# DEPARTMENT OF THE NAVY
# FISCAL YEAR (FY) 2001
# BUDGET ESTIMATES


## JUSTIFICATION OF ESTIMATES
## FEBRUARY 2000

# OTHER PROCUREMENT, NAVY
# BUDGET ACTIVITY 7

DEPARTMENT OF THE NAVY

FY 2001 PROCUREMENT PROGRAM

SUMMARY
($ IN MILLIONS)

February 2000

APPROPRIATION: OTHER PROCUREMENT, NAVY

| ACTIVITY | FY 1999 | FY 2000 | FY 2001 |
|---|---|---|---|
| 01. SHIPS SUPPORT EQUIPMENT | 948.4 | 910.4 | 573.5 |
| 02. COMMUNICATIONS AND ELECTRONICS EQUIPMENT | 1,646.1 | 1,948.8 | 1,490.3 |
| 03. AVIATION SUPPORT EQUIPMENT | 247.1 | 237.6 | 204.9 |
| 04. ORDNANCE SUPPORT EQUIPMENT | 719.1 | 652.0 | 498.0 |
| 05. CIVIL ENGINEERING SUPPORT EQUIPMENT | 54.4 | 68.7 | 97.7 |
| 06. SUPPLY SUPPORT EQUIPMENT | 89.2 | 140.0 | 161.8 |
| 07. PERSONNEL AND COMMAND SUPPORT EQUIPMENT | 98.4 | 71.0 | 99.5 |
| 08. SPARES AND REPAIR PARTS | 243.9 | 273.2 | 208.9 |
| TOTAL OTHER PROCUREMENT, NAVY | 4,046.7 | 4,301.5 | 3,334.6 |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | MILLIONS OF DOLLARS FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| | BUDGET ACTIVITY 01: SHIPS SUPPORT EQUIPMENT | | | | | | | | |
| | SHIP PROPULSION EQUIPMENT | | | | | | | | |
| 1 | LM-2500 GAS TURBINE | A | | 8.6 | | 8.3 | | 7.0 | U |
| 2 | ALLISON 501K GAS TURBINE | A | | 6.7 | | 8.3 | | 6.3 | U |
| 3 | STEAM PROPULSION IMPROVEMENT | A | | .6 | | | | | U |
| 4 | OTHER PROPULSION EQUIPMENT | A | | 12.0 | | | | | U |
| | GENERATORS | | | | | | | | |
| 5 | OTHER GENERATORS | A | | 18.1 | | | | | U |
| | PUMPS | | | | | | | | |
| 6 | OTHER PUMPS | A | | 1.0 | | | | | U |
| | PROPELLERS | | | | | | | | |
| 7 | SUBMARINE PROPELLERS | A | | 7.8 | | | | 3.8 | U |
| 8 | OTHER PROPELLERS AND SHAFTS | A | | 1.1 | | | | | U |
| | NAVIGATION EQUIPMENT | | | | | | | | |
| 9 | OTHER NAVIGATION EQUIPMENT | A | | 58.7 | | 100.0 | | 33.4 | U |
| | UNDERWAY REPLENISHMENT EQUIPMENT | | | | | | | | |
| 10 | UNDERWAY REPLENISHMENT EQUIPMENT | A | | 7.3 | | 15.6 | | 9.1 | U |
| | PERISCOPES | | | | | | | | |
| 11 | SUB PERISCOPES & IMAGING EQUIP | A | | 28.5 | | 64.7 | | 19.0 | U |
| | OTHER SHIPBOARD EQUIPMENT | | | | | | | | |
| 12 | FIREFIGHTING EQUIPMENT | A | | 11.1 | | 16.9 | | 16.8 | U |
| 13 | COMMAND AND CONTROL SWITCHBOARD | A | | 10.0 | | 14.2 | | 10.5 | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 14 | POLLUTION CONTROL EQUIPMENT | B | | 117.0 | | 114.4 | | 47.8 | U |
| 15 | SUBMARINE SILENCING EQUIPMENT | A | | 3.4 | | | | | U |
| 16 | SUBMARINE SUPPORT EQUIPMENT | A | | | | 50.3 | | 11.4 | U |
| 17 | SUBMARINE BATTERIES | A | | 8.3 | | 13.0 | | 12.4 | U |
| 18 | SSN21 CLASS SUPPORT EQUIPMENT | A | | 15.3 | | | | | U |
| 19 | STRATEGIC PLATFORM SUPPORT EQUIP | A | | 10.1 | | 21.0 | | 6.2 | U |
| 20 | DSSP EQUIPMENT | A | | 10.3 | | 7.9 | | 5.4 | U |
| 21 | LCAC | A | | | | 4.0 | | 3.6 | U |
| 22 | MINESWEEPING EQUIPMENT | A | | .4 | | 19.6 | | 16.6 | U |
| 23 | HM&E ITEMS UNDER $2 MILLION | A | | 50.7 | | | | | U |
| 24 | ITEMS LESS THAN $5 MILLION | A | | | | 127.7 | | 58.9 | U |
| 25 | SURFACE IMA | A | | 4.1 | | | | 2.0 | U |
| 26 | MINI/MICROMINI ELECTRONIC REPAIR | A | | .5 | | | | | U |
| 27 | SUBMARINE LIFE SUPPORT SYSTEM | A | | | | 1.3 | | 4.9 | U |
| | REACTOR PLANT EQUIPMENT | | | | | | | | |
| 28 | REACTOR POWER UNITS | A | | 226.4 | | | | | U |
| 29 | REACTOR COMPONENTS | A | | 210.5 | | 198.0 | | 203.4 | U |
| | OCEAN ENGINEERING | | | | | | | | |
| 30 | DIVING AND SALVAGE EQUIPMENT | A | | 5.6 | | 5.5 | | 5.6 | U |
| 31 | EOD UNDERWATER EQUIPMENT | B | | 8.1 | | | | | U |
| | SMALL BOATS | | | | | | | | |
| 32 | STANDARD BOATS | A | | 1.4 | | 3.1 | | 2.7 | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | MILLIONS OF DOLLARS FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| | TRAINING EQUIPMENT | | | | | | | | |
| 33 | OTHER SHIPS TRAINING EQUIPMENT | A | | 1.8 | | 3.8 | | 3.3 | U |
| | PRODUCTION FACILITIES EQUIPMENT | | | | | | | | |
| 34 | OPERATING FORCES IPE | A | | .7 | | 4.5 | | 2.7 | U |
| | OTHER SHIP SUPPORT | | | | | | | | |
| 35 | NUCLEAR ALTERATIONS | A | | 94.1 | | 108.3 | | 80.9 | U |
| | DRUG INTERDICTION SUPPORT | | | | | | | | |
| 36 | DRUG INTERDICTION SUPPORT | A | | 8.3 | | | | | U |
| | TOTAL SHIPS SUPPORT EQUIPMENT | | | 948.4 | | 910.4 | | 573.5 | |
| | BUDGET ACTIVITY 02: COMMUNICATIONS AND ELECTRONICS EQUIPMENT | | | | | | | | |
| | SHIP RADARS | | | | | | | | |
| 37 | AN/SPS-49 | A | | 1.0 | | 2.2 | | | U |
| 38 | RADAR SUPPORT | A | | 28.6 | | 19.9 | | | U |
| 39 | TISS | A | | 3.5 | | 1.7 | | | U |
| | SHIP SONARS | | | | | | | | |
| 40 | AN/SQQ-89 SURF ASW COMBAT SYSTEM | A | | 23.2 | | 31.7 | | 14.3 | U |
| 41 | SSN ACOUSTICS | A | | 142.7 | | 216.4 | | 106.6 | U |
| 42 | UNDERSEA WARFARE SUPPORT EQUIPMENT | A | | | | 11.5 | | .8 | U |
| 43 | SONAR SUPPORT EQUIPMENT | A | | 8.1 | | 3.0 | | | U |
| 44 | SONAR SWITCHES AND TRANSDUCERS | A | | 12.7 | | 14.0 | | 10.7 | U |
| | ASW ELECTRONIC EQUIPMENT | | | | | | | | |
| 45 | SUBMARINE ACOUSTIC WARFARE SYSTEM | A | | 7.3 | | 11.1 | | 10.7 | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 46 | SSTD | A | | .8 | | | | | U |
| 47 | ACOUSTIC COMMUNICATIONS | A | | .4 | | | | | U |
| 48 | FIXED SURVEILLANCE SYSTEM | A | | 9.4 | | 16.6 | | 29.9 | U |
| 49 | SURTASS | A | | 12.5 | | 7.2 | | 5.5 | U |
| 50 | ASW OPERATIONS CENTER | A | | 2.6 | | 4.4 | | 6.2 | U |
| 51 | CARRIER ASW MODULE | A | | .4 | | | | | U |
| | ELECTRONIC WARFARE EQUIPMENT | | | | | | | | |
| 52 | AN/SLQ-32 | A | | 1.5 | | 1.9 | | | U |
| 53 | AN/WLR-1 | A | | 1.8 | | | | | U |
| 54 | INFORMATION WARFARE SYSTEMS | A | | 3.4 | | 4.1 | | 3.9 | U |
| 55 | C-3 COUNTERMEASURES | A | | 10.0 | | | | | U |
| | RECONNAISSANCE EQUIPMENT | | | | | | | | |
| 56 | SHIPBOARD IW EXPLOIT | A | | 40.1 | | 50.9 | | 61.5 | U |
| 57 | COMMON HIGH BANDWIDTH DATA LINK | A | | 55.6 | | 36.8 | | | U |
| | SUBMARINE SURVEILLANCE EQUIPMENT | | | | | | | | |
| 58 | AN/WLQ-4 | A | | 2.8 | | | | | U |
| 59 | SUBMARINE SUPPORT EQUIPMENT PROG | A | | 3.9 | | 38.2 | | 17.3 | U |
| | OTHER SHIP ELECTRONIC EQUIPMENT | | | | | | | | |
| 60 | NAVY TACTICAL DATA SYSTEM | A | | 12.1 | | 22.4 | | | U |
| 61 | COOPERATIVE ENGAGEMENT CAPABILITY | B | | 81.7 | | 60.2 | | 15.9 | U |
| 62 | GCCS-M EQUIPMENT AFLOAT | A | | 41.1 | | 24.9 | | 37.4 | U |
| 63 | NAVAL TACTICAL COMMAND SUPPORT SYSTEM | A | | 79.2 | | 58.2 | | 46.7 | U |
| 64 | ATDLS | A | | 28.8 | | 19.0 | | 19.2 | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 65 | MINESWEEPING SYSTEM REPLACEMENT | A | | 17.2 | | 19.6 | | 9.0 | U |
| 66 | SHALLOW WATER MCM | B | | 7.3 | | 18.7 | | 16.9 | U |
| 67 | NAVSTAR GPS RECEIVERS (SPACE) | A | | 9.4 | | 8.5 | | 9.6 | U |
| 68 | ARMED FORCES RADIO AND TV | A | | 15.9 | | 7.7 | | 9.0 | U |
| 69 | STRATEGIC PLATFORM SUPPORT EQUIP | A | | 12.5 | | 24.7 | | 15.4 | U |
| | TRAINING EQUIPMENT | | | | | | | | |
| 70 | OTHER SPAWAR TRAINING EQUIPMENT | A | | 1.0 | | 1.0 | | 1.3 | U |
| 71 | OTHER TRAINING EQUIPMENT | A | | 26.8 | | 51.1 | | 21.4 | U |
| | AVIATION ELECTRONIC EQUIPMENT | | | | | | | | |
| 72 | MATCALS | A | | 11.6 | | 12.3 | | 4.3 | U |
| 73 | SHIPBOARD AIR TRAFFIC CONTROL | B | | 8.5 | | 7.5 | | 7.9 | U |
| 74 | AUTOMATIC CARRIER LANDING SYSTEM | A | | 10.7 | | 18.5 | | 18.5 | U |
| 75 | NATIONAL AIR SPACE SYSTEM | B | | 7.7 | | 34.9 | | 30.5 | U |
| 76 | AIR STATION SUPPORT EQUIPMENT | A | | 7.2 | | 7.2 | | 6.7 | U |
| 77 | MICROWAVE LANDING SYSTEM | A | | 4.6 | | 5.3 | | 5.1 | U |
| 78 | FACSFAC | A | | 3.7 | | 5.3 | | 4.3 | U |
| 79 | ID SYSTEMS | A | | 17.6 | | 9.2 | | 14.3 | U |
| 80 | SURFACE IDENTIFICATION SYSTEMS | A | | 2.6 | | .6 | | | U |
| 81 | TAC A/C MISSION PLANNING SYS(TAMPS) | A | | 23.2 | | 20.7 | | 12.0 | U |
| | OTHER SHORE ELECTRONIC EQUIPMENT | | | | | | | | |
| 82 | GCCS-M EQUIPMENT ASHORE | A | | 4.0 | | 9.4 | | | U |
| 83 | OSIS EVOLUTIONARY DEVELOPMENT (OED) | A | | .9 | | | | | U |
| 84 | TADIX-B | A | | 4.3 | | 18.8 | | * | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 85 | NAVAL SPACE SURVEILLANCE SYSTEM | A | | | | 7.8 | | 2.7 | U |
| 86 | GCCS-M EQUIPMENT TACTICAL/MOBILE | A | | 24.6 | | 14.0 | | | U |
| 87 | COMMON IMAGERY GROUND SURFACE SYSTEMS | A | | 65.2 | | 41.0 | | 47.0 | U |
| 88 | RADIAC | A | | 4.0 | | 4.3 | | 8.3 | U |
| 89 | GPETE | A | | 9.5 | | 7.7 | | 7.4 | U |
| 90 | INTEG COMBAT SYSTEM TEST FACILITY | A | | 6.4 | | 4.3 | | 4.4 | U |
| 91 | CALIBRATION STANDARDS | A | | 1.9 | | | | | U |
| 92 | EMI CONTROL INSTRUMENTATION | A | | 7.5 | | 6.5 | | 5.4 | U |
| 93 | SHORE ELEC ITEMS UNDER $2 MILLION | A | | 10.4 | | | | | U |
| 94 | ITEMS LESS THAN $5 MILLION | A | | | | 10.9 | | 4.9 | U |
| | SHIPBOARD COMMUNICATIONS | | | | | | | | |
| 95 | SHIPBOARD TACTICAL COMMUNICATIONS | A | | 31.9 | | 25.2 | | | U |
| 96 | PORTABLE RADIOS | A | | 6.4 | | | | | U |
| 97 | SINCGARS | A | | 27.7 | | | | | U |
| 98 | SHIP COMMUNICATIONS AUTOMATION | A | | 109.1 | | 229.2 | | 185.1 | U |
| 99 | SHIP COMM ITEMS UNDER $5 MILLION | A | | 31.2 | | 30.5 | | | U |
| 100 | INTEGRATED BROADCAST SYSTEM | A | | 10.2 | | | | | U |
| 101 | COMMUNICATIONS ITEMS UNDER $5M | A | | | | | | 30.9 | U |
| | SUBMARINE COMMUNICATIONS | | | | | | | | |
| 102 | SHORE LF/VLF COMMUNICATIONS | A | | 13.9 | | 36.2 | | 31.4 | U |
| 103 | SUBMARINE COMMUNICATION EQUIPMENT | A | | 63.7 | | 83.2 | | 78.0 | U |
| 104 | ADVANCED VLF RECEIVER | B | | 16.1 | | | | | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| | SATELLITE COMMUNICATIONS | | | | | | | | |
| 105 | SATCOM SHIP TERMINALS (SPACE) | A | | 140.8 | | 216.5 | | | U |
| 106 | SATELLITE COMMUNICATIONS SYSTEMS | A | | | | | | 252.7 | U |
| 107 | SATCOM SHORE TERMINALS (SPACE) | A | | 65.1 | | 65.3 | | | U |
| | SHORE COMMUNICATIONS | | | | | | | | |
| 108 | JCS COMMUNICATIONS EQUIPMENT | A | | 3.3 | | 3.7 | | 2.5 | U |
| 109 | NSIPS | A | | 5.1 | | 7.0 | | 1.8 | U |
| 110 | JEDMICS | A | | 7.0 | | 16.9 | | | U |
| 111 | GCCS EQUIPMENT | A | | 2.5 | | | | | U |
| 112 | NAVAL SHORE COMMUNICATIONS | A | | 105.8 | | 113.4 | | 176.1 | U |
| | CRYPTOGRAPHIC EQUIPMENT | | | | | | | | |
| 113 | INFO SYSTEMS SECURITY PROGRAM (ISSP) | A | | 39.2 | | 66.8 | | 46.6 | U |
| | CRYPTOLOGIC EQUIPMENT | | | | | | | | |
| 114 | SPECIAL DCP | A | | | | | | 15.0 | U |
| 115 | CRYPTOLOGIC COMMUNICATIONS EQUIP | A | | 20.8 | | 21.0 | | 17.2 | U |
| | DRUG INTERDICTION SUPPORT | | | | | | | | |
| 116 | OTHER DRUG INTERDICTION SUPPORT | A | | 5.3 | | | | | U |
| | TOTAL COMMUNICATIONS AND ELECTRONICS EQUIPMENT | | | 1,646.1 | | 1,948.8 | | 1,490.3 | |
| | BUDGET ACTIVITY 03: AVIATION SUPPORT EQUIPMENT | | | | | | | | |
| | SONOBUOYS | | | | | | | | |
| 117 | AN/SSQ-36 (BT) | A | | 2.9 | | | | | U |
| 118 | AN/SSQ-53 (DIFAR) | A | | 28.0 | | | | | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | MILLIONS OF DOLLARS FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 119 | PASSIVE SONOBUOYS (NON-BEAM FORMING) | A | | | | 20.8 | | | U |
| 120 | AN/SSQ-57 (SPECIAL PURPOSE) | A | | 2.4 | | | | | U |
| 121 | AN/SSQ-62 (DICASS) | A | | 24.3 | | 16.6 | | | U |
| 122 | AN/SSQ-101 (ADAR) | B | | 19.4 | | 16.7 | | | U |
| 123 | SIGNAL, UNDERWATER SOUND (SUS) | A | | 1.4 | | | | | U |
| 124 | SONOBUOYS - ALL TYPES | A | | | | | | 49.5 | U |
| 125 | MISCELLANEOUS SONOBUOYS LESS THAN $5 M | A | | | | 2.2 | | | U |
| | AIRCRAFT SUPPORT EQUIPMENT | | | | | | | | |
| 126 | WEAPONS RANGE SUPPORT EQUIPMENT | A | | 22.9 | | 23.0 | | 15.1 | U |
| 127 | EXPEDITIONARY AIRFIELDS | A | | 2.4 | | .1 | | 3.3 | U |
| 128 | AIRCRAFT REARMING EQUIPMENT | A | | 12.7 | | 12.4 | | 10.7 | U |
| 129 | AIRCRAFT LAUNCH & RECOVERY EQUIPMENT | A | | 37.5 | | 40.4 | | 36.4 | U |
| 130 | METEOROLOGICAL EQUIPMENT | A | | 27.9 | | 31.3 | | 30.9 | U |
| 131 | OTHER PHOTOGRAPHIC EQUIPMENT | A | | .6 | | 1.7 | | 1.7 | U |
| 132 | AVIATION LIFE SUPPORT | A | | 22.7 | | 36.8 | | 20.4 | U |
| 133 | AIRBORNE MINE COUNTERMEASURES | A | | 35.3 | | 31.3 | | 32.1 | U |
| 134 | REWSON PHOTOGRAPHIC EQUIPMENT | A | | .8 | | | | | U |
| 135 | OTHER AVIATION SUPPORT EQUIPMENT | A | | 5.8 | | 4.2 | | 4.9 | U |
| | TOTAL AVIATION SUPPORT EQUIPMENT | | | 247.1 | | 237.6 | | 204.9 | |
| | BUDGET ACTIVITY 04: ORDNANCE SUPPORT EQUIPMENT | | | | | | | | |
| | SHIP GUN SYSTEM EQUIPMENT | | | | | | | | |
| 136 | GUN FIRE CONTROL EQUIPMENT | A | | 31.0 | | 5.8 | | 18.3 | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| | SHIP MISSILE SYSTEMS EQUIPMENT | | | | | | | | |
| 137 | MK-92 FIRE CONTROL SYSTEM | A | | 1.0 | | | | | U |
| 138 | TARTAR SUPPORT EQUIPMENT | A | | * | | | | | U |
| 139 | POINT DEFENSE SUPPORT EQUIPMENT | A | | * | | | | | U |
| 140 | NATO SEASPARROW | A | | 7.3 | | .5 | | 21.7 | U |
| 141 | RAM GMLS | A | | 63.1 | | 39.1 | | 37.3 | U |
| 142 | SHIP SELF DEFENSE SYSTEM | B | | 38.6 | | 38.6 | | 9.4 | U |
| 143 | AEGIS SUPPORT EQUIPMENT | A | | 89.4 | | 91.2 | | 36.8 | U |
| 144 | SURFACE TOMAHAWK SUPPORT EQUIPMENT | A | | 96.7 | | 85.3 | | 70.6 | U |
| 145 | SUBMARINE TOMAHAWK SUPPORT EQUIP | A | | 3.9 | | 2.1 | | 2.9 | U |
| 146 | VERTICAL LAUNCH SYSTEMS | A | | 10.3 | | 7.2 | | 7.0 | U |
| | FBM SUPPORT EQUIPMENT | | | | | | | | |
| 147 | STRATEGIC PLATFORM SUPPORT EQUIP | A | | 2.9 | | 9.3 | | 2.9 | U |
| 148 | STRATEGIC MISSILE SYSTEMS EQUIP | A | | 275.7 | | 238.2 | | 166.6 | U |
| 149 | ANTI-SHIP MISSILE DECOY SYSTEM | A | | 21.9 | | 32.3 | | 33.8 | U |
| | ASW SUPPORT EQUIPMENT | | | | | | | | |
| 150 | SSN COMBAT CONTROL SYSTEMS | A | | 18.7 | | 35.1 | | 20.9 | U |
| 151 | SUBMARINE ASW SUPPORT EQUIPMENT | A | | 5.7 | | 3.7 | | 4.0 | U |
| 152 | SURFACE ASW SUPPORT EQUIPMENT | A | | 4.9 | | 6.1 | | 6.3 | U |
| 153 | ASW RANGE SUPPORT EQUIPMENT | A | | 4.5 | | 6.4 | | 6.9 | U |
| | OTHER ORDNANCE SUPPORT EQUIPMENT | | | | | | | | |
| 154 | EXPLOSIVE ORDNANCE DISPOSAL EQUIP | B | | 8.8 | | 8.9 | | 7.5 | U |
| 155 | UNMANNED SEABORNE TARGET | A | | 1.9 | | | | | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 156 | INDUSTRIAL FACILITIES (CALIBRATION EQU | A | | 1.0 | | | | | U |
| 157 | ITEMS LESS THAN $5 MILLION | A | | | | 4.3 | | 5.6 | U |
| 158 | STOCK SURVEILLANCE EQUIPMENT | A | | 1.4 | | | | | U |
| | OTHER EXPENDABLE ORDNANCE | | | | | | | | |
| 159 | FLEET MINE SUPPORT EQUIPMENT | A | | * | | | | | U |
| 160 | SURFACE TRAINING DEVICE MODS | A | | 6.8 | | 10.6 | | 7.9 | U |
| 161 | SUBMARINE TRAINING DEVICE MODS | A | | 23.5 | | 27.4 | | 31.6 | U |
| | TOTAL ORDNANCE SUPPORT EQUIPMENT | | | 719.1 | | 652.0 | | 498.0 | |
| | BUDGET ACTIVITY 05: CIVIL ENGINEERING SUPPORT EQUIPMENT | | | | | | | | |
| | CIVIL ENGINEERING SUPPORT EQUIPMENT | | | | | | | | |
| 162 | ARMORED SEDANS | A | 1 | .2 | | | 1 | .2 | U |
| 163 | PASSENGER CARRYING VEHICLES | A | 102 | 3.2 | 25 | .6 | 3 | .1 | U |
| 164 | SPECIAL PURPOSE VEHICLES | A | | 4.3 | | | | | U |
| 165 | GENERAL PURPOSE TRUCKS | A | | .1 | | 1.6 | | 1.0 | U |
| 166 | CONSTRUCTION & MAINTENANCE EQUIP | A | | 1.5 | | 2.7 | | 6.2 | U |
| 167 | FIRE FIGHTING EQUIPMENT | A | | 1.6 | | 2.3 | | 2.5 | U |
| 168 | TACTICAL VEHICLES | B | | 1.3 | | 9.3 | | 10.5 | U |
| 169 | AMPHIBIOUS EQUIPMENT | A | | 19.7 | | 20.5 | | 51.6 | U |
| 170 | COMBAT CONSTRUCTION SUPPORT EQUIP | A | | 1.1 | | | | | U |
| 171 | MOBILE UTILITIES SUPPORT EQUIPMENT | A | | .4 | | | | | U |
| 172 | OCEAN CONSTRUCTION EQUIPMENT | A | | .4 | | | | | U |
| 173 | POLLUTION CONTROL EQUIPMENT | A | | 20.7 | | 23.9 | | 22.2 | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | MILLIONS OF DOLLARS FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| 174 | ITEMS UNDER $5 MILLION | A | | | | 7.8 | | 3.4 | U |
| | TOTAL CIVIL ENGINEERING SUPPORT EQUIPMENT | | | 54.4 | | 68.7 | | 97.7 | |
| | BUDGET ACTIVITY 06: SUPPLY SUPPORT EQUIPMENT | | | | | | | | |
| | SUPPLY SUPPORT EQUIPMENT | | | | | | | | |
| 175 | MATERIALS HANDLING EQUIPMENT | A | | 4.7 | | 6.2 | | 7.6 | U |
| 176 | OTHER SUPPLY SUPPORT EQUIPMENT | A | | 11.9 | | 6.9 | | 5.2 | U |
| 177 | FIRST DESTINATION TRANSPORTATION | A | | 4.4 | | 1.6 | | 4.1 | U |
| 178 | SPECIAL PURPOSE SUPPLY SYSTEMS | A | | 68.3 | | 125.2 | | 144.9 | U |
| | TOTAL SUPPLY SUPPORT EQUIPMENT | | | 89.2 | | 140.0 | | 161.8 | |
| | BUDGET ACTIVITY 07: PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | | | | | | | |
| | TRAINING DEVICES | | | | | | | | |
| 179 | TRAINING SUPPORT EQUIPMENT | A | | 5.1 | | 3.1 | | 1.6 | U |
| | COMMAND SUPPORT EQUIPMENT | | | | | | | | |
| 180 | COMMAND SUPPORT EQUIPMENT | A | | 28.2 | | 14.9 | | 15.6 | U |
| 181 | EDUCATION SUPPORT EQUIPMENT | A | | 2.3 | | 2.3 | | 2.1 | U |
| 182 | MEDICAL SUPPORT EQUIPMENT | A | | 1.3 | | 5.0 | | 7.4 | U |
| 183 | INTELLIGENCE SUPPORT EQUIPMENT | A | | 23.0 | | 19.3 | | 16.0 | U |
| 184 | OPERATING FORCES SUPPORT EQUIPMENT | A | | 9.6 | | 5.8 | | 25.0 | U |
| 185 | ENVIRONMENTAL SUPPORT EQUIPMENT | A | | 16.5 | | 18.3 | | 22.2 | U |
| 186 | PHYSICAL SECURITY EQUIPMENT | A | | | | 2.3 | | 9.6 | U |

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

| LINE NO | ITEM NOMENCLATURE | IDENT CODE | MILLIONS OF DOLLARS FY 1999 QUANTITY | FY 1999 COST | FY 2000 QUANTITY | FY 2000 COST | FY 2001 QUANTITY | FY 2001 COST | SEC |
|---|---|---|---|---|---|---|---|---|---|
| | OTHER | | | | | | | | |
| 187 | CANCELLED ACCOUNT ADJUSTMENTS | A | | 12.4 | | | | | U |
| | TOTAL PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | | 98.4 | | 71.0 | | 99.5 | |
| | BUDGET ACTIVITY 08: SPARES AND REPAIR PARTS | | | | | | | | |
| | SPARES AND REPAIR PARTS | | | | | | | | |
| 188 | SPARES AND REPAIR PARTS | A | | 243.9 | | 273.2 | | 208.9 | U |
| | TOTAL SPARES AND REPAIR PARTS | | | 243.9 | | 273.2 | | 208.9 | |
| | TOTAL OTHER PROCUREMENT, NAVY | | | 4,046.7 | | 4,301.5 | | 3,334.6 | |

Other Procurement, Navy
Program and Financing (in Thousands of dollars)

| Identification code 17-1810-0-1-051 | Budget Plan (amounts for PROCUREMENT actions programed) | | | Obligations | | |
|---|---|---|---|---|---|---|
| | 1999 actual | 2000 est. | 2001 est. | 1999 actual | 2000 est. | 2001 est. |
| Program by activities: | | | | | | |
| Direct program: | | | | | | |
| 00.0101 Ships support equipment | 946,065 | 910,427 | 573,480 | 939,561 | 771,374 | 609,406 |
| 00.0201 Communications and electronics equipment | 1,642,290 | 1,948,778 | 1,490,336 | 1,597,867 | 2,135,453 | 1,537,011 |
| 00.0301 Aviation support equipment | 251,256 | 237,554 | 204,932 | 255,317 | 202,969 | 204,020 |
| 00.0401 Ordnance support equipment | 714,877 | 651,967 | 497,956 | 674,332 | 580,051 | 510,092 |
| 00.0501 Civil engineering support equipment | 54,367 | 68,674 | 97,670 | 42,748 | 68,151 | 93,629 |
| 00.0601 Supply support equipment | 89,139 | 139,984 | 161,808 | 94,599 | 114,395 | 151,299 |
| 00.0701 Personnel and command support equipment | 104,909 | 70,961 | 99,488 | 109,472 | 76,146 | 98,117 |
| 00.0801 Spares and repair parts | 243,799 | 273,155 | 208,941 | 235,003 | 235,346 | 210,511 |
| 00.9101 Total direct program | 4,046,702 | 4,301,500 | 3,334,611 | 3,948,899 | 4,183,885 | 3,414,085 |
| 01.0101 Reimbursable program | 53,392 | 42,000 | 42,000 | 45,999 | 54,202 | 42,000 |
| 10.0001 Total | 4,100,094 | 4,343,500 | 3,376,611 | 3,994,898 | 4,238,087 | 3,456,085 |
| Financing: | | | | | | |
| Offsetting collections from: | | | | | | |
| 11.0001 Federal funds(-) | -1,735 | -42,000 | -42,000 | -1,627 | -42,000 | -42,000 |
| 14.0001 Non-Federal sources(-) | -51,657 | | | -52,778 | | |
| 17.0001 Recovery of prior year obligations | | | | -8,731 | | |
| Unobligated balance available, start of year: | | | | | | |
| 21.4002 For completion of prior year budget plans | | | | -465,555 | -543,326 | -648,739 |
| 21.4003 Available to finance new budget plans | | -38,951 | | | -38,951 | |
| 21.4009 Reprograming from/to prior year budget plan | -37,167 | | | | | |
| Unobligated balance available, end of year: | | | | | | |
| 24.4002 For completion of prior year budget plans | | | | 543,326 | 648,739 | 569,265 |
| 24.4003 Available to finance subsequent year budget | 38,951 | | | 38,951 | | |
| 25.0001 Unobligated balance expiring | 6,500 | | | 6,500 | | |
| 39.0001 Budget authority | 4,054,986 | 4,262,549 | 3,334,611 | 4,054,986 | 4,262,549 | 3,334,611 |
| Budget authority: | | | | | | |
| 40.0001 Appropriation | 4,060,662 | 4,320,238 | 3,334,611 | 4,060,662 | 4,320,238 | 3,334,611 |
| 40.3601 Unobligated Balance Rescinded | -28,500 | -38,951 | | -28,500 | -38,951 | |
| 40.7601 Reduction pursuant to P.L. 106-113(-), Titl | | -22,138 | | | -22,138 | |
| 40.7701 Reduction pursuant to P.L. 105-262 (-), 803 | -55,247 | | | -55,247 | | |
| 41.0001 Transferred to other accounts (-) | -3,000 | | | -3,000 | | |
| 42.0001 Transferred from other accounts | 81,071 | 3,400 | | 81,071 | 3,400 | |
| 43.0001 Appropriation (adjusted) | 4,054,986 | 4,262,549 | 3,334,611 | 4,054,986 | 4,262,549 | 3,334,611 |

Other Procurement, Navy
Program and Financing (in Thousands of dollars)

| Identification code 17-1810-0-1-051 | Budget Plan (amounts for PROCUREMENT actions programed) | | | Obligations | | |
|---|---|---|---|---|---|---|
| | 1999 actual | 2000 est. | 2001 est. | 1999 actual | 2000 est. | 2001 est. |
| Relation of obligations to outlays: | | | | | | |
| 71.0001 Obligations incurred | | | | 3,940,493 | 4,196,087 | 3,414,085 |
| 72.1001 From Federal sources: Receivables and unpaid, unfilled orders, SOY | | | | -78,045 | -66,263 | -66,263 |
| 72.4001 Obligated balance, start of year | | | | 3,193,645 | 3,682,444 | 4,005,971 |
| 74.1001 From Federal sources: Receivables and unpaid, unfilled orders, EOY | | | | 66,263 | 66,263 | 66,263 |
| 74.4001 Obligated balance, end of year | | | | -3,682,444 | -4,005,971 | -3,633,925 |
| 77.0001 Adjustments in expired accounts (net) | | | | -68,467 | | |
| 78.0001 Adjustments in unexpired accounts | | | | -8,731 | | |
| 90.0001 Outlays (net) | | | | 3,362,714 | 3,872,560 | 3,786,131 |

Other Procurement, Navy
Object Classification (in Thousands of dollars)

| Identification code 17-1810-0-1-051 | 1999 actual | 2000 est. | 2001 est. |
|---|---|---|---|
| Direct obligations: | | | |
| 125.101 Advisory and assistance services | 21,340 | 23,159 | 21,976 |
| 125.201 Other services | 7,603 | 131,712 | 159,771 |
| Purchases goods/services from Government accounts | | | |
| 125.301 Purchase of goods/services from Government accounts | 126,825 | 138,806 | 131,034 |
| 125.303 Purchases from revolving funds | 908,958 | 950,977 | 876,731 |
| 126.001 Supplies and materials | 111,066 | 118,846 | 69,334 |
| 131.001 Equipment | 2,773,107 | 2,820,385 | 2,155,239 |
| 199.001 Total Direct obligations | 3,948,899 | 4,183,885 | 3,414,085 |
| Reimbursable obligations: | | | |
| Purchases goods/services from Government accounts | | | |
| 225.303 Purchases from revolving funds | 14,718 | 41,598 | 41,591 |
| 226.001 Supplies and materials | | 402 | 409 |
| 231.001 Equipment | 31,281 | 12,202 | |
| 299.001 Total Reimbursable obligations | 45,999 | 54,202 | 42,000 |
| 999.901 Total obligations | 3,994,898 | 4,238,087 | 3,456,085 |

# Comparison of FY 1999 Financing as reflected in FY 2000 Budget with 1999 Financing as Shown in the FY 2001 Budget

($ In Thousands)

| | **Financing Per FY 2000 Budget** | **Financing Per FY 2001 Budget** | **Increase (+) or Decrease (-)** |
|---|---|---|---|
| Program Requirements (Total) | 4,050,915 | $4,100,094 | +$49,179 |
| Program Requirements (Service Account) | ($4,008,915) | ($4,046,702) | (+37,787) |
| Program Requirements (Reimbursable) | ($42,000) | ($53,392) | (+11,392) |
| **Appropriation (Adjusted)** | **$3,980,415** | **$4,054,986** | **+$74,571** |

## Explanation of Changes in Financing

The Fiscal Year 1999 program has changed since the presentation of the FY 2000 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of ( +$49,179). This net change is comprised of an increase in program requirements (+$37,787) plus an increase in reimbursable authority of (+$11,392).

# Comparison of FY 1999 program requirements as reflected in the FY 2000 Budget with FY 1999 program requirements as shown in the FY 2001 Budget

Summary of Requirements
($ in Thousands)

| | **Total Program Requirements per FY 2000 Budget** | **Total Program Requirements per FY 2001 Budget** | **Increase (+) or Decrease (-)** |
|---|---|---|---|
| Ships Support Equipment | $954,401 | $948,436 | -$5965 |
| Communications and Electronic Equip | 1,184,901 | 1,646,128 | -46,122 |
| Aviation Support Equipment | 243,679 | 247,148 | -3,469 |
| Ordnance Support Equipment | 715,972 | 719,069 | +3,097 |
| Civil Engineering Support Equip | 54,856 | 54,389 | -467 |
| Supply Support Equipment | 89,537 | 89,230 | -307 |
| Personnel and Command Support Equip | 74,063 | 98,411 | +23,348 |
| Spares and Repair Parts | 246,506 | 243,891 | -2,615 |
| Total Fiscal Year Program | $4,063,915 | $4,046,702 | -$17,213 |

## Explanation by Budget Activity

($ In Thousands)

1. SHIP SUPPORT EQUIPMENT (-$5,965) - Net decrease reflecting (-$17,650) FY 1999 Congressional adjustments and internal reprogrammings (+$11,685) including (+$5,300) for Counter Drug Interdiction.

## Explanation by Budget Activity (Continued)
($ In Thousands)

2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-$46,122) - Net decrease reflecting (-$9,307) FY 1999 Congressional recissions, other Congressional adjustments (-$17,026), offsets for high priority Navy programs, (-$10,399), and internal reprogramming actions of (-$9390).

3. AVIATION SUPPORT EQUIPMENT (-$3469) - Net decrease reflecting (-$15,243) Congressional adjustments, and internal reprogrammings (+11,774).

4. ORDNANCE SUPPORT EQUIPMENT (+$3,097) - Net increase reflecting Congressional adjustments (-$7,073), and internal reprogrammings (+$10,170).

5. CIVIL ENGINEERING SUPPORT (-$467) - Net decrease reflecting Congressional adjustments (-$620), and internal realignments (+$153).

6. SUPPLY SUPPORT EQUIPMENT (-$307) - Net decrease reflecting Congressional adjustments (-$307).

7. PERSONNEL & COMMAND SUPPORT (+$23,348) - Net increase reflecting Congressional adjustments (+$6,500), economic assumptions (-$704), and increases for high priority Navy programs including paperless acquisition and smartcard (+$16,144).

8. SPARES & REPAIR PARTS (-$2,615) - Net decrease reflecting Congressional adjustments (-$3,191), and internal realignments (+$576).

# Comparison of FY 2000 Financing as reflected in FY 2000 Budget with 2000 Financing as Shown in the FY 2001 Budget

($ In Thousands)

| | **Financing Per FY 2000 Budget** | **Financing Per FY 2001 Budget** | **Increase (+) or Decrease (-)** |
|---|---|---|---|
| Program Requirements (Total) | $4,142,091 | $4,343,500 | +$201,409 |
| Program Requirements (Service Account) | ($4,100,091) | ($4,301,500) | (+201,409) |
| Program Requirements (Reimbursable) | ($42,000) | ($42,000) | 0 |
| **Appropriation (Adjusted)** | **$4,100,091** | **$4,262,549** | **+$162,458** |

## Explanation of Changes in Financing

The Fiscal Year 2000 program has changed since the presentation of the FY 2000 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of +$162,458. This net change is comprised of an increase in program requirements (+$184,596), less rescissions of (-$22,138).

# Comparison of FY 2000 program requirements as reflected in the FY 2000 Budget with FY 2000 program requirements as shown in the FY 2001 Budget

Summary of Requirements ($ in Thousands)

| | **Total Program Requirements per FY 2000 Budget** | **Total Program Requirements per FY 2001 Budget** | **Increase (+) or Decrease (-)** |
|---|---|---|---|
| Ships Support Equipment | $858,709 | $910,427 | +$51,718 |
| Communications and Electronic Equip | 1,845,227 | 1,948,778 | +103,551 |
| Aviation Support Equipment | 216,237 | 237,554 | +21,317 |
| Ordnance Support Equipment | 629,418 | 651,967 | +22,549 |
| Civil Engineering Support Equip | 67,144 | 68,674 | +1,530 |
| Supply Support Equipment | 139,628 | 139,984 | +356 |
| Personnel and Command Support Equip | 67,598 | 70,961 | +3,363 |
| Spares and Repair Parts | 276,130 | 273,155 | -2,975 |
| Total Fiscal Year Program | $4,100,091 | $4,301,500 | +$201,409 |

Explanation by Budget Activity
($ in Thousands)

1. Ships Support Equipment (+$51,718) – Net changes reflect FY 2000 Congressional adjustments (+$51,718).

2. Communications and Electronics Equipment ( +$103,551) – Net changes reflect FY 2000 Congressional adjustments (+$103,551).

Comparison of FY 2000 program requirements as reflected
in the FY 2000 Budget with FY 2000 program requirements
as shown in the FY 2001 Budget

Explanation by Budget Activity (Continued)
($ in Thousands)

3. Aviation Support Equipment (+$21,317) - Changes reflect FY 2000 Congressional reductions (-$8953), and Congressional increases (+$30,270).

4. Ordnance Support Equipment (+$22,549) - Changes reflect FY 2000 Congressional adjustments (+$13,345), and DoN internal realignments (+$9,204).

5. Civil Engineering Support Equipment (+$1,530) - Changes reflect FY 2000 Congressional adjustments (+$1,530).

6. Supply Support Equipment (+$356) - Changes reflect FY 2000 Congressional reductions (-$744), and Congressional increases (+$1,100).

7. Personnel and Command Support (+$3,363) - Changes reflect Congressional reductions (-$286), and Department realignments (+$3,649).

8. Spare and Repair Parts (-$2,975) - Changes reflect FY 2000 Congressional reductions (-$1,435) and internal reprogrammings (-$1,540).

**DEPARTMENT OF THE NAVY**
**OTHER PROCUREMENT, NAVY**
**FY 2001 PRESIDENT'S BUDGET**
**CHIEF OF NAVAL EDUCATION AND TRAINING**

| | | APPROPRIATION | BUDGET ACTIVITY: 7 | LINE ITEM: 808100 | |
|---|---|---|---|---|---|
| | | OTHER PROCUREMENT, NAVY | PERSONNEL AND COMMAND SUPPORT EQUIPMENT | TRAINING SUPPORT EQUIPMENT | FEB 2000 |

| NO | ITEM | END USER | TOTAL COSTS IN THOUSANDS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FY 1999 | | FY 2000 | | FY 2001 | | FY 2002 | | FY 2003 | | FY 2004 | | FY 2005 | |
| | | | | | QTY | TOTAL COST | QTY | TOTAL COST | QTY | TOTAL COST | QTY | TOTAL COST | QTY | TOTAL COST | QTY | TOTAL COST | QTY | TOTAL COST |
| 1 | STASS | VARIOUS | | | | 2,141 | | 3,059 | | 1,562 | | 419 | | 0 | | 0 | | 0 |
| 2 | LASER MARKSMANSHIP TRAINING SYSTEM (LMTS) | | | | | 3,000 | | | | | | | | | | | | |
| | TOTAL | | | | | 5,141 | | 3,059 | | 1,562 | | 419 | | 0 | | 0 | | 0 |

P40 - JUSTIFICATION STATEMENT:

1. STASS is a mission critical training management system approved by CNET as delegated by ASN (RD&A) implemented at 90+ Navy training activities. STASS has eliminated seven legacy systems that were more than 15 years old, obsolete both technically and functionally, and cost prohibitive to maintain. STASS provides a comprehensive automation support tool for the day to day schoolhouse training functions. In today's environment when accurate and current information is critical to the training mission and in accordance with SECNAV's direction, there are no alternatives. STASS "up-line" reporting provides accurate student status and quota utilization information to the Navy Integrated Training Resource Management System (NITRAS) and the Navy Training Reservation System (NTRS). These systems, STASS/NITRAS/NTRS, form the overarching strategy which integrates the critical functions required for the efficient and effective recruiting, training, and distribution of personnel to the fleet. Together these systems, known as the Integrated Navy Training Requirements and Planning Data Base (INTRPD), support on-line real time synchronization of data bases and provide timely accurate processing of military manpower between the personnel and training commands. STASS is a major building block and key element to the success of the INTRPD concept.

2. The Laser Marksmanship Training System (LMTS) will enable military personnel to train with their own weapons and do so under home station conditions thereby conserving ammunition and other resources. LMTS is so precise that it can be used to correct the aim of both weapons and aiming devices.

**EXHIBIT P-40**

**DEPARTMENT OF THE NAVY**
**FY 2001 PRESIDENT'S BUDGET**

## STANDARD TRAINING ACTIVITY SUPPORT SYSTEM (STASS)
## ($000)

**Exhibit P-5 Cost Analysis**
Date: February 2000
Appropriation/Budget Activity: OTHER PROCUREMENT, NAVY
BA-7 - Training Support Equipment

LI: 808100

P-1 Line Item Nomenclature: TRAINING SUPPORT EQUIPMENT

| COST ELEMENTS: ID Code<br>Hardware for<br>STASS Locations | FY 99<br>Total<br>Cost | FY00<br>Total<br>Cost | FY 01<br>Total<br>Cost |
|---|---|---|---|
| SUBTRAFAC NORVA (BETA) | | 0.098 | |
| RTC GREAT LAKES | | 0.124 | |
| NAMTRAGRU DET NORFOLK (BETA) | | 0.043 | |
| NATTC PCOLA (Phase 1) | | 0.019 | |
| NATTC PCOLA (Phase 2) | | 0.077 | |
| FTC NORVA | | 0.094 | |
| COMTRALANT/LTA | | 0.004 | |
| NAMTRAGRU DET HQ PCOLA | | 0.019 | |
| NAVOSHENVTRACEN | | 0.024 | |
| NAMTRAGRU DET OCEANA | | 0.054 | |
| NASC PNCLA | | 0.028 | |
| MATSG 90 PNCLA/EAMTU PCOLA | | 0.039 | |
| NAMTRAGRU DET CHER PT | | 0.039 | |
| NAMTRAGRU DET NEW BERN | | 0.025 | |
| TRITRAFAC KINGS BAY | | | 0.101 |
| NAMTRAGRU DET JAX | | | 0.068 |
| NAVHOSPCORPSCOL | | | 0.026 |
| SERVSCOLCOM GLKS | | | 0.109 |
| NMITC DAM NECK | | | 0.021 |
| NAVCONSTRACEN PH | | | 0.032 |
| NAVSCOLCECOFF PH | | | 0.019 |
| EDOSCOL PORT HUENEME | | | 0.007 |
| NAMTRAGRU DET LEMOORE | | | 0.052 |
| NAMTRAGRU DET NORTH ISL | | | 0.068 |
| NAMTRAGRU DET MIRAMAR | | | 0.018 |
| NAVCONSTRACEN GULFPORT | | | 0.063 |
| FCTCL DAM NECK | | | 0.104 |
| TRITRAFAC BANGOR | | | 0.101 |
| TORPEDOMAN "C" SCOL KEYPORT | | | 0.006 |
| NSHS SAN DIEGO CA | | | 0.020 |
| NAMTRAGRU DET MAYPORT | | | 0.021 |
| FLETRACEN MAYPORT FL | | | 0.018 |
| NAMTRAGRU DET CECIL FIELD | | | closed |
| NAVLEADTRUNIT LC | | | 0.011 |
| SWOSCOLCOM NEWPORT | 0.080 | | |
| FCTCP SAN DIEGO | 0.080 | | |
| NAVDIVESALVTRACN | 0.080 | | |
| NAMTRAGRU DET TINKER | 0.060 | | |
| NAMTRAGRU DET CAMP PEN | 0.063 | | |
| NAVSCOLEOD DET EGLIN | 0.043 | | |
| NAVTECHTRACEN MERIDIAN | 0.232 | | |
| NAVTECHTRACEN CORRY | 0.121 | | |
| FAMWTC INGLESIDE | 0.121 | | |
| FLEASWTRACENPAC | 0.219 | | |
| NAVTECHTRAU KEESLER | 0.232 | | |
| NATTCDET LAKEHURST | 0.006 | | |
| NAVSCSCOL ATHENS | 0.006 | | |
| FITCPAC SAN DIEGO | 0.006 | | |
| NAVRESPRODEVCEN | 0.121 | | |
| LTA SAN DIEGO | 0.043 | | |
| CNATRA | 0.043 | | |
| NCTC DET SHEPPARD | 0.006 | | |
| DENTAL SCHOOL SHEPPARD | 0.006 | | |
| NAVSCSCOLDET FT GORDON | 0.043 | | |
| NAVSPECWARCEN | 0.043 | | |
| NAVTECHTRACEN DET FT HUA | 0.043 | | |
| NAMTRAGRUDET FT HUA | 0.023 | | |
| NAS MAYPORT | 0.043 | | |
| NCTCDET FORT LEONARD WOOD | 0.043 | | |
| NTTCDET GOODFELL | 0.043 | | |
| AFLOATRAGRU MIDPAC | 0.043 | | |
| DLI MONTEREY | 0.098 | | |
| FASOTRAGRUPAC | 0.043 | | |
| TACTRAGRULANT | 0.043 | | |
| TACTRAGRUPAC | 0.043 | | |
| COMNAVAIRLANT | 0.022 | 0.021 | |
| COMNAVAIRPAC | | 0.043 | |
| COMNAVSURFPAC | | 0.043 | |
| COMNAVSURFLANT | | 0.043 | |
| AFLOATRAGRU WESTPAC | | 0.121 | |
| COMSUBPAC | | 0.043 | |
| COMSUBLANT | | 0.043 | |
| NAMTRAGRUDET Corpus Christi | | 0.121 | |
| NAVAIRSYSCOM Pax River | | 0.043 | |
| Regional Training Labs | | 0.188 | |
| STASS Regional Production Hosts | | 0.523 | 0.342 |
| STASS Regional Host Backup(s) | | | 0.087 |
| STASS RTM Upgrade/Expansion | | 0.290 | 0.268 |
| Replace Obsolete Host Computer (STASS/NITRAS) | | 0.850 | |
| Upgrade Host Computer (STASS/NITRAS) | | | |
| TOTALS | 2.141 | 3.059 | 1.562 |

**EXHIBIT P-5**

**DEPARTMENT OF THE NAVY**
**FY 2001 PRESIDENT'S BUDGET**

**LASER MARKSMANSHIP TRAINING SYSTEM (LMTS)**
**($000)**

**Exhibit P-5 Cost Analysis**
Date: February 2000
Appropriation/Budget Activity: LI: 808100 P-1 Line Item Nomenclature:
OTHER PROCUREMENT, NAVY TRAINING SUPPORT EQUIPMENT
BA-7 - Training Support Equipment

| COST ELEMENTS: ID Code | FY 99 Total Cost | FY 00 Total Cost | FY01 Total Cost |
|---|---|---|---|
| LMTS | 3,000 | 0 | 0 |
| TOTALS | 3,000 | 0 | 0 |

**EXHIBIT P-5**

| BUDGET ITEM JUSTIFICATION SHEET P-40 | DATE: February 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY/BA7 | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>*BLI: 8106 Command Support Equipment* |
| Program Element for Code B Items: | OTHER RELATED PROGRM ELEMENTS |

| | Prior Years | ID Code | | | FY 1999 | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | | | |
| EQUIPMENT COST (In Millions) | | | | | $28.2 | $14.9 | $15.6 | $12.7 | $11.6 | $10.7 | $10.5 | N/A | |
| SPARES COST (In Millions) | | | | | | | | | | | | | |

***PROGRAM DESCRIPTION/JUSTIFICATION:***

***Naval Sea Systems Command (NAVSEA)***

***FY99 & FY00 funding procures Advanced Technical Information System (ATIS), to be attached to ship local area networks to allow access to technical drawings/tech manuals and other CD ROMs. The funding will allow completion of 50 ships in FY99 and 50 ships in FY00. The specific ships will be determined by Fleet priorities, but most likely will be tied to deploying battlegroup ships.***

***FY99 & FY01 funding for this line item provides ADP/IT Equipment and Software funding for the newly established consolidated Pearl Harbor Naval Shipyard/Intermediate Maintenance Facility (PHNSY/IMF). Funds will be used for the procurement and execution of ADP/IT equipment projects (hardware and software) to maintain, modernize, and improve the PHNSY/IMF infrastructure and industrial base. Funding will allow PHNSY/IMF to support the mission of repairing, conversion, and modernization of fleet ships and submarines in the most economical, efficient, environmentally sound, and safe manner possible. As this is a pilot program having impact on other fleet depot maintenance activities, it is critical these projects be funded in order to most accurately determine the economic and operational success or failure of the program itself.***

***FY00 funding provides support for the Regional Maintenance Automated Information System (RMAIS) Initiative. Specifically the funds will be used to procure computer hardware and software needed to connect existing Maintenance Automated Information Systems with established Local Area Networks (LANs) and Wide Area Networks (WANS) to facilitate the transfer of maintenance data. The per unit cost for this effort is $100K per server, which includes hardware, software and installation.***

***Naval Computer and Telecommunications Command (NCTC)***

***Command Support Equipment for NCTC involves the purchase of various pieces of equipment, such as: reprographic equipment and security disintegrators. This program provides the systematic replacement of investment items required in support of the operational mission of the claimancy.***

| BUDGET ITEM JUSTIFICATION SHEET P-40 | DATE: February 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY/BA7 | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>*BLI: 8106 Command Support Equipment* |
| Program Element for Code B Items: | OTHER RELATED PROGRM ELEMENTS |

| | Prior Years | ID Code | | | FY 1999 | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | | | |
| EQUIPMENT COST (In Millions) | | | | | $27.9 | $27.2 | $10.4 | $13.9 | $12.8 | $11.9 | $11.7 | N/A | |
| SPARES COST (In Millions) | | | | | | | | | | | | | |

***PROGRAM DESCRIPTION/JUSTIFICATION:***

***Chief of Naval Operations***

***Command Support Equipment Supports the U.S. Atlantic Command in performing its mission of commanding most continental U.S. combat forces. Various systems to be kept operational include those for Information Transfer, Information, Training, Analysis, Modeling and Simulation and Command/Control Computers/Communications Intelligence (C4I). It also supports the Naval Space Command, which budgets for satellite/ground/fleet interface equipment., and the Naval Central Command, which budgets for equipment to protect forces from terrorism.***

***Bureau of Naval Personnel***

***The Chief of Naval Personnel Claimancy is charged with the responsibility of providing the quantitative and qualitative manpower requirements of the United States Navy as determined by the Chief of Naval Operations. To accomplish this task, the Claimancy is concerned with the conception, development, execution, appraisal and management of plans and programs for the recruitment; distribution; accounting; utilization; morale, welfare, and recreation; religious programs; and discipline of the members of the Navy. Programs include: Navy Recruiting Command; Human Resource Management Support System; United States Navy Bands; Enlisted Personnel Management Center; and various other functions and activities. Funds requested provide necessary equipment for the Defense Message System, Memphis Local Area Network, Recruiting Tools - Twenty-first Century, and Personalized Recruiting for Immediate and Delayed Enlistment , and the Electronic Military Personnel Records System.***

***Department of the Navy, Information Network Program Office***

***The Department of the Navy, Information Network Program Office (DoNINPO) is a SECNAV directed program tasked to consolidate the disparate DoN HQ Local Area Networks (LANs) and resources within the Pentagon, interconnect the major Navy Wide Area Networks (WANs) in the National Capitol Region (NCR), and to facilitate the development of DoN Information Technology (IT) standards.***

| BUDGET ITEM JUSTIFICATION SHEET P-40 | DATE: February 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY/BA7 | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>*BLI: 8106 Command Support Equipment* |
| Program Element for Code B Items: | OTHER RELATED PROGRM ELEMENTS |

| | Prior Years | ID Code | | | FY 1999 | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | To Complete | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | | | | | | |
| EQUIPMENT COST (In Millions) | | | | | $27.9 | $27.2 | $10.4 | $13.9 | $12.8 | $11.9 | $11.7 | N/A | |
| SPARES COST (In Millions) | | | | | | | | | | | | | |

***PROGRAM DESCRIPTION/JUSTIFICATION:***

***Department of the Navy, Information Network Program Office (cont.)***

***Included in this effort are the architectures, technologies, standards, policies, and profiles necessary to provide or direct the acquisition and installation of the plethora of common information infrastructure tools and E-apps including those listed here as well as those emergent in the future to include: local area networks (LAN), remote and mobile network connectivity, palm-top and Personal Digital Assistant (PDA) technologies, wireless networking, wide area networks (WAN), network management, E-desktop applications, file standards, groupware applications, E-tools, E-data and repositories, telephony and telephone switching, cellular, Personal Communications Systems (PCs), television, desktop video teleconferencing technology (DT-VTC), low bit rate video (LBRV) and theater or conference room video teleconferencing technologies (VTC) used in support of connectivity and communications between Headquarters elements within the Washington region. In conjunction with the Defense Messaging System (DMS) architecture, an electronic mail system supporting both the X.400 and X.500 messaging protocols will be implemented on both the Classified and Unclassified LANs. Desktop and network hardware and software updates will be accomplished over a four year refresh cycle.***

| WEAPONS SYSTEM COST ANALYSIS P-5 | Weapon System | DATE: February 2000 |
|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy/BA-7 | ID Code | P-1 ITEM NOMENCLATURE/SUBHEAD: BLI: 8106 Command Support Equipment |

| COST CODE | ELEMENT OF COST | ID Code | TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | FY 1999 | | | FY 2000 | | | FY 2001 | | |
| | | | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST |
| NAVSEA | | 8106 | | | | | | | | | | | | |
| | Advanced Technical Info System | | | | | 50 | 40 | 1,986 | | | 2,000 | | | |
| | Standard Procurement System (SPS) | | | | | | | 0 | | | 0 | | | |
| | Pearl Harbor ADP/IT Equipment and Software (Pearl Harbor Pilot) | | | | | | | 1,563 | | | 0 | | | 761 |
| | Regional Maintenance AIS | | | | | | | 0 | 10 | 100 | 992 | | | |
| | **TOTAL NAVSEA** | | | | | | | **3,549** | | | **2,992** | | | **761** |
| NCTC | | | | | | | | | | | | | | |
| | Command Support Equipment | 8106 | | | | | | 1,299 | | | 1,653 | | | 1420 |
| | **TOTAL NCTC** | | | | | | | **1,299** | | | **1,653** | | | **1420** |
| BUPERS | | | | | | | | | | | | | | |
| | Memphis Local Area Network | | | | | | | 0 | | | 300 | | | 0 |
| | Defense Message System | | | | | | | 348 | | | 0 | | | 0 |
| | Recruiting Tools - 21st Century | | | | | | | 0 | | | 300 | | | 0 |
| | Personal Recruitment Immed/Delay Enlist | | | | | | | 0 | | | 498 | | | 0 |
| | Mail Sorting Eqpt | | | | | | | 0 | | | 0 | | | 0 |
| | Electronic Mil Pers Records System | | | | | | | | | | | | | 3,300 |
| | **TOTAL BUPERS** | | | | | | | **348** | | | **1,098** | | | **3,300** |
| CNO | | | | | | | | | | | | | | |
| | USACOM | | | | | | | 6,199 | | | 7,669 | | | 6,605 |
| | NAVSPACECOM | | | | | | | 0 | | | 1,441 | | | 429 |
| | NSA Bahrain | | | | | | | 1,113 | | | | | | |
| | Naval Post Graduate School | | | | | | | 47 | | | | | | |
| | NAVCENT | | | | | | | 165 | | | 0 | | | |
| | **TOTAL CNO** | | | | | | | **7,524** | | | **9,110** | | | **7,034** |
| AAUSN | | | | | | | | | | | | | | |
| | EA-21 | | | | | | | 5,790 | | | 0 | | | 0 |
| | Electronic Commerce Commerce Online | | | | | | | 610 | | | 0 | | | 0 |
| | CPARS | | | | | | | 780 | | | 0 | | | 0 |
| | Electronic Mall/E-Catalog | | | | | | | 0 | | | 0 | | | 0 |
| | DONINPO | | | | | | | 8,315 | | | 0 | | | 0 |
| | DON SLDCADA System | | | | | | | 0 | | | | | | 3,077 |
| | **TOTAL AAUSN** | | | | | | | **15,495** | | | **0** | | | **3,077** |
| **TOTAL** | | | | | **0** | | | **28,215** | | | **14,853** | | | **15,592** |

CLASSIFICATION

**UNCLASSIFIED**

| **BUDGET ITEM JUSTIFICATION SHEET** | | | | | | **DATE** February 2000 | | |
|---|---|---|---|---|---|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>Other Procurement, Navy/BA-7 | | | | **P-1 Nomenclature FY 01 President's Budget**<br>BLI: 8108 Education Support Equipment | | | | |
| | | **FY 1999** | **FY 2000** | **FY 2001** | **FY 2002** | **FY 2003** | **FY 2004** | **FY 2005** |
| **QUANTITY** | | Various | None | None | None | None | None | None |
| **COST (in millions)** | | **$2.3** | **$2.3** | **$2.1** | **$4.1** | **$4.1** | **$4.1** | **$4.0** |

**Naval War College: IT-21 Requirements, McCarty-Little Hall (MLH) Requirements:**
**( $2,279 thousand in FY 1999, $0 thousand in FY 2000, $0 thousand in FY 2001**

IT-21 Requirements
The Maritime Battle Center and the Concept Development Group (newly established under the Navy Warfare Development Command) require expansion of Local Area Network infrastructures, upgrades to IT21 standards, and acquisition of technical equipment. One of the principle functions of the Maritime Battle Center will be to support Fleet Battle Exercises. Interaction to support these activities requires information exchange. As information exchange in the fleets is now based on IT21 standards, interoperability and compatibility requirements mandate the new organization be compliant with this information technology standard to communicate and exchange information both internally and with the Fleets. The funding provided to date covers 1) planned FY99 IT-21 requirements, except for the backbone upgrade to ATM (deferred to FY00), and 2) the partial coverage of equipment/systems to backfill Sims Hall (now occupied by NWDC) for equipment/systems that migrated from Sims Hall to McCarty-Little Hall when the NWC Wargaming Department moves from Sims Hall to McCarty Little Hall (remaining funding requirement deferred to FY00).

McCarty-Little Hall Requirements
McCarty-Little Hall is an integral facility for the development and examination of the Navy's Network Centric Warfare (NCW) concepts. As such, an infrastructure must be established for the data, video, and audio systems that will provide the technological foundation to support the mission of NWC's Wargaming Department. The OPN funding received to date will cover the full stand up of the Joint Command Center (JCC) and several Component Commander Cells (C3). These gaming centers will constitute the focal areas to examine and simulate NCW, and will be equipped with the presentation and information technology that is necessary to communicate with the fleets and other military gaming centers. Funding for the remainder of the MLH rooms deferred to FY00.

**Bureau of Personnel**

Funding will procure equipment to support Virtual Recruiting. This touch screen kiosk system provides education information to the user about the Navy. Users browse through web based sites to gain more information about Navy life, jobs, and benefits and interested users can provide necessary information to recruiters so that recruiters can contact eligible prospects.

CLASSIFICATION

**UNCLASSIFIED**

PROGRAM COST BREAKDOWN
P-5

Date: Feb 00

**Appropriation/Budget Activity**
Other Procurement, Navy/BA-7

**P-1 Nomenclature**
BLI: 8108 Education Support Equipment

TOTAL COST IN THOUSANDS OF DOLLARS

| COST CODE | ELEMENT OF COST | IDENT CODE | FY 1999 QTY | FY 1999 TOTAL COST | FY 2000 QTY | FY 2000 TOTAL COST | FY 2001 QTY | FY 2001 TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| | **Naval War College: IT-21 Requirements, McCarty-Little Hall (MLH) Requirements:** | | | | | | | |
| | NWC IT-21/Sims Hall: | | | | | | | |
| | Desktop PCs | 8108 | | 0 | | 0 | | 0 |
| | Servers | 8108 | var | 230 | | 0 | | 0 |
| | Notebooks | 8108 | var | 155 | | 0 | | 0 |
| | Network Hubs | 8108 | var | 200 | | 0 | | 0 |
| | Contractor Support | 8108 | var | 50 | | 0 | | 0 |
| | Miscellaneous (firewalls, wiring, etc..) | 8108 | var | 56 | | 0 | | 0 |
| | Subtotal, IT-21/Sims Hall | | | 691 | | 0 | | 0 |
| | NWC McCarty-Little Hall: | | | | | | | |
| | Contract Support | 8108 | var | 404 | | 0 | | 0 |
| | Projection Equipment | 8108 | var | 628 | | 0 | | 0 |
| | A/V Switchers and Components | 8108 | var | 228 | | 0 | | 0 |
| | Audio Systems | 8108 | var | 64 | | 0 | | 0 |
| | Equipment Racks/Components | 8108 | var | 135 | | 0 | | 0 |
| | Security Devices | 8108 | var | 11 | | 0 | | 0 |
| | Simulation Models | 8108 | var | 100 | | 0 | | 0 |
| | Misc. Equipment | 8108 | var | 18 | | 0 | | 0 |
| | Subtotal, McCarty-Little Hall | | | 1,588 | | 0 | | 0 |
| | BUPERS - Virtual Recruiting | | | | | 2300 | | 2076 |
| | **GRAND TOTAL, Education Support Equipment** | | | **2,279** | | **2,300** | | **2,076** |

**OTHER PROCUREMENT, NAVY**
**BUDGET ITEM JUSTIFICATION SHEET**

(DOD EXHIBIT P-40)
February 2000

| BUDGET ACTIVTY<br>BA-7 | | | | | | P-1 ITEM NOMENCLATURE<br>BLI: 8109 MEDICAL SUPPORT EQUIP | | |
|---|---|---|---|---|---|---|---|---|
| QUANTITY | FY 98 | FY99 | FY00 | FY 01 | FY02 | FY 03 | FY 04 | FY 05 |
| COST (in millions) | $ - | $ 1.3 | $ 5.0 | $ 7.4 | $ 7.7 | $ 6.6 | $ 7.3 | $ 6.7 |

This line provides funding for the Fleet Hospital Program whose mission is to provide comprehensive medical support to the Fleet and Fleet Marine Forces engaged in combat operations. Fleet Hospitals complement and expand the medical capabilities of the Fleet and play a critical role in the Navy's doctrinal concept of overseas theater support. Fleet Hospitals will deliver definitive health care (surgical or other acute) necessary to stabilize, treat, and rehabilitate (in-theater) wounded Sailors and Marines through relocatable, prepositioned, modular, rapidly erectable medical and surgical facilities accommodating 500 beds.

This line item also provides deployable medical support equipment to CINCLANTFLT for the USNS Comfort hospital ship and to CINCPACFLT for the USNS Mercy. These ships are deployed in the combat theater to treat wounded sailors and marines.

Classification: Unclassified

Exhibit P-40a, Budget Item Justification for Aggregated Items — February-00

OTHER PROCUREMENT, NAVY/BA-7, PERSONNEL AND COMMAND SUPPORT EQUIPMENT — (In Millions)

| Procurement Items \ Quantity | ID Code | PY FY 1998 | CY FY 1999 | BY1 FY 2000 | BY2 FY 2001 |
|---|---|---|---|---|---|
| | | | | | |
| COMP RAD (C-R) WORKSTATION (2) | A | | $0 | $0 | |
| C-ARM (2) | A | | | $440 | |
| ENDOSCOPIC SYSTEM (1) | A | | | $0 | $396 |
| X-RAY ROOM W/TOMOGRAPHY (1 | A | | $0 | $0 | $670 |
| NON-STEAM STERILIZER (1) | A | | $0 | $0 | $128 |
| **TOTAL PACFLT** | | **$0** | **$0** | **$440** | **$1,194** |
| | | | | | |
| Comp RAD (C-r) Workstation | 8109 | | $1,263 | $0 | |
| C-ARM | 8109 | | $0 | $440 | |
| Endoscopic System | 8109 | | $0 | $0 | $400 |
| X-Ray Room W/Tomography | 8109 | | $0 | $0 | $659 |
| Non Stern Sterilizer | 8109 | | $0 | $0 | $130 |
| TMIP Hardware | 8109 | | $0 | $0 | $975 |
| **TOTAL LANTFLT** | | **$0** | **$1,263** | **$440** | **$2,164** |
| | | | | | |
| TRK, TRACTOR 25 TON | 8109 | | | $1,433 | $1,512 |
| LAUNDRY | 8109 | | | $250 | $265 |
| FIRE TRUCK | 8109 | | | $91 | $96 |
| AMBULANCE | 8109 | | | $580 | $610 |
| BUS AMBULANCE | 8109 | | | $380 | $0 |
| PICKUP 6 PASS | 8109 | | | $350 | $324 |
| TRK, STAKE 15 TON | 8109 | | | $588 | $516 |
| TRK, LUBE/FUEL SERV | 8109 | | | $89 | $94 |
| TRK, UTIL, MAINT | 8109 | | | $0 | $39 |
| TRK, SEPTIC, CLEAN | 8109 | | | $0 | $132 |
| TRK, WRECKER | 8109 | | | $0 | $47 |
| RTCH | 8109 | | | $365 | $393 |
| **TOTAL BUMED** | | | **$0** | **$4,126** | **$4,028** |
| | | | | | |
| **TOTAL MEDICAL SUPPORT EQUIPMENT** | | **$0** | **$1,263** | **$5,006** | **$7,386** |

P-1 SHOPP. LIST 182 | PAGE NO. 2

FY 2001 BUDGET ESTIMATES FOR PRESIDENT'S BUDGET

FEB 2000

ONI

BUDGET ITEM JUSTIFICATION SHEET

APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY BA 7 P-1 LINE ITEM: INTELLIGENCE SUPPORT EQUIPMENT (N7YG)

| (U) | | FY 1999 | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|---|---|---|---|---|---|---|---|---|
| Quantity | | VARIOUS | VARIOUS | VARIOUS | VARIOUS | VARIOUS | VARIOUS | VARIOUS |
| Cost (In Thousands) | $ | $ 22967 | $ 19331 | $ 15993 | $ 13050 | $ 10578 | $ 12117 | $ 10913 |

(U) This line item funds equipment needed for the Office of Naval Intelligence, and intelligence activities of the Unified Commands. It is part of the General Defense Intelligence Program (GDIP) and National Foreign Intelligence Program (NFIP).

Derived From: OPNAVINST S5513.4B-04.1
Declassify On: X1

Exhibit P-40

(U)

| BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | | | | | | | | | A. DATE FEBRUARY 2000 | |
|---|---|---|---|---|---|---|---|---|---|---|
| B. APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY BA7 - ONI | | | | | | C. P-1 ITEM NOMENCLATURE<br>INTELLIGENCE SUPPORT EQUIPMENT | | | | |
| Cost Element/ FISCAL YEAR | CONTRACTOR AND LOCATION | CONTRACT METHOD & TYPE | CONTRACTED BY | AWARD DATE | DATE OF FIRST DELIVERY | QUANTITY | UINT COST | SPECS AVAILABLE NOW | SPEC REV REQ'D | IF YES WHEN AVAILABLE |
| NOTE: DETAILS AVAILABLE AT A HIGHER CLASSIFICATION. | | | | | | | | | | |
| AAUSN/NCIS: DETAILS AVAILABLE AT A HIGHER CLASSIFICATION | | | | | | | | | | |
| D. REMARKS | | | | | | | | | | |

(DOD EXHIBIT P-40)
February 2000

**OTHER PROCUREMENT, NAVY**
**BUDGET ITEM JUSTIFICATION SHEET**

| BUDGET ACTIVTY | P-1 ITEM NOMENCLATURE |
|---|---|
| 07 - Personnel and Command Support Equipment | Operating Forces Support Equipment BLI: 8118 |

| | FY 98 | FY 99 | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 |
|---|---|---|---|---|---|---|---|---|
| QUANTITY | | | | | | | | |
| COST (in millions) | | $9.6 | $5.8 | $25.0 | $4.9 | $4.9 | $5.0 | $5.0 |

This category includes funding for
LANTFLT: (a) Information Technology Systems of automated financial equipment (FMIS); other information technology systems inclusive of computers, ancillary equipment, software, and support services; an automated warfare system (FIWC); and communications and connectivity LAN for warfare and Battle Group commanders (COMNAVBASE Norfolk); (b) General Purpose Equipment which encompasses telephone system upgrades and emergency generators; and (c) Waterfront Equipment which includes camels (carrier, Trident, wooden, and deep draft), paint floats, and fenders (submarine, Arleigh Burke Class, and Yokohama); and Anti-Terrorism/Force Protection equipment for deploying battle groups.
PACFLT: Security Communications System, Firetrucks, Generators, Intrusion Detection System. Central Dispatch System, and Portal Crane.
NAVEUR: FY1999: A Public Address System to encompass Capodichino ( the main operational site, containing the C4I complex) adjacent to the civilian airport at Naples,Italy. System consists of 25 sirens connected to a central control unit.An emergent requirement to harden force protection, made necessary by the increased threat level resulting from operations Allied Force and Joint Guardian. FY 2000 funding in support of NATO - procurement of light armored vehicles. FY 2001: (a) Signella NAS I and NAS II Waves Personnel Alerting System (PAS). a wireless based emergency information system designed to alert and protect both major installations at Sigonella and the personnel from life threatening crisis situations. (b) Naples residential Intrusion Detection Security system, a wireless based system for the protection of sailors and their families living off base. (c) Naples consolidated dispatch center. A fully integrated system providing computer aided dispatch for police, fire and emergency vehicles, crime and fire report monitoring, 2-way mobile communications, remote location vehicle monitoring, voice recording and personnel warning. (d) Naples communications trunking system. Provides Digital SmartZone Narrowband Capable Trunking Radio System to meet land mobile radio communications to unify communications among the Giciagnano and CapodiChino areas and coverage along the road to Gaeta. It will greatly enhance the force protection for this high threat area.
NAVSEA: FY 1999 funding for reverse osmosis life raft desalination gear.

| P-1 SHOPP. LIST | PAGE NO. |
|---|---|
| 184 | 1 OF 2 |

UNCLASSIFIED

CLASSIFICATION

APPROPRIATION: OTHER PROCUREMENT, NAVY

BUDGET ACTIVITY: 07 - Personnel and Command Support Equipment

**PROGRAM COST BREAKDOWN**

P-1 ITEM NOMENCLATURE: Operating Forces Support Equipment

(DOD Exhibit P-5)

February 2000

SUBHEAD NO.

TOTAL COST IN THOUSANDS OF DOLLARS

| COST CODE | ELEMENT OF COST | IDENT CODE | FY 1999 TOTAL QTY | FY 1999 TOTAL COST | FY 2000 TOTAL QTY | FY 2000 TOTAL COST | FY 2001 TOTAL QTY | FY 2001 TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| | Security Communications System | A | | | 1 | 0.119 | | |
| | Stuctural Fire Truck | A | | | 1 | 0.212 | | |
| | Emergency Generator | A | | | 1 | 0.108 | | |
| | Intrusion Detection System | A | | | 1 | 0.481 | | |
| | Central Dispatch System | A | | | | | 1 | 4.910 |
| | Portal Crane | A | | | | | 1 | 7.900 |
| | Smart Card Program | A | 1 | 2.765 | | | 1 | 1.670 |
| | Hyroneumatic Fenders | A | | | | | 1 | 0.560 |
| | **TOTAL (PACFLT)** | | | **2.765** | | **0.920** | | **15.040** |
| | Waterfront | 8118 | | 1.490 | | 2.462 | | 2.188 |
| | IT | 8118 | | 1.104 | | 2.194 | | 2.187 |
| | General | | | 1.691 | | | | 0.190 |
| | Reporgraphic | | | 0.340 | | | | |
| | **TOTAL (LANTFLT)** | | | **4.625** | | **4.656** | | **4.565** |
| | NAPLES Public Address System | | | | | | | |
| | Sigonella NAS I,II Waves PAS | | | | | | | 0.323 |
| | IDS | | | | | | | 0.600 |
| | Consolidated dispatch center | | | | | | | 2.411 |
| | Communications Trunking System | | | | | | | 2.064 |
| | Light Armored Vehicles | | | | | 0.240 | | |
| | AT/FP | | | 0.257 | | | | |
| | Public Address System | | | 0.500 | | | | |
| | **TOTAL (NAVEUR)** | | | **0.757** | | **0.240** | | **5.398** |
| | Reverse Osmosis Life Raft Gear | | | 1.500 | | | | |
| | **TOTAL (NAVSEA)** | | | **1.500** | | | | |
| | **TOTAL OPERATING FORCES SUPPORT EQUIPMENT** | | | **9.647** | | **5.816** | | **25.003** |

CLASSIFICATION: **UNCLASSIFIED**

| BUDGET ITEM JUSTIFICATION SHEET P-40 | | | | | | | | | | | | | DATE: February 2000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | | | | | | | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 | | | | | |
| Program Element for Code B Items: | | | | | | | | OTHER RELATED PROGRM ELEMENTS | | | | | |
| | Prior Years | ID Code | FY 1997 | FY 1998 | FY 1999 | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | To Complete | Total |
| QUANTITY | | | | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A |
| EQUIPMENT COST (In Millions) | | | | | $16.5 | $18.3 | $22.2 | $27.2 | $23.5 | $23.9 | $24.4 | | |
| SPARES COST (In Millions) | | | | | | | | | | | | | |

***PROGRAM DESCRIPTION/JUSTIFICATION:***

**AIRCRAFT SYSTEMS** **AIRCRAFT DATA ACQUISITION SYSTEM**

This line item is for portable data acquisition and processing systems for use on either Fleet aircraft or dedicated aircraft (Naval Research Laboratory (NRL)). The systems will have the capability to collect/process physical oceanographic (temperature, conductivity, and sound speed versus depth) and acoustic data (ambient noise, bottom reverberation and transmission loss). The data will be collected via expendable sensors): physical oceanography (AXBT, ACTD, AXSV) and Acoustics (sonobuoys). One of the systems will be UNIX-based and be derived from AIRDALE technology. A significant portion of its mission will include in-house processing and training for NAVOCEANO personnel. The other systems shall utilize a PC-based technology. All the systems will provide field personnel with data to prepare near real time briefings to support Fleet exercises such as SHAREM and Rapid Response.

**ALTIMETRY DATA FUSION SYSTEMS** **ADFC (ALTIMETRY DATA FUSION CENTER)**

NAVOCEANO's Altimetry Data Fusion Center (ADFC) is the DoD processing center for all military, civilian, and foreign altimetry data streams (USN GEOSAT Follow-On, NASA Topex, European Space Agency ERS-2) as mandated by CNO OCEN 90-02 . Altimetry is an essential input to modeling and determining ocean currents as required by LITT OCEN 93-01 (Improved Mine Drift Predictions), LITT OCEN 93-06 (High Resolution Surface/Subsurface Current Predictions), and CINC OCEN 91-06 (Ocean Prediction Models). Two additional data streams will become operational in the FY00 timeframe, namely NASA's JASON and the European Space Agency's ENVISAT. These systems will dramatically improve the Navy's capability to meet the above requirements through improved ocean circulation modeling, but will also dramatically increase the data volume and processing load on the ADFC. In addition, by FY00 much of the ADFC hardware will be 5 to 7 years old. This acquisition is for hardware replacements and upgrades to the baseline ADFC system.

**AUV SYSTEMS** **AUTONOMOUS UNDERWATER VEHICLE**

The Autonomous Underwater Vehicle (AUV) consists of a relatively low cost, 300 nautical mile range autonomous vehicle equipped with bathymetric, side-scan, Acoustic Doppler Current Profiler (ADCP), and Current, Temperature and Depth (CTD) sensors capable of independent high resolution environmental data collection. The AUV will significantly increase seafloor survey capability with only a modest increase in operating cost.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**CENTRAL SITE SYSTEMS** **CENTRAL DATA BASE SERVER**

NAVOCEANO scientific data are stored within the Data Warehouse (DW) in standardized formats. The DW, using a distributed client-server architecture, is used to manage the 600 plus gigabytes of on-line storage needed to provide responsive access to users that include DoD and non-DoD agencies. The existing DW servers and mass storage are at the end of their life cycle and are constrained in the number of data request transactions that may be simultaneously processed, as well as the quantity of data that may be stored and managed.

**SURVEY WORKSTATIONS/MASS STORAGE**

Workstations aboard NAVOCEANO survey platforms are presently used to quality control data as it is acquired to ensure its validity and content. This process allows technical specialists to quickly identify problems associated with the collection sensors so that immediate corrective actions may be taken. Using this approach, NAVOCEANO maximizes ship collection time while assuring that all survey expenditures result in valid, useful data. Present workstations and associated mass storage are at the end of their life cycle and are inadequate to process the greater volumes of data generated by the current generation of collection sensors coming on-line. In addition, NAVOCEANO is re-engineering the data processing function such that the final quality control steps are performed at sea vice the current process in which the final quality control is performed at Stennis Space Center. This approach will push activities associated with the final data quality control closer to the collection point resulting in a higher quality product. Further, by more fully utilizing the technical specialists at sea, NAVOCEANO will be able to more quickly make the data available for the office wide product lines.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**COMMUNICATIONS SYSTEMS** **ATM CAPABILITY/LAN UPGRADE**

This effort is to equip the current classified and unclassified Local Area Network (LAN) Ethernet hardware with microprocessor controlled LAN and cell switching units. Fiber optic cable will replace existing Ethernet coaxial cable through the network. The topology upgrade will provide NAVOCEANO's classified and unclassified networks with a minimum capacity of 155 Mbs backbone and switched 10 Mbs Ethernet to the desktop. Selected workstations will have 100 Mbs Ethernet, 100 Mbs FDDI, or 155 Mbs ATM interfaces. This topology supports existing bandwidth demands, and provides scalability to support high-speed data requirements. This network topology will immediately support higher speed information transfer, data will be analyzed faster, and imagery will be delivered to the warfighter closer to real-time. After completion, the NAVOCEANO network will be seamlessly interoperable with all external ATM network connections.

**ENVIRONMENTAL SYSTEMS** **COMPREHENSIVE ENVIRONMENTAL ASSESSMENT SYSTEM**

The Comprehensive Environmental Assessment System (CEAS) has three primary functions. The first supports the Undersea Warfare Program Directorate (PD18) Sea Site Implementation Process. CEAS uses bathymetric data sets, derived products (bottom roughness, slopes, and slope direction, acoustic backscatter, and other geophysical data sets for the Integrated Undersea Surveillance System (IUSS) deployment process. This is in support of the Fixed Distributed System (FDS), FDS-Deployable (FDS-D) and the Advanced Deployable System (ADS). The second function support shallow water acoustic modeling using current acoustic models and high resolution oceanographic and geophysical data bases. This portion of CEAS is sponsored by the Office of Naval Intelligence (ONI). Under the direction of Chief of Naval Operations (N096), this portion of CEAS has been provided to Commander Submarine Forces, U.S. Atlantic Fleet (COMSUBLANT) and others for implementation into Fleet Tactical Decision Aids (TDAs), specifically Submarine Fleet Mission Program Library (SFMPL). An interface is provided to view the oceanographic and geophysical data which are input into the model runs. CEAS also provides an interface to set up and run the acoustic models, view results and compare against in-situ data. The third function of CEAS supports Mine Warfare (MIW). Sponsored by N85 under the MIW Campaign Plan, CEAS integrates MIW related environmental data for sensor performance prediction and planning. This includes high resolution bottom imagery, bottom composition, currents, sound speed, and mine-like contacts. CEAS interfaces with the MIW TDA . CEAS is under development at NAVOCEANO, is used at NAVOCEANO to construct the environmental data bases, and is operational at COMINEWARCOM supported by NAVOCEANO. During MIW exercises, CEAS is operational at command level (USS Inchon) for near real-time and post exercise analysts.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**ENVIRONMENTAL SYSTEMS** **INTEGRATED DRIFTING BUOYS**

The Integrated Drifting Buoy Program supports Fleet activities ashore and afloat with near real-time environmental data. The buoys are deployed in Navy operational areas and disseminate oceanographic, acoustic, and meteorological data to operational commands in the area, through various real-time means. These near real-time data are used for severe weather forecasting and typhoon warning, ground truthing satellite-derived multi-channel sea surface temperature extraction, refining the fronts and eddies bogus, and initializing the Modular Ocean Data Assimilation System. Procurement has been centrally managed through Naval Air Warfare Center, Indianapolis. This will ensure a smooth transition of the WSQ (SAN-1 through 6) series drifting buoy into the Fleet supply system. This transition to central management necessitated a change in funding and these funds were transferred from NAVOCEANO's O&M,N allotment accordingly.

**MIDEX BIOLUMINESCENCE PHOTOMETER**

NAVOCEANO supports numerous validated requirements to provide bioluminescence data to determine non-acoustic detection of naval assets. These data are vital to the Navy's ability to operate undetected. Photometer Systems measure bioluminescence and minimum ancillary environmental parameters required for warfighter products and special requests. In addition, data are used to populate the bioluminescence data base and are core data for the Data Warehouse. MIDEX provides a less sophisticated and easier to operate photometer system that complements NAVOCEANO's multifunction platforms and ocean surveyor strategies. MIDEX units on all ships will provide expanded coverage of the basic parameters required to meet validated bioluminescence product requirements of the warfighter.

**OPTICS MEASUREMENT ARRAY**

Validated Fleet requirements task NAVOCEANO to provide optics support to warfare areas including Mine, Special, and Undersea Operations. This information is vital to the Navy's ability to operate undetected and to locate/identify threats based on non-acoustic methods. The function of the Optics Measurement Array is to acquire core data for IDBMS to apply such Fleet products as STOIC and STORM and to support in-house requirements such as the Laser Airborne Bathymetry System (LABS). This sensor system measures optical properties of the water column over various temporal an spatial scales so that the impact of the optical environment on a number of issues pertinent to the warfighter can be comprehensively characterized.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**GFMPL SYSTEMS** **DTC/GFMPL SYSTEMS**

NAVOCEANO is tasked to provide deployed on-scene environmental prediction systems to the Fleet. These high visibility systems are developed to provide a local resource to predict the effects of the environment on Fleet platforms, sensors, and systems. NAVOCEANO must maintain currency with the Navy's Tactical Advanced Computer (TAC-n) family which includes the base line TAC-n processor with standard 3-D display subsystems (or "g3" subsystems as described by TAC-3 and TAC-4). Acquisition of a high-end TAC-n visualization system (i.e. "g4" for TAC-4) which will allow NAVOCEANO to develop advanced visualization capabilities for deployment on Fleet assets.

**GFMPL HARDWARE UPGRADE**

NAVOCEANO is tasked to provide deployed on-scene environmental prediction systems to the Fleet. These high visibility systems are developed to provide a local resource to predict the effect of the environment on Fleet platforms, sensors, and systems. The Tactical Environmental Support System (TESS) is a bundled hardware/software package, while the Geophysical Fleet Mission Program Library (GFMPL) essentially consists of the TESS software configured to be run on the Fleet users' own computer resources. This equipment will allow TESS (3) software to be rehosted for subsequent distribution to the Fleet for use on their systems.

**HYCOOP SYSTEMS**

**HYCOOP DIGITAL SIDE SCAN SONAR**

Side scan sonar data is used to ascertain hazards to navigation and to determine depth between survey lines. These data are used to populate imagery data bases such as the Sea Floor Trackline Data Base and various Mapping, Charting, and Geodesy (MC&G) charts. Current HYCOOP assets do not possess the capability to digitally record the side scan data. The existing analog paper records obtained have short shelf lives, are expensive to use, and are generally poor quality. Moreover, the side scan data record acquired by NAVOCEANO from HYCOOP is a paper copy of the single, poor quality original. The upgrade to digital recording will facilitate digital archiving on magnetic media which has a much longer shelf life, is inexpensive to use, has high accuracy recording and is readily and accurately reproducible. Digital archiving will facilitate the construction of sonar mosaics to obtain aerial views having a photographic-like quality from acoustic side scan data. The systems will incorporate a video display to provide fast, accurate, and simple target marking identification. This computerized approach will dramatically reduce the required data analysis time. Additionally, the acquisition of digital technology has much greater system dynamic range than current systems and enables the use of in-house digital signal and image processing techniques to extract subtle details from the data.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**FLYAWAY SURVEY SYSTEM**

Fleet Commanders regularly have a need for rapid response hydrographic surveys to support real world operations, including Croatia, Albania, Liberia, Haiti, and many others. Naval Expeditionary Operations require Amphibious Ready Groups or other warships to enter waters where little is known about hazards to navigation. Visits supporting MI.-MIL or POL-MIL efforts in unknown parts require the same type of information. If waters are uncharted or incorrectly charted (i.e., old data) ships and lives could be at risk. This system is modular, versatile and air-liftable, for installation on a small vessel of opportunity in theater (e.g., a 25-ft or larger boat). This gives the Fleet Commander an ability to acquire data to determine if ships can approach safely. Potentially ship-damaging shoals and other hazards to navigation can be avoided.

**HYDROPHONE SYSTEMS** **HYDROPHONE COLLECTION SYSTEMS**

The Echo Repeater System is an active frequency acoustic system designed for direct Fleet support during military exercises such as Ship ASW Readiness Effectiveness Measuring (SHAREM) Program. The system can collect and process sonar signals, transmit sonar pulses back to the Fleet unit and act as a repeater to retransmit a sonar pulse back to the Fleet unit. The Echo Repeater allows near real time performance evaluation on sonars in actual operating conditions. This is important to the Fleet that it allows them to study the performance of their sonar systems. Multiple SHAREM exercises are conducted each year; therefore, funding is needed to bring a second system on line for Fleet support and to add improved transducers for different sonars.

**GEODETIC GPS-TAGS 52**

A geodetic capability is required aboard each ship that deploys Hydrographic Survey Launches (HSLs) in order to establish the location of Differential Global Positioning Systems (DGPS) reference stations and tidal measurement benchmarks. In addition, this system is used for calibration of swath systems and benchmarks. The new systems are in full compliance with DoD GPS regulations . The present systems in inventory do not comply with DoD regulations and are over 7 years old and technically out-of-date.

**ULTRASHORT BASELINE TRACKING SYSTEM**

This equipment is hydroacoustic positioning and tracking equipment employing "CHIRP" technology. The tracking system will operate in an integrated navigation scenario to perform Remotely Operated Vehicle (ROV) operations to inspect, video, and recover bottom mount equipment. An acoustic tracking system is required to guide a ROV to sensors deployed on the ocean floor. This system will allow for the efficient recovery of instrumentation that can not be recovered by traditional means.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**SATELLITE SYSTEMS** **SATELLITE PROCESSING UPGRADE**

NAVOCEANO is the National Center of Expertise for the production of multi-channel sea surface temperatures (MCSSTs). MCSSTs are produced from NOAA's Polar Orbiting Environmental Satellites using the Satellite Processing System (SPS). Recent improvements to NOAA's Geostationary Orbiting Environmental Satellites (GOES) make it possible for the first time to produce MCSSTs from the GOES data stream. These GOES MCSSTs will dramatically improve the coverage, resolution, timeliness and accuracy of sea surface temperatures. Ingest and processing of the GOES data stream will require acquisition of GOES antenna/receiver equipment. Production automation and data storage will require an integrated computer system upgrade for the current SPS. Sea surface temperatures are a critical element of information for (1) support of DoD personnel exposed to in-water activity (e.g. SEALs), (2) acoustic prediction in support of ASW, and (3) input to numerical circulation models providing ocean currents affecting mine countermeasures an amphibious operations. NAVOCEANO production of MCSSTs is required by the Joint Navy/Air Force/NOAA Shared Processing Memorandum of Agreement. Production of MCSSTs supports a number of validated requirements including USMC-OCEN 93-01 (Littoral Sea Environment), LITT OCEN 93-01 (Improved Mine Drift Predictions), LITT OCEN 93-06 (High Resolution Surface/Subsurface Current Predictions), and CINC OCEN 91-06 (Ocean Prediction Models).

**SEAMAP SYSTEMS**

**SEAMAP FIBER OPTICS SYSTEM**

Fiber optic equipment will replace existing coaxial cable telemetry systems improving data acquisition and processing of collected data. The present system is limited to basebanded data that requires a 422 kHz bandwidth. Fiber optic telemetry will allow data generated by the A/D converters to be directed topside which will allow better processing and quality control of collected data.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**SEAMAP TOWFISH UPGRADE**

This upgrade to the SEAMAP system will allow survey requirements to be met without interruption. Fleet requirements for seafloor bathymetric and acoustic backscatter maps, and quantitative backscatter measurements for SWASI, Mine Warfare, and Route Survey data collection can be accomplished. This upgrade will increase pulse compression and calibration capability which will allow a much greater transmit energy which results in better bathymetric data records and more accurate products for the warfighter.

**SHALLOW WATER SYSTEMS**

**SHALLOW WATER SEISMIC SYSTEM**

The Shallow Water Seismic System is a portable roll on/roll off system for use on T-AGS 60 ships in water depths to approximately 300 meters. The system includes a CHIRP Subbottom Profiler, a Wide Angle Bottom Reflection (WABR) , a seismic sound source, and a seismic data acquisition system. This system is required to support high priority acoustic and geophysical survey operations. Data collected from this system is used to produce acoustic and geophysical databases. These data provide support for Fleet sonar system performance and weapons system predictions.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**SHIPBOARD INSTRUMENTATION**

**CTD ACQUISITION & PROCESSING SYSTEM CALIBRATION UPGRADE**

The existing inventory of Connectivity, Temperature and Depth (CTD) sensors consists primarily of the Falmouth Scientific, Inc. (FSI) ICTD underwater unit and deck unit. Due to problems associated with design and quality control there have been complaints about performance and reliability. NAVOCEANO is working directly with the manufacturer to resolve these issues at this time. However, it is imperative that NAVOCEANO has a plan in place in the event that the problems with the FSI ICTD cannot be resolved. The CTD is one of the primary sensor systems used in the NOLS program throughout the research community. This CTD system will be evaluated "in-house" and at sea as a potential replacement for FSI ICTD.

**DIGITAL SIDE SCAN WITH CHIRP - T-AGS 63**

NAVOCEANO does not currently have side scan sonar capability aboard T-AGS 63. It is anticipated that these vessels will be fitted with Hydrographic Survey Launches (HSLs) at some point. Side scan sonar capability is required to effectively meet DMA hydrographic and Mine Warfare (MIW) data requirements. T-AGS 63 and later HSLs will be outfitted with these systems, which will provide the capability to (1) digitally archive raw side-scan data to be used in populating sea floor trackline databases, (2) precisely geo-reference side scan sonar scan-line data for accurate target location and identification, and (3) monitor real-time data collection using a video display with optional and concurrent hardcopy output. Current systems collect analog data only and are limited to hardcopy archiving. This is a significant operational and processing limitation, supporting only marginal data analysis and subsequent product development.

**EM1000 MULTIBEAM UPGRADE - T-AGS 51**

T-AGS 51 is currently equipped with an EM1000 Shallow Water Multibeam. This system is no longer in production and is expensive to maintain, especially with regard to replacements part availability and long lead time logistics support. This EM1000 multibeam has been in use for approximately 10 years and required life cycle replacement. Without the EM1000 system, the ability of the ship to conduct multibeam surveys will degrade as equipment becomes unsupportable.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**GGPS - TAGS 64**

Differential Global Positioning System (DGPS) with Geodetic capability are required to provide the geographic accuracy specified on hydrographic charts. These new systems replace older versions that become obsolete in CY97. DGPS Reference Stations and landmarks can be rapidly positioned if the DGPS includes a geodetic capability. Set up time can be reduced by 90 to 95%. Since JPO will be eliminating non-military access to the L2 frequency on GPS satellites, accuracy of civilian systems will be immediately degraded. This affects NAVOCEANO since we use untended receivers and currently employ civilian systems.

**HIDEX BIOLUMINESCENCE PHOTOMETER**

The High Intake Defined Excitation (HIDEX) photometer system supports numerous validated requirements to provide bioluminescence data to determine non-acoustic detection of naval assets. These data are vital to the Navy's ability to operate undetected. The system measures bioluminescence, light propagation, and other pertinent parameters in the water column which are required to produce such warfighting support products as STOICs, STORMs, and Environmental Guides.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**HIGH SPEED DIGITAL SIDE SCAN SONAR-T-AGS 62**

NAVOCEANO currently collects high speed side scan imagery data in support of Q-Routes and Mine Warfare (MW) requirements. Requirements for this type of data have been increasing and NAVOCEANO has only a single system of this type in the inventory. This significantly limits the ability to collect high resolution data in more than one operational area, or to have an installed backup capability on another platform. Without the addition of this high speed digital side scan sonar system to T-AGS 62, our ability to collect this data will remain very limited.

**HSL (SHORE-BASED) T-AGS 60/61**

The procurement and outfitting of a shore-based Hydrographic Survey Launch (HSL) provides NAVOCEANO with a local system integration platform that is identical to the HSLs that will be deployed on T-AGS 60 class ships. This platform will be used for at-sea testing of survey system installation or upgrade. The shore-based HSL will also provide NAVOCEANO the capability to provide its survey personnel with comprehensive hydrographic training prior to field assignment. Incorporating this capability into NAVOCEANO's operating tools will increase the effectiveness of hydrographic survey efforts by providing the ability to perform integration and engineering testing and improved personnel training in the local commuting area.

**MULTIBEAM UPGRADE HSL - TAGS 51**

NAVOCEANO has multiple requirements to collect bathymetry and imagery data in littoral areas. Presently the near-shore data (less than 50 meters) is collected from HSLs having a single beam sounder and imagery data is collected by towing a side-scan sonar. The replacement of the single-beam sonar with a high resolution swath multibeam capable of collecting 140 degrees swath to 20 meters., 100 degrees swath 20 to 50 meters and 60 degrees swath 50 to 150 meters. The system will collect concurrent bathymetry and imagery data. In 25 meters the HSL would need less than 10% of the time to survey a given area and would collect higher resolution bathymetry and imagery data.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**MULTICHANNEL ACOUSTICS SYSTEM**

This equipment is PC based sonar simulator for the SIMRAD EM121A. The equipment will operate on the TAGS-60 class ships to allow system testing dockside rather than at sea. The equipment will also be used for SIL training.

**MULTICHANNEL SEISMIC SYSTEM**

This equipment provides high resolution measurements of sediment structure along with velocity information of the sediments. This information is critical for construction of geophysical data bases that support acoustic performance prediction systems.

**POS-MV**

The POS-MV is an attitude sensor system which will provide backup/replacement for existing equipment. The new equipment will reduce life cycle maintenance cost, reduce lost survey time and provide a redundant system.

**WIRE ROPE REELING MACHINE**

The Wire Rope Reeling machine is portable equipment used for reeling wire to/from ship equipment to shore/spools. The equipment currently in use is over 20 years old. The equipment cannot be repaired economically because the manufacturer is no longer in business.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**FLEET NUMERICAL METEOROLOGY AND OCEANOGRAPHY CENTER**

Fleet Numerical Meteorology and Oceanography Center (FNMOC), Monterey, CA provides responsive quality meteorological and oceanographic (METOC) guidance and information to Navy and other Department of Defense activities worldwide to increase safety of forces and to optimize the use of platforms, weapons, sensors and facilities. METOC support to the operating forces is provided principally through five geographically dispersed commands (four USN sites located in Fleet concentration areas, and Air Force Global Weather Center which supports USAF and USA) via direct connectivity and through DoD circuits. Additionally, thousands of DoD PC users receive their product support directly from FNMOC using advanced mathematical techniques on high-performance computers. Analyses are used to predict the state of atmosphere and oceans for periods ranging from a few hours to a week. These analyses and predictions are used as the basis of specific, fleet-related products for platforms, weapon systems and sensors.

PRIMARY OCEAN PREDICTION SYSTEM (POPS) ENHANCEMENTS

DoD's role of "global presence" has stressed the current super computer architecture beyond its capacity to provide adequate support. Mission critical functions will be addressed through the use of additional processors and disk storage devices. Customer service will be improved via upgrades to client/server architecture of the worldwide distribution system. Greater emphasis on preparation for and reaction to regional conflicts and the littoral threat has resulted in a greatly increased demand for high resolution, coupled model meteorological guidance and forecasts, as well as oceanographic support to tactical coastal operations. The capability to produce and distribute products to users will be significantly improved as well. Improved atmospheric model output will be available for regional centers to initialize locally-run mesoscale models. Higher resolution nests will be available to ships to run local area analysis and short duration forecasts. This upgrade will provide FNMOC customers with better atmospheric and oceanographic forecasts at longer ranges as a result of sharper data focus, improvements in physics and increase in the resolution of the models, including a coupled atmosphere/wave model. It will also provide improved operational data management and implementation of 3-dimensional variational data assimilation.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**U.S. NAVAL OBSERVATORY**

The Naval Observatory, Washington, DC, provides the astronomical and timing data required by the Navy, the Department of Defense, other government agencies and the general public. Precise time and astronomical data are essential for command, control and communications; navigation and precise positioning; and targeting of tactical and strategic weapons systems.

VLBI SUBSYSTEM

VLBI provides the most accurate means of determining astronomical time and the celestial reference frame. Subsystems are needed to keep the VLBI program in Earth orientation in operation. These are data acquisition systems (receivers, digitizing and recording systems) and hydrogen maser clocks needed at the three observation sites in Kokee Park, Hawaii; Fairbanks, Alaska; and Green Bank, West Virginia.

1.3M CHARGED COUPLED DEVICE ARRAY

Procurement of this array is to enable the 1.3M astrometric telescope to track Earth satellites and space debris. This array must have a state-of-the-art readout capability in order to achieve this.

IR ASTROMETRIC TELESCOPE

This telescope will measure the precise celestial position of space objects at wavelengths of 1-10 microns. This is the wavelength band that makes manmade space objects more luminous. This telescope will track satellites and map space debris. It will also establish an IR reference frame.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

INDIUM ANTIMONIDE ARRAY DETECTORS

These array detectors with sensitivities between 1 and 5 micron wavelengths are needed to astronomically map the celestial background emission. The precise positions of objects at these wavelengths may be used in guidance systems for infrared seekers.

TIME TRANSFER RECEIVER

These receivers are needed to monitor the time on the GPS code signal. They are to be multi-channel in order to monitor all satellites above the horizon at Washington, D.C. and Falcon, AFB. This information is needed to maintain time on the GPS satellites in accord with an Interface Control Document between the Observatory and the Air Force.

MARK IV UPGRADE

This procurement will upgrade the VLBI Data Acquisition System to Mark IV capability. These capabilities will replace the data acquisition hardware at the VLBI station at Kauai (Hawaii) and at Green Bank (West Virginia) currently equipped with Mark IIIA or VLBI style systems. This is also essential to maintain compatibility with other VLBI stations in the global network, some of which have already made the upgrade.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

CESIUM SYSTEM

The Master Clock consists of over 10 hydrogen masers, 45 cesium standards and associated electronics, computer and communications systems to establish the time scale. Additional maser and cesium atomic clock standards must be procured to replace those that have reached the end of their useable ten-year lifetime. The hydrogen maser atomic clocks are very precise in short-term stability and are utilized in conjunction with cesium beam atomic clocks that provide long-term stability to ensure the accuracy of the Navy/DOD/National Master Clock System. The components of the clock must be replaced as they age to maintain the accuracy of the timescale. This system must continue to provide a timescale stable to 12 billionths of a second for GPS operations. Smart weapons, long-range Cruise missiles and weapons delivery platforms need near-perfect positioning and precise time (nanoseconds) information. Lack of replacement of the hydrogen maser and cesium standards will degrade the accuracy of the Maser Clock, leading to the possibility of failing to meet the requirements for accurate time for precise targeting systems and degraded security for secure communication systems. The Observatory will not be able to meet its mission of providing time to GPS and other DOD users who need accurate time without the Master Clock Replacement.

OPTICAL INTERFEROMETER SUBSYSTEM

These subsystems are necessary to bring the optical interferometer into full operation. Subsystems include mirror systems for conditioning and reducing the beam size and fast steering mirror systems to compensate for the atmosphere. These observations are necessary for the maintenance of the accuracy of the celestial reference frame for guidance systems.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

PMM DIGITAL

DVD storage system capable of serving the 10-terabyte Precision Measuring Machine (PMM) database to DoD and civilian astronomers over the World Wide Web.

3H MASER SYSTEM

Hydrogen Masers are an integral part of the Master Clock system at the Naval Observatory. These clocks are very precise in the short term and are utilized in conjunction with cesium beam clocks to ensure accuracy of the Navy/DoD/National Master Clock System.

FIBER OPTIC DISTRIBUTION SYSTEM

Fiber optic systems offer the highest accuracy time transfer over limited distances. This system is needed to replace the present system that links the cesium and hydrogen maser time standards making up the Master Clock in Washington, DC. The present system will reach the end of its operational lifetime in 2002.

MOBILE EARTH STATION

This Mobile Earth Station is needed to calibrate the Two Way Satellite Time Transfer (TWSTT) at remote sites. This technique is employed when the highest possible accuracy is needed for time synchronization. This earth station is needed to support space operations for surveillance.

NEW TECHNOLOGY CLOCK

New atomic clocks are being developed that will exceed the accuracy of the present atomic clocks making up the Master Clock. This improvement in accuracy will approach will make it possible to have knowledge of time at the 0.1 billionth of a second level. It is expected that production models will be available by 2002. This accuracy is needed for improvement in the accuracy of the GPS system necessary for precisely guided munitions such as Cruise missiles.

| BUDGET ITEM JUSTIFICATION SHEET<br>P- 40 CONTINUATION | DATE:<br>FEBRUARY 2000 |
|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | P-1 ITEM NOMENCLATURE/LINE ITEM #<br>ENVIRONMENTAL SUPPORT EQUIPMENT LI:8126 |

**CNMOC HEADQUARTERS**

LASER AIRBORNE BATHYMETRIC SURVEY SYSTEM (LABS)

The objective of the LABS program is to obtain very high speed bathymetric data collection capability in very shallow water (0-50m) in non-hostile environments that support Navy MC& G requirements. Data would support Navy and conventional nautical charting efforts in both routine operation and rapid response capability. The LABS system can acquire data at a rate of about 130 sqnm/24 vs 20 sqnm/24 for a survey ship.

UNMANNED UNDERWATER VEHICLE (UUV)

The UUV program acquires UUV technology that can operate as force multipliers and collect various oceanographic data in support of Oceanographic and MC&G requirements and provide access to denied areas. The intent of the UUV operations center is to have a variety of UUV's to meet various jobs. They will be deployed from the fantail and be allowed to survey in a passive mode for a specified period. Once that period is met, they will wait for recovery and its data downloaded for processing. Sensors onboard this UUV will include CTD, SSS, and single beam echo sounders.

SHALLOW WATER SYSTEMS

A new Fleet requirement for a worldwide Shallow Water digital navigation database for the littoral regions has resulted in a need for a greater resolution, more stringent bathymetric database than already exists. Consequently, new multibeam swath sonar systems, digital side scan sonars systems, and additional shallow water survey platforms (Hydrographic Survey Launches (HSL)) must be procured to meet this critical navigation to support safe, secure SSN operations. Additionally, recent changes in hydrographic data collection techniques by the International Hydrographic Organization (IHO) have necessitated newer, more precise, shallow water survey systems be procured or upgraded to support the National Imagery and Mapping Agency's chart production in order to meet these new IHO standards.

| WEAPONS SYSTEMS COST ANALYSIS P-5 | | | WEAPONS SYSTEMS | DATE: FEBRUARY 2000 |
|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>Other Procurement, Navy<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | ID Code | P-1 ITEM NOMENCLATURE/SUBHEAD<br>ENVIRONMENTAL SUPPORT EQUIPMENT L7Z7 | |

| COST CODE | ELEMENT OF COST | ID Code | TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | FY 1999 | | | FY 2000 | | | FY 2001 | | | FY 2002 | | |
| | | | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST |
| | **Naval Oceanographic Office** | | | | | | | | | | | | | |
| | **Aircraft Systems** | | | | | | | | | | | | | |
| | Aircraft Data Acquisition System | | 1 | 200 | 200 | | | | | | | | | |
| | **Altimetry Data Fusion Systems** | | | | | | | | | | | | | |
| | ADFC (Altimetry Data Fusion System) | | 1 | 200 | 200 | | | | | | | | | |
| | **AUV Systems** | | | | | | | | | | | | | |
| | Autonomous Underwater Vehicle | | 1 | 2,650 | 2,650 | 1 | 2,656 | 2,656 | | | | | | |
| | **Central Site Systems** | | | | | | | | | | | | | |
| | Central Data Base Server | | 1 | 169 | 169 | | | | | | | | | |
| | Survey Workstations/Mass Storage | | 3 | 130 | 390 | | | | | | | | | |
| | **Communications Systems** | | | | | | | | | | | | | |
| | ATM Capability/ATM Upgrade | | | | | 1 | 274 | 274 | 1 | 444 | 444 | | | |
| | **Environmental Systems** | | | | | | | | | | | | | |
| | Comprehensive Environmental Assessment | | | | | | | | 1 | 600 | 600 | | | |
| | Integrated Drifting Buoys | | 145 | 4 | 580 | 119 | 4 | 475 | 164 | 4 | 655 | | | |
| | MIDEX Bioluminescence Photometer | | | | | | | | 3 | 105 | 315 | | | |
| | Optics Measurement Array | | 1 | 120 | 120 | | | | 1 | 120 | 120 | | | |
| **SubTotal** | | | **153** | | **4,309** | **121** | | **3,405** | **170** | | **2,134** | | | |

| WEAPONS SYSTEMS COST ANALYSIS P-5 | | | WEAPONS SYSTEMS | DATE: FEBRUARY 2000 |
|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OTHER PROCUREMENT, NAVY<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | ID Code | P-1 ITEM NOMENCLATURE/SUBHEAD<br>ENVIRONMENTAL SUPPORT EQUIPMENT L7Z7 | |

| COST CODE | ELEMENT OF COST | ID Code | TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | FY 1999 | | | FY 2000 | | | FY 2001 | | | FY 2002 | | |
| | | | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST |
| | **GFMPL SYSTEMS** | | | | | | | | | | | | | |
| | DTC/GFMPL System | | 1 | 150 | 150 | | | | | | | | | |
| | GFMPL Hardware Upgrade | | 1 | 150 | 150 | | | | | | | | | |
| | **HYCOOP SYSTEMS** | | | | | | | | | | | | | |
| | HYCOOP Digital Side Scan Sonar | | 1 | 515 | 515 | | | | | | | | | |
| | FLYAWAY Survey System | | | | | | | | 1 | 370 | 370 | | | |
| | **HYDROPHONE SYSTEMS** | | | | | | | | | | | | | |
| | Hydrophone Collection System | | 1 | 250 | 250 | | | | | | | | | |
| | **NAVIGATION SYSTEMS** | | | | | | | | | | | | | |
| | Geodetic GPS - T-AGS 52 | | 1 | 171 | 171 | | | | | | | | | |
| | Geodetic GPS - T-AGS 64 | | | | | 1 | 175 | 175 | | | | | | |
| | Ultrashort Baseline Tracking System | | | | | | | | 1 | 125 | 125 | | | |
| | **SATELLITE SYSTEMS** | | | | | | | | | | | | | |
| | Satellite Processing Upgrade | | 1 | 200 | 200 | | | | | | | | | |
| **SubTotal** | | | **6** | | **1,436** | **1** | | **175** | **2** | | **495** | | | |

| WEAPONS SYSTEMS COST ANALYSIS P-5 | | | | | | | | | | | | | | | DATE: FEBRUARY 2000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>Other Procurement, Navy<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | | | | | ID Code | P-1 ITEM NOMENCLATURE/SUBHEAD<br>ENVIRONMENTAL SUPPORT EQUIPMENT L7Z7 | | | | | | | | |
| COST CODE | ELEMENT OF COST | ID Code | TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | | | | | | |
| | | | FY 1999 | | | FY 2000 | | | FY 2001 | | | FY 2002 | | | |
| | | | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST |
| | **SEAMAP SYSTEMS** | | | | | | | | | | | | | |
| | SEAMAP Fiber Optics System | | | | | | | | 1 | 125 | 125 | | | |
| | SEAMAP Towfish Upgrade | | | | | | | | 1 | 250 | 250 | | | |
| | **SHALLOW WATER SYSTEMS** | | | | | | | | | | | | | |
| | Shallow Water Seismic System | | | | | | | | 1 | 816 | 816 | | | |
| | **SHIPBOARD INSTRUMENTATION** | | | | | | | | | | | | | |
| | CTD Acquisition & Processing System UG | | | | | | | | 7 | 125 | 875 | | | |
| | Digital Side Scan with Chirp - T-AGS 63 | | 1 | 530 | 530 | | | | 1 | 600 | 600 | | | |
| | EM1000 Multibeam Upgrade - T-AGS 51/52 | | 2 | 684 | 1,368 | | | | | | | | | |
| | HIDEX Bioluminescence Photometer | | | | | | | | 1 | 500 | 500 | | | |
| | High Speed Digital Side Scan - T-AGS 62 | | 1 | 400 | 400 | | | | | | | | | |
| | Hydrographic Survey Launch -T-AGS 60/61 | | | | | 2 | 2,050 | 4,100 | 2 | 2,000 | 4,000 | | | |
| | Multibeam Upgrade HSL - T-AGS 51 | | | | | | | | 2 | 861 | 1,722 | | | |
| **SubTotal** | | | **4** | | **2,298** | **2** | | **4,100** | **16** | | **8,888** | | | |

| WEAPONS SYSTEMS COST ANALYSIS P-5 | | | | | | WEAPONS SYSTEMS | | | DATE: FEBRUARY 2000 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>Other Procurement, Navy<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | ID Code | P-1 ITEM NOMENCLATURE/SUBHEAD<br>ENVIRONMENTAL SUPPORT EQUIPMENT L7Z7 | | | | | | | | |
| COST CODE | ELEMENT OF COST | ID Code | TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | | |
| | | | FY 1999 | | | FY 2000 | | | FY 2001 | | | FY 2002 | | |
| | | | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST |
| | Multichannel Acoustic System | | | | | | | | 1 | 125 | 125 | | | |
| | Multichannel Seismic System | | | | | | | | 1 | 670 | 670 | | | |
| | POS/MV | | | | | | | | 1 | 175 | 175 | | | |
| | Wire Rope Reeling Machine | | | | | | | | 1 | 137 | 137 | | | |
| | **Subtotal** | | | | | | | | 4 | | 1,107 | | | |
| **NAVOCEANO Total** | | | **163** | | **8,043** | **124** | | **7,680** | **192** | | **12,624** | | | |

| WEAPONS SYSTEM COST ANALYSIS P-5 | | | Weapon System | DATE: FEBRUARY 2000 |
|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>Other Procurement, Navy<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | ID Code | P-1 ITEM NOMENCLATURE/SUBHEAD<br>ENVIRONMENTAL SUPPORT EQUIPMENT L7Z7 | |

| COST CODE | ELEMENT OF COST | ID Code | TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | FY 1999 | | | FY 2000 | | | FY 2001 | | | FY 2002 | | |
| | | | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST |
| | **U.S. NAVAL OBSERVATORY** | | | | | | | | | | | | | |
| | 1.3 Charged Coupled Device Array | | | | | 1 | 185 | 185 | | | | | | |
| | Indium Antimonide Array Detectors | | 1 | 190 | 190 | | | | 1 | 250 | 250 | | | |
| | IR Astrometric Telescope | | | | | | | | 1 | 300 | 300 | | | |
| | Optical Interferometer Subsystem | | 1 | 538 | 538 | 1 | 508 | 508 | | | | | | |
| | Cesium System | | 1 | 413 | 413 | 1 | 420 | 420 | 1 | 420 | 420 | | | |
| | Time Transfer Receiver | | 1 | 300 | 300 | 1 | 300 | 300 | 1 | 150 | 150 | | | |
| | PMM Digital | | | | | | | | 1 | 100 | 100 | | | |
| | 3H Maser System | | 1 | 235 | 235 | 2 | 250 | 500 | 2 | 250 | 500 | | | |
| | Mobile Earth Station | | | | | | | | 1 | 206 | 206 | | | |
| | Fiber Optic Distribution System | | | | | | | | 1 | 100 | 100 | | | |
| | Mark IV Upgrade | | 1 | 240 | 240 | 1 | 150 | 150 | | | | | | |
| | VLBI Subsystem | | 2 | 125 | 250 | 1 | 150 | 150 | 1 | 150 | 150 | | | |
| | **OBSERVATORY SUBTOTAL** | | **8** | | **2,166** | **8** | | **2,213** | **10** | | **2,176** | | | |

CLASSIFICATION: **UNCLASSIFIED**

| WEAPONS SYSTEM COST ANALYSIS P-5 | | | | | | | | | | | | | | Weapon System | DATE: FEBRUARY 2000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>Other Procurement, Navy<br>BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | | | | | | ID Code | P-1 ITEM NOMENCLATURE/SUBHEAD<br>ENVIRONMENTAL SUPPORT EQUIPMENT L7Z7 | | | | | | | |
| COST CODE | ELEMENT OF COST | ID Code | TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | | | | | | |
| | | | FY 1999 | | | FY 2000 | | | FY 2001 | | | FY 2002 | | | |
| | | | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | QTY | UNIT COST | TOTAL COST | |
| | FLEET NUMERICAL METEOROLOGY AND OCEANOGRAPHY CENTER | | | | | | | | | | | | | | |
| | POPS Enhancements | | 1 | | 6,291 | 1 | | 8,359 | 1 | | 7,447 | | | | |
| | TOTAL | | 172 | | 16,500 | 133 | | 18,252 | 203 | | 22,247 | | | | |

| BUDGET ITEM JUSTIFICATION SHEET | | | | | | DATE February 2000 | | |
|---|---|---|---|---|---|---|---|---|
| **APPROPRIATION/BUDGET ACTIVITY**<br>OTHER PROCUREMENT, NAVY / BUDGET ACTIVITY 7 | | | **P-1 ITEM NOMENCLATURE**<br>PHYSICAL SECURITY EQUIPMENT (812800) | | | | | |
| | FY 98 | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 | FY 04 | FY 05 |
| QUANTITY | | | | | | | | |
| Cost (in millions) | - | - | $2.3 | $9.6 | $1.0 | $10.2 | $10.3 | $10.3 |

**Up-Armored High Mobility Multipurpose Wheeled Vehicles (HMMWVs)**

The SSP funding in this P-1 line provides for the procurement of nuclear weapons security vehicles required at the Strategic Weapons Facility, Atlantic (SWFLANT) and Strategic Weapons Facility, Pacific (SWFPAC). The current armored personnel carriers (APCs) in use at SWFLANT and SWFPAC are not HMMWV-type vehicles. SWFLANT has a model of APC known as Dragoons and the SWFPAC vehicles are V-150s. Vehicles at both sites are becoming increasingly more difficult and expensive to support. The existing vehicles have major reliability and operability problems requiring significant management attention to maintain the fleet without presenting excessive risk to site security. The HMMWV is the proposed replacement APC to both Dragoons and V-150s since it fulfills all mission requirements, has proven reliability, has low projected major maintenance costs and has a projected long production run.

**Naval Criminal Investigative Service (NCIS)**

This program provies integrated physical security/antiterrorism security essential to detect, deter and defeat terrorist and criminal activity targeted against Navy people, government property, and facilities ashore. Specifically, physical security equipment/systems procured provide protection of mission essential assets, such as: nuclear weapons; arms, ammunition, and explosives CAT's I and II. Security upgrades in support of the White House Military Office. Additionally, funding is included for Intrusion Detection Systems requirements.

| WEAPON SYSTEM COST ANALYSIS<br>EXHIBIT (P-5) PROGRAM COST BREAKDOWN | | | | | | | | | DATE:<br>Feb 2000 |
|---|---|---|---|---|---|---|---|---|---|
| APPROPRIATION/BUDGET ACTIVITY<br>OPN BA-7:PERSONNEL AND COMMAND SUPPORT EQUIPMENT | | P-1 ITEM NOMENCLATURE/SUBHEAD<br>PHYSICAL SECURITY EQUIPMENT/37X7<br>TOTAL COST IN THOUSANDS OF DOLLARS | | | | | | | |
| WEAPON SYSTEM COST ELEMENTS | Ident. Code | FY 98 Qty | TOTAL COST | FY 99 Qty | TOTAL COST | FY 00 Qty | TOTAL COST | FY 01 Qty | TOTAL COST |
| Up-Armored High Mobility Multipurpose Wheeled Vehicles (HMMWVs) | | | | | | 9 | 1,377 | 17 | 2,426 |
| Regional Security Systems | | | | | | | 967 | | 7,203 |
| **Total** | | | | | | | **2,344** | | **9,629** |

**P-1 Shopping List**
**Item No. Page No.**
**186 2**