INITIATIVE	4,682	4,682
STRATEGIC MISSION PLANNING & EXECUTION SYSTEM		
228 (SMPES)	64,944	64,944
230 AIRBORNE SIGINT ENTERPRISE	108,947	113,431
AFSA previously funded		-2,202
Program increase - special projects		9,000
Underexecution		-2,314
231 COMMERCIAL ECONOMIC ANALYSIS	4,635	4,635
234 C2 AIR OPERATIONS SUITE - C2 INFO SERVICES	13,751	13,751
235 CCMD INTELLIGENCE INFORMATION TECHNOLOGY	1,660	1,660
236 ISR MODERNIZATION & AUTOMATION DVMT (IMAD)	18,680	15,180
Unjustified growth		-3,500
237 GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	5,031	5,031
238 CYBER SECURITY INITIATIVE	301	0
Integrated sensor collection development ahead of need		-301
239 WEATHER SERVICE	26,329	51,329
Program increase - Air Force weather transformation		10,000
Program increase - machine learning global weather forecasting		6,000
Program increase - weather wing data migration		9,000

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R-1	Budget Request	Final Bill
<b>AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM</b>		
<b>240 (ATCALS)</b>	<b>8,751</b>	<b>26,751</b>
Program increase - infill radars for wind farm coverage		3,000
Program increase - mobile air traffic surveillance system		15,000
<b>241 AERIAL TARGETS</b>	<b>6,915</b>	<b>6,915</b>
<b>244 SECURITY AND INVESTIGATIVE ACTIVITIES</b>	<b>352</b>	<b>352</b>
<b>245 DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES</b>	<b>6,930</b>	<b>6,930</b>
<b>246 INTEGRATED BROADCAST SERVICE (IBS)</b>	<b>21,588</b>	<b>18,540</b>
Unjustified growth		-3,048
<b>247 DRAGON U-2</b>	<b>16,842</b>	<b>16,842</b>
<b>248 AIRBORNE RECONNAISSANCE SYSTEMS</b>	<b>43,158</b>	<b>56,158</b>
Agile ISR PMA costs excess to need		-2,000
Program increase - persistent wide-area moving target engagement		15,000
<b>249 MANNED RECONNAISSANCE SYSTEMS</b>	<b>14,330</b>	<b>14,330</b>
<b>250 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS</b>	<b>88,854</b>	<b>88,854</b>
<b>251 RQ-4 UAV</b>	<b>1,242</b>	<b>1,242</b>
<b>252 NETWORK-CENTRIC COLLABORATIVE TARGETING</b>	<b>12,496</b>	<b>12,496</b>
<b>253 NATO AGS</b>	<b>2</b>	<b>2</b>
<b>254 SUPPORT TO DCGS ENTERPRISE</b>	<b>31,589</b>	<b>33,589</b>
Program increase - computer vision platform for high-altitude imagery object re-identification		2,000
<b>INTERNATIONAL INTELLIGENCE TECHNOLOGY AND</b>		
<b>255 ARCHITECTURES</b>	<b>15,322</b>	<b>15,322</b>
<b>256 RAPID CYBER ACQUISITION</b>	<b>8,830</b>	<b>8,830</b>
<b>257 PERSONNEL RECOVERY COMMAND &amp; CTRL (PRC2)</b>	<b>2,764</b>	<b>2,764</b>
<b>258 INTELLIGENCE MISSION DATA (IMD)</b>	<b>7,090</b>	<b>7,090</b>
<b>259 C-130 AIRLIFT SQUADRON</b>	<b>5,427</b>	<b>6,427</b>
Program increase - infrared suppressor system modification testing		1,000
<b>260 C-5 AIRLIFT SQUADRONS (IF)</b>	<b>29,502</b>	<b>28,286</b>
Early to need		-1,216
<b>261 C-17 AIRCRAFT (IF)</b>	<b>2,753</b>	<b>2,753</b>
<b>262 C-130J PROGRAM</b>	<b>19,100</b>	<b>25,772</b>
Program increase - aerial delivery of fire suppression		5,000
Program increase - non-recurring engineering for polar airlift aircraft		5,000
Block 8.1 excess to need		-2,900
MILSATCOM carryover		-428
<b>263 LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)</b>	<b>5,982</b>	<b>3,982</b>
Excess growth		-2,000

R-1	Budget Request	Final Bill
<b>264 KC-135S</b>	<b>51,105</b>	<b>72,587</b>
COMM 2 crypto delay		-1,771
Program increase - intelligent gateway		19,100
Program increase - multi-function sensor		15,000
CCR early to need		-5,182
HFM early to need		-1,415
Winglets early to need		-4,250
<b>265 CV-22</b>	<b>18,127</b>	<b>17,127</b>
Core Avionics carryover		-1,000
<b>266 SPECIAL TACTICS / COMBAT CONTROL</b>	<b>9,198</b>	<b>7,977</b>
M2M Software delay		-1,221
<b>268 LOGISTICS INFORMATION TECHNOLOGY (LOGIT)</b>	<b>17,520</b>	<b>17,520</b>
<b>269 AF LVC OPERATIONAL TRAINING (LVC-OT)</b>	<b>25,144</b>	<b>22,144</b>
Direct Mission Support previously funded		-3,000
<b>270 OTHER FLIGHT TRAINING</b>	<b>2,265</b>	<b>2,265</b>
<b>272 JOINT PERSONNEL RECOVERY AGENCY</b>	<b>2,266</b>	<b>2,266</b>
<b>273 CIVILIAN COMPENSATION PROGRAM</b>	<b>4,006</b>	<b>4,006</b>
<b>274 PERSONNEL ADMINISTRATION</b>	<b>3,078</b>	<b>3,078</b>
<b>275 AIR FORCE STUDIES AND ANALYSIS AGENCY</b>	<b>5,309</b>	<b>909</b>
Insufficient justification		-4,400
<b>FINANCIAL MANAGEMENT INFORMATION SYSTEMS</b>		
<b>276 DEVELOPMENT</b>	<b>4,279</b>	<b>4,279</b>
<b>277 DEFENSE ENTERPRISE ACNTNG AND MGT SYS (DEAMS)</b>	<b>45,925</b>	<b>45,925</b>
<b>278 SERVICE SUPPORT TO SPACECOM ACTIVITIES</b>	<b>9,778</b>	<b>9,778</b>
<b>999 CLASSIFIED PROGRAMS</b>	<b>16,814,245</b>	<b>16,621,491</b>
Classified adjustment		-192,754
<b>UND CIVILIAN FTE ADJUSTMENT</b>		<b>-129,630</b>
<b>TOTAL, RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE</b>	<b>46,565,356</b>	<b>47,340,416</b>

#### SENTINEL MANPOWER

The agreement recognizes that the Sentinel program has experienced delays and that the Air Force is updating program cost estimates and schedule information. The agreement includes the directive under this heading in Senate Report 118-81 and further directs the Secretary of the Air Force to update the congressional defense committees on the current status of cost and schedule of the program on a quarterly basis and any changes that impact Interim Operational Capability and Full Operational Capability whenever such change occurs.

#### SENTINEL INDUSTRIAL BASE

The agreement provides \$100,000,000 for prototyping to reduce schedule and cost risk, and stabilize the supply base. This funding may also be used for commissioning industrial base studies, developing radiation-hardened components for strategic applications, and certifying metal-oxide-semiconductor field-effect transistors. The agreement also provides \$100,000,000 to strengthen Sentinel program key suppliers, particularly in areas with identified gaps, and to improve supplier efficiency. This funding may also be used for workforce development and collaboration with trade schools. The agreement retains the directives under the heading "Sentinel Industrial Base" in Senate Report 118-81.

#### ADVANCED ENGINE DEVELOPMENT — ENGINE TECHNOLOGIES

The agreement recognizes the importance of engine development for fighter aircraft, and investments in the skilled engineering and manufacturing workforce to support the domestic fighter aircraft engine industrial base. Therefore, the agreement includes \$280,000,000 only to develop advanced engine technologies for integration into future engine development programs. This can include investments in adaptive cycle engine technologies, improved manufacturing techniques for engine components, development of novel materials, and the integration of enhanced digital design capabilities into the engine development process.

The Assistant Secretary of the Air Force for Acquisition, Technology and Logistics is directed to provide to the congressional defense committees, not later than 90 days after enactment of this Act, a spend plan for the additional resources provided by this agreement. The Assistant Secretary of the Air Force for Acquisition, Technology and Logistics is also directed to provide to the congressional defense

committees, not later than 90 days after enactment of this Act, a briefing describing how the Air Force intends to ensure there is a sufficient level of engine design work in order to maintain a robust domestic aircraft engine industrial base.

The agreement does not support the integration of an alternative engine on the F-35, and includes a new general provision that prohibits the use of funds to integrate an alternative engine on any F-35 aircraft.

This language replaces the language under the heading "Fighter Aircraft Engine Development" in House Report 118-121 and the language under the heading "Future Engine Technologies" in Senate Report 118-81.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, SPACE FORCE

The agreement provides \$18,669,844,000 for Research, Development, Test and Evaluation, Space Force, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ Insert 101A-E

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 DEFENSE RESEARCH SCIENCES</b>	<b>0</b>	<b>20,100</b>
Transfer from RDT&E, AF line 1 for space unique S&T		20,100
<b>2 UNIVERSITY RESEARCH INITIATIVES</b>	<b>0</b>	<b>14,400</b>
Transfer from RDT&E, AF line 2 for space unique S&T		14,400
<b>4 SPACE TECHNOLOGY</b>	<b>206,196</b>	<b>342,592</b>
Prior year underexecution		-2,765
DAF requested transfer from line 48 for civilian personnel		72,888
Transfer from RDT&E, AF line 3 for space unique S&T		7,273
Program increase - L-band active phased array demonstration		3,000
Program increase - small satellite chemical propulsion		3,000
Program increase - advanced analog microelectronics		3,000
Program increase - isotope power systems		3,000
Program increase - hybrid space architecture		5,000
Program increase - thin film tandem solar cells		3,000
Program increase - university consortium for space technology		1,000
Program increase - autonomous RPOD		10,000
Program increase - high-efficiency solar chiplet arrays for LEO satellites		5,000
Program increase - on-orbit bi-propellant propulsion		2,000
Program increase - space modeling, simulation, and analysis hub		7,500
Program increase - space situational awareness ground infrastructure		5,000
Program increase - space qualified solar cell manufacturing		4,000
Program increase - sub-zero volt lithium-ion battery		2,500
Program increase - software development for RPO to support space domain awareness		2,000
<b>5 SPACE SCIENCE AND TECHNOLOGY RESEARCH AND DEVELOPMENT</b>	<b>472,493</b>	<b>477,193</b>
Prior year carryover		-15,000
Inadequate justification - other tranche 2 activities		-10,300
Program increase - radiation-hardened, trusted, assured microelectronics		5,000
Program increase - space sensor fusion		6,500
Program increase - defense of LEO		10,500
Program increase - isotope power systems		5,000
Program increase - defense in depth as mission assurance spacecraft multi-level security		3,000

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R-1	Budget Request	Final Bill
<b>6 SPACE ADVANCED TECHNOLOGY DEVELOPMENT/DEMO</b>	<b>110,033</b>	<b>232,906</b>
DAF requested transfer from line 16 for space solar power project		40,000
Underexecution		-9,800
Transfer from RDT&E, AF line 15 for space unique S&T		48,373
Transfer from RDT&E, AF line 16 for space unique S&T		3,033
Transfer from RDT&E, AF line 24 for space unique S&T		812
Transfer from RDT&E, AF line 27 for space unique S&T		1,955
Program increase - EO and LADAR for early threat detection		5,000
Program increase - modular multi-mode propulsion system		8,000
Program increase - commercial space access improvements		5,000
Program increase - responsive launch infrastructure upgrade		5,000
Program increase - additive manufacturing of energetics		5,000
Program increase - hydrocarbon boost engine		5,000
Program increase - adaptive medium-lift engine architecture		3,500
Program increase - advanced spacecraft non-toxic multi-mode propulsion		2,000
<b>7 SPACE FORCE WEATHER SERVICES RESEARCH</b>	<b>849</b>	<b>849</b>
<b>8 SPACE FORCE IT, DATA ANALYTICS, DIGITAL SOLUTIONS</b>	<b>61,723</b>	<b>51,723</b>
Inadequate justification - digital engineering		-10,000
<b>9 NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT) (SPACE)</b>	<b>353,807</b>	<b>333,247</b>
MGUE Inc 2 handheld delay		-6,960
MGUE Inc 2 excess to need		-13,600
<b>10 SPACE WARFIGHTING ANALYSIS</b>	<b>95,541</b>	<b>95,541</b>
<b>11 EO/IR WEATHER SYSTEMS</b>	<b>95,615</b>	<b>80,615</b>
Demo 2 acquisition strategy		-15,000
<b>13 SPACE TECHNOLOGY DEVELOPMENT AND PROTOTYPING</b>	<b>2,081,307</b>	<b>2,056,307</b>
Inadequate justification - other activities		-25,000
<b>16 SPACE SYSTEMS PROTOTYPE TRANSITIONS (SSPT)</b>	<b>145,948</b>	<b>80,975</b>
Underexecution		-18,000
DAF requested transfer to line 6 for space solar power project		-40,000
ROOSTER launch support ahead of need		-8,472
LDPE-2 and 3A launch support previously funded		-1,001
Program increase - GEO SmallSat communications technology		2,500
<b>17 SPACE CONTROL TECHNOLOGY</b>	<b>58,374</b>	<b>63,374</b>
Program increase - in-orbit electric propulsion		5,000
<b>18 TECH TRANSITION (SPACE)</b>	<b>164,649</b>	<b>164,649</b>
<b>19 SPACE SECURITY AND DEFENSE PROGRAM</b>	<b>59,784</b>	<b>63,784</b>
Program increase - SSDP support		4,000
<b>20 PROTECTED TACTICAL ENTERPRISE SERVICE (PTES)</b>	<b>76,554</b>	<b>72,809</b>
Underexecution		-3,745

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>21 PROTECTED TACTICAL SERVICE (PTS)</b>	<b>360,126</b>	<b>233,596</b>
Unjustified request - management services		-5,574
Reduce EMD and rapid prototyping concurrency		-108,356
ECO FFP reduction		-12,600
<b>22 EVOLVED STRATEGIC SATCOM (ESS)</b>	<b>632,833</b>	<b>505,224</b>
Griffon follow-on ahead of need		-10,650
ECO excess with FFP construct		-28,412
Overestimation of A&AS		-20,000
Overestimation of SE&I		-4,477
End cryptologic contract delay		-25,592
Ground segment contract delay		-38,478
<b>23 SPACE RAPID CAPABILITIES OFFICE</b>	<b>12,036</b>	<b>19,536</b>
Program increase - digital beamforming ground-based C2		7,500
<b>24 TACTICALLY RESPONSE SPACE</b>	<b>30,000</b>	<b>50,000</b>
Program increase		20,000
<b>25 GPS III FOLLOW-ON (GPS IIIF)</b>	<b>308,999</b>	<b>292,185</b>
Development excess to need		-16,814
<b>27 COUNTERSPACE SYSTEMS</b>	<b>36,537</b>	<b>32,159</b>
Underexecution		-4,378
<b>28 WEATHER SYSTEM FOLLOW-ON</b>	<b>79,727</b>	<b>75,327</b>
Unjustified increase - management services		-1,600
SV 1-2 excess to need		-2,800
<b>29 SPACE SITUATION AWARENESS SYSTEMS</b>	<b>372,827</b>	<b>372,827</b>
<b>30 ADVANCED EHF MILSATCOM (SPACE)</b>	<b>4,068</b>	<b>4,068</b>
<b>31 POLAR MILSATCOM (SPACE)</b>	<b>73,757</b>	<b>64,422</b>
EPS-R payload development complete		-9,335
<b>32 WIDEBAND GLOBAL SATCOM (SPACE)</b>	<b>49,445</b>	<b>35,620</b>
PCMS award delay		-13,825
<b>33 NEXT-GEN OPIR - GROUND</b>	<b>661,367</b>	<b>575,875</b>
Overestimation of MDP expenditures		-57,592
FORGE-C2 acquisition strategy change		-19,400
RGS-A contract savings		-8,500
<b>34 NEXT GENERATION OPIR</b>	<b>222,178</b>	<b>192,366</b>
Data exploitation carryover		-29,812
<b>35 NEXT-GEN OPIR - GEO</b>	<b>719,731</b>	<b>691,069</b>
Incentive fees ahead of need		-18,819
Overestimation of A&AS		-9,843
<b>36 NEXT-GEN OPIR - POLAR</b>	<b>1,013,478</b>	<b>866,813</b>
Unjustified increase - management services		-3,265
Phase 2 concurrency		-143,400

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>37 COMMERCIAL SATCOM (COMSATCOM) INTEGRATION</b>	<b>73,501</b>	<b>71,413</b>
LUX MEO new start ECO reduction		-2,088
<b>37A COMMERCIAL SERVICES</b>	<b>0</b>	<b>50,000</b>
Program increase - space-based monitoring over the U.S. Southern Command AOR		10,000
Program increase - CCMD direct commercial surveillance, reconnaissance and tracking services		40,000
<b>38 RESILIENT MISSILE WARNING MISSILE TRACKING - LOW EARTH ORBIT (LEO)</b>	<b>1,266,437</b>	<b>1,481,222</b>
DAF requested transfer from line 40		252,785
Inadequate justification		-38,000
<b>39 RESILIENT MISSILE WARNING MISSILE TRACKING - MEDIUM EARTH ORBIT (MEO)</b>	<b>538,208</b>	<b>684,675</b>
DAF requested transfer from line 40		252,784
SV 1-3 contract savings		-67,457
SV 4-6 budgeted excess to estimate		-38,860
<b>40 RESILIENT MISSILE WARNING MISSILE TRACKING - INTEGRATED GROUND SEGMENT</b>	<b>505,569</b>	<b>0</b>
DAF requested transfer to line 38		-252,785
DAF requested transfer to line 39		-252,784
<b>41 NATIONAL SECURITY SPACE LAUNCH PROGRAM (SPACE) - EMD</b>	<b>82,188</b>	<b>162,188</b>
Program increase - additional NSSL payload processing facility		80,000
<b>43 SPACE WARFIGHTING ANALYSIS</b>	<b>3,568</b>	<b>3,568</b>
<b>46 ACQ WORKFORCE - SPACE &amp; MISSILE SYSTEMS</b>	<b>258,969</b>	<b>253,786</b>
DAF requested transfer from line 48		17,531
Projected overestimation of civilian compensation		-22,714
<b>47 SPACE &amp; MISSILE SYSTEMS CENTER - MHA</b>	<b>13,694</b>	<b>15,053</b>
DAF requested transfer from line 48		1,359
<b>48 SPACE TECHNOLOGY</b>	<b>91,778</b>	<b>0</b>
DAF requested transfer to line 4		-72,888
DAF requested transfer to line 46		-17,531
DAF requested transfer to line 47		-1,359
<b>49 MAJOR T&amp;E INVESTMENT - SPACE</b>	<b>146,797</b>	<b>146,797</b>
<b>50 ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)</b>	<b>18,023</b>	<b>43,023</b>
Program increase - state launched range services and capabilities		25,000
<b>52 SPACE TEST PROGRAM (STP)</b>	<b>30,192</b>	<b>30,192</b>
<b>55 FAMILY OF ADVANCED BLOS TERMINALS (FAB-T)</b>	<b>91,369</b>	<b>91,369</b>
<b>56 DCO-SPACE</b>	<b>76,003</b>	<b>76,003</b>
<b>57 NARROWBAND SATELLITE COMMUNICATIONS</b>	<b>230,785</b>	<b>206,369</b>
Inadequate justification - management services		-9,450
Prior year SLE excess to need		-14,966

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>58 SATELLITE CONTROL NETWORK (SPACE)</b>	<b>86,465</b>	<b>79,665</b>
Underexecution		-4,700
ERM excess to need		-2,100
<b>59 LONG RANGE KILL CHAINS</b>	<b>243,036</b>	<b>193,036</b>
Classified adjustment		-50,000
<b>61 SPACE AND MISSILE TEST AND EVALUATION CENTER</b>	<b>22,039</b>	<b>22,039</b>
<b>62 SPACE INNOVATION, INTEGRATION AND RAPID TECHNOLOGY DEVELOPMENT</b>	<b>41,483</b>	<b>38,983</b>
Previously funded by P.L. 117-328 Section 8121		-4,500
Program increase - space operators education and experiential learning		2,000
<b>63 SPACELIFT RANGE SYSTEM (SPACE)</b>	<b>11,175</b>	<b>11,175</b>
<b>65 SPACE SUPERIORITY ISR</b>	<b>28,730</b>	<b>28,730</b>
<b>67 BALLISTIC MISSILE DEFENSE RADARS</b>	<b>20,752</b>	<b>28,752</b>
Program increase - PARCS		8,000
<b>68 NCMC - TW/AA SYSTEM</b>	<b>25,545</b>	<b>25,545</b>
<b>69 NUDET DETECTION SYSTEM (SPACE)</b>	<b>93,391</b>	<b>93,391</b>
<b>70 SPACE SITUATION AWARENESS OPERATIONS</b>	<b>264,966</b>	<b>279,824</b>
GSW sensor comm upgrade prior year carryover		-3,142
Program increase - commercial collaborative sensor network		3,000
Program increase - AI and autonomy for data analytics and sensors		10,000
Program increase - unified data library		5,000
<b>71 GLOBAL POSITIONING SYSTEM III - OPERATIONAL CONTROL SEGMENT</b>	<b>317,309</b>	<b>246,809</b>
Blk 1/2 interim contractor support-excess to need		-11,200
Blk 1/2 A&AS overestimation		-3,000
Blk 1/2 prior-year carryover		-29,400
OCX 3F execution delay		-26,900
<b>75 ENTERPRISE GROUND SERVICES</b>	<b>155,825</b>	<b>155,825</b>
<b>76 JOINT TACTICAL GROUND SYSTEM</b>	<b>14,568</b>	<b>14,568</b>
<b>999 CLASSIFIED PROGRAMS</b>	<b>5,764,667</b>	<b>5,851,367</b>
Classified adjustment		86,700
<b>78 SPACE COMMAND &amp; CONTROL - SOFTWARE PILOT PROGRAM</b>	<b>122,326</b>	<b>122,326</b>
<b>TOTAL, RESEARCH, DEVELOPMENT, TEST AND EVALUATION, SPACE FORCE</b>	<b>19,199,340</b>	<b>18,669,844</b>

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#### TACTICALLY RESPONSIVE SPACE AND THE INDUSTRIAL BASE

The agreement directs the Assistant Secretary of the Air Force for Space Acquisition and Integration to provide a report to the congressional defense committees, not later than 120 days after enactment of this Act, that defines the mission sets to be pursued under the tactically responsive space umbrella within the future years defense program and longer term prospective mission sets, along with a market analysis of the resident and emerging capabilities within the space industrial base to perform these missions. The report shall include an assessment of the relative technical maturity of each capability and an assessment of the industrial base capacity to support these mission sets, including but not limited to, responsive launch, on-orbit servicing, on-orbit pre-positioning, and on-orbit refueling.

#### CISLUNAR SPACE

Developing capabilities and operating within cislunar space is imperative for the Nation to obtain national security, science and technology, and economic advantages. Congressionally directed increases accounted for 80 percent of all resources invested in cislunar activities over the last two fiscal years. The agreement again encourages the Secretary of the Air Force to increase its investments in cislunar propulsion technologies, space domain awareness, and other related activities.

#### IN-SPACE ASSEMBLY AND MANUFACTURING

The agreement notes the promise of in-space assembly and manufacturing (ISAM) to support a range of civil and national security missions and is aware that the Space Force is exploring a mission to resurrect the NASA Spitzer Space Telescope using such capabilities. The agreement encourages the Secretary of the Air Force to increase investment for ISAM and pursue avenues to collaborate with the civil space sector and industry on a near-term mission.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE

The agreement provides \$36,892,886,000 for Research, Development, Test and Evaluation, Defense-Wide, as follows:

~~(INSERT PROJECT LEVEL TABLE)~~ (Insert 103A-N

**EXPLANATION OF PROJECT LEVEL ADJUSTMENTS**  
[In thousands of dollars]

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>1 DTRA BASIC RESEARCH</b>	<b>14,761</b>	<b>21,761</b>
Program increase - materials science in extreme dynamic environments plus		2,000
Program increase - materials science in extreme environments		5,000
<b>2 DEFENSE RESEARCH SCIENCES</b>	<b>311,531</b>	<b>304,031</b>
Reduce carryover - advanced manufacturing science		-7,500
<b>3 HIGH ENERGY LASER RESEARCH INITIATIVES</b>	<b>16,329</b>	<b>16,329</b>
<b>4 BASIC RESEARCH INITIATIVES</b>	<b>71,783</b>	<b>111,783</b>
Program increase - DEPSCoR		20,000
Program increase - global competition analysis net assessment		10,000
Program increase - Hispanic serving research cohort		10,000
<b>5 BASIC OPERATIONAL MEDICAL RESEARCH SCIENCE</b>	<b>50,430</b>	<b>50,430</b>
<b>6 NATIONAL DEFENSE EDUCATION PROGRAM</b>	<b>159,549</b>	<b>162,549</b>
Program increase - STEM fellowships		3,000
<b>7 HISTORICALLY BLACK COLLEGES AND UNIVERSITIES/MINORITY INSTITUTIONS</b>	<b>100,467</b>	<b>101,467</b>
Program increase - augmenting quantum sensing research, education, and training		1,000
<b>8 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM</b>	<b>36,235</b>	<b>33,486</b>
Prior year underexecution		-2,749
<b>9 JOINT MUNITIONS TECHNOLOGY</b>	<b>19,157</b>	<b>17,241</b>
Unclear S&T strategy		-1,916
<b>10 BIOMEDICAL TECHNOLOGY</b>	<b>141,081</b>	<b>114,525</b>
Excess growth		-26,556
<b>11 PROMOTION AND PROTECTION STRATEGIES</b>	<b>3,219</b>	<b>3,219</b>
<b>12 DEFENSE TECHNOLOGY INNOVATION</b>	<b>55,160</b>	<b>20,002</b>
Unjustified growth		-35,158
<b>13 LINCOLN LABORATORY RESEARCH PROGRAM</b>	<b>46,858</b>	<b>46,858</b>
<b>14 APPLIED RESEARCH FOR THE ADVANCEMENT OF S&amp;T</b>	<b>66,866</b>	<b>60,440</b>
Rebaseline program profile		-6,426
<b>15 INFORMATION &amp; COMMUNICATIONS TECHNOLOGY</b>	<b>333,029</b>	<b>326,779</b>
Efforts previously funded		-6,250
<b>17 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM</b>	<b>240,610</b>	<b>240,610</b>
<b>18 CYBER SECURITY RESEARCH</b>	<b>17,437</b>	<b>30,437</b>
Program increase - academic cyber institutes		5,000
Program increase - Pacific intelligence and innovation initiative		5,000
Program increase - semiconductor supply chain cyber security research		3,000

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>19 SOCIAL SCIENCES FOR ENVIRONMENTAL SECURITY</b>	<b>4,718</b>	<b>3,218</b>
Program decrease - PREPARES		-1,500
<b>20 TACTICAL TECHNOLOGY</b>	<b>234,549</b>	<b>211,848</b>
Excess growth		-22,701
<b>21 MATERIALS AND BIOLOGICAL TECHNOLOGY</b>	<b>344,986</b>	<b>344,986</b>
<b>22 ELECTRONICS TECHNOLOGY</b>	<b>572,662</b>	<b>517,831</b>
Program increase - small radio-frequency demonstrator		6,000
Program decrease - reduce carryover		-60,831
<b>23 COUNTER WEAPONS OF MASS DESTRUCTION APPLIED RESEARCH</b>	<b>208,870</b>	<b>220,220</b>
Program increase - advanced manufacturing of energetics		5,000
Program increase - crowd sourced AI for detection		6,350
<b>24 SOFTWARE ENGINEERING INSTITUTE (SEI) APPLIED RESEARCH</b>	<b>11,168</b>	<b>11,168</b>
<b>25 HIGH ENERGY LASER RESEARCH</b>	<b>48,804</b>	<b>48,804</b>
<b>26 FSRM MODELLING</b>	<b>2,000</b>	<b>2,000</b>
<b>27 SOF TECHNOLOGY DEVELOPMENT</b>	<b>52,287</b>	<b>67,937</b>
Program increase - assessment of commercial systems		6,000
Program increase - identity threat mitigation		7,000
Program increase - signature management improvements (SUAS)		2,650
<b>28 JOINT MUNITIONS ADVANCED TECHNOLOGY</b>	<b>37,706</b>	<b>39,883</b>
Program increase - energetics acceleration		5,000
Unclear strategy		-2,823
<b>29 NATIONAL SECURITY INNOVATION CAPITAL</b>	<b>15,085</b>	<b>15,085</b>
<b>30 SO/LIC ADVANCED DEVELOPMENT</b>	<b>30,102</b>	<b>2,000</b>
Duplicative funding		-15,800
Transfer to line 130, CDAO Dem/Val Activities for SUNet		-12,302
<b>31 COMBATING TERRORISM TECHNOLOGY SUPPORT</b>	<b>75,593</b>	<b>178,093</b>
Program increase - advanced EMS monitoring for western EW test ranges		5,000
Program increase - anti-tunneling		47,500
Program increase - artificial intelligence for explosive ordinance disposal decision support		1,000
Program increase - combat terrorism technology support		2,500
Program increase - cooperative C-UAS development including directed energy and laser technology		40,000
Program increase - supercavitating projectiles		5,000
Program increase - wearable detection of chemical and biological agents		1,500
<b>32 FOREIGN COMPARATIVE TESTING</b>	<b>27,078</b>	<b>27,078</b>
<b>33 COUNTER WEAPONS OF MASS DESTRUCTION ADVANCED TECHNOLOGY DEVELOPMENT</b>	<b>400,947</b>	<b>409,447</b>
Program increase - advanced manufacturing of energetic materials		8,500
<b>34 ADVANCED CONCEPTS AND PERFORMANCE ASSESSMENT</b>	<b>7,990</b>	<b>7,990</b>

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>35 ADVANCED CONCEPTS AND PERFORMANCE ASSESSMENT</b>	<b>17,825</b>	<b>29,325</b>
Program increase - hypersonic HWIL upgrades		5,000
Program increase - long-lived power source for directed energy weapon missile defense satellite system		5,000
Program increase - quantum computing threat modeling		1,500
<b>36 ADVANCED RESEARCH</b>	<b>21,461</b>	<b>61,961</b>
Program increase - advanced carbon materials for hypersonic applications		2,500
Program increase - advanced directed energy optics design and manufacturing		7,000
Program increase - benzoxazine for high-mach system thermal protection		8,000
Program increase - energy efficient AI hardware for military edge devices		6,000
Program increase - hypersonic interceptor component technology		5,000
Program increase - radiation hardened microelectronics testing facility		12,000
<b>37 JOINT HYPERSONIC TECHNOLOGY DEVELOPMENT &amp; TRANSITION</b>	<b>52,292</b>	<b>54,292</b>
Program increase - additive hypersonic components with advanced porous materials		2,000
<b>38 JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT</b>	<b>19,567</b>	<b>19,567</b>
<b>39 INTELLIGENCE ADVANCED DEVELOPMENT</b>	<b>10,000</b>	<b>10,000</b>
<b>40 ADVANCED AEROSPACE SYSTEMS</b>	<b>331,753</b>	<b>233,943</b>
Program increase - artificial intelligence reinforcements		10,000
Early to need - liberty lifter		-8,310
Excess growth		-18,000
Program termination - tactical boost glide		-81,500
<b>41 SPACE PROGRAMS AND TECHNOLOGY</b>	<b>134,809</b>	<b>118,809</b>
Excess growth		-16,000
<b>42 ANALYTIC ASSESSMENTS</b>	<b>24,328</b>	<b>32,328</b>
Program increase - strategic multilayer assessment		8,000
<b>43 ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS</b>	<b>55,626</b>	<b>65,626</b>
Classified adjustment		10,000
<b>44 QUANTUM APPLICATION</b>	<b>75,000</b>	<b>20,000</b>
Lack of acquisition strategy		-55,000
<b>46 DEFENSE INNOVATION UNIT (DIU)</b>	<b>104,729</b>	<b>225,229</b>
Program increase - defense innovation onramp hubs		65,000
Program increase - defense innovation onramp hubs geographic expansion		10,000
Program increase - industrial foreign influence analysis		8,000
Program increase - innovation with academia		15,000
Program increase - nuclear advanced propulsion and power		2,500
Program increase - reusable hypersonic technology		10,000
Program increase - hypersonic unmanned wingman		10,000
<b>47 TECHNOLOGY INNOVATION</b>	<b>123,837</b>	<b>50,232</b>
Phase programmatic growth		-31,724
Transfer Project 375 to line 66		-41,881
<b>48 ADVANCED TECHNICAL INTEGRATION</b>	<b>11,000</b>	<b>11,000</b>

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R-1	Budget Request	Final Bill
<b>49 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEVELOPMENT</b>	<b>267,073</b>	<b>255,073</b>
Program increase - broad-spectrum indirect antiviral research		3,000
Excess growth		-15,000
<b>50 RETRACT LARCH</b>	<b>57,401</b>	<b>57,401</b>
<b>51 JOINT ELECTRONIC ADVANCED TECHNOLOGY</b>	<b>19,793</b>	<b>16,824</b>
Unclear strategy		-2,969
<b>53 NETWORKED COMMUNICATIONS CAPABILITIES</b>	<b>11,197</b>	<b>3,253</b>
Unjustified growth		-7,944
<b>54 DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM</b>	<b>252,965</b>	<b>479,465</b>
Program increase - accelerating predictive supply chain logistics		2,000
Program increase - additive manufacturing at scale		5,000
Program increase - additive manufacturing casting		5,000
Program increase - aluminum castings performance initiative		4,000
Program increase - advanced regenerative manufacturing		4,000
Program increase - advanced robotics and automation training		8,000
Program increase - biotechnology manufacturing institutes		100,000
Program increase - data analytics and visualization		6,000
Program increase - digital manufacturing accelerator		6,000
Program increase - domestic flexible factory for footwear manufacturing		10,000
Program increase - flexible hybrid electronics		10,000
Program increase - high performance computing enabled large-scale manufacturing		25,000
Program increase - high temperature composite material manufacturing		10,000
Program increase - integrated silicon-based lasers		4,000
Program increase - manufacturing of advanced components for hypersonics		16,000
Program increase - microelectromechanical systems mirror-based LiDAR sensor		3,000
Program increase - OT and internet-of-things asset identification and management		5,000
Program increase - rapid additive manufacturing		3,500
<b>55 MANUFACTURING TECHNOLOGY PROGRAM</b>	<b>46,404</b>	<b>69,764</b>
Program increase - artificial intelligence manufacturing		5,000
Program increase - critical mineral supply chain resiliency		5,000
Program increase - high purity vanadium for aerospace titanium alloys		2,000
Program increase - hypersonic radomes and apertures		4,000
Program increase - processing pilot for high-purity nickel		3,000
Program increase - rare earth element mining		2,000
Program increase - recover, reclaim, recycle materials from defense scrap		2,000
Program increase - steel performance initiative		5,000
Execution risk		-4,640
<b>56 GENERIC LOGISTICS R&amp;D TECHNOLOGY DEMONSTRATIONS</b>	<b>16,580</b>	<b>16,991</b>
Program increase - wood to jet fuel		3,000
Leverage Joint SBIR/STTR		-2,589
<b>57 STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM</b>	<b>60,387</b>	<b>60,387</b>
<b>58 MICROELECTRONICS TECHNOLOGY DEVELOPMENT AND SUPPORT</b>	<b>144,707</b>	<b>147,472</b>
Program increase - enhanced RF microelectronics production		10,000
Execution risk		-7,235
<b>59 JOINT WARFIGHTING PROGRAM</b>	<b>2,749</b>	<b>2,749</b>

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>60 ADVANCED ELECTRONICS TECHNOLOGIES</b>	<b>254,033</b>	<b>254,033</b>
<b>61 COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS</b>	<b>321,591</b>	<b>346,591</b>
Classified adjustment		25,000
<b>62 NETWORK-CENTRIC WARFARE TECHNOLOGY</b>	<b>885,425</b>	<b>863,175</b>
Classified adjustment		-16,000
Unjustified growth		-6,250
<b>63 SENSOR TECHNOLOGY</b>	<b>358,580</b>	<b>322,050</b>
Excess growth		-36,530
<b>65 SOFTWARE ENGINEERING INSTITUTE</b>	<b>16,699</b>	<b>16,699</b>
<b>66 DEFENSE INNOVATION ACCELERATION (DIA)</b>	<b>257,110</b>	<b>261,741</b>
Maintain level of effort		-18,000
Previously funded		-19,250
Transfer Project 375 from line 47		41,881
<b>67 HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM</b>	<b>111,799</b>	<b>111,799</b>
<b>68 TEST &amp; EVALUATION SCIENCE &amp; TECHNOLOGY</b>	<b>345,384</b>	<b>412,368</b>
Program increase - enhanced hypersonic testing capabilities in collaboration with NASA		15,000
Program increase - hypersonic wave heat facilities		20,000
Program increase - MACH-TB modeling, simulating, analysis, and testing classified network		10,000
Program increase - space based telemetry using phased array		8,350
Program increase - space testing facilities		25,000
Unjustified growth		-11,366
<b>69 AUKUS INNOVATION INITIATIVES</b>	<b>25,000</b>	<b>12,500</b>
Program decrease - excess to need		-12,500
<b>70 NATIONAL SECURITY INNOVATION NETWORK</b>	<b>21,575</b>	<b>21,575</b>
<b>71 OPERATIONAL ENERGY CAPABILITY IMPROVEMENT</b>	<b>171,668</b>	<b>221,085</b>
Program increase		20,000
Program increase - high energy laser counter anti-ship cruise missile program thermal energy storage		10,000
Program increase - radioisotope power systems		18,000
Program increase - TRISO advanced fuel		10,000
Prior year underexecution		-8,583
<b>72 SOF ADVANCED TECHNOLOGY DEVELOPMENT</b>	<b>156,097</b>	<b>161,163</b>
Program increase - C-130J auto flight deck and remote mission systems		10,500
Program increase - identity management		3,500
Maintain level of effort - advanced technology development		-4,934
Program decrease		-4,000
<b>74 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&amp;E ADC&amp;P</b>	<b>76,764</b>	<b>59,463</b>
Excess growth		-17,301
<b>75 WALKOFF</b>	<b>143,486</b>	<b>143,486</b>

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R-1	Budget Request	Final Bill
<b>76 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM</b>	<b>117,196</b>	<b>122,196</b>
Program increase - on-base microgrid resiliency		5,000
Program increase - sustainable technology evaluation and demonstration program		3,000
Program decrease - sustainable technologies evaluation and demonstration program		-3,000
<b>77 BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT</b>	<b>220,311</b>	<b>225,311</b>
Program increase - THAAD modernization		5,000
<b>78 BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE</b>	<b>903,633</b>	<b>886,798</b>
Early to need		-4,050
Excess growth		-12,785
<b>79 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - DEM/VAL</b>	<b>316,853</b>	<b>292,006</b>
Excess growth		-24,847
<b>80 BALLISTIC MISSILE DEFENSE SENSORS</b>	<b>239,159</b>	<b>239,159</b>
<b>81 BMD ENABLING PROGRAMS</b>	<b>597,720</b>	<b>587,490</b>
Future concepts and planning growth		-3,500
Threat systems engineering		-6,730
<b>82 SPECIAL PROGRAMS - MDA</b>	<b>552,888</b>	<b>564,888</b>
Classified adjustment		12,000
<b>83 AEGIS BMD</b>	<b>693,727</b>	<b>603,671</b>
Program increase - lightweight, radiation-hardened, thermally-insensitive sensors		10,000
Excess growth		-4,856
Unjustified request		-95,200
<b>84 BALLISTIC MISSILE DEFENSE COMMAND AND CONTROL, BATTLE MANAGEMENT AND COMMUNICATION</b>	<b>554,201</b>	<b>553,870</b>
Program decrease - flight test adjustments		-331
<b>85 BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT</b>	<b>48,248</b>	<b>48,248</b>
<b>86 MISSILE DEFENSE INTEGRATION &amp; OPERATIONS CENTER (MDIOC)</b>	<b>50,549</b>	<b>50,549</b>
<b>87 REGARDING TRENCH</b>	<b>12,564</b>	<b>17,564</b>
Classified adjustment		5,000
<b>88 SEA BASED X-BAND RADAR (SBX)</b>	<b>177,868</b>	<b>177,868</b>
<b>89 ISRAELI COOPERATIVE PROGRAMS</b>	<b>300,000</b>	<b>300,000</b>
<b>90 BALLISTIC MISSILE DEFENSE TEST</b>	<b>360,455</b>	<b>358,903</b>
Program decrease - flight test adjustments		-1,552
<b>91 BALLISTIC MISSILE DEFENSE TARGETS</b>	<b>570,258</b>	<b>617,758</b>
Program increase - advanced reactive target simulation		10,000
Program increase - advanced target front end configuration technology maturation		5,000
Program increase - leveraging commercial launch for targets and countermeasures		10,000
Program increase - low cost hypersonic flight test bed		15,000
Program increase - low cost liquid target demonstration		7,500

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>92 COALITION WARFARE</b>	<b>12,103</b>	<b>9,903</b>
Program decrease - excess to need		-2,200
<b>93 NEXT GENERATION INFORMATION COMMUNICATIONS TECHNOLOGY (5G)</b>	<b>179,278</b>	<b>124,278</b>
Program decrease - excess to need		-20,000
Transfer to line 281		-35,000
<b>94 DEPARTMENT OF DEFENSE CORROSION PROGRAM</b>	<b>3,185</b>	<b>5,185</b>
Program increase - anti-corrosion initiatives		2,000
<b>95 GUAM DEFENSE DEVELOPMENT</b>	<b>397,578</b>	<b>397,578</b>
<b>96 TECHNOLOGY MATURATION INITIATIVES</b>	<b>0</b>	<b>10,000</b>
Program increase - short pulse laser directed energy demonstration for hypersonic defense		10,000
<b>97 CHIEF DIGITAL AND ARTIFICIAL INTELLIGENCE OFFICER (CDAO) - MIP</b>	<b>34,350</b>	<b>34,350</b>
<b>98 HYPERSONIC DEFENSE</b>	<b>208,997</b>	<b>233,997</b>
Program increase - reusable hypersonic flight testing		25,000
<b>99 ADVANCED INNOVATIVE TECHNOLOGIES</b>	<b>1,085,826</b>	<b>1,016,283</b>
Program increase - Project Pele		41,800
Classified adjustment		-68,518
Early to need - hypervelocity gun weapons system		-32,825
Effort previously funded		-10,000
<b>100 TRUSTED &amp; ASSURED MICROELECTRONICS</b>	<b>760,839</b>	<b>710,814</b>
Program increase - chiplet interfaces for advanced node field programmable gate arrays		10,000
Program increase - high voltage silicon carbide microelectronics		7,000
Program increase - magnetoresistive random-access memory		3,500
Program increase - radiation-hardened chiplet design acceleration		5,000
Execution risk		-75,525
<b>101 RAPID PROTOTYPING PROGRAM</b>	<b>110,291</b>	<b>79,191</b>
Program increase - undersea kinetic multi-payload capable USV		5,000
Program completion - SCIFIRE		-8,900
Prior year contract savings		-12,200
Functional transfer to line 130A for JADC2		-15,000
<b>102 RAPID PROTOTYPING PROGRAM</b>	<b>9,880</b>	<b>5,880</b>
Program decrease		-4,000
<b>103 DEFENSE INNOVATION UNIT (DIU) PROTOTYPING</b>	<b>0</b>	<b>131,874</b>
Program increase		7,000
Program increase - accountability bookkeeping dashboard		18,000
Program increase - additive manufacturing of undersea drones		10,000
Program increase - advance rocket propulsion		20,000
Program increase - aircraft autonomy		14,750
Program increase - quantum		55,000
Transfer from line 106 - operational energy capability improvement non-S&T		7,124
<b>104 DEPARTMENT OF DEFENSE (DOD) UNMANNED SYSTEM COMMON DEVELOPMENT</b>	<b>2,643</b>	<b>9,643</b>
Program increase - unmanned traffic management test, evaluation, and implementation		7,000
<b>105 CATAPULT INFORMATION SYSTEM</b>	<b>8,328</b>	<b>8,328</b>

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>106 OPERATIONAL ENERGY CAPABILITY IMPROVEMENT - NON S&amp;T</b>	<b>53,726</b>	<b>39,479</b>
Prior year underexecution		-7,123
Transfer to line 103		-7,124
<b>108 WARGAMING AND SUPPORT FOR STRATEGIC ANALYSIS (SSA)</b>	<b>3,206</b>	<b>3,206</b>
<b>109 RAPID DEFENSE EXPERIMENTATION RESERVE (RDER)</b>	<b>79,773</b>	<b>23,515</b>
Program decrease		-56,258
<b>110 JOINT C5 CAPABILITY DEVELOPMENT, INTEGRATION AND INTEROPERABILITY ASSESSMENTS</b>	<b>28,517</b>	<b>19,457</b>
Transfer to Line 130A for JADC2		-9,060
<b>111 LONG RANGE DISCRIMINATION RADAR (LRDR)</b>	<b>103,517</b>	<b>103,517</b>
<b>112 IMPROVED HOMELAND DEFENSE INTERCEPTORS</b>	<b>2,130,838</b>	<b>2,130,838</b>
<b>113 BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT TEST</b>	<b>47,577</b>	<b>20,708</b>
Program decrease - flight test adjustments		-26,869
<b>114 AEGIS BMD TEST</b>	<b>193,484</b>	<b>186,484</b>
Program decrease		-7,000
<b>115 BALLISTIC MISSILE DEFENSE SENSOR TEST</b>	<b>111,049</b>	<b>111,049</b>
<b>116 LAND-BASED SM-3 (LBSM3)</b>	<b>22,163</b>	<b>22,163</b>
<b>117 BALLISTIC MISSILE DEFENSE MIDCOURSE SEGMENT TEST</b>	<b>41,824</b>	<b>33,224</b>
Prior year test adjustments		-8,600
<b>118 SAFETY PROGRAM MANAGEMENT</b>	<b>2,484</b>	<b>2,484</b>
<b>119 CYBERCOM ACTIVITIES</b>	<b>65,484</b>	<b>65,484</b>
<b>120 ROBUST INFRASTRUCTURE AND ACCESS</b>	<b>170,182</b>	<b>135,482</b>
Unjustified growth		-34,700
<b>121 CYBER TRAINING ENVIRONMENT (CTE)</b>	<b>114,980</b>	<b>114,980</b>
<b>122 ENTERPRISE INFORMATION TECHNOLOGY SYSTEMS</b>	<b>2,156</b>	<b>2,156</b>
<b>123 CYBER SECURITY INITIATIVE</b>	<b>2,760</b>	<b>2,760</b>
<b>124 INTELLIGENCE CAPABILITIES AND INNOVATION</b>	<b>3,000</b>	<b>3,000</b>
<b>125 CYBERSPACE OPERATIONS FORCES AND FORCE SUPPORT</b>	<b>2,669</b>	<b>16,669</b>
Program increase - Joint Forces Headquarters - DOD information network cyber defensive operations and training		14,000
<b>126 OFFICE OF STRATEGIC CAPITAL (OSC)</b>	<b>99,000</b>	<b>34,800</b>
Program decrease - critical technologies limited partner program		-15,000
Transfer to Department of Defense Credit Program Account, Title VIII		-49,200

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R-1	Budget Request	Final Bill
<b>129 BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS</b>	<b>109,483</b>	<b>110,483</b>
Program increase - HBTSS		1,000
<b>130 CHIEF DIGITAL AND ARTIFICIAL INTELLIGENCE OFFICER (CDAO) - DEM/VAL ACTIVITIES</b>	<b>615,246</b>	<b>351,679</b>
Program increase - all domain autonomous simulation		4,900
Program increase - management innovation pilot		50,000
Program increase - secure transit over untrusted networks		5,000
Program increase - SUNvana improvements		5,000
Undefined requirement - big play pilot		-19,500
Cost overestimation - GIDE		-13,400
Functional transfer to line 130A for JADC2		-262,950
Functional transfer to line 130B for Alpha-1		-44,919
Transfer from line 30, SO/LIC advanced development		12,302
<b>130A JADC2</b>		<b>343,010</b>
Program increase - joint fires network		50,000
Classified adjustment		6,000
Functional transfer from line 101 for JADC2		15,000
Functional transfer from line 110 for JADC2		9,060
Functional transfer from line 130 for JADC2		262,950
<b>130B ALPHA-1</b>		<b>54,919</b>
Program increase - autonomy enterprise platform		10,000
Functional transfer from line 130 for Alpha-1		44,919
<b>131 NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&amp;E SDD</b>	<b>6,229</b>	<b>6,229</b>
<b>132 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - EMD</b>	<b>382,977</b>	<b>342,114</b>
Execution risk		-20,266
Unexecutable growth - autoinjector manufacturer capability		-20,597
<b>133 JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM</b>	<b>9,775</b>	<b>9,775</b>
<b>134 COUNTER WEAPONS OF MASS DESTRUCTION SYSTEMS DEVELOPMENT</b>	<b>14,414</b>	<b>14,414</b>
<b>135 INFORMATION TECHNOLOGY DEVELOPMENT</b>	<b>6,953</b>	<b>6,953</b>
<b>136 HOMELAND PERSONNEL SECURITY INITIATIVE</b>	<b>9,292</b>	<b>7,292</b>
Insufficient justification		-2,000
<b>137 DEFENSE EXPORTABILITY PROGRAM</b>	<b>18,981</b>	<b>14,731</b>
Excess growth		-4,250
<b>138 OUSD(C) IT DEVELOPMENT INITIATIVES</b>	<b>5,456</b>	<b>5,456</b>
<b>140 DEFENSE AGENCY INITIATIVES (DAI) - FINANCIAL SYSTEM</b>	<b>32,629</b>	<b>29,229</b>
Excess growth		-3,400
<b>141 MISSION ASSURANCE RISK MANAGEMENT SYSTEM (MARMS)</b>	<b>9,316</b>	<b>9,316</b>
<b>142 DEFENSE-WIDE ELECTRONIC PROCUREMENT CAPABILITIES</b>	<b>6,899</b>	<b>6,899</b>
<b>143 TRUSTED &amp; ASSURED MICROELECTRONICS</b>	<b>247,586</b>	<b>209,034</b>
Execution risk		-38,552
<b>145 NUCLEAR COMMAND, CONTROL, &amp; COMMUNICATIONS</b>	<b>4,110</b>	<b>4,110</b>
<b>146 DOD ENTERPRISE ENERGY INFORMATION MANAGEMENT</b>	<b>8,159</b>	<b>8,159</b>

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R-1	Budget Request	Final Bill
147 CWMD SYSTEMS: SYSTEM DEVELOPMENT AND DEMONSTRATION	14,471	14,471
148 DOMESTIC PREPAREDNESS AGAINST WEAPONS OF MASS DESTRUCTION	3,770	3,770
149 JOINT CAPABILITY EXPERIMENTATION	12,402	12,402
150 DEFENSE READINESS REPORTING SYSTEM (DRRS)	12,746	12,746
151 JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	8,426	8,426
152 CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT (CTEIP)	833,792	850,000
Program increase - hypersonic test facility		105,000
Early to need		-88,792
153 ASSESSMENTS AND EVALUATIONS	5,810	5,810
154 MISSION SUPPORT	99,090	99,090
155 JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC)	187,421	175,699
Duplicative funding		-11,722
156 JOINT INTEGRATED AIR AND MISSILE DEFENSE	61,477	61,477
157 CLASSIFIED PROGRAM USD(P)	0	167,042
Program increase - classified adjustment		167,042
158 SYSTEMS ENGINEERING	39,949	30,749
Excess growth		-9,200
159 STUDIES AND ANALYSIS SUPPORT - OSD	6,292	6,292
160 NUCLEAR MATTERS-PHYSICAL SECURITY	21,043	15,400
Excess growth		-5,643
161 SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	10,504	10,504
162 GENERAL SUPPORT TO OUSD (INTELLIGENCE AND SECURITY)	2,980	7,980
Program increase - implementation of findings and recommendations of security programs, policies and procedures		5,000
163 CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	74,382	74,382
170 SMALL BUSINESS INNOVATION RESEARCH (SBIR)/ SMALL BUSINESS TECHNOLOGY TRANSFER	3,831	3,831
171 MAINTAINING TECHNOLOGY ADVANTAGE	38,923	38,923
172 DEFENSE TECHNOLOGY ANALYSIS	60,404	55,565
Unclear strategy and metrics		-4,839
173 DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	65,715	65,715
174 R&D IN SUPPORT OF DOD ENLISTMENT, TESTING AND EVALUATION	26,037	31,037
Program increase - federal voting assistance program		5,000
175 DEVELOPMENT TEST AND EVALUATION	37,353	37,353

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R-1	Budget Request	Final Bill
176 MANAGEMENT HQ - R&D	14,833	14,833
177 MANAGEMENT HQ - DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	3,752	3,752
178 SPECIAL ACTIVITIES	18,088	18,088
179 BUDGET AND PROGRAM ASSESSMENTS	14,427	14,427
180 ANALYSIS WORKING GROUP (AWG) SUPPORT	4,200	4,200
181 CHIEF DIGITAL AND ARTIFICIAL INTELLIGENCE OFFICER (CDAO) ACTIVITIES Excess growth	17,247	13,447 -3,800
182 ODNA TECHNOLOGY AND RESOURCE ANALYSIS	3,386	3,386
183 DEFENSE SCIENCE BOARD	2,352	2,352
184 AVIATION SAFETY TECHNOLOGIES Program decrease - unjustified request	213	0 -213
186 CYBER RESILIENCY AND CYBERSECURITY POLICY Duplicative spending	45,194	42,194 -3,000
187 MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	11,919	11,919
188 DEFENSE OPERATIONS SECURITY INITIATIVE (DOSI)	3,112	3,112
189 JOINT STAFF ANALYTICAL SUPPORT	4,916	4,916
190 C4I INTEROPERABILITY	66,152	66,152
195 COMBINED ADVANCED APPLICATIONS	5,366	5,366
197 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	3,069	3,069
199 COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION (CE2T2) - NON-MHA Duplicative request - JLVC modernization	101,319	54,069 -47,250
200 DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE (DEOMI)	740	740
201 MANAGEMENT HQ - MDA	28,363	28,363
202 JOINT SERVICE PROVIDER (JSP)	5,177	5,177
203 ENTERPRISE SECURITY SYSTEM (ESS)	42,482	42,482

<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>205 INDUSTRIAL BASE ANALYSIS AND SUSTAINMENT SUPPORT</b>	<b>1,017,141</b>	<b>921,354</b>
Program increase - 2.5D advanced packaging		10,250
Program increase - 3D printing technology		3,000
Program increase - 5G testbed		10,000
Program increase - advanced electrification demonstration		3,000
Program increase - advanced headborne systems and manufacturing		5,000
Program increase - advanced thermoplastics demonstration		10,000
Program increase - automated textile manufacturing		5,000
Program increase - battery manufacturing supply chain resilience		5,000
Program increase - critical materials processing		10,000
Program increase - critical minerals from chromatographic separation		2,000
Program increase - defense supply chain and workforce readiness program		2,000
Program increase - domestic nickel superalloy castings		4,000
Program increase - domestic organic light emitting diode microdisplay manufacturing		24,500
Program increase - extreme environment clothing		2,000
Program increase - freeze-dried plasma		7,800
Program increase - high temperature ceramics lab and prototyping capability		2,000
Program increase - munitions supply chain diversification		5,000
Program increase - rare earth element demonstration		5,000
Program increase - ruggedized transceivers		10,000
Program increase - scaling commercial grade packs and frames		5,000
Program increase - securing rare earth		5,000
Program increase - shipyard and ship repair workforce training		3,000
Program increase - small business shipbuilding supplier resiliency		5,000
Planned FY25 contract awards		-239,337
<b>206 COUNTERPROLIFERATION SPECIAL PROJECTS: OPERATIONAL SYSTEMS DEVELOPMENT</b>	<b>12,713</b>	<b>12,713</b>
<b>207 GLOBAL THEATER SECURITY COOPERATION MANAGEMENT INFORMATION SYSTEMS (G-TSCMIS)</b>	<b>8,503</b>	<b>8,503</b>
<b>208 CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS DEVELOPMENT)</b>	<b>80,495</b>	<b>67,162</b>
Excess growth		-13,333
<b>209 CYBER COMMAND AND CONTROL (CYBER C2)</b>	<b>95,733</b>	<b>95,733</b>
<b>210 DATA AND UNIFIED PLATFORM (D&amp;UP)</b>	<b>138,558</b>	<b>118,558</b>
Unjustified growth - unified platform infrastructure		-20,000
<b>214 DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATION</b>	<b>19,299</b>	<b>19,299</b>
<b>215 LONG-HAUL COMMUNICATIONS - DCS</b>	<b>37,726</b>	<b>37,726</b>
<b>216 MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)</b>	<b>5,037</b>	<b>5,037</b>
<b>218 INFORMATION SYSTEMS SECURITY PROGRAM</b>	<b>97,171</b>	<b>137,171</b>
Program increase - centers for academic excellence		25,000
Program increase - cyber institutes at senior military colleges		15,000
<b>220 INFORMATION SYSTEMS SECURITY PROGRAM</b>	<b>8,351</b>	<b>8,351</b>
<b>222 DEFENSE SPECTRUM ORGANIZATION</b>	<b>35,995</b>	<b>25,995</b>
EMBM contract delays		-10,000

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R-1	Budget Request	Final Bill
223 JOINT PLANNING AND EXECUTION SERVICES	5,677	5,677
224 JOINT REGIONAL SECURITY STACKS (JRSS)	3,196	3,196
228 DEFENSE INDUSTRIAL BASE (DIB) CYBER SECURITY	25,655	25,655
232 INDUSTRIAL SECURITY ACTIVITIES	2,134	2,134
235 DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	2,295	2,295
236 COMBINED ADVANCED APPLICATIONS	52,736	52,736
239 POLICY R&D PROGRAMS	6,263	6,263
240 NET CENTRICITY Excess growth	23,275	19,784 -3,491
242 DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	6,214	6,214
249 INSIDER THREAT Program increase - credibility assessment modernization	2,971	12,971 10,000
250 HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM Program increase - dual advanced use trauma system	1,879	7,269 5,390
257 CYBER OPERATIONS TECHNOLOGY SUPPORT Program increase - cyber operations technology support Unjustified growth - deployable mission support systems Unjustified growth - joint cyber warfighting architecture Unjustified growth - joint development environment Program decrease unaccounted for	469,385	399,366 2,000 -1,119 -35,000 -25,000 -10,900
261 DOMESTIC PREPAREDNESS AGAINST WEAPONS OF MASS DESTRUCTION	1,760	1,760
262 LOGISTICS SUPPORT ACTIVITIES Program increase - next generation transponder integration	1,420	4,420 3,000
263 PACIFIC DISASTER CENTERS Program increase - global water security center	1,905	3,905 2,000
264 DEFENSE PROPERTY ACCOUNTABILITY SYSTEM	3,249	3,249
265 MQ-9 UAV Program increase - adaptive airborne enterprise	37,188	92,188 55,000
267 AVIATION SYSTEMS Program increase - alternative domestic source C-130J IRSS Program increase - C-130J weapons modernization Unjustified request - aviation engineering analysis	216,174	221,177 6,000 8,000 -8,997
268 INTELLIGENCE SYSTEMS DEVELOPMENT Program increase - detecting and tracking technology Program increase - multi-mission tactical unmanned aerial system Program increase - quantum computing and quantum networking	86,737	125,237 6,000 25,000 7,500

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<b>R-1</b>	<b>Budget Request</b>	<b>Final Bill</b>
<b>269 OPERATIONAL ENHANCEMENTS</b>	<b>216,135</b>	<b>236,135</b>
Program increase - female body armor development and modernization		5,000
Program increase - loitering munitions		15,000
<b>270 WARRIOR SYSTEMS</b>	<b>263,374</b>	<b>337,174</b>
Program increase - blast exposure monitoring		10,000
Program increase - CUAS group 3 defeat acceleration		5,000
Program increase - next-generation electronic countermeasures		12,000
Program increase - non-kinetic targeting and signature management		10,000
Program increase - non-traditional ISR		10,000
Program increase - passive radar for air defense and counter unmanned aerial systems		3,500
Program increase - platform agnostic data storage infrastructure		3,000
Program increase - SPEAR body armor		5,000
Program increase - stand-off precision guided munitions		24,000
Early to need - MPE-M		-8,700
<b>271 SPECIAL PROGRAMS</b>	<b>529</b>	<b>529</b>
<b>272 UNMANNED ISR</b>	<b>6,727</b>	<b>6,727</b>
<b>273 SOF TACTICAL VEHICLES</b>	<b>9,335</b>	<b>9,335</b>
<b>274 MARITIME SYSTEMS</b>	<b>158,231</b>	<b>163,231</b>
Program increase - autonomous unmanned surface vessels		5,000
<b>275 OPERATIONAL ENHANCEMENTS INTELLIGENCE</b>	<b>15,749</b>	<b>18,249</b>
Program increase - 3D mapping at the tactical edge		2,500
<b>278 ACQUISITION VISIBILITY - SOFTWARE PILOT PROGRAM</b>	<b>21,355</b>	<b>21,355</b>
<b>279 GLOBAL COMMAND AND CONTROL SYSTEM</b>	<b>33,166</b>	<b>33,166</b>
<b>281A DEFENSE INNOVATION UNIT (DIU) FIELDING</b>	<b>0</b>	<b>589,400</b>
Program increase - AI development tools		8,000
Program increase - AI for ISR data and analysis		9,800
Program increase - AI for ISR drones		10,000
Program increase - AUKUS and coalition warfare		14,700
Program increase - autonomous amphibious response vehicle		5,000
Program increase - automated cybersecurity testing		2,000
Program increase - autonomous VTOL air logistics		23,000
Program increase - CsUAS		50,000
Program increase - digital engineering		13,000
Program increase - DIU and service Non-traditional Innovation Fielding Enterprise		134,000
Program increase - long endurance USVs for multi-domain awareness		50,000
Program increase - modeling and simulation for autonomy		4,900
Program increase - research on 5G interference with military radars		10,000
Program increase - support to combatant commands		220,000
Transfer from line 93		35,000
<b>999 CLASSIFIED PROGRAMS</b>	<b>8,463,742</b>	<b>8,809,670</b>
Classified adjustment		345,928
<b>999 CLASSIFIED PROGRAMS</b>	<b>36,315</b>	<b>36,315</b>
<b>999 CLASSIFIED PROGRAMS</b>	<b>270,653</b>	<b>0</b>
Classified adjustment		-270,653
<b>TOTAL, RESEARCH, DEVELOPMENT, TEST &amp; EVALUATION, DEFENSE-WIDE</b>	<b>36,085,834</b>	<b>36,892,886</b>

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#### TACTICALLY MOBILE MICRO-REACTOR DEVELOPMENT

The agreement directs the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs to provide expeditious oversight of physical security and nuclear material handling, interagency coordination, and technical review and assistance for the design, development, and test of tactically mobile micro-reactors. This language replaces the language under this heading in Senate Report 118-81.

#### DIGITAL TRANSFORMATION

The agreement directs the Chief Digital and Artificial Intelligence Officer (CDAO), in coordination with the Undersecretary of Defense (Comptroller) and the Director of the Defense Innovation Unit, to submit a report to the congressional defense committees, not later than 60 days after the enactment of this Act, on a development, data, and deployment strategy of an appropriately secure web interface that can provide access to budget and acquisition data reporting to the congressional defense committees. The report shall include an analysis of any budgetary policy barriers to implementing this secure web interface. This language replaces the directives under this heading in House Report 118-121.

#### OFFICE OF STRATEGIC CAPITAL OVERSIGHT AND EXECUTABILITY

The agreement recognizes the objectives and promise of the Office of Strategic Capital (OSC). Given the congressional interest in the success of this office, a continued active dialogue between the OSC and the House and Senate Defense Appropriations Subcommittees is encouraged to ensure that the necessary authorities and funding mechanisms are available and proper oversight and execution of the same. Noting the importance of the Office of Strategic Capital, the agreement provides \$84,000,000, of which \$49,200,000 is for the loan program office as appropriated in section 8140 for the Department of Defense Credit Program Account. The loan program office shall only make direct loans, and such direct loans shall be limited to companies developing critical technologies.

#### BIOTECHNOLOGY MANUFACTURING INSTITUTES

The agreement includes the reporting requirement under this heading in House Report 118-121. However, the spend plan directed under this heading in House Report 118-121 is no longer required.

#### ALTERNATIVE BATTERY CHEMISTRY

The agreement directs the Deputy Secretary of Defense to provide a briefing to the congressional defense committees, not later than 120 days after the enactment of this Act, on potential alternatives or advanced battery chemistries to address strategic vulnerabilities and an assessment of the security risk associated with the sourcing of raw and processed materials from outside the United States. The brief shall also include the Department's plan to address these vulnerabilities, including the Department's projected timelines to increase domestic procurement of rechargeable batteries and battery cells, as well as an analysis of key factors limiting domestic procurement of rechargeable batteries and battery cells. This language replaces the directives under this heading in House Report 118-121.

#### OPERATIONAL TEST AND EVALUATION, DEFENSE

The agreement provides \$337,489,000 for Operational Test and Evaluation, Defense, as follows:

##### EXPLANATION OF PROJECT LEVEL ADJUSTMENTS [In thousands of dollars]

	Budget Request	Final Bill
<b>OPERATIONAL TEST AND EVALUATION</b>	<b>169,544</b>	<b>140,044</b>
Program increase - browser plug-in security research		6,000
Transfer to line 3 per DOT&E request		-35,500
<b>LIVE FIRE TESTING</b>	<b>103,252</b>	<b>103,252</b>
<b>OPERATIONAL TEST ACTIVITIES AND ANALYSIS</b>	<b>58,693</b>	<b>94,193</b>
Transfer from line 1 per DOT&E request		35,500
<b>TOTAL, OPERATIONAL TEST &amp; EVALUATION, DEFENSE</b>	<b>331,489</b>	<b>337,489</b>