

NAVAL AIR
WARFARE CENTER
Aircraft Division

Warminster, PA

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

*Naval Air Warfare Center,
 Aircraft Div., Warminster PA*

Starting Year : 1996
 Final Year : 1998
 ROI Year : Immediate

*Naval CC & Ocean Surv. Center
 RDT & E Div. Det. Warminster, PA*

NPV in 2015(\$K): -104,569
 1-Time Cost(\$K): 8,356

| | Constant Dollars | | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|--------------|------------------|-------------|---------------|---------------|---------------|---------------|----------------|---------------|
| | 1996 | 1997 | | | | | | |
| MilCon | -3,030 | 0 | 0 | -1,300 | 0 | 0 | -4,330 | 0 |
| Person | -281 | -2,668 | -4,888 | -4,888 | -4,888 | -4,888 | -22,501 | -4,888 |
| Overhd | -119 | -812 | -2,290 | -2,468 | -2,468 | -2,468 | -10,624 | -2,468 |
| Moving | 2,650 | 2,954 | 0 | 0 | 0 | 0 | 5,604 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | -1,000 | 0 | -200 | -1,200 | -200 |
| TOTAL | -780 | -526 | -7,178 | -9,656 | -7,356 | -7,556 | -33,051 | -7,556 |

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------------------------|-----------|-----------|----------|----------|----------|----------|-----------|
| POSITIONS ELIMINATED | | | | | | | |
| Off | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enl | 10 | 0 | 0 | 0 | 0 | 0 | 10 |
| Civ | 13 | 69 | 0 | 0 | 0 | 0 | 82 |
| TOT | 24 | 69 | 0 | 0 | 0 | 0 | 93 |

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|----------------------------|------------|------------|----------|----------|----------|----------|------------|
| POSITIONS REALIGNED | | | | | | | |
| Off | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enl | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Stu | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| TOT | 116 | 101 | 0 | 0 | 0 | 0 | 217 |

Summary:

Close NAWC/NCCOSC WARMINSTER

SCENARIO 030

16

20

212

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Costs (\$K) Constant Dollars | 1996 | | | | | | Total | Beyond |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | | |
| MilCon | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 | 0 |
| Person | 300 | 360 | 27 | 27 | 27 | 27 | 769 | 27 |
| Overhd | 913 | 1,348 | 1,170 | 992 | 992 | 992 | 6,406 | 992 |
| Moving | 2,655 | 2,954 | 0 | 0 | 0 | 0 | 5,608 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 5,138 | 4,662 | 1,197 | 1,019 | 1,019 | 1,019 | 14,054 | 1,019 |

| Savings (\$K) Constant Dollars | 1996 | | | | | | Total | Beyond |
|--------------------------------|--------------|--------------|--------------|---------------|--------------|--------------|---------------|--------------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | | |
| MilCon | 4,300 | 0 | 0 | 1,300 | 0 | 0 | 5,600 | 0 |
| Person | 581 | 3,028 | 4,915 | 4,915 | 4,915 | 4,915 | 23,270 | 4,915 |
| Overhd | 1,032 | 2,160 | 3,459 | 3,459 | 3,459 | 3,459 | 17,030 | 3,459 |
| Moving | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 1,000 | 0 | 200 | 1,200 | 200 |
| TOTAL | 5,918 | 5,188 | 8,374 | 10,674 | 8,374 | 8,574 | 47,104 | 8,574 |

NET PRESENT VALUES REPORT (COBRA v5.08)
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Year | Cost(\$) | Adjusted Cost(\$) | NPV(\$) |
|------|------------|-------------------|--------------|
| ---- | ----- | ----- | ----- |
| 1996 | -780,367 | -769,853 | -769,853 |
| 1997 | -525,735 | -504,770 | -1,274,624 |
| 1998 | -7,177,629 | -6,706,971 | -7,981,594 |
| 1999 | -9,655,630 | -8,781,004 | -16,762,599 |
| 2000 | -7,355,630 | -6,510,309 | -23,272,908 |
| 2001 | -7,555,630 | -6,508,345 | -29,781,254 |
| 2002 | -7,555,630 | -6,334,156 | -36,115,410 |
| 2003 | -7,555,630 | -6,164,629 | -42,280,039 |
| 2004 | -7,555,630 | -5,999,639 | -48,279,678 |
| 2005 | -7,555,630 | -5,839,064 | -54,118,742 |
| 2006 | -7,555,630 | -5,682,788 | -59,801,530 |
| 2007 | -7,555,630 | -5,530,694 | -65,332,224 |
| 2008 | -7,555,630 | -5,382,670 | -70,714,894 |
| 2009 | -7,555,630 | -5,238,609 | -75,953,503 |
| 2010 | -7,555,630 | -5,098,402 | -81,051,906 |
| 2011 | -7,555,630 | -4,961,949 | -86,013,855 |
| 2012 | -7,555,630 | -4,829,147 | -90,843,002 |
| 2013 | -7,555,630 | -4,699,900 | -95,542,902 |
| 2014 | -7,555,630 | -4,574,112 | -100,117,014 |
| 2015 | -7,555,630 | -4,451,691 | -104,568,705 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

(All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-----------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 1,270,000 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 1,270,000 |
| Personnel | | |
| Civilian RIF | 383,952 | |
| Civilian Early Retirement | 147,674 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 18,557 | |
| Unemployment | 56,376 | |
| Total - Personnel | | 606,559 |
| Overhead | | |
| Program Planning Support | 731,782 | |
| Mothball / Shutdown | 138,750 | |
| Total - Overhead | | 870,532 |
| Moving | | |
| Civilian Moving | 4,673,874 | |
| Civilian PPS | 720,000 | |
| Military Moving | 19,619 | |
| Freight | 195,023 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 5,608,516 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | | |
| Total One-Time Costs | | 8,355,607 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 5,600,000 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 4,512 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 5,604,512 |
| ----- | | |
| Total Net One-Time Costs | | 2,751,095 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NCCOSC NRAD SAN DGO, CA
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-----------|-----------|
| Construction | | |
| Military Construction | 1,270,000 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 1,270,000 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| Total One-Time Costs | | 1,270,000 |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| Total One-Time Savings | | 0 |
| Total Net One-Time Costs | | 1,270,000 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAVOCEANO, MS
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | | |
| Total One-Time Costs | | 0 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 0 |
| ----- | | |
| Total Net One-Time Costs | | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\W95DBOF.SFF

Base: NNMC BETHESDA, MD
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | | |
| Total One-Time Costs | | 0 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 0 |
| ----- | | |
| Total Net One-Time Costs | | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMM2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AD PAX RIVER, MD
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | | |
| Total One-Time Costs | | 0 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 0 |
| ----- | | |
| Total Net One-Time Costs | | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-----------|------------------|
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 383,952 | |
| Civilian Early Retirement | 147,674 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 18,557 | |
| Unemployment | 56,376 | |
| Total - Personnel | | 606,559 |
| Overhead | | |
| Program Planning Support | 731,782 | |
| Mothball / Shutdown | 138,750 | |
| Total - Overhead | | 870,532 |
| Moving | | |
| Civilian Moving | 4,673,874 | |
| Civilian PPS | 720,000 | |
| Military Moving | 19,619 | |
| Freight | 195,023 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 5,608,516 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| Total One-Time Costs | | 7,085,607 |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 5,600,000 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 4,512 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| Total One-Time Savings | | 5,604,512 |
| Total Net One-Time Costs | | 1,481,095 |

Department : Navy
Option Package : NAWC WARMINSTER 2
Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

All Costs in \$K

| Base Name | Total MilCon | IMA Cost | Land Purch | Cost Avoid | Total Cost |
|---------------------|-----------------|-------------|---------------|---------------|---------------|
| NCCOSC NRAD SAN DGO | 1,270 | 0 | 0 | 0 | 1,270 |
| NAVOCEANO | 0 | 0 | 0 | 0 | 0 |
| NNMC BETHESDA | 0 | 0 | 0 | 0 | 0 |
| NAWC AD PAX RIVER | 0 | 0 | 0 | 0 | 0 |
| NAWC AC WARMINSTER | 0 | 0 | 0 | -5,600 | -5,600 |
| Totals: | 1,270 | 0 | 0 | -5,600 | -4,330 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

MilCon for Base: NCCOSC NRAD SAN DGO, CA

All Costs in \$K

| Description: | MilCon Categ | Using Rehab | Rehab Cost* | New MilCon | New Cost* | Total Cost* |
|---------------------------------------|-----------------|----------------|----------------|---------------|--------------|----------------|
| RF MICROELECTRONICS Clean Room | OTHER | 0 | n/a | 0 | n/a | 270 |
| SHIP MOTION SIMULATO Concrete Well | OTHER | 0 | n/a | 0 | n/a | 1,000 |

| | |
|----------------------------|--------------|
| Total Construction Cost: | 1,270 |
| + Info Management Account: | 0 |
| + Land Purchases: | 0 |
| - Construction Cost Avoid: | 0 |
| TOTAL: | 1,270 |

* All MilCon Costs include Design, Site Preparation, Contingency Planning, and SIQH Costs where applicable.

Department : Navy
Option Package : NAWC WARMINSTER 2
Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

MilCon for Base: NAWC AC WARMINSTER, PA

All Costs in \$K

| Description: | MilCon Categ | Using Rehab | Rehab Cost* | New MilCon | New Cost* | Total Cost* |
|----------------------------|-----------------|----------------|----------------|---------------|--------------|----------------|
| ----- | | | | | | ----- |
| Total Construction Cost: | | | | | | 0 |
| + Info Management Account: | | | | | | 0 |
| + Land Purchases: | | | | | | 0 |
| - Construction Cost Avoid: | | | | | | 5,600 |
| ----- | | | | | | ----- |
| TOTAL: | | | | | | -5,600 |

* All MilCon Costs include Design, Site Preparation, Contingency Planning, and SIOH Costs where applicable.

PERSONNEL SUMMARY REPORT (COBRA v5.08)

Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

PERSONNEL SUMMARY FOR: NCCOSC NRAD SAN DGO, CA

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 45 | 91 | 0 | 5,204 |

PERSONNEL REALIGNMENTS:

From Base: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 99 | 65 | 0 | 0 | 0 | 0 | 164 |
| TOTAL | 99 | 65 | 0 | 0 | 0 | 0 | 164 |

TOTAL PERSONNEL REALIGNMENTS (Into NCCOSC NRAD SAN DGO, CA):

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 99 | 65 | 0 | 0 | 0 | 0 | 164 |
| TOTAL | 99 | 65 | 0 | 0 | 0 | 0 | 164 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 45 | 91 | 0 | 5,368 |

PERSONNEL SUMMARY FOR: NAVOCEANO, MS

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 29 | 41 | 0 | 0 |

PERSONNEL REALIGNMENTS:

From Base: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| TOTAL | 0 | 36 | 0 | 0 | 0 | 0 | 36 |

TOTAL PERSONNEL REALIGNMENTS (Into NAVOCEANO, MS):

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| TOTAL | 0 | 36 | 0 | 0 | 0 | 0 | 36 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 29 | 41 | 0 | 36 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

PERSONNEL SUMMARY FOR: NNMC BETHESDA, MD

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 1,075 | 1,754 | 202 | 1,733 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 1,075 | 1,754 | 202 | 1,733 |

PERSONNEL SUMMARY FOR: NAWC AD PAX RIVER, MD

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 463 | 2,361 | 23 | 3,119 |

PERSONNEL REALIGNMENTS:

From Base: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| TOTAL | 17 | 0 | 0 | 0 | 0 | 0 | 17 |

TOTAL PERSONNEL REALIGNMENTS (Into NAWC AD PAX RIVER, MD):

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| TOTAL | 17 | 0 | 0 | 0 | 0 | 0 | 17 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 464 | 2,365 | 23 | 3,131 |

PERSONNEL SUMMARY FOR: NAWC AC WARMINSTER, PA

BASE POPULATION (FY 1996):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 2 | 14 | 0 | 311 |

FORCE STRUCTURE CHANGES:

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | -17 | 0 | 0 | 0 | 0 | 0 | -17 |
| TOTAL | -17 | 0 | 0 | 0 | 0 | 0 | -17 |

BASE POPULATION (Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 2 | 14 | 0 | 294 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

PERSONNEL REALIGNMENTS:

| To Base: NCCOSC NRAD SAN DGO, CA | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|----------------------------------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 99 | 65 | 0 | 0 | 0 | 0 | 164 |
| TOTAL | 99 | 65 | 0 | 0 | 0 | 0 | 164 |

| To Base: NAVOCEANO, MS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|------------------------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| TOTAL | 0 | 36 | 0 | 0 | 0 | 0 | 36 |

| To Base: NAWC AD PAX RIVER, MD | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|--------------------------------|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| TOTAL | 17 | 0 | 0 | 0 | 0 | 0 | 17 |

| TOTAL PERSONNEL REALIGNMENTS (Out of NAWC AC WARMINSTER, PA): | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|---|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| TOTAL | 116 | 101 | 0 | 0 | 0 | 0 | 217 |

| SCENARIO POSITION CHANGES: | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|----------------------------|------|------|------|------|------|------|-------|
| Officers | -1 | 0 | 0 | 0 | 0 | 0 | -1 |
| Enlisted | -10 | 0 | 0 | 0 | 0 | 0 | -10 |
| Civilians | -13 | -69 | 0 | 0 | 0 | 0 | -82 |
| TOTAL | -24 | -69 | 0 | 0 | 0 | 0 | -93 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 0 | 0 | 0 | 0 |

TOTAL PERSONNEL IMPACT REPORT (COBRA v5.08) - Page 1/6
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| Early Retirement* | 10.00% | 11 | 11 | 0 | 0 | 0 | 0 | 22 |
| Regular Retirement* | 5.00% | 6 | 5 | 0 | 0 | 0 | 0 | 11 |
| Civilian Turnover* | 15.00% | 17 | 15 | 0 | 0 | 0 | 0 | 32 |
| Civs Not Moving (RIFs)*+ | | 7 | 6 | 0 | 0 | 0 | 0 | 13 |
| Civilians Moving (the remainder) | | 70 | 64 | 0 | 0 | 0 | 0 | 134 |
| Civilian Positions Available | | 41 | 37 | 0 | 0 | 0 | 0 | 78 |
| CIVILIAN POSITIONS ELIMINATED | | 13 | 69 | 0 | 0 | 0 | 0 | 82 |
| Early Retirement | 10.00% | 1 | 7 | 0 | 0 | 0 | 0 | 8 |
| Regular Retirement | 5.00% | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| Civilian Turnover | 15.00% | 2 | 10 | 0 | 0 | 0 | 0 | 12 |
| Civs Not Moving (RIFs)*+ | | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| Priority Placement# | 60.00% | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| Civilians Available to Move | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilians Moving | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| Civilians Moving | | 70 | 68 | 0 | 0 | 0 | 0 | 138 |
| New Civilians Hired | | 41 | 33 | 0 | 0 | 0 | 0 | 74 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 12 | 18 | 0 | 0 | 0 | 0 | 30 |
| TOTAL CIVILIAN RIFs | | 8 | 10 | 0 | 0 | 0 | 0 | 18 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| TOTAL CIVILIAN NEW HIRES | | 41 | 33 | 0 | 0 | 0 | 0 | 74 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

+ The Percentage of Civilians Not Willing to Move (Voluntary RIFs) varies from base to base.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NCCOSC NRAD SAN DGO, CA | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|--|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | | | | | | | |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | | | | | | | |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | | | | | | | |
| Civilians Moving | | 63 | 41 | 0 | 0 | 0 | 0 | 104 |
| New Civilians Hired | | 36 | 24 | 0 | 0 | 0 | 0 | 60 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 36 | 24 | 0 | 0 | 0 | 0 | 60 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NAVOCEANO, NS | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| Civilians Moving | | 0 | 27 | 0 | 0 | 0 | 0 | 27 |
| New Civilians Hired | | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 0 | 9 | 0 | 0 | 0 | 0 | 9 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NMMC BETHESDA, MD | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Civilians Hired | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFs | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95D8OF.SFF

| Base: NAWC AD PAX RIVER, MD | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|--|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | | | | | | | |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | | | | | | | |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | | | | | | | |
| Civilians Moving | | 7 | 0 | 0 | 0 | 0 | 0 | 7 |
| New Civilians Hired | | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 5 | 0 | 0 | 0 | 0 | 0 | 5 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NAWC AC WARMINSTER, PA | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|--|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | | | | | | | |
| Early Retirement* | 10.00% | 11 | 11 | 0 | 0 | 0 | 0 | 22 |
| Regular Retirement* | 5.00% | 6 | 5 | 0 | 0 | 0 | 0 | 11 |
| Civilian Turnover* | 15.00% | 17 | 15 | 0 | 0 | 0 | 0 | 32 |
| Civs Not Moving (RIFs)* | 6.00% | 7 | 6 | 0 | 0 | 0 | 0 | 13 |
| Civilians Moving (the remainder) | | 70 | 64 | 0 | 0 | 0 | 0 | 134 |
| Civilian Positions Available | | 41 | 37 | 0 | 0 | 0 | 0 | 78 |
| CIVILIAN POSITIONS ELIMINATED | | | | | | | | |
| Early Retirement | 10.00% | 1 | 7 | 0 | 0 | 0 | 0 | 8 |
| Regular Retirement | 5.00% | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| Civilian Turnover | 15.00% | 2 | 10 | 0 | 0 | 0 | 0 | 12 |
| Civs Not Moving (RIFs)* | 6.00% | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| Priority Placement# | 60.00% | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| Civilians Available to Move | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilians Moving | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | | | | | | | |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Civilians Hired | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 12 | 18 | 0 | 0 | 0 | 0 | 30 |
| TOTAL CIVILIAN RIFS | | 8 | 10 | 0 | 0 | 0 | 0 | 18 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| TOTAL CIVILIAN NEW HIRES | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 1/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\W95DBOF.SFF

| ONE-TIME COSTS -----(\$K)----- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| CONSTRUCTION | | | | | | | |
| MILCON | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIF | 171 | 213 | 0 | 0 | 0 | 0 | 384 |
| Civ Retire | 59 | 89 | 0 | 0 | 0 | 0 | 148 |
| CIV MOVING | | | | | | | |
| Per Diem | 294 | 263 | 0 | 0 | 0 | 0 | 557 |
| POV Miles | 31 | 25 | 0 | 0 | 0 | 0 | 56 |
| Home Purch | 823 | 769 | 0 | 0 | 0 | 0 | 1,592 |
| HHG | 551 | 515 | 0 | 0 | 0 | 0 | 1,067 |
| Misc | 49 | 47 | 0 | 0 | 0 | 0 | 96 |
| House Hunt | 278 | 238 | 0 | 0 | 0 | 0 | 516 |
| PPS | 115 | 605 | 0 | 0 | 0 | 0 | 720 |
| RITA | 413 | 376 | 0 | 0 | 0 | 0 | 789 |
| FREIGHT | | | | | | | |
| Packing | 19 | 17 | 0 | 0 | 0 | 0 | 35 |
| Freight | 61 | 99 | 0 | 0 | 0 | 0 | 159 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 25 | 31 | 0 | 0 | 0 | 0 | 56 |
| OTHER | | | | | | | |
| Program Plan | 316 | 237 | 178 | 0 | 0 | 0 | 732 |
| Shutdown | 63 | 76 | 0 | 0 | 0 | 0 | 139 |
| New Hire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 16 | 0 | 0 | 0 | 0 | 0 | 16 |
| Misc | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| OTHER | | | | | | | |
| Elim PCS | 18 | 0 | 0 | 0 | 0 | 0 | 18 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 4,577 | 3,600 | 178 | 0 | 0 | 0 | 8,356 |

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 2/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| RECURRINGCOSTS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|----------------|-------|-------|-------|--------|-------|-------|--------|--------|
| ----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 99 | 99 | 99 | 99 | 99 | 99 | 592 | 99 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 27 | 27 | 27 | 27 | 27 | 27 | 162 | 27 |
| OTHER | | | | | | | | |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 435 | 936 | 893 | 893 | 893 | 893 | 4,943 | 893 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 561 | 1,062 | 1,019 | 1,019 | 1,019 | 1,019 | 5,698 | 1,019 |
| TOTAL COST | 5,138 | 4,662 | 1,197 | 1,019 | 1,019 | 1,019 | 14,054 | 1,019 |
| ONE-TIME SAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
| ----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | |
| CONSTRUCTION | | | | | | | | |
| MILCON | 4,300 | 0 | 0 | 1,300 | 0 | 0 | 5,600 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 4 | 0 | 0 | 0 | 0 | 0 | 4 | |
| OTHER | | | | | | | | |
| Land Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 4,304 | 0 | 0 | 1,300 | 0 | 0 | 5,604 | |
| RECURRINGSAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| ----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 119 | 394 | 563 | 563 | 563 | 563 | 2,765 | 563 |
| BOS | 88 | 941 | 2,071 | 2,071 | 2,071 | 2,071 | 9,315 | 2,071 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 355 | 2,598 | 4,485 | 4,485 | 4,485 | 4,485 | 20,893 | 4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 38 | 77 | 77 | 77 | 77 | 77 | 422 | 77 |
| Enl Salary | 166 | 332 | 332 | 332 | 332 | 332 | 1,825 | 332 |
| House Allow | 21 | 21 | 21 | 21 | 21 | 21 | 129 | 21 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 1,000 | 0 | 200 | 1,200 | 200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 825 | 825 | 825 | 825 | 825 | 825 | 4,950 | 825 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 1,614 | 5,188 | 8,374 | 9,374 | 8,374 | 8,574 | 41,500 | 8,574 |
| TOTAL SAVINGS | 5,918 | 5,188 | 8,374 | 10,674 | 8,374 | 8,574 | 47,104 | 8,574 |

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 3/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| ONE-TIME NET | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| CONSTRUCTION | | | | | | | | |
| MILCON | -3,030 | 0 | 0 | -1,300 | 0 | 0 | -4,330 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 230 | 302 | 0 | 0 | 0 | 0 | 532 | |
| Civ Moving | 2,635 | 2,954 | 0 | 0 | 0 | 0 | 5,589 | |
| Other | 404 | 345 | 178 | 0 | 0 | 0 | 927 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 34 | 0 | 0 | 0 | 0 | 0 | 34 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 273 | 3,600 | 178 | -1,300 | 0 | 0 | 2,751 | |
| RECURRING NET | | | | | | | | |
| -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ----- |
| FAM HOUSE OPS | | | | | | | | |
| O&M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RPMA | -119 | -394 | -563 | -563 | -563 | -563 | -2,765 | -563 |
| BOS | 10 | -842 | -1,973 | -1,973 | -1,973 | -1,973 | -8,722 | -1,973 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | -355 | -2,598 | -4,485 | -4,485 | -4,485 | -4,485 | -20,893 | -4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | -204 | -408 | -408 | -408 | -408 | -408 | -2,247 | -408 |
| House Allow | 5 | 5 | 5 | 5 | 5 | 5 | 33 | 5 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | -1,000 | 0 | -200 | -1,200 | -200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | -390 | 111 | 68 | 68 | 68 | 68 | -7 | 68 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | -1,053 | -4,126 | -7,356 | -8,356 | -7,356 | -7,556 | -35,802 | -7,556 |
| TOTAL NET COST | -780 | -526 | -7,178 | -9,656 | -7,356 | -7,556 | -33,051 | -7,556 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 4/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NCCOSC MRAD SAN DGO, CA

| ONE-TIME COSTS -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| CONSTRUCTION | | | | | | | |
| MILCON | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 6/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NCCOSC NRAD SAN DGO, CA

| ONE-TIME NET | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|-----------------------|--------------|------------|------------|------------|------------|------------|--------------|------------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | |
| CONSTRUCTION | | | | | | | | |
| MILCON | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 | |
| RECURRING NET | | | | | | | | |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 435 | 717 | 717 | 717 | 717 | 717 | 4,020 | 717 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 435 | 717 | 717 | 717 | 717 | 717 | 4,020 | 717 |
| TOTAL NET COST | 1,705 | 717 | 717 | 717 | 717 | 717 | 5,290 | 717 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 7/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAVOCEANO, MS

| ONE-TIME COSTS ----(\$K)----- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 9/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAVOCEANO, MS

| ONE-TIME NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|---------------------------------|------|------|------|------|------|------|-------|
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| RECURRING NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|----------------------------------|------|------|------|------|------|------|-------|--------|
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 219 | 176 | 176 | 176 | 176 | 923 | 176 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 0 | 219 | 176 | 176 | 176 | 176 | 923 | 176 |
| TOTAL NET COST | 0 | 219 | 176 | 176 | 176 | 176 | 923 | 176 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 10/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NNMC BETHESDA, MD | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------|------|------|------|------|------|------|-------|
| ONE-TIME COSTS | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| -----(\$K)----- | | | | | | | |
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 15/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AD PAX RIVER, MD

| ONE-TIME NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|----------------------------------|------|------|------|------|------|------|-------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| RECURRING NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 99 | 99 | 99 | 99 | 99 | 99 | 592 | 99 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 27 | 27 | 27 | 27 | 27 | 27 | 162 | 27 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 126 | 126 | 126 | 126 | 126 | 126 | 755 | 126 |
| TOTAL NET COST | 126 | 126 | 126 | 126 | 126 | 126 | 755 | 126 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 16/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA

| ONE-TIME COSTS -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------------------------------|-------|-------|------|------|------|------|-------|
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 171 | 213 | 0 | 0 | 0 | 0 | 384 |
| Civ Retire | 59 | 89 | 0 | 0 | 0 | 0 | 148 |
| CIV MOVING | | | | | | | |
| Per Diem | 294 | 263 | 0 | 0 | 0 | 0 | 557 |
| POV Miles | 31 | 25 | 0 | 0 | 0 | 0 | 56 |
| Home Purch | 823 | 769 | 0 | 0 | 0 | 0 | 1,592 |
| HHG | 551 | 515 | 0 | 0 | 0 | 0 | 1,067 |
| Misc | 49 | 47 | 0 | 0 | 0 | 0 | 96 |
| House Hunt | 278 | 238 | 0 | 0 | 0 | 0 | 516 |
| PPS | 115 | 605 | 0 | 0 | 0 | 0 | 720 |
| RITA | 413 | 376 | 0 | 0 | 0 | 0 | 789 |
| FREIGHT | | | | | | | |
| Packing | 19 | 17 | 0 | 0 | 0 | 0 | 35 |
| Freight | 61 | 99 | 0 | 0 | 0 | 0 | 159 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 25 | 31 | 0 | 0 | 0 | 0 | 56 |
| OTHER | | | | | | | |
| Program Plan | 316 | 237 | 178 | 0 | 0 | 0 | 732 |
| Shutdown | 63 | 76 | 0 | 0 | 0 | 0 | 139 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 16 | 0 | 0 | 0 | 0 | 0 | 16 |
| Misc | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| OTHER | | | | | | | |
| Elim PCS | 18 | 0 | 0 | 0 | 0 | 0 | 18 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 3,307 | 3,600 | 178 | 0 | 0 | 0 | 7,086 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 17/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA

| RECURRINGCOSTS -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------------------------|------|------|------|------|------|------|-------|--------|
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL COSTS 3,307 3,600 178 0 0 0 7,086 0

| ONE-TIME SAVES -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------------------------|-------|------|------|-------|------|------|-------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 4,300 | 0 | 0 | 1,300 | 0 | 0 | 5,600 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| OTHER | | | | | | | | |
| Land Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 4,304 | 0 | 0 | 1,300 | 0 | 0 | 5,604 | 0 |

| RECURRINGSAVES -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------------------------|-------|-------|-------|--------|-------|-------|--------|--------|
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 119 | 394 | 563 | 563 | 563 | 563 | 2,765 | 563 |
| BOS | 88 | 941 | 2,071 | 2,071 | 2,071 | 2,071 | 9,315 | 2,071 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 355 | 2,598 | 4,485 | 4,485 | 4,485 | 4,485 | 20,893 | 4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 38 | 77 | 77 | 77 | 77 | 77 | 422 | 77 |
| Enl Salary | 166 | 332 | 332 | 332 | 332 | 332 | 1,825 | 332 |
| House Allow | 21 | 21 | 21 | 21 | 21 | 21 | 129 | 21 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 1,000 | 0 | 200 | 1,200 | 200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 825 | 825 | 825 | 825 | 825 | 825 | 4,950 | 825 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 1,614 | 5,188 | 8,374 | 9,374 | 8,374 | 8,574 | 41,500 | 8,574 |
| TOTAL SAVINGS | 5,918 | 5,188 | 8,374 | 10,674 | 8,374 | 8,574 | 47,104 | 8,574 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 18/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA

| ONE-TIME NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|----------------------------------|--------|--------|--------|---------|--------|--------|---------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | -4,300 | 0 | 0 | -1,300 | 0 | 0 | -5,600 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 230 | 302 | 0 | 0 | 0 | 0 | 532 | |
| Civ Moving | 2,635 | 2,954 | 0 | 0 | 0 | 0 | 5,589 | |
| Other | 404 | 345 | 178 | 0 | 0 | 0 | 927 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 34 | 0 | 0 | 0 | 0 | 0 | 34 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | -997 | 3,600 | 178 | -1,300 | 0 | 0 | 1,481 | |
| RECURRING NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | -119 | -394 | -563 | -563 | -563 | -563 | -2,765 | -563 |
| BOS | -88 | -941 | -2,071 | -2,071 | -2,071 | -2,071 | -9,315 | -2,071 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | -355 | -2,598 | -4,485 | -4,485 | -4,485 | -4,485 | -20,893 | -4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | -204 | -408 | -408 | -408 | -408 | -408 | -2,247 | -408 |
| House Allow | -21 | -21 | -21 | -21 | -21 | -21 | -129 | -21 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | -1,000 | 0 | -200 | -1,200 | 200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | -825 | -825 | -825 | -825 | -825 | -825 | -4,950 | -825 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | -1,614 | -5,188 | -8,374 | -7,374 | -8,374 | -8,174 | -39,100 | -8,174 |
| TOTAL NET COST | -2,611 | -1,587 | -8,196 | -10,674 | -8,374 | -8,574 | -40,019 | -8,574 |

PERSONNEL, SF, RPMA, AND BOS DELTAS (COBRA v5.08)
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base | Personnel | | SF | | |
|---------------------|-----------|---------|----------|---------|---------|
| | Change | %Change | Change | %Change | Chg/Per |
| NCCOSC NRAD SAN DGO | 164 | 3% | 0 | 0% | 0 |
| NAVOCEANO | 36 | 51% | 0 | 0% | 0 |
| NNMC BETHESDA | 0 | 0% | 0 | 0% | 0 |
| NAWC AD PAX RIVER | 17 | 0% | 0 | 0% | 0 |
| NAWC AC WARMINSTER | -310 | -100% | -111,000 | -100% | 358 |

| Base | RPMA(\$) | | | BOS(\$) | | |
|---------------------|----------|---------|---------|------------|---------|---------|
| | Change | %Change | Chg/Per | Change | %Change | Chg/Per |
| NCCOSC NRAD SAN DGO | 0 | 0% | 0 | 0 | 0% | 0 |
| NAVOCEANO | 0 | 0% | 0 | 0 | 0% | 0 |
| NNMC BETHESDA | 0 | 0% | 0 | 0 | 0% | 0 |
| NAWC AD PAX RIVER | 0 | 0% | 0 | 98,755 | 0% | 5,809 |
| NAWC AC WARMINSTER | -563,000 | -100% | 1,816 | -2,071,407 | -100% | 6,682 |

| Base | RPMABOS(\$) | | |
|---------------------|-------------|---------|---------|
| | Change | %Change | Chg/Per |
| NCCOSC NRAD SAN DGO | 0 | 0% | 0 |
| NAVOCEANO | 0 | 0% | 0 |
| NNMC BETHESDA | 0 | 0% | 0 |
| NAWC AD PAX RIVER | 98,755 | 0% | 5,809 |
| NAWC AC WARMINSTER | -2,634,407 | -101% | 8,498 |

RPMA/BOS CHANGE REPORT (COBRA v5.08)
Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
Option Package : NAWC WARMINSTER 2
Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Net Change(\$K) | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------|------|--------|--------|--------|--------|--------|---------|--------|
| RPMA Change | -119 | -394 | -563 | -563 | -563 | -563 | -2,765 | -563 |
| BOS Change | 10 | -842 | -1,973 | -1,973 | -1,973 | -1,973 | -8,722 | -1,973 |
| Housing Change | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CHANGES | -109 | -1,236 | -2,536 | -2,536 | -2,536 | -2,536 | -11,487 | -2,536 |

INPUT DATA REPORT (COBRA v5.08)
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

| Base Name | Strategy: |
|-------------------------|-------------------|
| ----- | ----- |
| NCCOSC NRAD SAN DGO, CA | Realignment |
| NAVOCEANO, MS | Realignment |
| NNMC BETHESDA, MD | Realignment |
| NAWC AD PAX RIVER, MD | Realignment |
| NAWC AC WARMINSTER, PA | Closes in FY 1998 |

Summary:

 Close NAWC/NCCOSC WARMINSTER

SCENARIO 030

INPUT SCREEN TWO - DISTANCE TABLE

| From Base: | To Base: | Distance: |
|-------------------------|------------------------|-----------|
| ----- | ----- | ----- |
| NCCOSC NRAD SAN DGO, CA | NAWC AC WARMINSTER, PA | 2,762 mi |
| NAVOCEANO, MS | NAWC AC WARMINSTER, PA | 904 mi |
| NNMC BETHESDA, MD | NAWC AC WARMINSTER, PA | 157 mi |
| NAWC AD PAX RIVER, MD | NAWC AC WARMINSTER, PA | 195 mi |

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NAWC AC WARMINSTER, PA to NCCOSC NRAD SAN DGO, CA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------------------------|------|------|------|------|------|------|
| | ---- | ---- | ---- | ---- | ---- | ---- |
| Officer Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions: | 99 | 65 | 0 | 0 | 0 | 0 |
| Student Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Missn Eqpt (tons): | 118 | 79 | 0 | 0 | 0 | 0 |
| Suppt Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Military Light Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy/Special Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |

Transfers from NAWC AC WARMINSTER, PA to NAVOCEANO, MS

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------------------------|------|------|------|------|------|------|
| | ---- | ---- | ---- | ---- | ---- | ---- |
| Officer Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions: | 0 | 36 | 0 | 0 | 0 | 0 |
| Student Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Missn Eqpt (tons): | 0 | 166 | 0 | 0 | 0 | 0 |
| Suppt Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Military Light Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy/Special Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NAWC AC WARMINSTER, PA to NAWC AD PAX RIVER, MD

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------------------------|------|------|------|------|------|------|
| | ---- | ---- | ---- | ---- | ---- | ---- |
| Officer Positions: | 1 | 0 | 0 | 0 | 0 | 0 |
| Enlisted Positions: | 4 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions: | 12 | 0 | 0 | 0 | 0 | 0 |
| Student Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Missn Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Suppt Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Military Light Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy/Special Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NCCOSC NRAD SAN DGO, CA

| | | | |
|--------------------------------|-------|-------------------------------|-------|
| Total Officer Employees: | 45 | RPMA Non-Payroll (\$K/Year): | 0 |
| Total Enlisted Employees: | 91 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 0 | BOS Non-Payroll (\$K/Year): | 0 |
| Total Civilian Employees: | 5,204 | BOS Payroll (\$K/Year): | 0 |
| Mil Families Living On Base: | 19.1% | Family Housing (\$K/Year): | 0 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.16 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 1,785 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 353 | Activity Code: | 66001 |
| Enlisted VHA (\$/Month): | 224 | | |
| Per Diem Rate (\$/Day): | 116 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

Name: NAVOCEAND, MS

| | | | |
|--------------------------------|------|-------------------------------|-------|
| Total Officer Employees: | 29 | RPMA Non-Payroll (\$K/Year): | 0 |
| Total Enlisted Employees: | 41 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 0 | BOS Non-Payroll (\$K/Year): | 0 |
| Total Civilian Employees: | 0 | BOS Payroll (\$K/Year): | 0 |
| Mil Families Living On Base: | 0.0% | Family Housing (\$K/Year): | 0 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 0.82 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 262 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 75 | Activity Code: | 62306 |
| Enlisted VHA (\$/Month): | 63 | | |
| Per Diem Rate (\$/Day): | 94 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

Name: NMMC BETHESDA, MD

| | | | |
|--------------------------------|-------|-------------------------------|--------|
| Total Officer Employees: | 1,075 | RPMA Non-Payroll (\$K/Year): | 10,796 |
| Total Enlisted Employees: | 1,754 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 202 | BOS Non-Payroll (\$K/Year): | 27,845 |
| Total Civilian Employees: | 1,733 | BOS Payroll (\$K/Year): | 33,576 |
| Mil Families Living On Base: | 11.0% | Family Housing (\$K/Year): | 301 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.03 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 7,200 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 78 |
| Total Base Facilities(KSF): | 4,086 | CHAMPUS Shift to Medicare: | 55.0% |
| Officer VHA (\$/Month): | 462 | Activity Code: | 00168 |
| Enlisted VHA (\$/Month): | 316 | | |
| Per Diem Rate (\$/Day): | 151 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NAWC AD PAX RIVER, MD

| | | | |
|--------------------------------|-------|-------------------------------|--------|
| Total Officer Employees: | 463 | RPMA Non-Payroll (\$K/Year): | 22,778 |
| Total Enlisted Employees: | 2,361 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 23 | BOS Non-Payroll (\$K/Year): | 64,222 |
| Total Civilian Employees: | 3,119 | BOS Payroll (\$K/Year): | 46,573 |
| Mil Families Living On Base: | 44.0% | Family Housing (\$K/Year): | 2,111 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.03 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 3,985 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 284 | Activity Code: | 00421 |
| Enlisted VHA (\$/Month): | 219 | | |
| Per Diem Rate (\$/Day): | 80 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

~~133,573~~

Name: NAWC AC WARMINSTER, PA

| | | | |
|--------------------------------|-------|-------------------------------|-------|
| Total Officer Employees: | 2 | RPMA Non-Payroll (\$K/Year): | 563 |
| Total Enlisted Employees: | 14 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 0 | BOS Non-Payroll (\$K/Year): | 2,185 |
| Total Civilian Employees: | 311 | BOS Payroll (\$K/Year): | 1,153 |
| Mil Families Living On Base: | 22.0% | Family Housing (\$K/Year): | 0 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.03 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 111 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 281 | Activity Code: | 62269 |
| Enlisted VHA (\$/Month): | 217 | | |
| Per Diem Rate (\$/Day): | 80 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

~~3,901~~

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NCCOSC NRAD SAN DGO, CA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|----------------------------|------|-------------------------------|------|------|------|------|
| | ---- | ---- | ---- | ---- | ---- | ---- |
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqcd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 435 | 717 | 717 | 717 | 717 | 717 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| | | Perc Family Housing ShutDown: | | | | 0.0% |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NAVOCEANO, MS

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---------------------------|------|-------------------------------|------|------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 219 | 176 | 176 | 176 | 176 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| | | Perc Family Housing ShutDown: | | | | 0.0% |

Name: NNMC BETHESDA, MD

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---------------------------|------|-------------------------------|------|------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| | | Perc Family Housing ShutDown: | | | | 0.0% |

Name: NAWC AD PAX RIVER, MD

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---------------------------|------|-------------------------------|------|------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| | | Perc Family Housing ShutDown: | | | | 0.0% |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-------------------------------|-------|------|------|-------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Save(\$K): | 825 | 825 | 825 | 825 | 825 | 825 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 4,300 | 0 | 0 | 1,300 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 1,000 | 0 | 200 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 111 | | | | | |
| Perc Family Housing ShutDown: | | | | | | 0.0% |

INPUT SCREEN SIX - BASE PERSONNEL INFORMATION

Name: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------------------------|------|------|------|------|------|------|
| Off Force Struc Change: | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Force Struc Change: | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Force Struc Change: | -17 | 0 | 0 | 0 | 0 | 0 |
| Stu Force Struc Change: | 0 | 0 | 0 | 0 | 0 | 0 |
| Off Scenario Change: | -1 | 0 | 0 | 0 | 0 | 0 |
| Enl Scenario Change: | -10 | 0 | 0 | 0 | 0 | 0 |
| Civ Scenario Change: | -13 | -69 | 0 | 0 | 0 | 0 |
| Off Change(No Sal Save): | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Change(No Sal Save): | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Change(No Sal Save): | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretakers - Military: | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretakers - Civilian: | 0 | 0 | 0 | 0 | 0 | 0 |

INPUT SCREEN SEVEN - BASE MILITARY CONSTRUCTION INFORMATION

Name: NCCOSC NRAD SAN DGO, CA

| Description | Categ | New MilCon | Rehab MilCon | Total Cost(\$K) |
|----------------------|-------|------------|--------------|-----------------|
| RF MICROELECTRONICS | OTHER | 0 | 0 | 270 |
| Clean Room | | | | |
| SHIP MOTION SIMULATO | OTHER | 0 | 0 | 1,000 |
| Concrete Well | | | | |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

| | | | |
|----------------------------------|------------------|--------------------------------|------------|
| Percent Officers Married: | 71.70% | Civ Early Retire Pay Factor: | 9.00% |
| Percent Enlisted Married: | 60.10% | Priority Placement Service: | 60.00% |
| Enlisted Housing MilCon: | 98.00% | PPS Actions Involving PCS: | 50.00% |
| Officer Salary(\$/Year): | 76,781.00 | Civilian PCS Costs (\$): | 28,800.00 |
| Off BAQ with Dependents(\$): | 7,925.00 | Civilian New Hire Cost(\$): | 0.00 |
| Enlisted Salary(\$/Year): | 33,178.00 | Nat Median Home Price(\$): | 114,600.00 |
| Enl BAQ with Dependents(\$): | 5,251.00 | Home Sale Reimburse Rate: | 10.00% |
| Avg Unemploy Cost(\$/Week): | 174.00 | Max Home Sale Reimburs(\$): | 22,385.00 |
| Unemployment Eligibility(Weeks): | 18 | Home Purch Reimburse Rate: | 5.00% |
| Civilian Salary(\$/Year): | 54,694.00 | Max Home Purch Reimburs(\$): | 11,191.00 |
| Civilian Turnover Rate: | 15.00% | Civilian Homeowning Rate: | 64.00% |
| Civilian Early Retire Rate: | 10.00% | HAP Home Value Reimburse Rate: | 22.90% |
| Civilian Regular Retire Rate: | 5.00% | HAP Homeowner Receiving Rate: | 5.00% |
| Civilian RIF Pay Factor: | 39.00% | RSE Home Value Reimburse Rate: | 0.00% |
| SF File Desc: | NAVY DBOF BRAC95 | RSE Homeowner Receiving Rate: | 0.00% |

STANDARD FACTORS SCREEN TWO - FACILITIES

| | | | |
|-------------------------------------|--------|-------------------------------------|--------|
| RPMA Building SF Cost Index: | 0.93 | Rehab vs. New MilCon Cost: | 75.00% |
| BOS Index (RPMA vs population): | 0.54 | Info Management Account: | 0.00% |
| (Indices are used as exponents) | | MilCon Design Rate: | 9.00% |
| Program Management Factor: | 10.00% | MilCon SIOH Rate: | 6.00% |
| Caretaker Admin(SF/Care): | 162.00 | MilCon Contingency Plan Rate: | 5.00% |
| Mothball Cost (\$/SF): | 1.25 | MilCon Site Preparation Rate: | 39.00% |
| Avg Bachelor Quarters(SF): | 294.00 | Discount Rate for NPV.RPT/ROI: | 2.75% |
| Avg Family Quarters(SF): | 1.00 | Inflation Rate for NPV.RPT/ROI: | 0.00% |
| APPDET.RPT Inflation Rates: | | | |
| 1996: 0.00% 1997: 2.90% 1998: 3.00% | | 1999: 3.00% 2000: 3.00% 2001: 3.00% | |

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

| | | | |
|-------------------------------|-----------|------------------------------|----------|
| Material/Assigned Person(Lb): | 710 | Equip Pack & Crate(\$/Ton): | 284.00 |
| HHG Per Off Family (Lb): | 14,500.00 | Mil Light Vehicle(\$/Mile): | 0.31 |
| HHG Per Enl Family (Lb): | 9,000.00 | Heavy/Spec Vehicle(\$/Mile): | 3.38 |
| HHG Per Mil Single (Lb): | 6,400.00 | POV Reimbursement(\$/Mile): | 0.18 |
| HHG Per Civilian (Lb): | 18,000.00 | Avg Mil Tour Length (Years): | 4.17 |
| Total HHG Cost (\$/100Lb): | 35.00 | Routine PCS(\$/Pers/Tour): | 3,763.00 |
| Air Transport (\$/Pass Mile): | 0.20 | One-Time Off PCS Cost(\$): | 4,527.00 |
| Misc Exp (\$/Direct Employ): | 700.00 | One-Time Enl PCS Cost(\$): | 1,403.00 |

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

| Category | UM | \$/UM | Category | UM | \$/UM |
|-----------------------|------|--------|---------------------|-----|-------|
| Horizontal | (SY) | 61 | Optional Category A | () | 0 |
| Waterfront | (LF) | 10,350 | Optional Category B | () | 0 |
| Air Operations | (SF) | 122 | Optional Category C | () | 0 |
| Operational | (SF) | 111 | Optional Category D | () | 0 |
| Administrative | (SF) | 123 | Optional Category E | () | 0 |
| School Buildings | (SF) | 108 | Optional Category F | () | 0 |
| Maintenance Shops | (SF) | 102 | Optional Category G | () | 0 |
| Bachelor Quarters | (SF) | 96 | Optional Category H | () | 0 |
| Family Quarters | (EA) | 78,750 | Optional Category I | () | 0 |
| Covered Storage | (SF) | 94 | Optional Category J | () | 0 |
| Dining Facilities | (SF) | 165 | Optional Category K | () | 0 |
| Recreation Facilities | (SF) | 120 | Optional Category L | () | 0 |
| Communications Facil | (SF) | 165 | Optional Category M | () | 0 |
| Shipyard Maintenance | (SF) | 129 | Optional Category N | () | 0 |
| RDT & E Facilities | (SF) | 160 | Optional Category O | () | 0 |
| POL Storage | (BL) | 12 | Optional Category P | () | 0 |
| Ammunition Storage | (SF) | 160 | Optional Category Q | () | 0 |
| Medical Facilities | (SF) | 168 | Optional Category R | () | 0 |
| Environmental | () | 0 | | | |

Document Separator

NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION,
WARMINSTER, PENNSYLVANIA

CHART F-4

DOD RECOMMENDS CLOSURE OF THE NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION, WARMINSTER, PENNSYLVANIA AND RELOCATION OF APPROPRIATE FUNCTIONS, EQUIPMENT, AND SUPPORT TO OTHER TECHNICAL ACTIVITIES, PRIMARILY THE NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION, PATUXENT RIVER, MARYLAND.

CHART F-5

**NO MAJOR ISSUES WERE IDENTIFIED WITH RESPECT TO THIS
CLOSURE. ARE THERE ANY QUESTIONS?**

BASE ANALYSIS

NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION WARMINSTER, PA

DOD RECOMMENDATION: Close the Naval Air Warfare Center, Aircraft Division, Warminster, PA. Relocate appropriate functions, personnel, equipment, and support to other activities, primarily the Naval Air Warfare Center, Aircraft Division, Patuxent, River, MD.

| CRITERIA | DOD RECOMMENDATION * |
|----------------------------------|----------------------|
| MILITARY VALUE | 6 of 8 |
| FORCE STRUCTURE | N/A |
| ONE-TIME COSTS (\$ M) | 8.4 |
| ANNUAL SAVINGS (\$ M) | 7.6 |
| RETURN ON INVESTMENT (\$M) | 1996 (Immediate) |
| NET PRESENT VALUE (\$M) | 104.6 |
| BASE OPERATING BUDGET (\$ M) | 3.9 |
| PERSONNEL ELIMINATED (MIL / CIV) | 11/82 |
| PERSONNEL REALIGNED (MIL / CIV) | 5/212 |
| ECONOMIC IMPACT (BRAC 95 / CUM) | 0.0% / -1.2% |
| ENVIRONMENTAL | Positive Effect |

* = All costs and personnel figures include Naval, Command, Control and Surveillance Center, RDT&E Division.

SCENARIO SUMMARY
NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION
WARMINSTER, PENNSYLVANIA

| DoD RECOMMENDATION | |
|---|------------|
| <p>Close the Naval Air Warfare Center, Aircraft Division, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, California; and the Naval Oceanographic Office.</p> | |
| <p>One Time Costs (\$M): 8.4 Annual Savings (\$M): 7.6 Return on Investment: 1996 (Immediate) Net Present Value (\$M): 104.6</p> | |
| PRO | CON |
| <p>Reduces excess capacity</p> <p>Efficiencies and economies from consolidation</p> | |

Document Separator

Federal Lands Reuse Authority of Bucks County

Page 1

Closure of NAWC, Warminster, PA
Commissioner Michael Fitzpatrick

Introduction

- The purpose of this brief is to highlight events particular to the realignment of the Naval Air Warfare Center, Warminster, PA. and put focus on the economic impact that will result from its realignment.
- My name is **Michael Fitzpatrick** and I am on the **Bucks County Board of Commissioners**. Warminster is within Bucks County and the Commissioners' offices are in the Bucks County Courthouse, Doylestown, PA.

Robert J. Finley
Chairman

Kathleen M. Belsky
Vice Chairman

Martin J. Westermann
Secretary

Dr. James J. Links
Treasurer

Topics of Discussion

Harry J. Barford, Jr.

Francis B. J. Branagan

Joseph Butch

Robert T. Hasty

Norman Kelly

Victor J. Lasher

Anthony F. Visco, Jr.

Sheila Bass
Acting Administrator

- Some of the main ideas of this brief include:
- NAWC size and employment statistics
- NAWC as a major purchaser of goods & services
- Centennial School District and associated impacts
- NAWC Flight Simulator, Centrifuge, Laboratory Testing and other fixed equipment

The **BRAC '91** realignment of the Naval Air Warfare Center Aircraft Division from Warminster, PA to Patuxent River, MD is to be completed by September 30, 1996. The NAWC occupies an 840-acre site in Warminster Township, Northampton Township, & Ivyland Borough, PA, and provided direct employment for some 2400 military and civilian personnel during June 1993. More than 87 percent of these employees live in Bucks and Montgomery Counties.

Page 2

In addition, the NAWC contracts for goods and services locally; of particular concern are contracts with professional services firms in the two counties which have some 1,500 employees. These firms have been dependent on the NAWC for most of their business.

The NAWC is a major purchaser of goods and services produced in Bucks and Montgomery Counties. Of total of **\$287.6 million** obligated by the NAWC during FY 1993, **\$76.6 million** was obligated for contracts with companies located in the counties. Of this amount, **\$48.8 million** was spent for engineering services, indicating the severe impact of the realignment on the NAWC Contractors. All of this funding was assumed to be lost as a result of this realignment.

Because Centennial School District serves the NAWC, and surrounding areas, the district is most impacted by the realignment. In fiscal year 1993, Centennial received **\$417,243** of impact aid payments related to the NAWC; the impact aid on behalf of the NAWC will cease when the realignment is completed.

⇒ Total impact as a result of the '91 BRAC in 1993 is **\$135 million**.

⇒ BRAC '95 adds the Navigation Center with over 250 employees and revenues of **\$73 million** FY '95 with a payroll of **\$13 million**.

Page 3

It is, first of all, important to realize that the NAWC is truly unique in both its mission and the nature of the men and women who work there. As result, filling the void in Bucks County is not the same as filling the void, for instance, in Fort Dix or Englund Air Force Base.

NAWC is where our early astronauts were trained. Today it remains the hub of America's navigational genius. It remains a setting for brilliant research, and extremely sensitive and extraordinary technical military projects.

Many NAWC scientists and others say they want to stay here and not move to Maryland. We also want them to stay because they are a remarkable human resource. Thus, when most operations of NAWC relocate, we will need to offer not just jobs, but jobs that will encourage them to remain in Bucks and Montgomery Counties. And here's where privatization and university participation would come into play.

We, therefore, respectfully request that the Navigation Center, with its Navigation Centrifuge, flight simulator, laboratory equipment, and other fixed equipment be kept open until this facility can be brought back into the community's economy.

Document Separator

**IMPACT TO U.S. NAVY & USAF
AVIATION**

CLOSURE OF THE

WARMINSTER

DYNAMIC FLIGHT SIMULATOR

**M.P. Taylor, Jr.
Captain USN (Ret)**

NAWCAD WAR

- **Base Closure and Realignment Report - March 95**
 - Recommendation: Close the Naval Air Warfare Center, Aircraft Division, Pennsylvania . . .
 - Justification: . . . Closure and excessing of the Human Centrifuge / Dynamic Flight Simulator further reduces excess capacity and provides the opportunity for the transfer of this facility to the public educational or commercial sectors, thus maintaining access on a as-needed basis

Purpose

- Requirement remains for the services to perform:
 - Crew systems integration, pilot vehicle interface, laser eye protection, controls and displays, information management, performance assessment and enhancements, aircraft / aircrew vulnerability & survivability, female aviators, chemical, biological and radiological protection and high-G tolerance training
- Both Warminster and Brooks AFB facilities are closing
- Potential critical gaps in both meeting needs of the services and drain of technical skills
- Seamless transition requires BRAC Commission attention

National Asset

- DFS unique because it is both a:
 - World-class high-G flight simulation capability for current and future fighter-attack cockpits and
 - Evaluation of new flight equipment or cockpits configurations in the actual environment in which they will be used
- Military value include:
 - Unsurpassed high-G flight simulation
 - Cockpits and models of current and future aircraft
 - F/A-18, F-14A, F-14D, F-16, and ATF
 - Replication of dangerous controlled and uncontrolled flight maneuvers
 - Max-G turns, departures, flat spins, thrust vectoring

National Asset (cont)

- Full environment mission simulation
 - Terrain following
 - Weapon deployment maneuvers
 - Air combat maneuvering
 - Missile evasion
- Crew equipment RDT&E (Combat Edge)
- G-tolerance improvement training (GTIP)
- Spatial awareness training
- Departure / spin recovery training

Summary

- Warminster DFS represents the premier center of excellence / capability to most effectively meet both service requirements

DFS vs Centrifuges

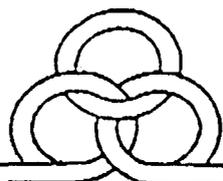
| Characteristic | NAWC AD - DFS | WPAFB - DES | Brooks AFB / Holman AFB | NAS Lemoore | NASA Ames | NASA Goddard |
|---------------------------|---------------------------------------|---------------------------------|-------------------------|-----------------------------------|----------------------|-------------------------------|
| Radius | 15m (50 ft) | 6m (20 ft) | 6m (20 ft) | 7.6m (25 ft) | 6m (20 ft) | 18m (60ft) |
| G-Onset Rate | 13 G/sec | 1 G/sec | 6 G/sec | 6 G/sec | 1 G/sec | 1-2 G/sec |
| Cockpit Axis Controls * | 2 - Active | 2 - Active, Limited Performance | 1 - Passive | 2 - Active | 1 - Passive | None |
| Flight Simulation Capable | Yes - Demonstrated | Not Possible | Not Possible | Not Possible | Not Possible | Not Possible |
| Comments | F14A, F14D, F18, ATF, Generic Fighter | Very Low Performance | EFAC 95 | Dedicated to G Tolerance Training | Very Low Performance | Low Performance Not Man-Rated |

* Flight simulation requires 2 actively controlled axes

Recommendation

- Until privatization becomes operational, provide interim DOD support to ensure interservice requirement needs are met

Document Separator



Delaware Valley Science and Technology Association

65 W. Street Road, Suite B-104, Warminster, PA 18974 Phone - (215) 675-4900

12 May 1995

Mr. Lester Farrington
BRAC Staff
1700 N. Moore St.
Suite 1425
Arlington, VA 22209

Dear Mr. Farrington,

I am a member of the Delaware Valley Science and Technology Association. We are an organization of contractors who support the Naval Air Warfare Center and the Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania.

While NAWCAD Warminster is being relocated to Patuxent River, MD, the NRaD group is being relocated to San Diego, California. I believe there is a much better alternative which is more desirable from a DOD point of view and probably less expensive than moving to San Diego.

This alternative, moving the NRaD, Warminster, to Fort Monmouth, New Jersey would combine the Communications and Command and Control technologies and programs, which NRaD personnel work on with similar technologies, programs, and personnel being relocated from Rome Air Development Center, Rome, New York, to Ft. Monmouth. This could be a major step toward realization of a Joint Communication, Command and Control capability for the services.

The attached White Paper and Reference summarize this alternative. I would be glad to present more information on this alternative after your review of it.

Sincerely,

William F. Lyons, Jr.
William F. Lyons, Jr.

References: White Paper: BRAC Decision on NRaD, Warminster, PA, closure

| | | |
|--|---------------------------|----------------|
| Post-It™ brand fax transmittal memo 7671 | | # of pages ▶ 5 |
| To MR. L. FARRINGTON | From Wm. F. LYONS, JR. | |
| Co. BRAC STAFF | Co. DVSTA | |
| Dept. | Phone # (215) 675-4900 | |
| Fax # 703-696-0530 | Fax # (215) 672-0597 | |

White Paper: BRAC Decision on NRaD, Warminster PA Closure

Ref (a): Attachment X-20 of BRAC Recommendations Document

Background: By ref (a), the USN has recommended the closure and relocation of the Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania. This recommendation identified NCCOSC RDT&E Division San Diego and the Naval Oceanographic Office, Bay St. Louis, Mississippi as primary receptors of the "appropriate functions, personnel, equipment and support". The recommendation also noted "other technical activities" as possible receptors.

Alternative Recommendation for BRAC Consideration: Close the Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania and relocate its Air Communications, Command and Control function, and related navigation functions, personnel, equipment and support to Fort Monmouth, New Jersey.

Justification: The NRaD detachment is heavily involved in communications networking and radio system development for joint programs such as JTIDS and GPS, and in the development of technologies used by all services (i.e. inertial navigation equipments). The USAF has recommended that the Rome Air Development Center, in particular the radio communications and communications network activities, be moved to Fort Monmouth. Fort Monmouth has previously been discussed as the possible site of a Joint Command, Control and Communications Activity, and Secretary Perry has expressed concern that additional future BRAC's may need to be convened to address the joint service issues, such as Communications and C3, that the services have, to date, been unable to tackle individually. The relocation of NRaD, Warminster detachment to Fort Monmouth would be a logical first step toward Navy involvement in implementing such a joint C3 facility. This relocation would be less expensive than the move to San Diego, would preclude the possible double move of the function should a future BRAC decide to consolidate joint activities at Fort Monmouth, and would allow the Navy to maintain access to the Inertial Facility as recommended in Attachment X-20.

Return on Investment: Since this recommendation still results in the closure of both NAWC, Warminster and NCCOSC, Warminster, the return on Investment is the same as that noted in attachment X-20.

Economic Impact on Communities: The impact of this decision to the Philadelphia, PA economic area would be less than that of the recommended move to San Diego, since the many of the current workforce would likely commute to Fort Monmouth, thus resulting in little or no tax loss to the area. Further, this proposal reduces the economic impact to an area that has been negatively affected by previous BRAC decisions.

Community Infrastructure & Environmental Impact: None.

MAY 12 1995 04:54PM
BRAC-95 recommendations and all prior-round BRAC actions in the economic area over the 1994-to-2001 period could result in a maximum potential decrease equal to 1.0 percent of employment in the economic area.

Community Infrastructure Impact: There is no known community infrastructure impact at any receiving installation.

Environmental Impact: The closure of both NAWC Warminster and NCCOSC Det Warminster will have a positive effect on the environment because their appropriate functions and personnel will be relocated out of an area that is in severe non-attainment for ozone and from an activity that is included on the National Priorities List. The personnel being relocated to NCCOSC San Diego represent an increase in personnel of less than 6 percent, which is not considered of sufficient size to adversely impact the environment at that sites. However, a conformity determination may be required to determine this impact. At both receiving sites, the utility infrastructure capacity is sufficient to handle the additional loading. There is no adverse impact on threatened/endangered species, sensitive habitats and wetlands, or cultural/historical resources occasioned by this recommendation.

MAY 12 '95 01:53 PM

ATTACHMENT X-20

RECOMMENDATION FOR CLOSURE

NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER,
RDT&E DIVISION DETACHMENT, WARMINSTER, PENNSYLVANIA

Recommendation: Close the Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, California; and the Naval Oceanographic Office, Bay St. Louis, Mississippi.

Justification: There is an overall reduction in operational forces and a sharp decline of the DON budget through FY 2001. Specific reductions for technical centers are difficult to determine, because these activities are supported through customer orders. However, the level of forces and of the budget are reliable indicators of sharp declines in technical center workload through FY 2001, which leads to a recognition of excess capacity in these activities. This excess and the imbalance in force and resource levels dictate closure/realignment or consolidation of activities wherever practicable. The closure of this activity reduces excess capacity with the resultant efficiencies and economies in the management of the relocated functions at the new receiving sites. Additionally, it completes the process of realignment initiated in BRAC-91, based on a clearer understanding of what is now required to be retained in-house. Closure and excessing of the Inertial Navigational Facility further reduces excess capacity and provides the opportunity for the transfer of these facilities to the public educational or commercial sectors, thus maintaining access on an as-needed basis.

Return on Investment: The return on investment data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. The total estimated one-time cost to implement this recommendation is \$8.4 million. The net of all costs and savings during the implementation period is a savings of \$33.1 million. Annual recurring savings after implementation are \$7.6 million with an immediate return on investment expected. The net present value of the costs and savings over 20 years is a savings of \$104.6 million.

Impacts:

Economic Impact on Communities: The economic data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1080 jobs (348 direct jobs and 732 indirect jobs) over the 1996-to-2001 period in the Philadelphia, Pennsylvania-New Jersey PMSA economic area, which is less than 0.1 percent of economic area employment. The cumulative economic impact of all

Recommendation: Close Rome Laboratory, Rome, New York. Rome Laboratory activities will relocate to Fort Monmouth, New Jersey, and Hanscom AFB, Massachusetts. Specifically, the Photonics, Electromagnetic & Reliability (except Test Site O&M operations), Computer Systems, Radio Communications and Communications Network activities, with their share of the Rome Lab staff activities, will relocate to Fort Monmouth. The Surveillance, Intelligence & Reconnaissance Software Technology, Advanced C2 Concepts, and Space Communications activities, with their share of the Rome Laboratory staff activities, will relocate to Hanscom AFB. The Test Site (e.g., Stockbridge and Newport) O&M operations will remain at its present location but will report to Hanscom AFB.

Justification: The Air Force has more laboratory capacity than necessary to support current and projected Air Force research requirements. The Laboratory Joint Cross-Service Group analysis recommended the Air Force consider the closure of Rome Laboratory. Collocation of part of the Rome Laboratory with the Army's Communications Electronics Research Development Evaluation Command at Fort Monmouth will reduce excess laboratory capacity and increase inter-Service cooperation and common C3 research. In addition, Fort Monmouth's location near unique civilian research activities offers potential for shared research activities. Those activities relocated to Hanscom AFB will strengthen Air Force C3I RDT&E activities by collocating common research efforts. This action will result in substantial savings and furthers the DoD goal of cross-service utilization of common support assets.

Return on Investment: The total estimated one-time cost to implement this recommendation is \$52.8 million. The net of all costs and savings during the implementation period is a cost of \$15.1 million. Annual recurring savings after implementation are \$11.5 million with a return on investment expected in four years. The net present value of the costs and savings over 20 years is a savings of \$98.4 million.

5-114

*Chapter 5
Recommendations -- Department of the Air Force*

Impacts: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 2,345 jobs (1,067 direct jobs and 1,278 indirect jobs) over the 1996-to-2001 period in the Utica-Rome, New York Metropolitan Statistical Area, which is 1.5 percent of the economic area's employment. The cumulative economic impact of all BRAC 95 recommendations and all prior-round BRAC actions in the economic area over the 1994-to-2001 period could result in a maximum potential decrease equal to 6.2 percent of employment in the economic area. Environmental impact from this action is minimal and ongoing restoration of Rome Laboratory and Griffiss AFB will continue.

Roslyn Air Guard Station, New York

Recommendation: Close Roslyn Air Guard Station (AGS) and relocate the 213th Electronic Installation Squadron (ANG) and the 274th Combat Communications Group (ANG) to Stewart International Airport AGS, Newburg, New York. The 722nd Aeromedical Staging

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION (DBRAC)

NAWCAD WARMINSTER/NCCOSC RDT&E DIVISION DET

VISIT BY COMMITTEE MEMBER MR. AL CORNELLA

7 APRIL 1995

Mr. Al Cornella Arriving at 1300/1330
Mr. David Epstein Accompanying Mr. Cornella
Mr. Les Farrington Arriving at 0730 (Staff member)

| TIME | AGENDA | SPEAKER |
|------------------|---|-----------------------|
| 1330 | Arrive At NAWCAD Warminster Lobby | |
| 1330-1415 | Working Lunch - Walnut Conference Room Overview and Introduction | CAPT McCracken |
| 1415-1425 | Travel to NRAD | |
| 1425-1615 | NRAD BRIEF AND TOUR | H. Seligman |
| 1615-1620 | Travel to Dynamic Flight Simulator | |
| 1620-1715 | Dynamic Flight Simulator Brief & Tour | T. Milhous |
| 1715-1730 | Press Conference (if needed) | |

Personnel Meeting with BRAC Commissioner and Staff at NAWCAD, Warminster 4/7/95

Captain William L. McCracken
Commander Naval Air Warfare Center Aircraft Division, Warminster
215-441-2235

Mr. Thomas Castaldi
Executive Director, Naval Air Warfare Center Aircraft Division, Warminster
X2153

Mr. Stuart Simon, Deputy Director, Corporate Operations
X2237

Mr. Franz Bonn, Transition Manager
X2289

Mr. Joseph Cody, Base Transition Office
X1032

Mr. Richard Coughlan, Branch Head, Acoustics Development
X2830

Mr. David B. Polish, Public Affairs Officer
X 1047

Mr. Thomas Milhous, Head Crew Systems
X2503

Dr. Phillip Whitley, Crew Systems
X1040

Mr. Herb Seligman, Navigational Systems Development & Integration Div.
X1077

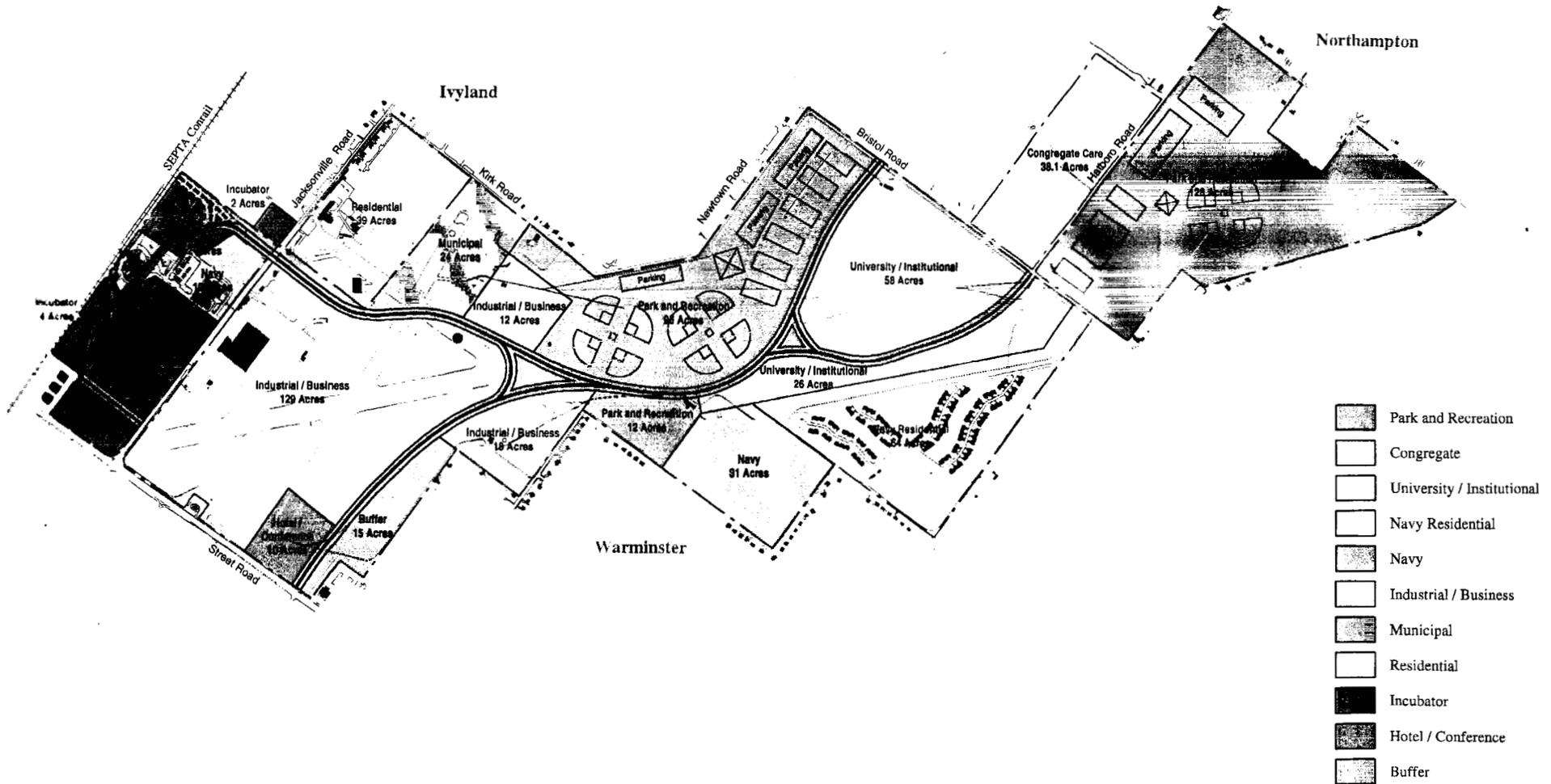
Mr. Steve Ganop, Supervisor, Integrated Navigation Systems Branch
X 1360

Mr. Jim Eck, NCCOSC
X3090

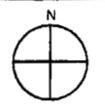
Mr. Pete Johnson
Staff of Congressman James Greenwood 8th District

Document Separator

Bucks County NAWC Draft Reuse Plan



Scale in Feet
0 250 500 1000





BRIEFING TO MR. A. CORNELLA, BRAC COMMISSIONER

7 April 1995

NAWC-AD WARMINSTER MISSION



THE PRINCIPAL RDT&E CENTER
FOR
NAVAL AIRCRAFT, AIRBORNE ASW,
AIRCRAFT SYSTEMS & TECHNOLOGY

IMPLEMENTING OUR MISSION



SENSORS

- RADAR
- INFRARED
- ACOUSTICS
- MAGNETICS
- ELECTRO-OPTIC

SOFTWARE

AVIONICS

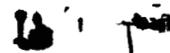
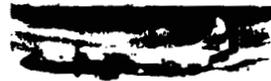
- PROCESSING
- ARCHITECTURE

AIRCRAFT SUBSYSTEMS

- ELECTRICAL
- HYDRAULIC
- ENVIRONMENTAL CONTROL
- FLIGHT CONTROLS

CREW

- PILOT/VEHICLE INTERFACE
- HUMAN ENGINEERING



PROPULSION

- CYCLE ANALYSIS
- AIRCRAFT INTEGRATION
- PERFORMANCE



WARFARE/ SYSTEMS ANALYSIS

- REQUIREMENTS
- FUTURE CV AIR WING
- ASW MASTER PLAN



CREW STATION

- PROTECTION
- ESCAPE
- CONTROLS
- DISPLAYS



SUSCEPTIBILITY

- RAM/ RAS
- ANTENNAS
- SHAPING
- COATINGS
- TESTING

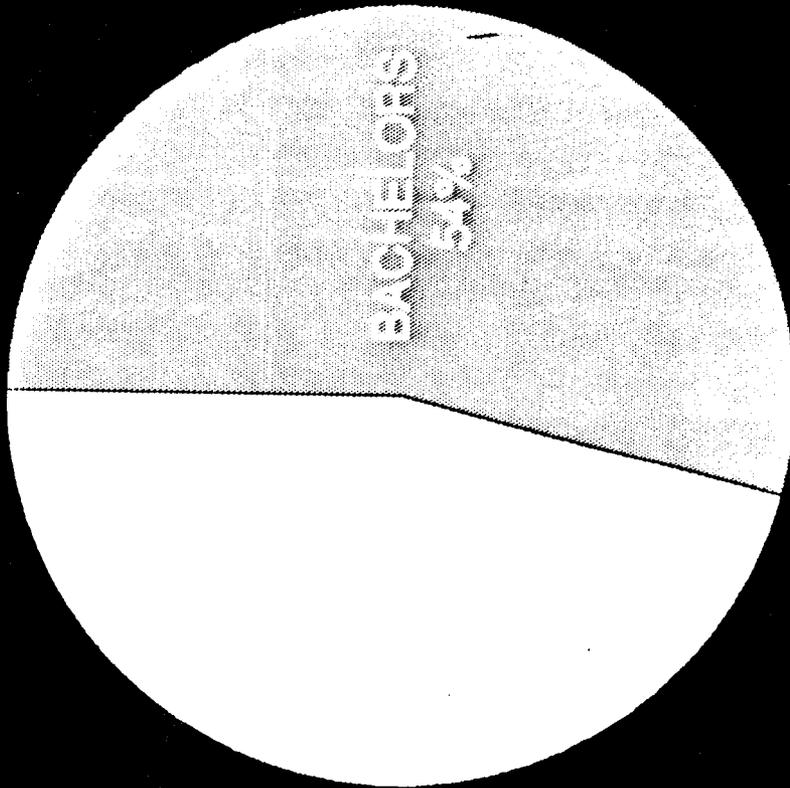
STRUCTURES

- STRUCTURES
- MATERIAL
- FATIGUE LIFE
- WEAPONS INTEGRATION
- CARRIER SUITABILITY

PERSONNEL DATA



| | | | | | | | | |
|-----------------|-----------------|-----------------|------------|------------|--------------|----------------|----------------------|--------------------|
| ON BOARD | MILITARY | CIVILIAN | FTP | PTP | OTHER | FTP/PTP | PERM UNGRADED | PERM GRADED |
| | 110 | 1818 | 1731 | 14 | 73 | 1745 | FTP 114 | FTP 1617 |
| | | | | | | | PTP 0 | PTP 14 |



| | |
|------------------------------|-------------|
| ADMINISTRATIVE | 132 |
| TECHNICIANS - S&E | 93 |
| OTHER | 422 |
| SCIENTIST & ENGINEERS | 1098 |
| ELECTRONIC ENGR. | 556 |
| AEROSPACE ENGR. | 153 |
| GENERAL ENGR. | 48 |
| MECHANICAL ENGR. | 94 |
| OPERATIONAL RESEARCH ANALYST | 52 |
| COMPUTER SCIENTIST | 79 |
| PHYSICIST | 24 |
| MATHEMATICIAN | 2 |
| MATERIALS ENGR. | 30 |
| CHEMIST | 3 |
| ELECTRICAL ENGR. | 11 |
| OTHER | 46 |
| TOTAL GS/GM | 1745 |

TOTAL S&E DEGREES 1093

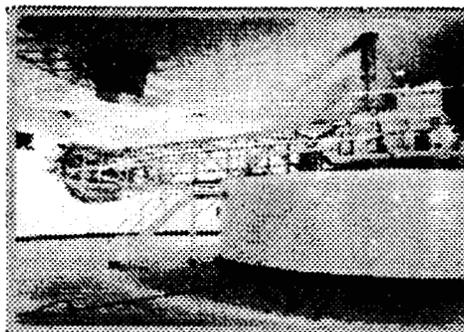
MILITARY BILLETTS AUTHORIZED 31 AUG 84
OFFICER 44
ENLISTED 82

UNIQUE FACILITIES



EJECTION TOWER

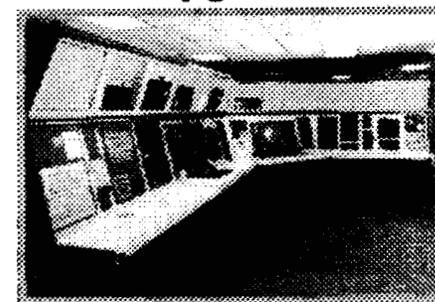
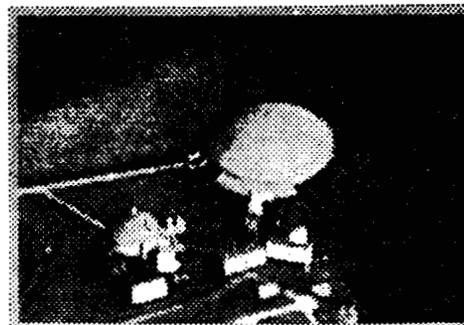
**INERTIAL NAVIGATION
FACILITY**



DYNAMIC FLIGHT SIMULATOR



CENTRAL COMPUTER SYSTEM



**P-3C SOFTWARE
DEVELOPMENT FACILITY**

VS

CV-ASWM

NAS WILLOW GROVE
HOUSING



Sonobuoy Test Facility
(Oreland, PA)



NAS WILLOW GROVE
HOUSING

NCCOSC
FACILITY

NAWCAD
DETACHMENT

BRAC 91

Property to be
disposed

TRANSITION OBJECTIVES



**BRAC 91 DIRECTED THE REALIGNMENT OF
NAWCAD WARMINSTER TO PATUXENT
RIVER BY OCT 95**

OBJECTIVES:

- **TRANSFER NAVAL AVIATION CAPABILITY INTACT**
- **MAXIMIZE RETENTION OF CRITICAL SKILLS IN THE TRANSITION**
- **MINIMIZE THE IMPACT OF THE TRANSITION ON NAVY PROGRAMS**
- **SHUT DOWN BASE WITH MINIMUM IMPACT TO THE COMMUNITY**

EXAMPLES OF THE MAGNITUDE OF TRANSITION

(Page 1 of 2)

1656 -- CIVILIAN BILLETS
143 -- MILITARY BILLETS
\$440M -- BUSINESS BASE
36,000 -- PIECES OF PLANT ACCOUNT EQUIPMENT
(Includes 2500 PCs, Monitors and Printers)
15,000 -- PIECES OF OTHER EQUIPMENT
22 -- CATEGORY 1 FACILITIES
140 -- CATEGORY 2 FACILITIES
59 -- CATEGORY 3 FACILITIES (including 15 SAP Facilities)
6 -- CATEGORY 4 FACILITIES
226,000 cu. ft. -- OFFICE REFERENCE MATERIALS/FILES
193 -- YELLOW GEAR

EXAMPLES OF THE MAGNITUDE OF TRANSITION

(Page 2 of 2)

*

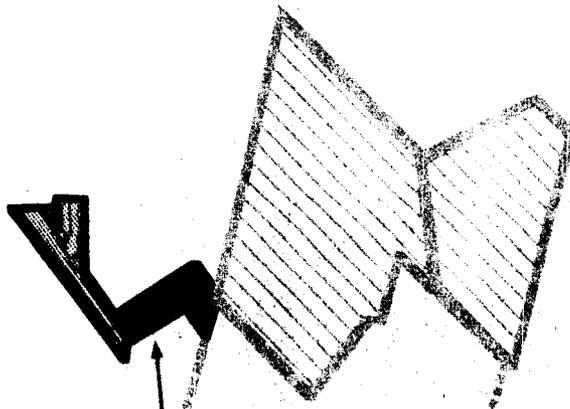
NAMC

- 25 -- LARGE COMPUTERS
- 210 -- LARGE COMPUTER PERIPHERALS
- 1400 -- SAFES (315 Tons, 11,780 cu. ft.)
- 887 -- CONTRACTS (Involving Local Contractors, \$81M)
- 979 -- CONTRACTS (Other Contractors, \$115M)
- 115 -- SHOP EQUIPMENT (175 Tons)
- 252 -- SETS OF DESKS & OFFICE FURNITURE FOR SES,
GM15 & GM14 (8 Tractor Trailers)
- 800 -- CONFERENCE ROOM CHAIRS
- 2300 - 2400 -- TELEPHONE LINES
- 83 -- VEHICLES (Cars/Trucks)
- 17 -- SPECIAL VEHICLES (Fuel/Fire/Emergency)

NAS WILLOW GROVE
HOUSING



Sonobuoy Test Facility
(Oreland, PA)



NAS WILLOW GROVE
HOUSING

BRAC 95

Property to be
disposed



N1806-SP-88-00654(15)



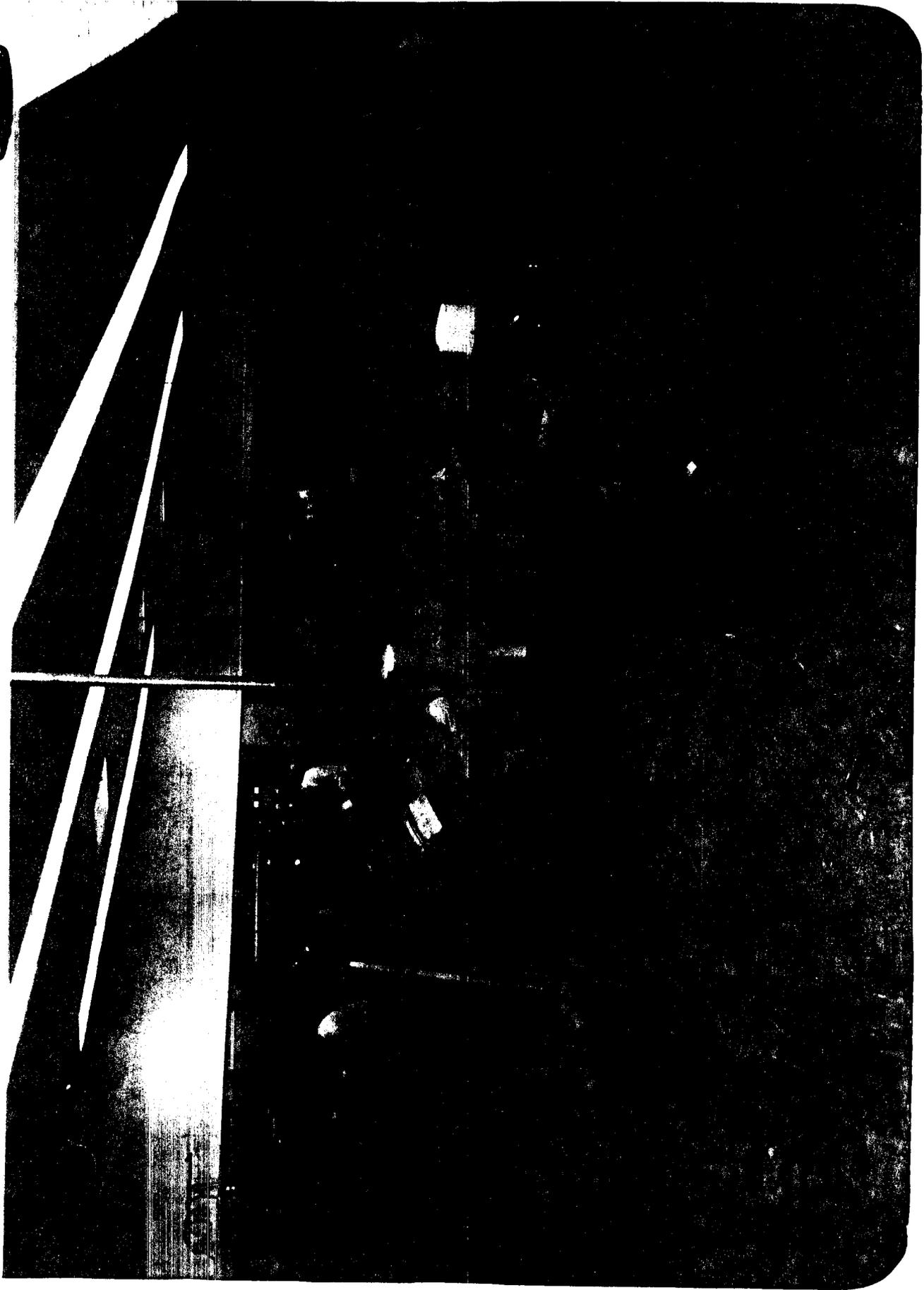
INERTIAL GUIDANCE FACILITY



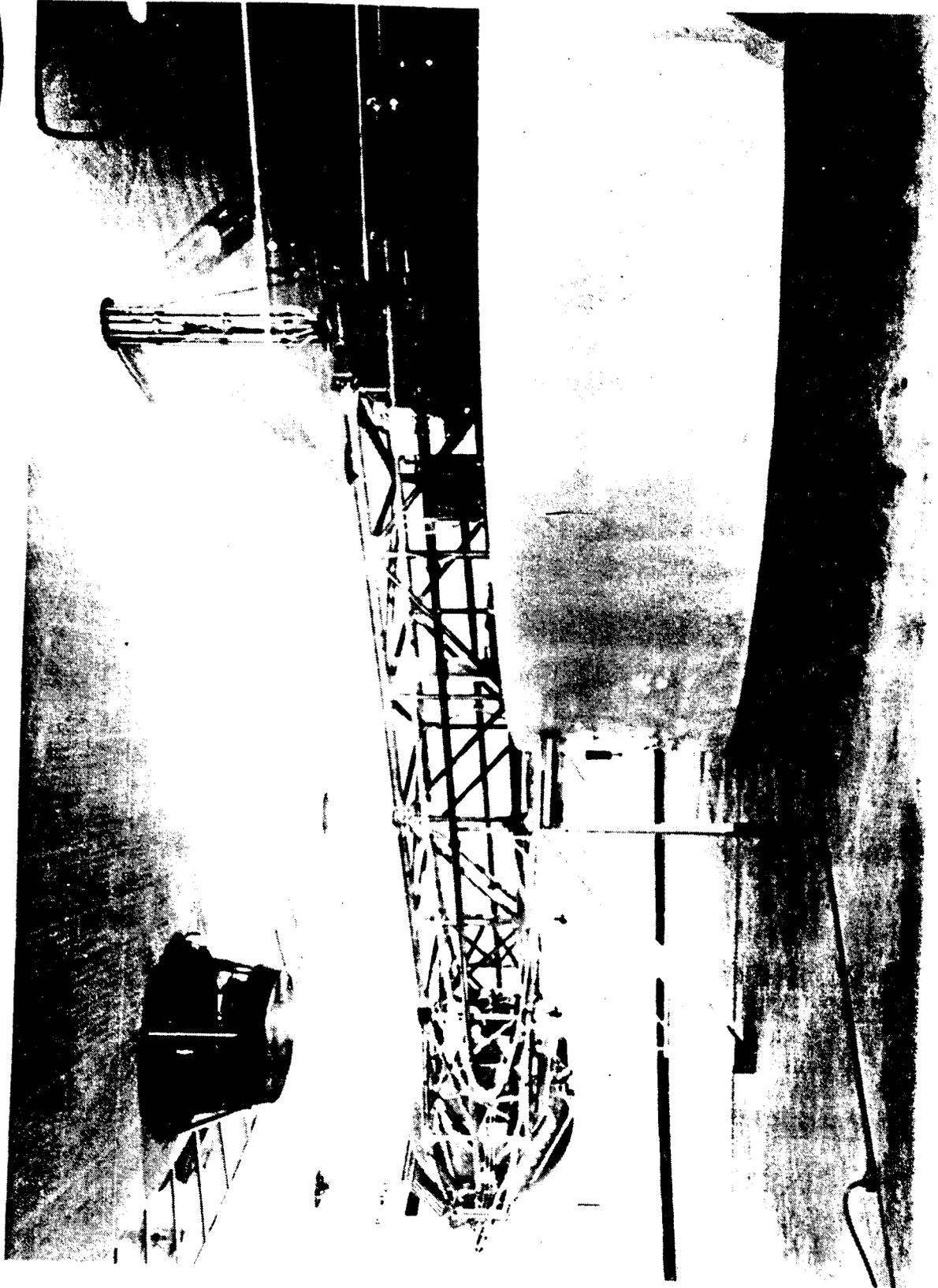
N1308-89-1871

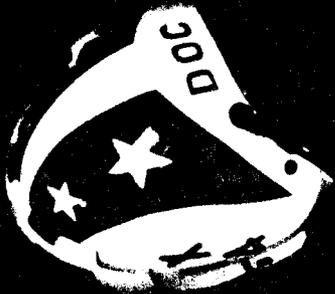
DILWORTH.16.LC.4/20/89

INERTIAL SENSORS LAB



DYNAMIC FLIGHT SIMULATOR





OPEN WATER FACILITY ORELAND, PA



532-GA-87-00473

DILWORTH-6.ch 3. 18/87

Open Water Facility

Flooded quarry, 65' depth

Located in Oreland, Pa.

(approx 25 min. from NAWCADWAR)



Mission: Testing of active and passive transducers and sonobuoy subsystems for both R&D and Production programs.

- **Acoustics**

- Calibration

Receive response, Directivity patterns, Transmit response (SPL, TVR, TCR), Electroacoustic efficiency, Impedance/admittance.
Pressure vessel up to 8000 psi.

- Flow noise

Measurement of flow induced low frequency noise in passive acoustic sensors.
100' tow rail with computer control to .01 kt accuracy.
Quiet ambient.

- **Hydromechanics**

- Lift/Drag

Measurement of lift and drag forces on sonobuoy components and subsystems to optimize designs, and demonstrate specification compliance.
100' tow rail instrumented for hydromechanical measurements.

Open Water Facility



Alternative Facility

NSWC, Crane, IN

Glendora Facility - Larger, Deeper, Flooded quarry near Crane.

Very similar facility for production testing of sonobuoys.

Some equipment can be moved from NAWCADWAR to supplement as needed.

Primary issue - Tow Rail

Flow noise testing requires a fixed tow rail in combination with a quiet ambient noise level.

Glendora is the only known alternative to the NAWC Open Water Facility with an ambient noise level quiet enough for flow noise measurements, however,

Glendora doesn't have a tow rail.

Recommendation

Recommend that NSWC, Crane be given BRAC funding to upgrade their Glendora Facility with a fixed tow rail to transition flow noise testing from the NAWC Open Water Facility.

(Moving some or all of the NAWC tow rail facility to Glendora may be possible)

Document Separator



Integrated Communications/ Navigation & Identification Systems Programs

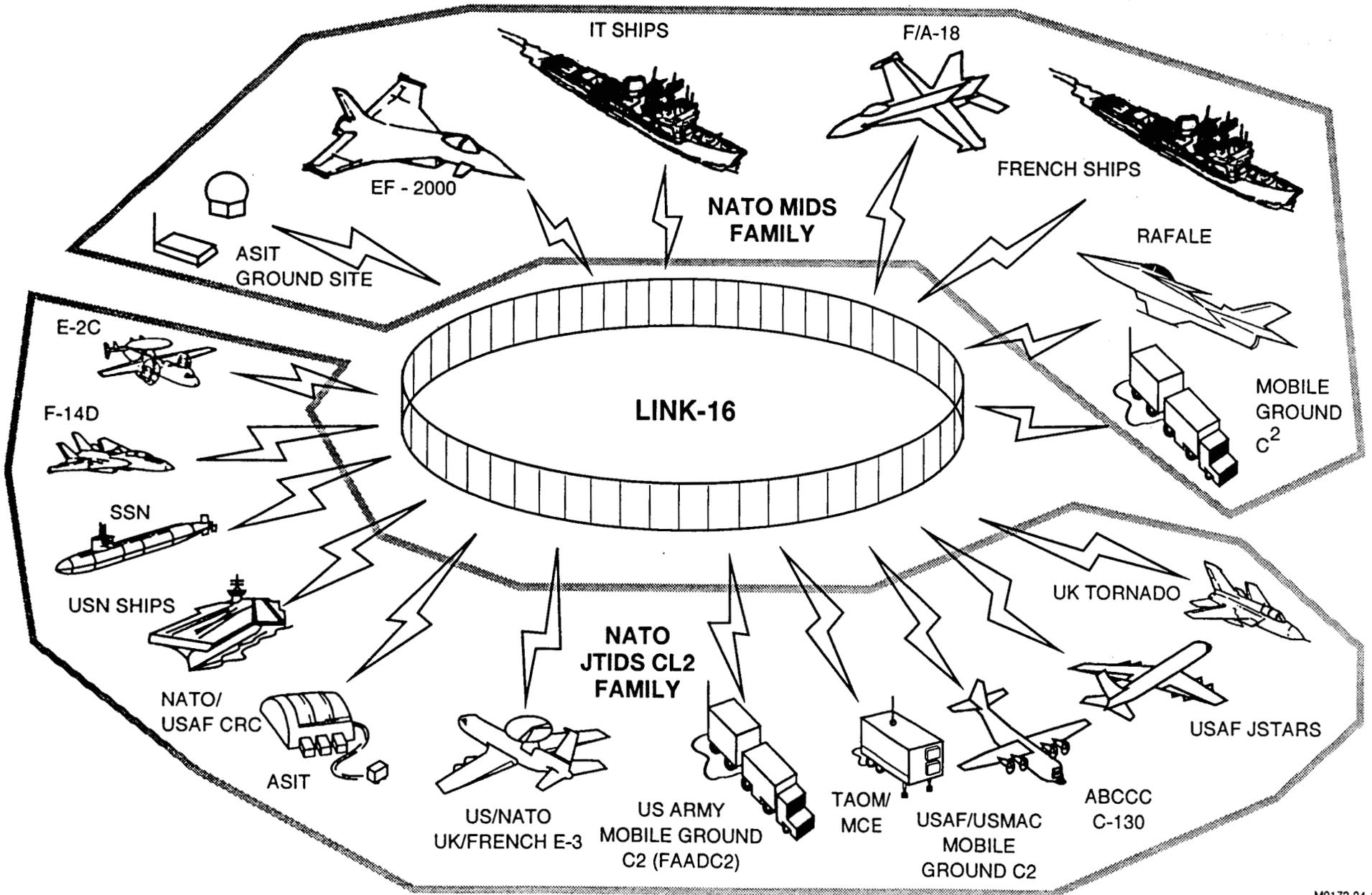


Major Products

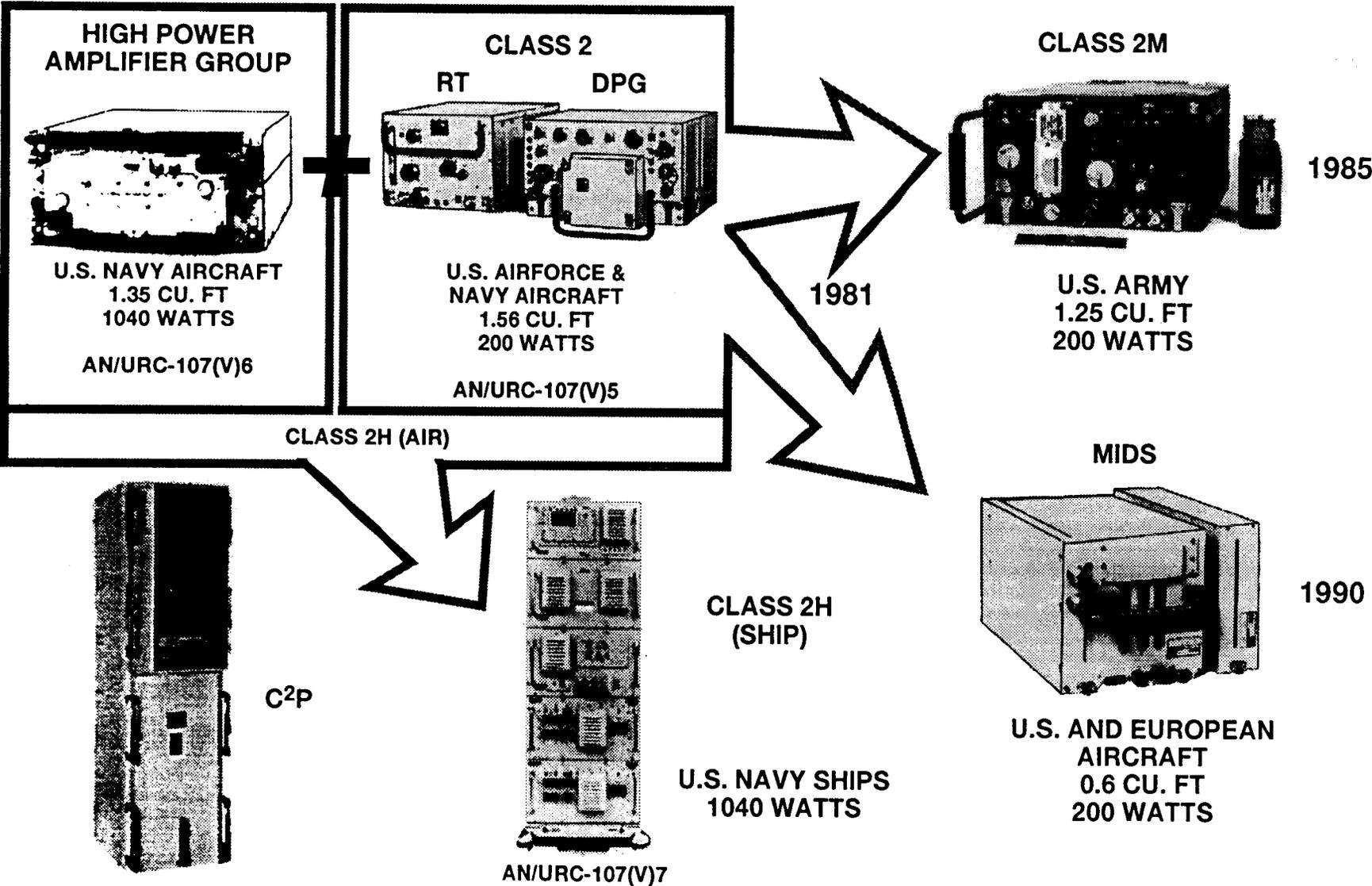
- Communications Network Technology
 - Joint Tactical Battleforce Networking
 - Battleforce Communication Planning Tools
- RF/Microwave Technology
 - Miniaturized Circuit/Component Development
- Communications Systems
 - Air to Air Low Probability of Intercept Designs
 - Multi-function Digital Receiver Design

JTIDS / MIDS / TADIL J OPERATIONAL CAPABILITY

9/1/94



JTIDS FAMILY OF TERMINALS

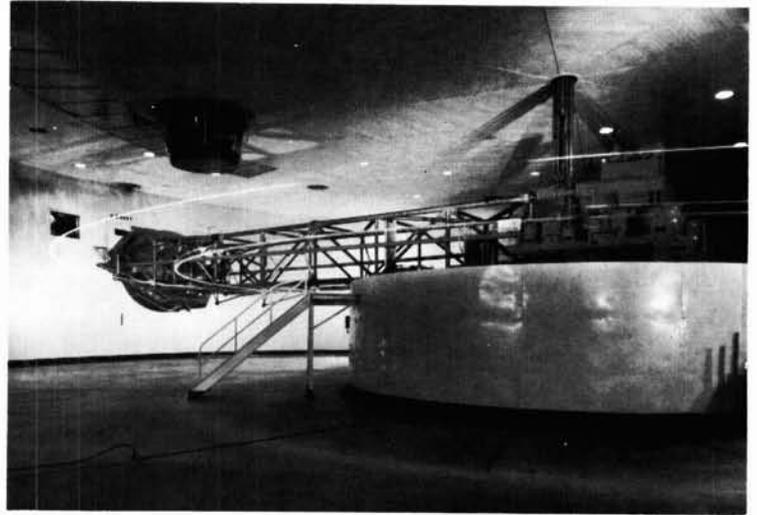


Microelectronic Lab Capabilities

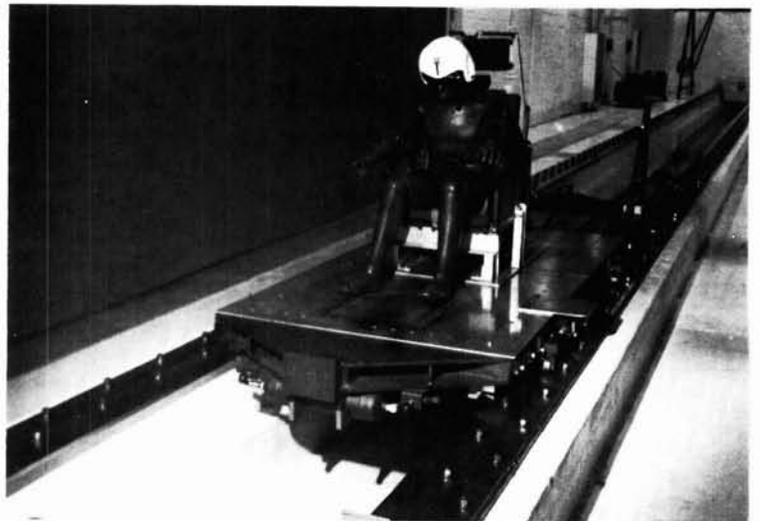
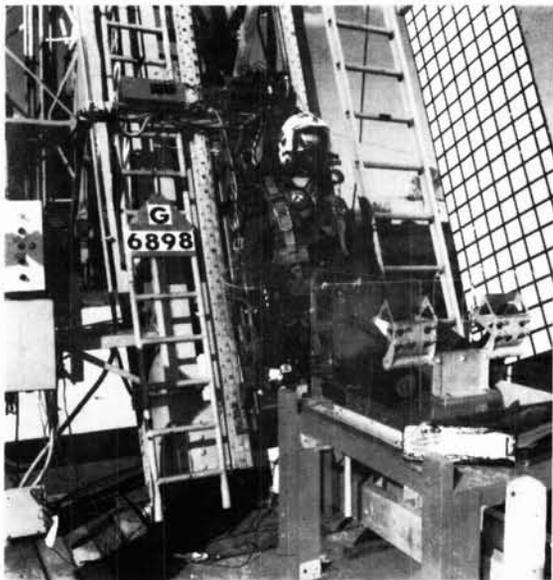


- Design, Develop and Test Miniaturized Circuit Assemblies for Integrated Comm/Nav Systems
 - Multi-Function Information Distribution System
 - GPS Simulators/Testers
 - Digital Receiver RF Front End
- State-of-the-Art Prototype Fabrication Capability
 - Surface Mount Technology
 - Thin Film Technology
 - Thick Film Technology

Document Separator



CREW SYSTEMS FACILITIES



NAVAL AIR WARFARE CENTER / AIRCRAFT DIVISION
WARMINSTER FACILITY

INTRODUCTION

Crew Systems Research at the Warminster Facility of the Naval Air Warfare Center / Aircraft Division (NAVAIRWARCENACDIVWAR) involves a wide range of disciplines which deal with the safety and performance of the human operator in Naval aircraft. The technologies supported are environmental protection (acceleration, anti-exposure, laser, and chemical biological), escape, crashworthiness, life support, human factors, and aircrew interface. The Crew Systems contingent at the Center includes over 170 engineers, scientists, medical professionals, and psychologists, representing the single largest assembly of Crew Systems technologists in the DoD.

The focal point for Crew Systems at NAWCADWAR is the Crew Systems Program Office in the Air Vehicle and Crew Systems Technology Department (AVCSTD). This office is responsible for the overall planning, administration, and technical management of crew systems programs, strategic planning, and the development of new initiatives for crew technologies, systems, and sub-systems. This office is also responsible

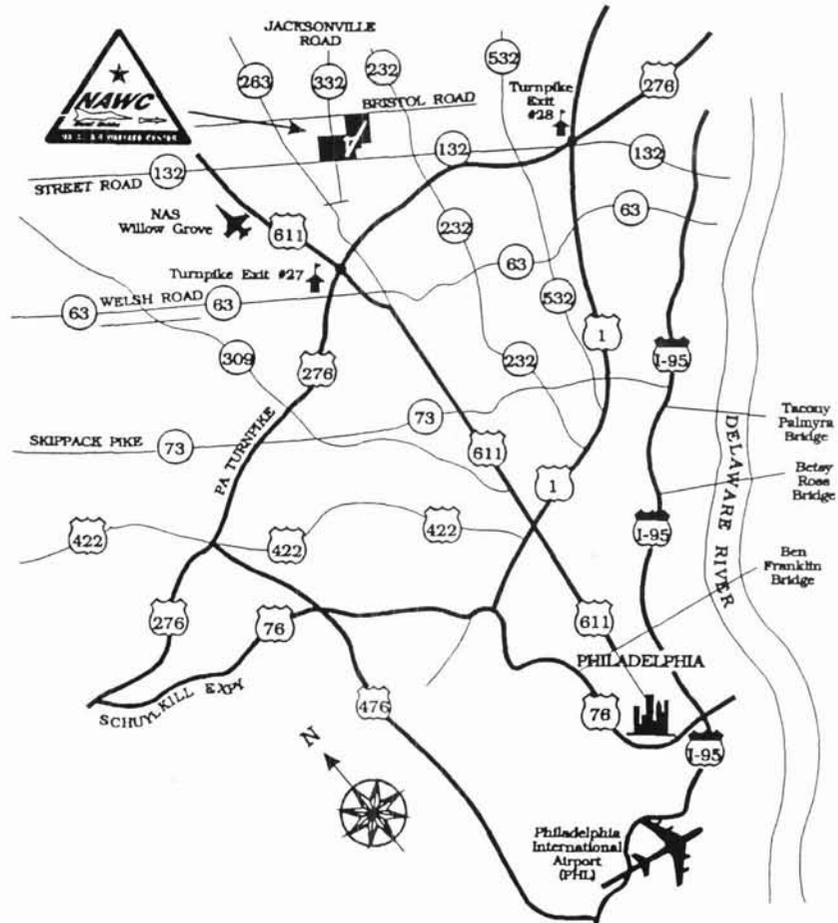
for Crew System participation in Joint Logistics Command Agreements and Interservice Memoranda of Agreement.

Through the years, Crew Systems personnel at the Center have developed a number of improved life support and life saving developments currently in use by the fleet. Included among these are the On-Board Oxygen Generating System (OBOGS), the water activated inflation device (FLU-8P), the Naval Aircrew Common Ejection Seat (NACES), the Helicopter Emergency Egress Lighting (HEEL) System, anti-exposure garments, multiple wavelength laser eye protection, fire retardant garments for Naval personnel, ASW Pattern Analysis Decision Aid (PANDA), helmet mounted displays and sighting systems, aircraft spin warning systems, and Chemical/Biological Protection equipment for aircrews. Advanced development programs currently being conducted at the Center include Advanced Technology Crew Station developments, improved acceleration protection methods, and the development of automated tactical decision aids.

NAWCADWAR LOCATION

The Warminster Facility, established in 1944, is one of five facilities under the Aircraft Division of the Naval Air Warfare Center.

Located in Warminster, Pennsylvania, 23 miles north of center city Philadelphia, it occupies 825 acres, including over 1 million square feet of office space. Numerous test laboratories and support facilities provide an environment to generate and develop ideas for practical, functional, air and sea systems and components. An 8,000 foot runway and aircraft maintenance department are equipped to operate and maintain any type of aircraft in the Navy's inventory, and provide flight testbeds for projects in development.

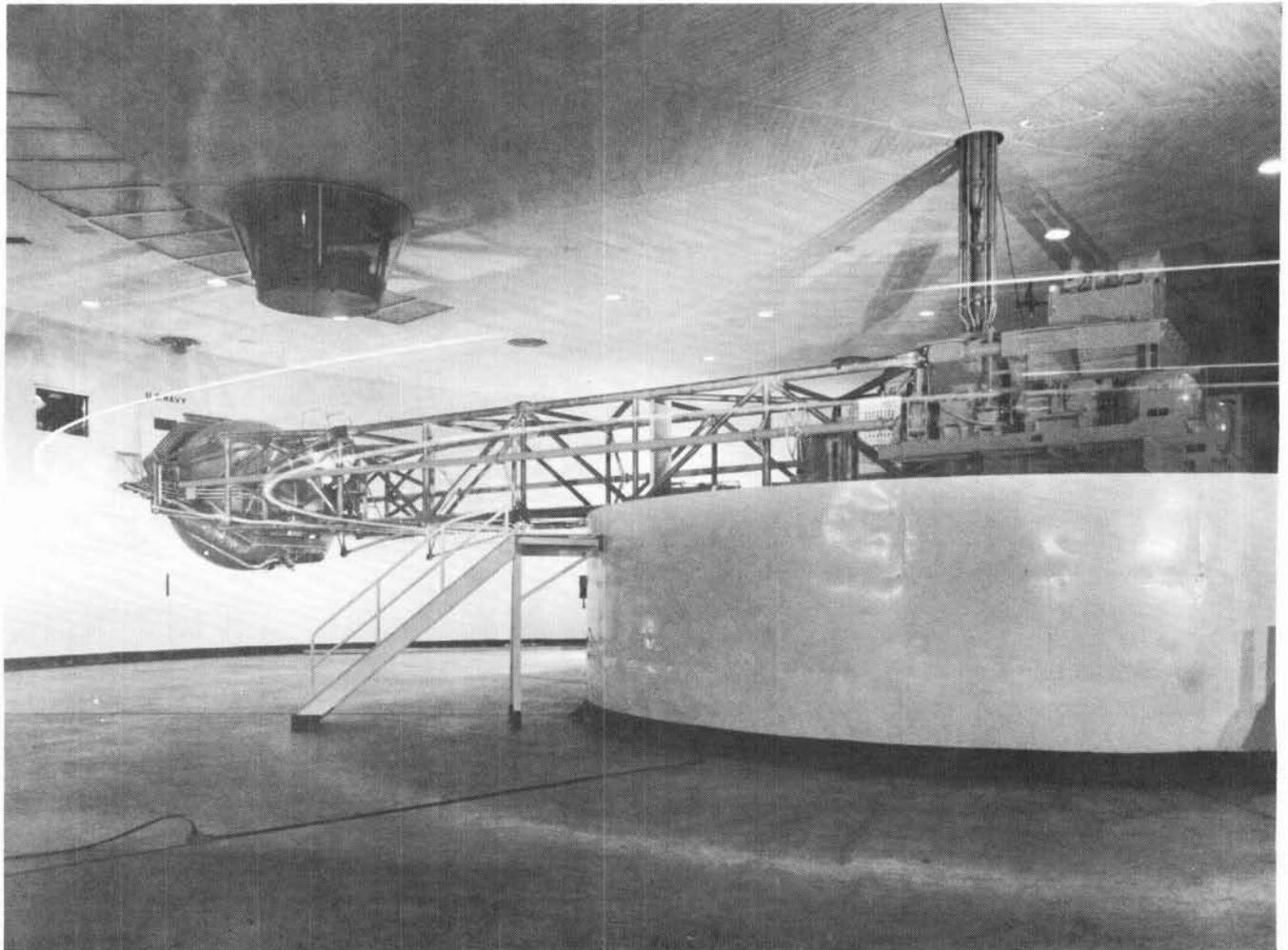


CREW SYSTEMS FACILITIES

Crew Systems research and development testing is enhanced by the availability of the NAWCADWAR Crew Systems Test Facilities. These facilities include several unique human-rated physiologic and psychologic test devices. The Center is the home of the world's largest and most capable human centrifuge, as well as other facilities including a 150' ejection tower / vertical decelerator, a horizontal accelerator, a thermal stress laboratory, the Man-Machine Integration Laboratory, and a fuel fire test facility. These facilities are supported by an extensive array of test equipment, including an inventory of over 30 biofidelic manikins, 20 high speed film and video cameras, standard ejection seats, data acquisition systems, and fabrication and instrumentation shops.

Through operation of these facilities, the Crew Systems organization has been able to develop a highly skilled core of scientists, engineers, and civilian and military support personnel who can evaluate and solve aircrew related problems using basic or applied research techniques. The Crew Systems Facilities are managed as a Service Cost Center which is able to contract with both Federal and industrial customers for crew systems testing.

The following facility descriptions and specifications provide an overview of the Crew Systems testing capability present at the Warminster Facility. For more detailed information, contact the Crew Systems Facilities Engineering Branch, Code 6035 (see address on back cover).



The NAWCADWAR Human Centrifuge in Operation.

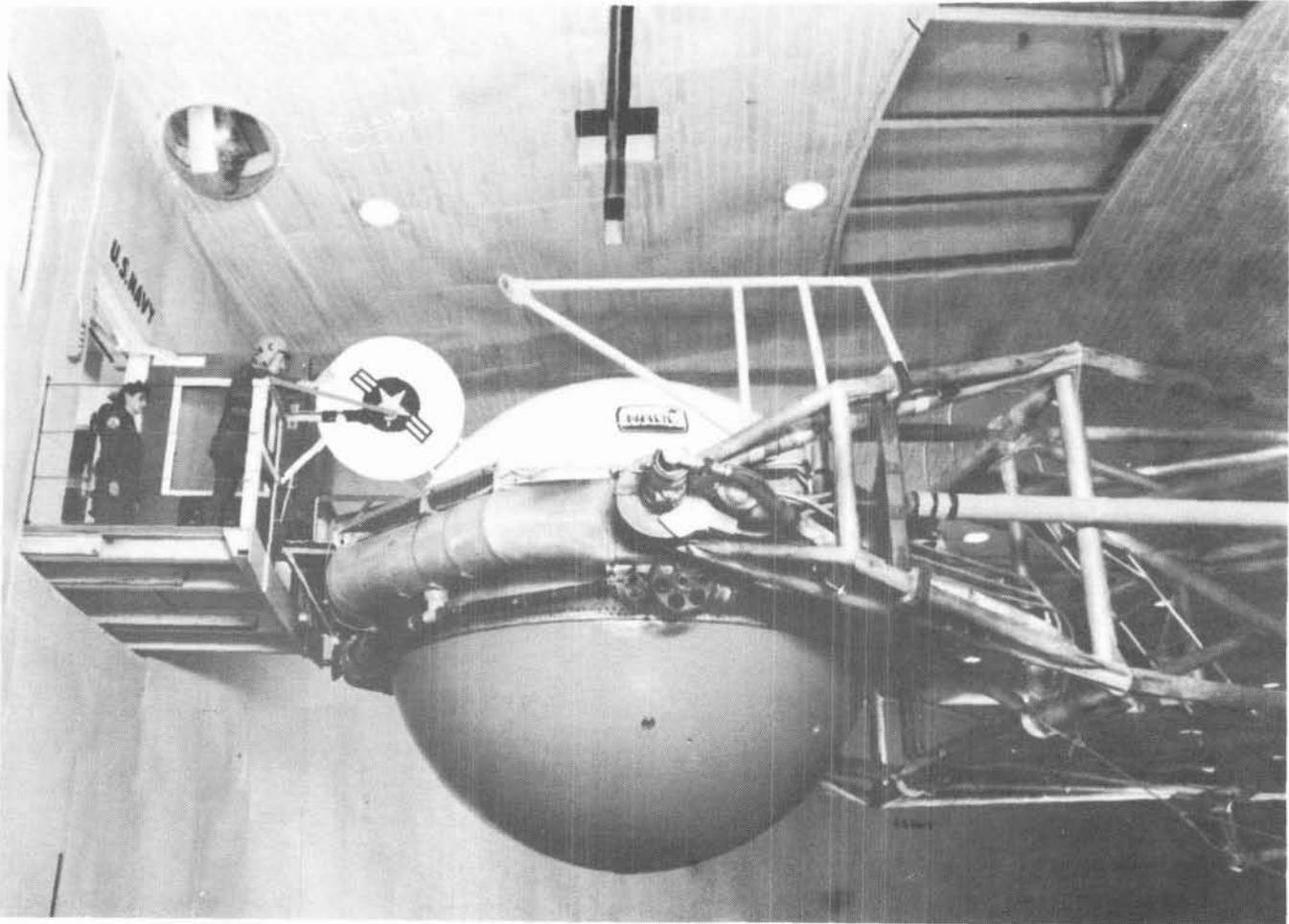
HUMAN CENTRIFUGE

The Human Centrifuge located at Warminster is one of the largest in the world. Capable of generating accelerations up to 40 G's, it features a 50 foot arm, which minimizes the G gradient and Coriolis force problems associated with shorter arms. A highly responsive, controllable two axis gimbaling system enables the centrifuge subject to be exposed to an unlimited range of multi-directional acceleration profiles. The centrifuge is driven by a 16,000 horsepower main drive motor, which provides onset rates of up to 13 G/sec. The device has a payload limit of 40,000 G pounds, which permits the installation of extensive fixturing and instrumentation. Additional characteristics include a gondola vacuum system which can simulate altitudes up to 100,000 feet, and a 3000 psi hydraulic supply to the centrifuge gondola which is capable of powering oscillating actuators, control feedback loaders, and other equipment. Various test fixtures such as a peripheral tracking light bar, g-suits, articulating seats, life support systems, and other articles of air crew equip-

ment, can be accommodated to support particular experiments or training. These unique capabilities combine to make this facility a true national test asset meeting DoD, NASA, aerospace industry, and academic research requirements.

Primarily used in the investigation of the physiological effects resulting from high sustained accelerations, the centrifuge has been used to train astronauts for the rigors of space flight launch, to train Navy, Marine, and Air Guard pilots in correct acceleration protection measures, to evaluate advanced life support systems, to analyze clear air turbulence problems, and most recently, to conduct research into G-induced loss of consciousness phenomena.

Experiments conducted on the human centrifuge are closely monitored by an experienced medical support team. A large complement of electrical slip rings provides the medical monitoring, instrumentation, and control signals necessary to safely monitor any experiment.



Test Subject Entering Centrifuge Gondola from Entry Platform.

CENTRIFUGE SPECIFICATIONS

| | | |
|--|--------------------------|--------------------------|
| ARM RADIUS | 50 FT | |
| CENTRIFUGE DRIVE MOTOR | | |
| MAXIMUM HORSEPOWER | 16,000 Hp | |
| MAXIMUM TORQUE | 1,700,000 ft-lbs | |
| MAXIMUM SPEED | 48.5 rpm | |
| PERFORMANCE CHARACTERISTIC (1000 lb PAYLOAD) | | |
| MAXIMUM G LEVEL | 40 G | |
| MAXIMUM AVERAGE RATE OF CHANGE OF G (1.5-15 G'S) | 10 G/sec | |
| MAXIMUM INSTANTANEOUS RATE OF CHANGE OF G | 13 G/sec | |
| MAXIMUM TANGENTIAL ACCELERATION | 2.9 G | |
| GIMBAL DRIVE CHARACTERISTICS | OUTER (ROLL) | INNER (PITCH) |
| DRIVE MOTORS | 75 Hp | 40Hp |
| MAXIMUM ANGULAR ACCELERATION | 6.5 rad/sec ² | 9.5 rad/sec ² |
| MAXIMUM ANGULAR VELOCITY | 30 rpm | 30 rpm |
| GONDOLA CHARACTERISTICS | | |
| SPHERICAL DIAMETER | 10 ft | |
| PAYLOAD | 2500 lb | |
| VACUUM ALTITUDE | 100,000 ft | |
| REMOVABLE CAPS FOR LARGE PAYLOAD INSTALLATIONS | | |
| ELECTRICAL SLIP RINGS | | |
| ARM | 144 | |
| GONDOLA | 124 | |
| ROTARY JOINTS | | |
| PNEUMATIC (100 psi) | 2 | |
| HYDRAULIC (3000 psi) | 2 | |
| VACUUM/AIR CONDITIONING (15 psi) | 2 | |
| OPEN-LOOP CONTROL SYSTEM | | |
| LIGHT-BAR SUBJECT MONITORING | | |
| MEDICAL SUPERVISION | | |



Interior of Centrifuge Gondola



Centrifuge Medical Monitoring Stations

DYNAMIC FLIGHT SIMULATOR

The Human Centrifuge at NAWCADWAR also provides the motion base for the Dynamic Flight Simulator.

The Dynamic Flight Simulator, or DFS, is the only manned, full system simulator in the world which reproduces the total G-force environment associated with controlled or uncontrolled flight of modern high performance aircraft. It fills a unique need in a wide range of research programs where flight related stresses influence how well the pilot performs his mission. The DFS is a national resource which the Center makes available for use by the world's aerospace community to solve today's problems and avoid tomorrow's.

The DFS incorporates a reconfigurable, full scale, aircraft crew station. In its lightweight format, this crew station includes an ejection seat, an active control stick, and a head-down CRT display. This configuration is especially useful for pilot-in-the-loop control of high G-onset test profiles. A high fidelity crew station, which includes programmable multi-function displays, a head-up display, active instruments, consoles, throttles, and an electro-hydraulic stick/rudder control loader, can be added to provide a crew station representative of modern aircraft.

An advanced, computer generated, visual display system is included in the DFS to produce real-time, outside the cockpit visual scenes. These real world scenes can be presented either through the forward windscreen

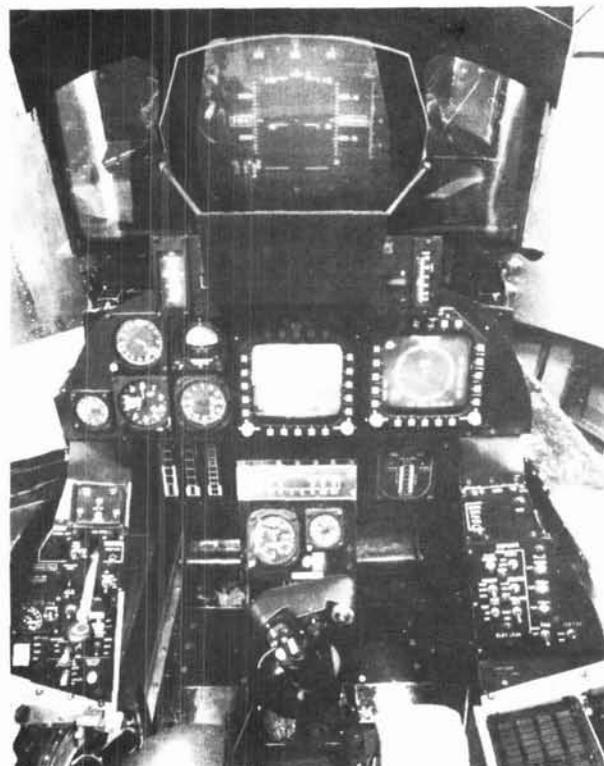
alone, or on a 3-window wide field of view display to further enhance the sensation of actual flight.

The DFS facility has been used successfully to support a variety of aerospace applications including pilot evaluation of new concepts in crew station design, cockpit controls and displays, weapons systems, aerodynamic configurations, and pilot procedures. It is best suited for simulation of high stress or hazardous flight scenarios, including: sustained high-G Air Combat Maneuvering, high agility maneuvering, high angle of attack departures, out of control flight, and spins.

The Dynamic Flight Simulator, as a ground based simulator, provides many advantages over flight testing, including lower cost and greater maneuver per hour efficiency. Its sustained G capability creates a more realistic motion environment than fixed based or limited motion base simulators. By permitting the pre-flight man-in-the-loop evaluation of aircraft systems/sub-systems during early stages of development, the DFS helps to diminish the number of problems which surface during flight test and can substantially reduce the cost and time associated with the introduction of new or modified equipment into operational use.



DFS High Fidelity Crew Station



F-14D Crew Station Configuration

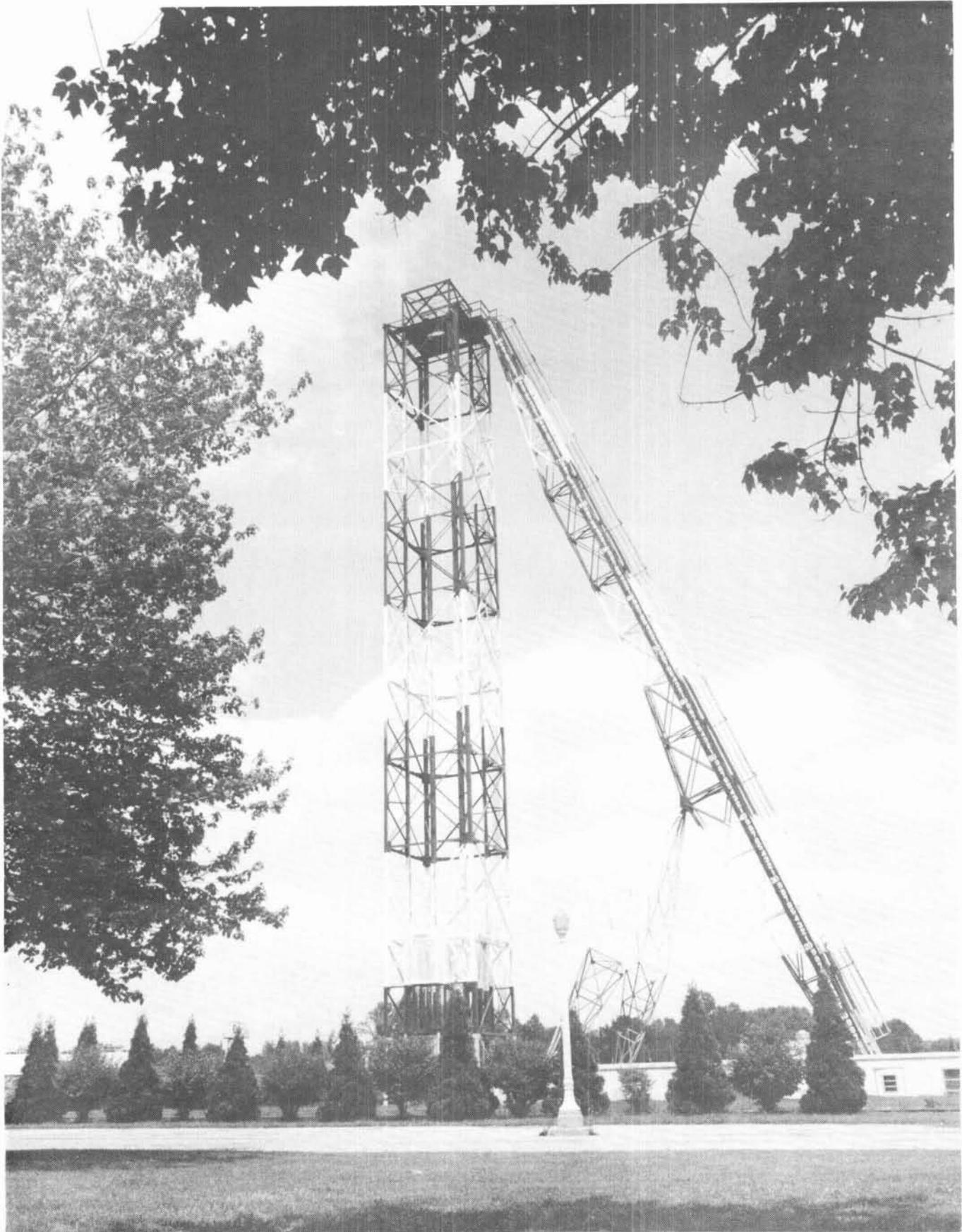


DFS Cockpit Installed in Centrifuge Gondola with Real World Image Display (Gondola Cap Removed)



DYNAMIC FLIGHT SIMULATOR SPECIFICATIONS

| | HIGH FIDELITY COCKPIT | LIGHTWEIGHT COCKPIT |
|------------------------------|--|--|
| PAYLOAD | 2500 lbs | 1800 lbs |
| MAXIMUM G | 10 G's | 15 G's |
| MAXIMUM G-ONSET | 4 G/sec | 13 G/sec |
| CONTROL LOADER | MCFADDEN CENTER STICK | ELECTRONIC SIDE-ARM |
| REAL WORLD VISUAL SYSTEMS | REDIFFUSION INC. SP-2 | PARAGON GRAPHICS PARAGON |
| | 32' H X 48' W FOV | 35' H X 120' W FOV |
| COCKPIT DISPLAY DRIVER | | SILICON GRAPHICS GAERTNER PARAGON |
| CONTROL MODES | | PILOT CLOSED-LOOP RANGE DATA PLAYBACK MISHAP DATA PLAYBACK |
| SIMULATED AIRCRAFT | F-14A, F-14A+, F-14D, F/A-18, THRUST VECTORED | |
| AERO COMPUTER FACILITIES | ENCORE CONCEPT 32/6780 CYBER 176 | |
| DATA FORMAT | 9 TRACK TAPE OPTICAL DISK PC COMPATIBLE MEDIA | |
| COCKPIT POWER SYSTEMS | 120 VAC, 400 Hz 120 VAC, 60 Hz 5, 10, & 28 VDC | |



Ejection Seat Tower and Vertical Decelerator

EJECTION SEAT TOWER/VERTICAL DECELERATOR

Built as a single structure, this facility contains both the Ejection Seat Tower and the Vertical Decelerator.

The Ejection Seat Tower is a 150' structure inclined at 21 degrees from the vertical, with carriage guide rails. The carriage can be configured with many styles of ejection seats, allowing for the testing of a wide range of equipment. The Tower can be used to simulate dynamic ejection conditions with both live subjects and anthropomorphic manikins. Accelerations of up to 30 G's and onset rates to 500 G/sec are obtained by tailoring the ejection cartridge and catapult device. Biomedical monitoring of live subjects is provided.

The Ejection Tower is useful in a variety of human factors and equipment testing, including: Human tolerance to ejection seat accelerations and onset rates, aircraft seat structural integrity, restraint system function (including torso, head, leg and arm restraints), physiologic compatibility of cushions, lumbar pads, ballistic inertia reels, seat platform and spinal alignment, and rescue and survival kit evaluation, both structural and physiological.

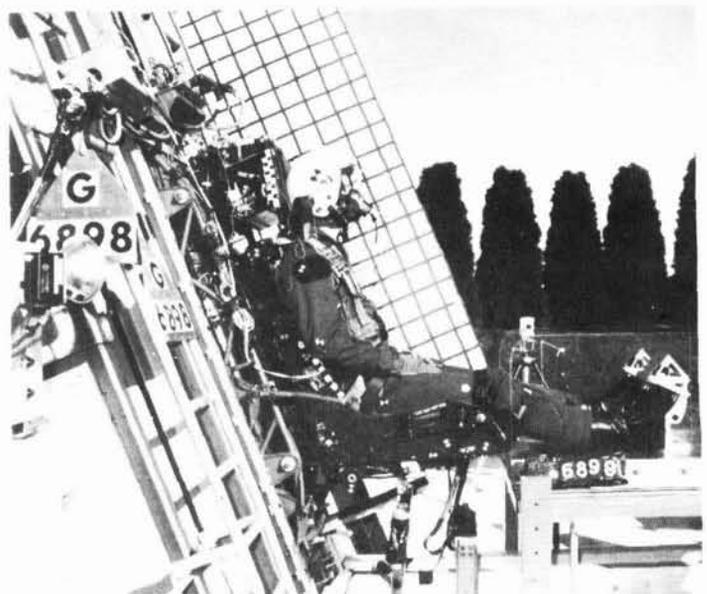
The greatest benefit of the Ejection Tower is the ability to generate repeatable pulses to allow comparisons between configurations. Since the device is captive, payloads can be tested repeatedly, reducing the cost of the testing.

The Vertical Decelerator is a 150' vertical structure with a 10' by 10' drop cart which free falls into a series of expendable metal arrestment straps, which produce square wave deceleration pulses. This unique facility has a single degree of freedom with a maximum free fall velocity of 85 feet per second. It is capable of imposing vertical crash type loads on test objects weighing up to 1000 pounds, and reproduces deceleration levels from 2 to 100 G's.

The Vertical Decelerator can be used for test and evaluation of many types of crew system equipment, including: Energy attenuating seats, restraint systems, and military and aerospace seat structures.

The Vertical Decelerator is able to produce a controlled pulse, with near zero acceleration prior to crash impact. The device is repeatable, which allows comparison studies to be conducted in a controlled environment.

| EJECTION/DROP TOWER SPECIFICATIONS | | |
|------------------------------------|---------------------|--|
| | EJECTION SEAT TOWER | VERTICAL DECELERATOR |
| HEIGHT | 150 ft | 150 ft |
| INCLINATION (FROM VERTICAL) | 21 Degree | 0 Degree |
| G CAPABILITY | | |
| MAXIMUM | 30 G's | 100 G's |
| ROUTINE OPERATION | 6-16 G's | 2-100 G's |
| PAYLOAD | 600 lbs | 1000 lbs |
| FREEFALL DISTANCE | | 95-120 ft |
| FREEFALL VELOCITY (MAX) | | 85 ft/sec |
| TEST SEATS AVAILABLE | | ACES II NACES GRU-7 SJU-5 |
| DATA ACQUISITION SYSTEM | | TMS 3000 DAS 32 CHANNEL A/D TIME AND FREQUENCY DOMAIN |
| SENSORS | | VIBRATION PRESSURE LINEAR DISPLACEMENT STRAIN GAGES |



Ejection Seat Mounted on Ejection Tower Carriage Prior to Test Firing

HORIZONTAL ACCELERATOR

The Horizontal Accelerator is used for the test and evaluation of aircrew systems, including rigid and energy absorbing seats, ejection seats, clothing assemblies, man-mounted equipment, restraints, and other components which may affect the air crew in a crash environment. The facility creates acceleration pulses which mimic the shock environment to which the pilot and his equipment are exposed. By producing the crash pulse in a time mirrored event, where the sequence of events is reversed from an actual crash, the accelerator control system permits precise, repeatable testing of systems and components, under laboratory conditions.

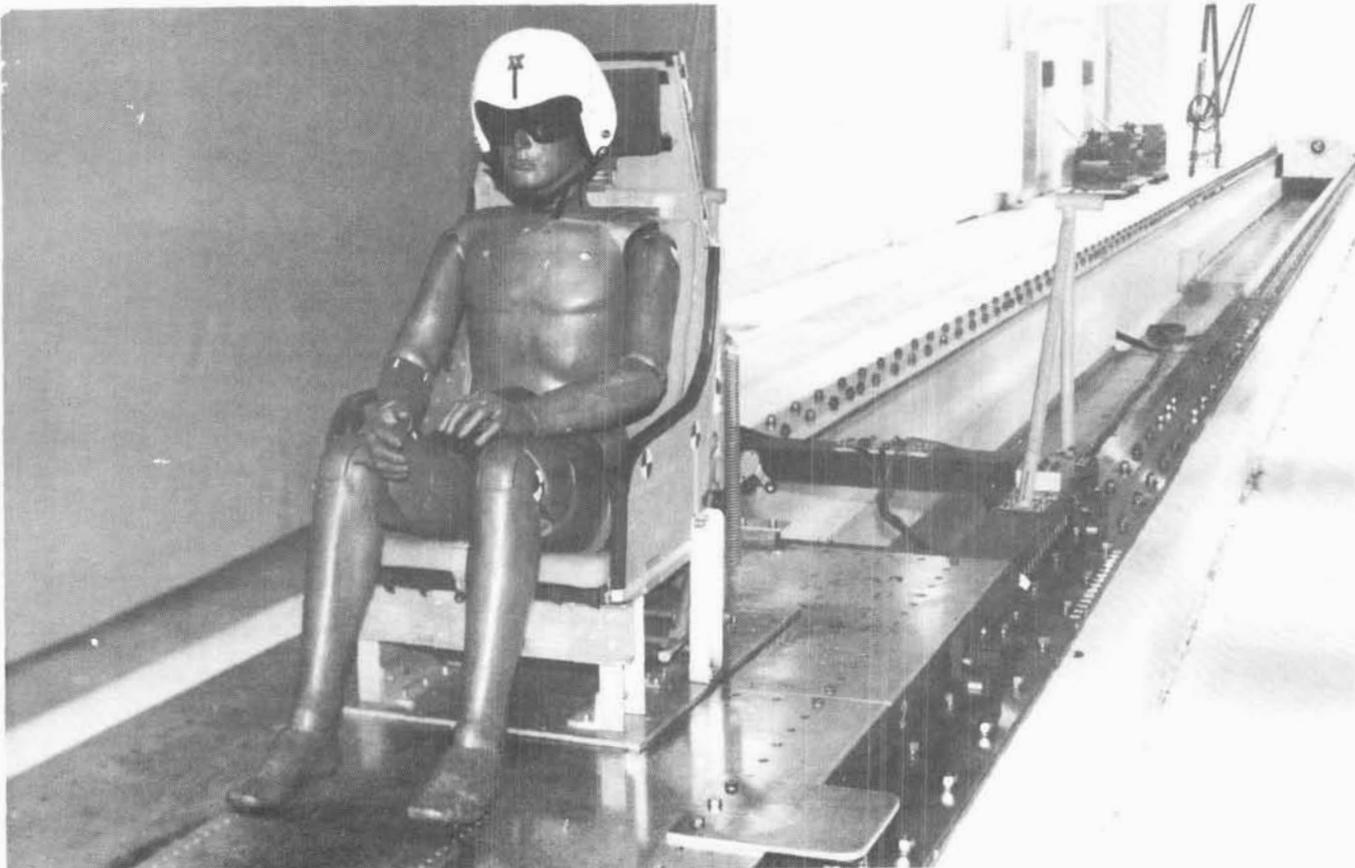
The Horizontal Accelerator Facility consists of a pneumatically-driven / hydraulically-controlled linear actuator, a 100' set of parallel rails, a common carriage, a set of high-intensity lights for high-speed photography, a control center, and several data acquisition systems.

The accelerator's energy producing mechanism consists of a 12" diameter bore stainless steel cylinder divided into two 12 foot long chambers. Both chambers are volume controlled through the use of hydraulic fluid. The rear chamber volume contains compressed air as the firing pressure. The front chamber houses the

thrust assembly and a volume of inert gas. Upon actuation, air is transferred from the rear chamber to the front chamber by an orifice in a chamber dividing plate. The size of the orifice is controlled by a metering pin, which is attached to the rear face of the thrust assembly. As the thrust assembly moves forward, the metering pin is drawn through the orifice, controlling the flow of air to the forward chamber. This system allows a variety of pulse profiles to be generated, with a maximum force of 225,000 pounds. This force is reacted by a 112.5 ton reaction mass. The result is a smooth transition of energy from the cylinder to the test carriage.

The accelerator carriage to which the payloads are attached is 12' long by 4' feet wide. On-board brake calipers are automatically activated to grip the rails and slowly decelerate the sled. Attached to the carriage are the data acquisition umbilicals, which provide hard-wiring for all instrumentation.

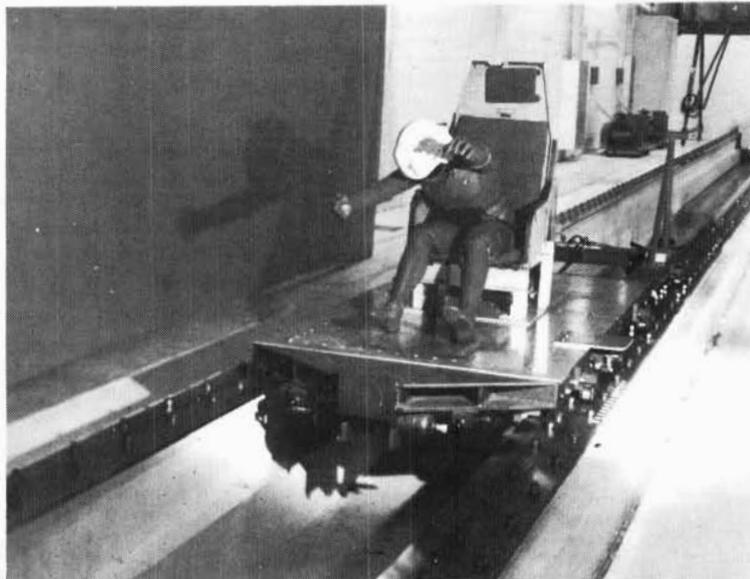
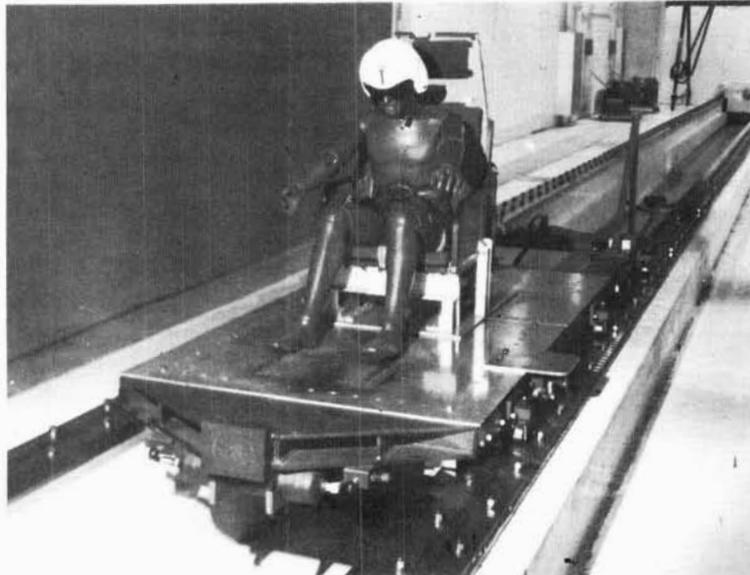
The guide rails are installed on a floating concrete foundation. The first 30' of the rail system are illuminated by the lighting system, which permits photographic rates up to 1000 frames per second.



Horizontal Accelerator Showing Test Sled in Initial Firing Position

HORIZONTAL ACCELERATOR SPECIFICATIONS

| | |
|--------------------------|---|
| MAXIMUM ACCELERATION | 50 G |
| MAXIMUM PAYLOAD | 5000 lbs @ 24 G's |
| MAXIMUM VELOCITY | 100 ft/sec |
| POWER STROKE | 8 ft |
| PULSE SHAPE | SINUSOIDAL, SINUSOIDAL SKEWED, TRAPEZOIDAL, RAMP RISE, DOUBLE HUMP |
| PULSE DURATION | 0.200 sec (MAXIMUM) |
| LENGTH | 100 ft |
| SLED DIMENSIONS | 12 ft X 4 ft |
| DATA ACQUISITION SYSTEMS | 20 CHANNEL FM TAPE 64 CHANNEL DIGITAL |



Time-lapse Photographs Showing Simulated Crash Impact on Instrumental Hybrid III Manikin

FUEL FIRE TEST FACILITY

The Fuel Fire Test Facility (Fire Pit) is designed for the test and evaluation of fire-resistant clothing, headgear, gloves, and boots under actual fuel fire conditions. This facility, which is an open fire (outdoor) test facility, is the only one of its kind in the United States.

The Fuel Fire Test Facility consists of a concrete pit containing 8" of water into which JP-4 fuel is pumped and allowed to float to the surface where it is ignited. Dressed fiberglass manikins mounted on a rotating crane are then passed through the fuel flames, simulating the escape of a crewman through a fuel fire. The manikin, which is mounted with temperature sensors and dressed in the test clothing, is rotated into the flames for 2 to 10 seconds. The temperature rise of the sensors is used to calculate the percentage of the body that would be burned (or protected) in an actual situation involving a human being wearing similar clothing. Five types of data are collected during the testing:

Video tapes of the manikin as it emerges from the flames, surface temperature of the manikin, still photographs of the manikin and clothing assembly before and after passage through the flames, temperature of the fire, and calorimeter heat flux of the fire. Visual observations can be recorded by high speed video, broadcast quality real time video, and still photography. Video tapes are used to assess material flammability by allowing observation of the manikin as it exits the pit. Pre- and Post-photographs allow comparison for damage assessment after the test.

The Fire Pit has been used for testing aircrew and shipboard clothing assemblies for the Navy, Coast Guard, Air Force, Army, and private industry. The facility played a crucial role in the development and use of advanced materials in flight suits, gloves, and other crew equipment.



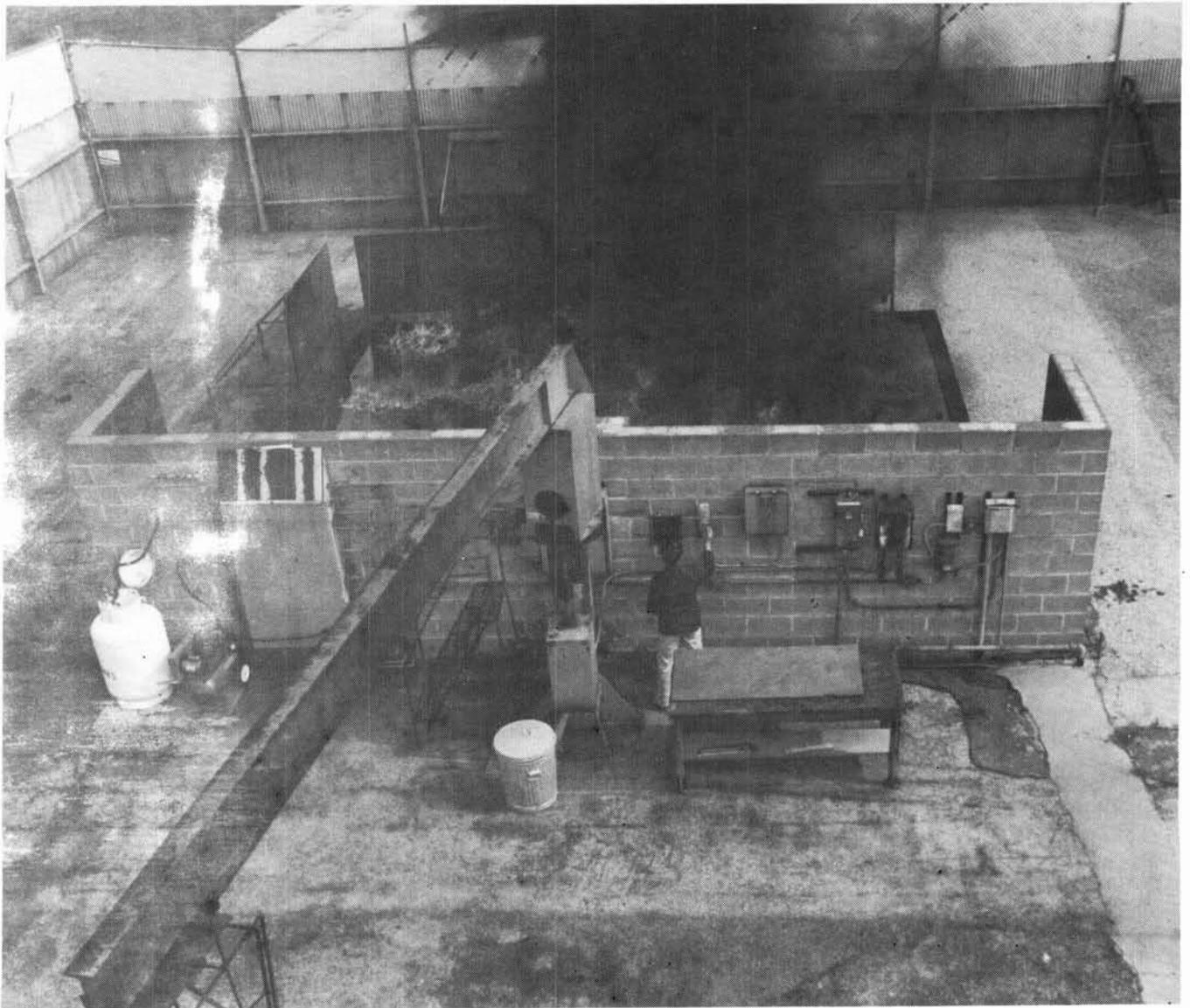
Fire Retardant Clothing Undergoing Burn Tests



Testing of a Personal Flotation Device After Exposure

FUEL FIRE TEST FACILITY SPECIFICATIONS

| | | |
|-----------------------|------------------|--|
| PIT SIZE | | 25 FT X 20 FT X 8 IN |
| CRANE ARM LENGTH | | 20 FT |
| FUEL | | JP-4 |
| RANGE OF EXPOSURE | | 12 SEC (MAXIMUM) 2 TO 3 SEC (ROUTINE) |
| DATA ACQUISITION | SKIN TEMPERATURE | 36 TEMPERATURE SENSORS (PAPER) RANGE 240°F TO 280°F |
| | HEAT FLUX | TWO CIRCULAR FOIL CALORIMETERS NORMAL HEAT FLUX 2 TO 4 CAL/CM ² /SEC |
| PHOTOGRAPHIC COVERAGE | | HIGH SPEED VIDEO (OPTIONAL) REAL TIME VIDEO STILL PHOTOGRAPHS |
| OPERATING PERIOD | | APRIL TO OCTOBER |



Overview of Fuel Fire Test Facility (Immediate Post-test)

ENVIRONMENTAL PHYSIOLOGY LABORATORY

The Environmental Physiology Laboratory is used to evaluate aircrew clothing assemblies and related equipment in thermal environments typically experienced during flight and emergency survival situations. The testing enables the development of standards for the physiologic limits which aircrew systems must meet. A variety of environmentally stressful conditions can be simulated in the laboratory: extreme heat, dry cold, and cold water immersion.



Test Subject (in Flight Gear) Undergoing Heat Stress Test

Cold weather immersion studies can be performed with water temperature controlled within the range of +3° to +15°C and air temperature independently maintained in the range of 0° to +15°C. Waves, spray, and winds can be generated simultaneously to create a sea-like environment. Dry cold temperatures as low as -30°C can also be maintained. Heat studies can be performed which examine the impact of ambient temperatures as high as +46°C along with controlled humidities.

Physiological variables normally measured during an assessment of clothing assemblies include multi-site skin surface temperatures, deep core temperatures, skin surface heat flux rate, ECG and heart rate, metabolic rate, respiration rate, and change in body weight.

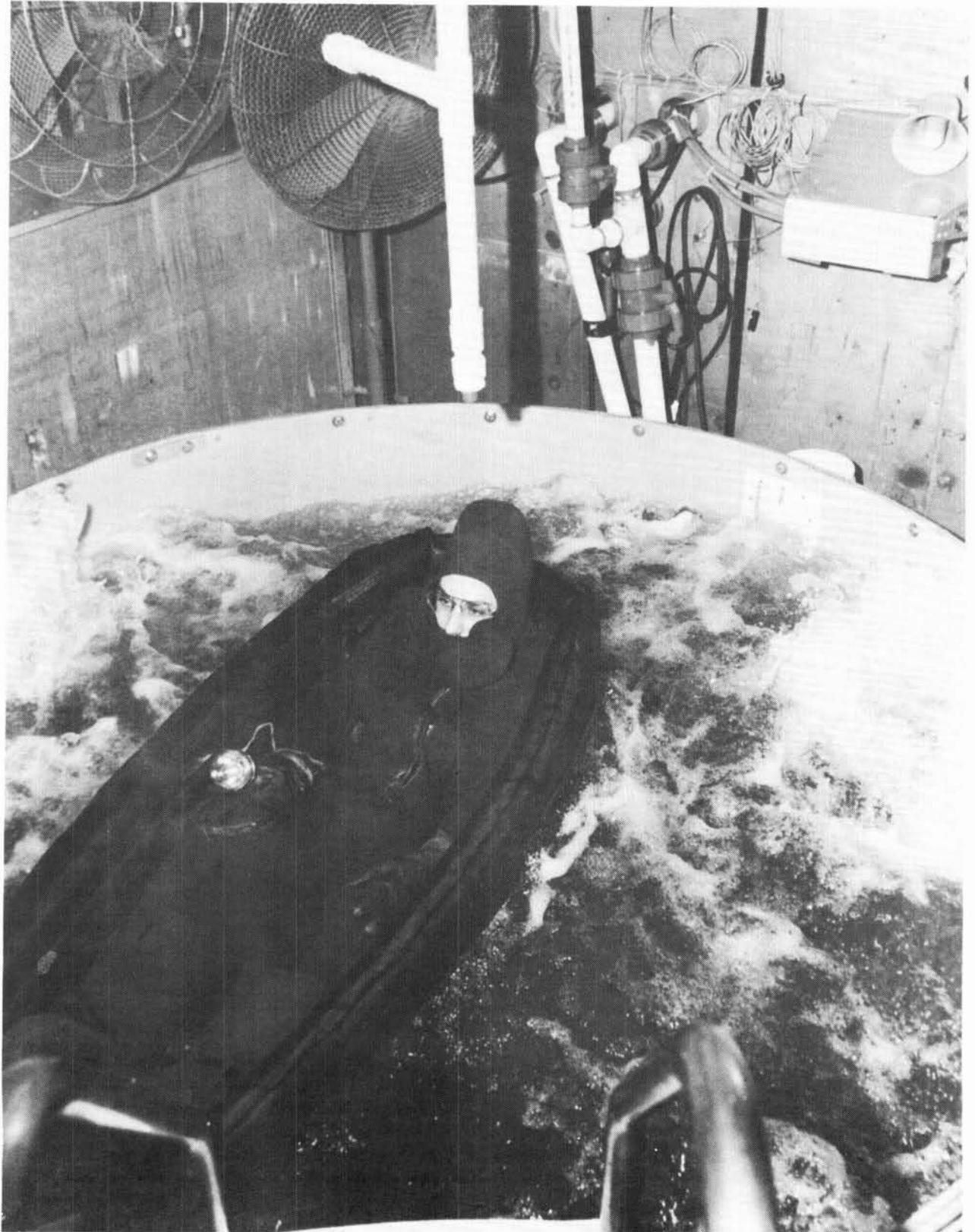


Test Subject Undergoing Cold Water Exposure

The Laboratory is useful in applications such as: protective clothing evaluations, raft testing in a cold environment, physiologic assessments of performance in a stressful environment, and training of emergency procedures in a realistic environment. Major accomplishments have been achieved through the development of anti-exposure protective systems that are used in naval and space applications.

ENVIRONMENTAL CHAMBER SPECIFICATIONS

| | |
|------------------------------------|---|
| EXTERIOR DIMENSIONS | 22 ft WIDE X 30 ft LONG X 14 ft HIGH |
| POOL DIMENSIONS | 8 ft DIA X 5 ft DEEP |
| TEMPERATURE RANGE | -30°F TO 160°F |
| TEMPERATURE GRADIENT | < ± 2°F |
| RELATIVE HUMIDITY | 5% TO 95% AT 80°F |
| AVERAGE TEMPERATURE CHANGE RATE | 2°F/mon WITH EMPTY ROOM |
| ENVIRONMENTAL CONDITION GENERATORS | WAVE ACTION, SPRAY AND WIND (5-20 mph) |
| PHYSIOLOGICAL MONITORING SYSTEMS | SKIN TEMPERATURE BODY TEMPERATURE HEART RATE EKG PSYCHOMOTOR EMG METABOLIC RATE |



Inflatable One-Man Life Raft During Cold Water Environmental Test

MAN-MACHINE INTEGRATION LABORATORY COMPLEX

The Man Machine Integration Laboratory Complex (MMIL) is a set of dynamic, flexible labs used to demonstrate and evaluate the viability of advanced technology concepts, from 6.1, 6.2 through 6.3. The complex is instrumental in the integration technology of new systems. Each lab has a manager whose expertise complements the lab.

The Complex consists of these laboratories:

(1) *Crewstation Evaluation Facility (CREST)*, sometimes called the Advanced Crewstation Laboratory, is the lab that integrates the various technologies developed in the other labs. One purpose of the other labels is to support the CREST with products of their research, and to see that they integrate into the crew station. This lab consists of several cockpits where design decisions are made: a tandem cockpit (such as F-18, F-14), a side-by-side cockpit (such as V-22, A-6), and a helicopter cockpit.

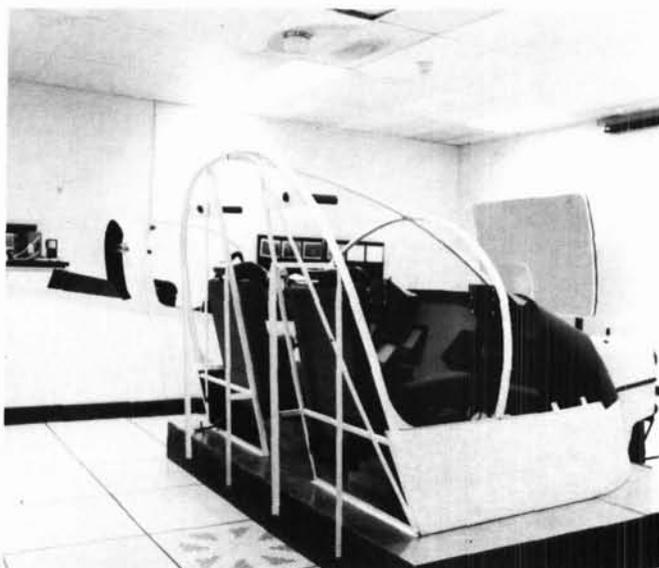
Multi-function controls (of various design) and displays (of all types), Head Up and Helmet Mounted systems, Graphic and Symbol generators are evaluated in the facility under mission task environments. Additionally, voice interaction, scene generation and video processing systems, target generation systems and digital map systems are evaluated.

(2) *The Computer & Generator Lab* contains the computers and communication equipment, image generators, graphic generators and symbol generators that provide CREST as well as the other laboratories with the processing capability. This facility can provide video to laboratories outside the MMIL via the video system.

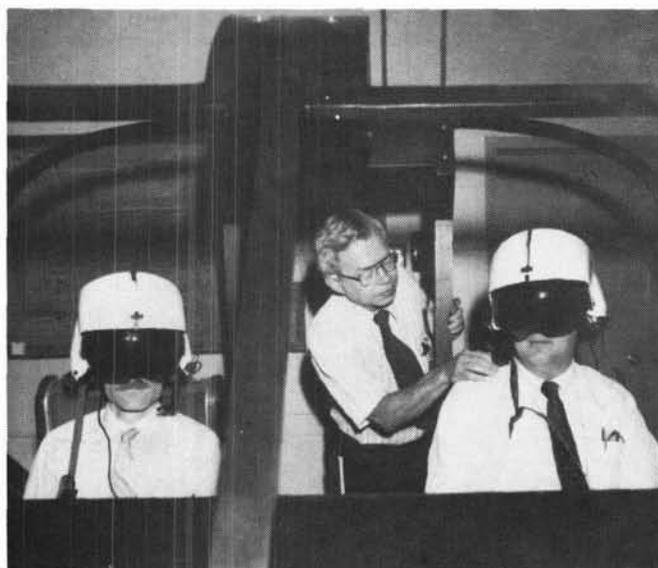
(3) *Lighting Evaluation and Display Lab (LEAD)* The lab provides the capability to develop and evaluate design criteria and compatibility for night vision systems. The laboratory is the standard for the industry, with many manufacturers and airframers sending samples to the lab for their evaluation.

(4) *Display Evaluation Lab*. This lab has the equipment to make measurements of, and evaluate any display device, from switches to CRTs to flat panels. The lab investigates the limitations of the various displays, and advises the project/sponsors of their capabilities to meet the requirements.

(5) *Sunlight Illuminance Evaluation Lab* investigates the ramifications of the operation of displays in bright sunlight, and the problem of veiling brightness in the cockpit. In conjunction with the Display Evaluation Lab, the Sunlight Illuminance Lab and Night Vision Compat-



Side by Side and Tandem Reconfigurable Crew Stations in Man-Machine Integration Laboratory



Helmet Display Integration Study in CREST Lab



Anthropometric Reach Test in a Crew Station

ibility, make up the complete display device evaluation capability.

(6) *Image Generation & Evaluation Lab.* The images/graphics/symbology that are presented to the pilot and crew are developed, programmed and critiqued in this lab for inclusion in the other labs, especially the CREST. This software intensive laboratory operates with multi line rate displays and generation systems.

(7) *Voice I/O Lab.* The Voice lab provides both the voice output that is used in the crew station evaluation facility, but also provides the voice command capability so that research can continue into how the voice commune should be used.

(8) *Anthropometric Lab (AnthroLab)* This lab works with and evaluates vision/reach/mobility and devices for projects and other MMIL facilities. Currently this facility is evaluating numerous torso restraints for the survival technology and restraint improvement project, as part of the NACES P31 program, whereby in-house development of a seat mounted restraint system is being accomplished.

(9) *Reconfigurable Crewstation Lab (RC Lab)* The RC lab is the Human Factors Tool to look at various problems of human stimuli. The lab contains an interactive generic cockpit (one or two place, side by side or tandem) which can measure the human performance with respect to the various configurations of equipment that can be used in the cockpit. These include side arm controllers, simulated head up display, and outside scene.

(10) *Advanced Technology Crewstation Lab (ATCS)* contains the contractors look into the future cockpits. Through the refinement of the requirements the ATCS project has tasked certain contractors to develop a next generation crewstation, This lab contains these futuristic cockpits for further development and evaluation.

The MMIL complex equipment is, like the technology it represents, ever changing. All equipment is currently connected though the ethernet, 1553B, RS-232C, RS-422, video, fiber optic and audio networks. Popular operating systems, programming languages, and graphic languages are supported. MMIL Lab managers continue to improve their equipment toward open systems standards to promote an extensible, portable, scalable and interoperable heterogeneous capability. Typical programming languages are: ADA, Fortran, C, Pascal, Basic, and Assembly. Typical Operating Systems include: VMS, UNIX, IRMX, MSDOS (including windows), MACDOS, AMIGADOS.

Processors used in the Complex include: 80X86 Series, 680X0 Series, RISC, MIPS, VAX.

Video supported in the Complex include: RS-170A, RS-343 (875, 945, 1023, 1225), stroke, and various graphic generators.

HELMET ADVANCED TECHNOLOGY LABORATORY

The Helmet Advanced Technology Laboratory (HATLAB) is a comprehensive resource used to develop and evaluate USN/USMC protective headgear. The primary goal of the HATLAB is to provide full test and evaluation capability for existing headgear configurations and to develop and demonstrate new technical baselines for helmet-mounted devices and protective equipment. Test equipment supported by the HATLAB include: an impact test tower, used to determine helmet impact protection capability; an environmental chamber, used to prepare new materials and condition test articles; and, a mass properties measurement system. The mass properties system is able to measure Cl , and mass moments of inertia. These data are an integral aspect of research in the effects of added head support weight on aircrew endurance and fatigue in the dynamic flight environment, as well as the risk of head/neck injury during emergency situations.

Other test equipment under development include a fixture which will be used to evaluate the stability of flight helmets under dynamic loads, and a measurement device which will determine helmet fit to aid in stability, retention, and comfort evaluations.

A secondary objective of the HATLAB is to provide a means to develop advanced headgear prototypes. Vacuum forming and injection molding machines are available in the laboratory to aid in producing test-worthy designs.

A computer workstation, paired with solid-modeling software is used as a precise developmental tool for new protective headgear designs. This powerful design tool is integrated with computational fluid dynamics analysis software to provide simulation of windblast effects on aircrew during emergency ejections. The data generated by these simulations can be correlated with real-world data to predict the incidence of aircrew injury in actual scenarios and can be used to provide guidelines for design and development of future protective equipment.

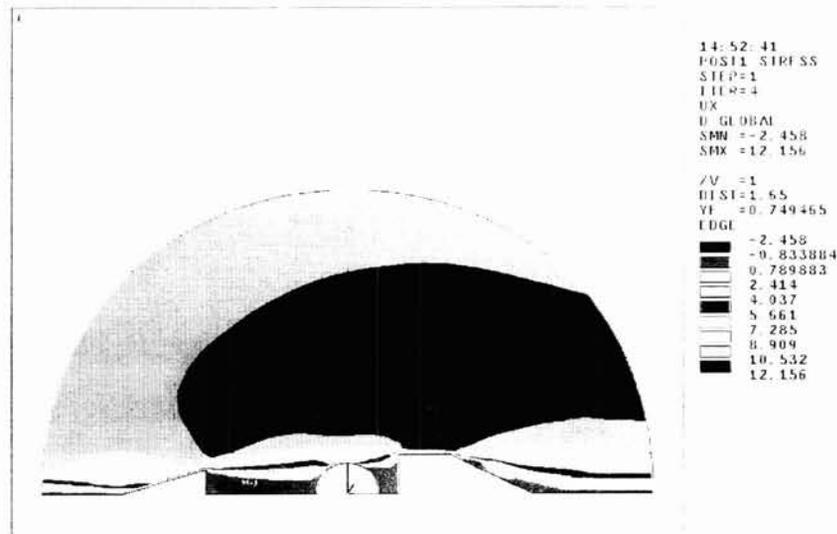
The HATLAB also provides inter-service support to Air Force and Army researchers as part of a continuing effort to coordinate the research goals of laboratories involved in helmet technology development.



The Mass Properties System: Used to Evaluate the Effects of Added Head Supported Weight

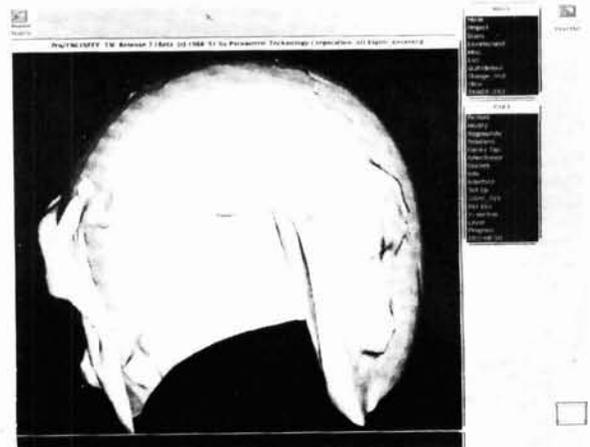


The Impact Test Tower: Used to Evaluate Helmet Energy Absorbing Capabilities



Simulation Results for 2-D Aerodynamic Flow Analysis

| HAT LABORATORY SPECIFICATIONS | |
|--------------------------------------|---|
| MASS PROPERTIES SYSTEM | MASS, CG, AND MASS MOMENTS EVALUATION |
| INJECTION MOLDER | 33 IN-LB OFFSET MOMENT LIMIT 300 LB PAYLOAD LIMIT |
| VACUUM FORMER | 60 TON INJECTION MOLDING MACHINE |
| ENVIRONMENTAL CHAMBER | HOPPER DRYER GRANULATOR COMPRESSED AIR SOURCE |
| COMPUTER SIMULATION | 6", 12", AND 18" REDUCING PLATES -37 C TO 177 C TEMPERATURE RANGE 10% TO 98 % RELATIVE HUMIDITY RANGE RISC BASED WORKSTATION PARAMETRIC, FEATURE BASED SOLID MODELER COMPRESSIBLE, TURBULENT, STEADY STATE, OR TRANSIENT FLUID MODELING |
| IMPACT DROP TOWER | MONORAIL GUIDED FREE FALL TOWER ACCELERATION, PENETRATION, IMPACT ENERGY EVALUATION 13.5 FT MAX DROP HEIGHT |



3-D Solid Modeling Software is Used to Generate Headform and Helmet System Models for Various Analyses

OXYGEN SYSTEMS LABORATORY

The Oxygen Systems Laboratory is devoted to the research, development, testing, and evaluation of aircrew related pneumatic systems used to support and protect Navy aircrew. This laboratory is the lead facility in the Navy for the development of these systems, which include chemical and biological protection systems as well as oxygen enriched breathing air equipment. In addition to its primary use for R & D, it also supports all inservice functions for oxygen equipment. Engineering investigations on equipment from aircraft mishaps, inflight failures, and fleet reported problems are evaluated in the lab.

The facility includes a full range of test equipment including an oxygen monitor test set, oxygen concentrator test set, oxygen components test stand, and liquid oxygen (LOX) converter test stand. The oxygen monitor and oxygen concentrator test sets are portable units designed to test the full performance range of the monitor and concentrator. The oxygen components test stand is a stationary unit designed to test regulators, pressure suits, and other oxygen equipment under variable pressure, flow, and altitude conditions. The LOX converter test stand is also a stationary unit capable of testing LOX converters, seat kits, and other oxygen equipment (valves, reducers, etc.) under variable flows and pressures.

This test equipment is supported by a dynamic breathing simulator. This simulator is capable of simulating two crew members breathing at variable flow rates and lung volumes, as well as computerized modeling equipment which can simulate human lungs, oxygen masks, breathing regulators, oxygen concentrators, and other systems. The laboratory also has the capability to fabricate and test the crew station portion of tactical life support systems, allowing the evaluation of development equipment.

This testing is supported by an automated data acquisition computer, which can provide up to 256 channels of pressure, temperature, gas composition, strain, position and voltage data. The system provides graphic based storage and analysis of the data, and can perform numerical calculus and frequency domain analysis of the data in real time. The lab also contains a submersible flow system which is used for evaluating underwater breathing requirements. This portable unit can be taken to water tanks and used to measure pressure and flow characteristics of equipment while underwater.

The facility has been involved in a large number of programs, including the Onboard Oxygen Generating System (OBOGS), the Navy Aircrew Eye and Respiratory Protection System (NAERP), the Advanced Tactical Life Support System (ATLSS) and the Advanced Aircrew Oxygen Delivery System.

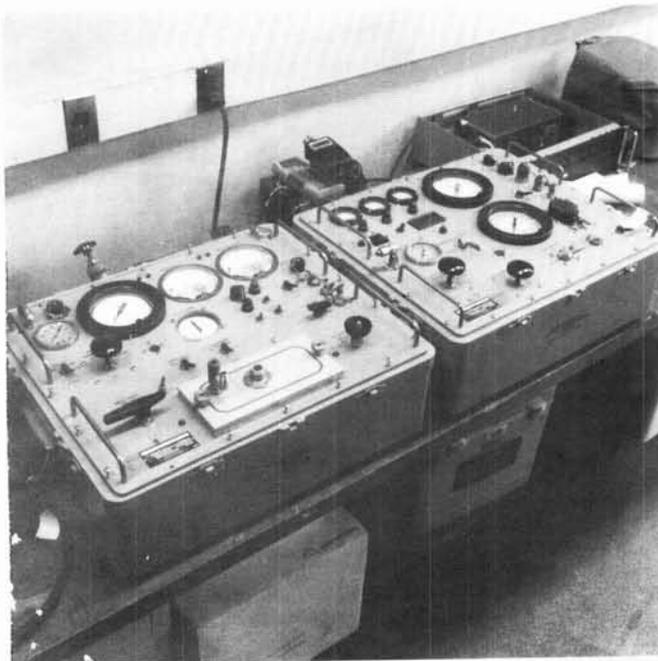


The Breathing Simulation Test Stand

OXYGEN SYSTEMS LABORATORY

OXYGEN LABORATORY SPECIFICATIONS

| | |
|------------------------------------|---|
| OXYGEN MONITOR TEST SET | PRESSURE, FLOW, AND % OXYGEN TESTING DESIGNED FOR OBOGS OXYGEN MONITORS |
| OXYGEN CONCENTRATOR TEST SET | PRESSURE, FLOW, AND % OXYGEN TESTING DESIGNED FOR OBOGS CONCENTRATORS |
| OXYGEN COMPONENTS | PRESSURE, FLOW, AND LEAKAGE TESTING PRESSURE ALTITUDES TO 150,000 FT. |
| LIQUID OXYGEN CONVERTER TEST STAND | PRESSURE, FLOW, AND LEAKAGE TESTING DESIGNED FOR LOX CONVERTORS AND SEAT KITS |
| DYNAMIC BREATHING SIMULATOR | VARIABLE FLOW RATES AND LUNG VOLUMES TWO PERSON SIMULTANEOUS BREATHING |
| DATA ACQUISITION SYSTEMS | 256 CHANNEL ACQUISITION CAPABILITY MACINTOSH PLATFORM 650 Mb CARTRIDGE STORAGE SYSTEM REAL TIME ANALYSIS CAPABLE |
| OXYGEN SYSTEM SIMULATION | CREW STATION COMPONENTS |
| COMPUTER MODELING | HUMAN LUNGS, BREATHING REGULATORS OXYGEN CONCENTRATORS, AND OTHERS |



Oxygen Concentrator Test Set and
Regulator/Monitor Test Set



Liquid Oxygen Converter Test Stand

TEST SUPPORT

The test cycle begins with the identification of test requirements and continues until all data has been reduced and the findings presented. The Crew Systems Facilities organization is able to support this full cycle test program through the availability of many technical disciplines. Project Engineers are available to provide assistance in the preparation of Test Plans, as well as the management and conduct of the testing. Instrumentation Engineers and Photographers are available to provide expert advice in methods of collecting data, as well as reducing the data and generating data presentation materials. Test engineers are available to assist in determining methods for the testing, and to assist in determining methods for the testing, and to identify all necessary equipment to conduct the testing. The Operations Staff is well versed in the operation of the facilities, and possess secondary skills which allow the efficient utilization of the test devices. Ordnance handling is available at those facilities which require pyrotechnics, as is equipment rigging and other specializations.

Engineering support services are available for the entire design cycle through fabrication. Computer

Aided Design (CAD) systems are used to provide geometric modeling, as well as production drawings, and offer the capability to conduct Finite Element Analyses of structures. The mechanical engineering staff is familiar with the wide variety of crew systems in use throughout the aviation community, and is able to apply this knowledge to the testing programs. Electrical engineers and technicians are able to design and install interfaces between test articles and facility instrumentation systems.

The Crew Systems Facilities have machine shops available to fabricate fixtures ranging from instrumentation bracketry through aircraft-type installations. Fabrication equipment available includes 3-axis milling machines, engine lathes, drill presses, and an arc welding capability. The shops can also provide prototyping and assembly of test articles. Modelmaking and wordworking can be obtained from the main NAWCADWAR fabrication shops, if required.

Electronics technicians at the facility are skilled at rewiring equipment to withstand high acceleration environments and repairing articles damaged during testing.

The broad base of support available to the Crew Systems Facilities, and the fact that much of the staff is cross-trained in multiple disciplines allows test programs to be conducted smoothly with a minimum of external intervention from the customers.



Fixture Design Being Developed Using CAD System



Cockpit Development and Aircraft Instruments Maintenance is Available

DATA ACQUISITION

The keystone of any test program is the acquisition of data, whether in visual or electronic format. This requirement is fully supported by the Crew Systems Facilities.

Electronic data acquisition is available on all facilities with data reduction as an option. The facility maintains a large inventory of test manikins, including nine Hybrid III versions as well as Hybrid II and Gard CG models. A wide range of electronic transducers are available for these manikins, including load cells and accelerometers.

Custom instrumentation including strain gaging and strap tensiometers are available as well. Strain gage installation, calibration, and static load testing can be provided for most test applications. The Crew Systems Facilities support group also possesses the capability to fabricate custom bracketry, or make minor modifications to test articles, as is often required for developmental equipment.

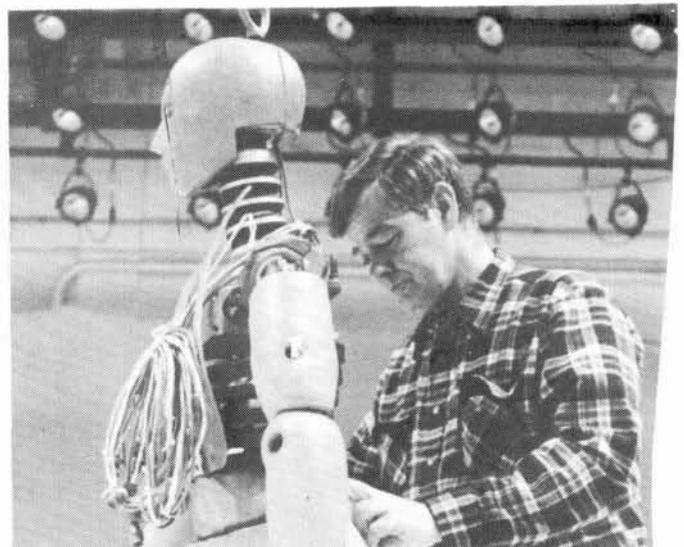


Video Data Being Down-Loaded After a Test

The collection of high speed electronic data is standardized across the Ejection Tower, Vertical Decelerator, and Horizontal Accelerator. The data acquisition systems range from portable single channel analog systems through 32 and 64 channel high frequency digital systems. All data acquisition systems maintain personal computer media compatibility, as well as compatibility with data analysis software.

Data analysis capabilities include both Data Acquisition System and personal computer based software, which allows the determination of standard criteria, as well as data display in formats ranging from text files through graphs. The analysis of the data is further supported by Project Engineers familiar with the goals of the program, and physiologists and Flight Surgeons who can assist with the interpretation of the data.

Visual data collection is supported by a wide variety of photographic systems, ranging from still cameras through 1000 frame per second color film and video cameras. Full editing services are available at the center, including titling. Over 20 high speed (200 to 1000 frame per second) cameras are complemented by broadcast quality real time photographic equipment, which allows the creation of full visual documentation of test program. Visual data analysis includes film analysis equipment, and limited spot tracking on the high speed video equipment.



Hybrid III Manikin Being Prepared For Test



For Further Information, Contact:

Commander
Naval Air Warfare Center/Aircraft Division/Warminster
Warminster, PA 18974-0591

ATTN: Crew Systems Facilities Manager (Code 6035)
Telephone: (215) 441-2891
DSN 441-2891



This page contains a pamphlet that was too large to be scanned in for electronic view regarding Ocean Survey Systems.

Document Separator

BRAC 95 EFFECTS



CLOSURE OF THE DYNAMIC FLIGHT SIMULATOR



EXECUTIVE SUMMARY

THE BRAC '95 CLOSURE OF THE DYNAMIC FLIGHT SIMULATOR (DFS) AT WARMINSTER WILL RESULT IN THE LOSS OF A WORLD-UNIQUE HIGH-G FLIGHT SIMULATION CAPABILITY. USING THE DFS, A PILOT CAN "FLY" REALISTIC SUSTAINED G MANEUVERS IN FULL-SCALE AIRCRAFT COCKPITS. THE DFS ENABLES PILOTS TO EVALUATE NEW EQUIPMENT OR COCKPIT CONFIGURATIONS IN THE ACTUAL ENVIRONMENT IN WHICH THEY WILL BE USED. THE DFS HAS BEEN USED FOR OVER 40 YEARS FOR RESEARCH, TEST AND EVALUATION AND TRAINING ON PROGRAMS RANGING FROM THE NASA MERCURY ASTRONAUT PROGRAM, TO THE DEVELOPMENT OF THE NEXT GENERATION AIRCRAFT, CIRCA 2010.

IN MAKING THE DECISION TO CLOSE THE DFS, THE MILITARY VALUE OF THE FACILITY WAS OVERLOOKED. WITH PERFORMANCE THAT SURPASSES EVEN THE HOTTEST MILITARY AIRCRAFT (40 G'S, 13 G/SEC), THE DFS IS THE PERFECT VEHICLE TO INVESTIGATE POTENTIALLY DANGEROUS FLIGHT-TEST MANEUVERS, SAFELY AND EFFICIENTLY ON THE GROUND. WHILE OTHER COUNTRIES AROUND THE WORLD ARE JUST BEGINNING TO PROCURE SMALLER 25-FOOT CENTRIFUGES WITH LIMITED DFS CAPABILITIES, THE NAVY HAS CHOSEN TO ABANDON THE DFS. THE USAF AT THE SAME TIME IS CLOSING ITS RESEARCH AND TRAINING CENTRIFUGES AT BROOKS AND HOLLOMAN AFB'S. IF THE BRAC DECISION IS NOT REVERSED, THE ONLY VIABLE OPTION TO RETAINING THE DFS WOULD BE TO TURN IT OVER TO A CORPORATION, UNIVERSITY OR NATIONAL INSTITUTION.

CREW SYSTEMS
4.6

NAWC-AD CREW SYSTEMS ENGINEERING



HEAD, CREW SYSTEMS 4.6
DEPARTMENT
TOM MILHOUS

DEPUTY
CDR TOM MITCHELL 3

4.6D
AEROMEDICAL STAFF
(3)

4.6C
FINANCIAL & ADMINISTRATION
(2)

4.6T
S&T PROGRAMS
(7)

* DUAL HATTED

4.6.1
SYSTEMS ENGINEERING

DON HARRIS* (53)

4.6.2
EMERGENCY EGRESS & CRASHWORTHY SYSTEMS

PETER AYOUB * (57)

4.6.3
TREAT PROTECTION & MISSION ENHANCEMENT

ARIS PASLES * (34)

4.6.4
HUMAN SYSTEMS

CDR TOM MITCHELL* (44)

- *4.6.1.1 COCKPIT/CREW STATION
- 4.6.1.2 CREW SYSTEMS PROJECTS
- 4.6.1.3 CREW SYSTEMS EVALUATION
- 4.6.1.4 CREW STATION INTEGRATION

- *4.6.2.1 IN-FLIGHT ESCAPE SYSTEMS
- 4.6.2.2 CRASHWORTHY SYSTEMS & INSERVICE PRODUCTION SUPPORT
- 4.6.2.3 FACILITIES

- 4.6.3.1 HEAD-MOUNTED SYSTEMS
- *4.6.3.2 BODY MOUNTED SYSTEMS
- 4.6.3.3 PLATFORM MOUNTED SYSTEMS

- *4.6.4.1 HUMAN PERFORMANCE TECHNOLOGY
- 4.6.4.2 BIOMEDICAL SUPPORT
- 4.6.4.3 HUMAN ENGINEERING APPLICATIONS & CREW STATION TECH

MAJOR THRUSTS

CREW SYSTEMS INTEGRATION

PILOT VEHICLE INTERFACE

LASER EYE PROTECTION

CONTROLS & DISPLAYS

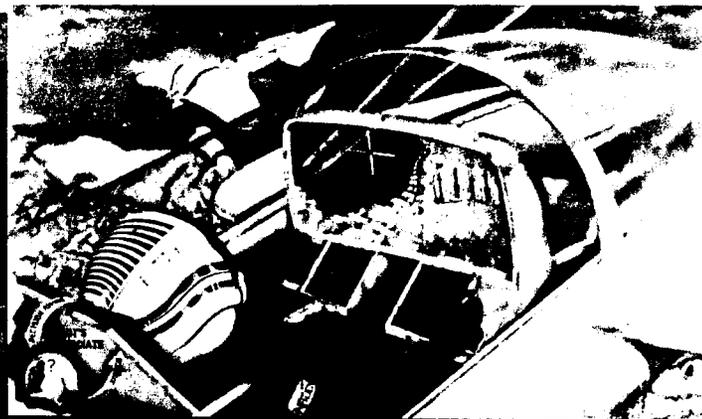
INFORMATION MANAGEMENT

PERFORMANCE ASSESSMENT AND ENHANCEMENTS

AIRCRAFT/AIRCREW VULNERABILITY & SURVIVABILITY

FEMALE AVIATOR

CBR



DFS UNIQUE FEATURES



- HIGH FIDELITY FLIGHT SIMULATION USING MOTION BASE
- TRUE MULTI-AXIS G-FORCES (GX, GY, GZ)
- 50 FOOT RADIUS/ 16,000 HP MOTOR
 - DOUBLE ANY OTHER US DEVICE
 - LESS DISORIENTATION
- MAXIMUM 40 G
- G-ONSET BETTER THAN HOTTEST MILITARY AIRCRAFT : 13 G/SEC

DFS vs Centrifuges



| Characteristic | NAWC AD - DFS | WPAFB - DES | Brooks AFB / Holloman AFB | NAS Lemoore |
|---------------------------|---------------------------------------|---------------------------------|---------------------------|-----------------------------------|
| Radius | 15m (50 ft) | 6m (20 ft) | 6m (20 ft) | 7.6m (25 ft) |
| G-Onset Rate | 13 G/sec | 1 G/sec | 6 G/sec | 6 G/sec |
| Cockpit Axis Controls * | 2 - Active | 2 - Active, Limited Performance | 1 - Passive | 2 - Active |
| Flight Simulation Capable | Yes - Demonstrated | Not Possible | Not Possible | Not Possible |
| Comments | F14A, F14D, F18, ATF, Generic Fighter | Very Low Performance | BRAC 95 | Dedicated to G Tolerance Training |

* Flight simulation requires 2 actively controlled axes

Prospective Foreign Facilities



- Under Construction or RFP's Out
 - France (Taiwan)
 - Singapore
 - Sweden
 - Indonesia
- Developing RFP's
 - Canada
 - Great Britain
- All used for training and limited DFS

Document Separator



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350 2000

IN REPLY REFER TO

5000
Memo N880G4/40156
6 January 1995

From: Chief of Naval Operations (N88) -
To: Commander, Naval Air Systems Command (AIR-00)

Subj: CLOSING OF THE DYNAMIC FLIGHT SIMULATOR AT NAWC WARMINSTER

1. A recent BRAC-95 Scenario Development Data Call Tasking (#3-20-0164-030) proposed closing the NAWC Detachment Warminster. One of the facilities included in the detachment is the Dynamic Flight Simulator (DFS). The DFS is a one of a kind unique device, the only "super centrifuge" in the world capable of accurately replicating dynamically unstable flight; the specialized work performed by the DFS cannot be re-distributed to other facilities.

2. The majority of the flight regimes studied with this device are unsafe for flight test in aircraft. The DFS is the only device which can recreate the full range of stresses on a pilot. In the recent past, the DFS has been used to address a number of safety problems including F-14 flat spin and F/A-18 G-induced loss of consciousness. The results of both of these projects led to improvements in cockpit warning systems, restraint systems, and flight techniques. These advances in aviation safety could not have occurred without the DFS.

3. The DFS site at NAWC Warminster is unusual because of the large deposit of bedrock upon which it sits. The DFS was specifically built into this bedrock base to provide the structural support needed when generating the centrifugal forces and torque required for DFS function. Finding and preparing another facility which has the bedrock to support the DFS will be cost prohibitive.

4. Work performed at the DFS has significantly benefitted Navy/Marine Corps Aviation safety and survivability. I am concerned that the closing of NAWC Warminster and potential elimination of the DFS will negatively affect future flight safety projects. With the closing of NAWC Warminster, I request you consider maintaining Department of the Navy operation of the Dynamic Flight Simulator at its present location.

5. N88 Point of Contact is LCDR Chris Real, N880G4, x3-2937.

*Bill would really help
if we could get some more
endorsement. I'll try but
would appreciate your help.*

Brent M. Bennett
BRENT M. BENNITT
By direction

Copy to:
ASST(RDA), ESAT, CNO(N44)



Fact Sheet

NAVAL AIR WARFARE CENTER • AIRCRAFT DIVISION WARMINSTER
 P.O. BOX 5152 • WARMINSTER, PA 18974-0591
 (215) 441-3444 • DSN 441-3444 • FAX (215) 441-1995

The Naval Air Warfare Center Aircraft Division Warminster ((NAWCADWAR) is the principal Navy research, development, test, and evaluation center for aircraft, airborne Anti-Submarine Warfare(ASW), and aircraft systems (less aircraft-launched weapon systems). It is located approximately 28 miles northeast of Philadelphia in Warminster, PA. NAWCADWAR is one of five sites that comprise the newly created Naval Air Warfare Center Aircraft Division, which is headquartered at Patuxent River Naval Air Station, MD.

Operations

NAWCADWAR is the primary research and development center for airborne ASW, aircrew life support systems, and tactical aircraft (minus weapons).

Modern airborne ASW capability began here and now includes programs to develop revolutionary acoustic and non-acoustic sensors. These sensors are sonobuoys dropped from aircraft. They locate submarines actively, by echo returns, or passively, by undetectable listening.

NAWCADWAR is the lead in-house development laboratory for major upgrades to the LAMPS, carrier-based helicopters, software and signal processing upgrades for carrier ASW aircraft and the carrier ASW comprehensive control module. NAWCADWAR provides upgrades and life support for existing fleet aircraft such as the F/A-18, F-14, and the E-2 aircraft.

This facility also provides weapons systems engineering and verification for the P-3C Update IV avionics systems, and acoustics channel expansion program to enhance the Navy's ability to detect and track submarines.

NAWCADWAR is charged with performing vital engineering and tests for aircraft reconnaissance systems using unmanned autonomous vehicles. Additionally, this site provides long-term support to aircraft development in diverse specialties such as flight controls, crew equipment, materials and sensors technologies, simulations, laboratories, and stealth-type high performance airborne systems.

Projects

The research, development, testing, and evaluation is conducted by three systems departments and three technical departments. The systems departments are ASW, Tactical Air, and Warfare Systems Analysis. The technical departments are the, Air Vehicles and Crew Systems, Mission Avionics, and Systems and Software.

The following are significant on-going projects:

Land-based, Fixed-Wing ASW Patrol Aircraft

Design, development, integration, and test support of computer equipment, and programming avionics improvements for the Lockheed P-3 Orion long-range, fixed-wing ASW patrol aircraft.

Advanced Systems and Sensors Integration

Research and development for air-launched sonobuoys used to detect undersea activity and transmit data back to aircraft flying overhead.

NAVAL AIR DEVELOPMENT CENTER

Crew System

Provide comprehensive support to aircrews. Includes all aspect of cockpit and crew station design such as life support, escape, protective gear, survival and rescue equipment.

Carrier-based ASW Module (CV-ASWM)

Develop VS System computer equipment and programs to protect carrier battle groups to include: life support cycles, technical support, liaison, and technology transfer. Additionally, this includes the development and use of airborne electronics. Together, this support helps to provide threat warning, surface surveillance, and long-range protection.

Vertical Flight

Technical center for all Navy anti-submarine helicopter programs. Provide support for key LAMPS, MK-III and SH-60F helicopter systems.

F-14 Development

Lead field activity for F-14D aircraft combat system development for both current and advanced application.

ASW Laser Radar

Lead laboratory in the development of a sonar system for airborne ASW laser radar. It is investigation efficient high average power blue-green pulsed lasers, efficient optical receivers, high speed scanners and real-time signal processing.

Infra-Red Search and Track (IRST)

Development of an infra-red sensor system to improve tactical aircraft capability to detect and engage threat aircraft at increased distances.

Naval Aircrew Common Ejection Seat (NACES)

Development of a common ejection seat for F/A-18, T-45, and F-14D aircraft.

Structural Appraisal of Fatigue Effect

Development and implementation of service life monitoring programs to assure the structural integrity of Navy aircraft.

Synthetic Aperture Radar

Development of a multi-frequency and polarimetric synthetic aperture airborne radar system for ocean and terrain sensing.

History

This site was originally established during World War II to meet the growing needs of a nation at war. In 1944, the Navy acquired the Brewster Aeronautical Corporation consisting of one million square feet of space, in addition to an adjoining airfield and aircraft hangars. Designated the Naval Aircraft Modification Unit (NAMU), the mission was to convert and modify Navy aircraft prior to delivery to combat units.

After the war ended, increased emphasis was placed on research and development activity.

August 1947: NAMU was redesignated the Naval Air Development Station and established as an independent and self-sufficient naval activity.

1947-1949: Several activities were transferred to Warminster, that included a reorganization to facilitate more efficient research and development in unmanned aircraft, electronic systems and components, and aviation armament. The site was renamed the Naval Air Development Center (NADC). Support functions become assigned to NADC to include: administration, industrial relations, security, medical, public works, operations, supply, and naval air station.

July 1950: Aeronautical Computer Laboratory added.

Initially as small engineering team later becomes a laboratory using the TYPHOON, the largest analog computer of its day.

June 1952: Avialton Medical Acceleration laboratory added. The world's largest centrifuge is dedicated. It is here that the Project Mercury astronauts received training.

December 1953: Aeronautical Instruments and Aeronautical Photographic experimental laboratories transferred to NADC from the Naval Air Materlal Center, Philadelphia. Three new branches added; simulation, inertial navigation, and systems and computers.

1958: Antisubmarine Warfare Laboratory established.

1963: Naval Air Station is redesignated the Naval Air Facility.

July 1965: Reorganization consolidates existing laboratories into four functional departments (Aero Electronics Technology Department, Aero Mechanics Department, Aerospace Medical Research Department) and adds the Systems Project Department. A computerized management information system is implemented.

February 1968: The Systems Project Department and the Air Warfare Department are disestablished. Resources are merged into a single department, the Systems Analysis and Engineering Department.

September 1968: Members of the Aerospace Medical Research Department, and the Aerospace Crew Equipment Department, form the Life Science and Bio-Equipment Group that is tasked to develop and conduct research in human behavior and associated tangents.

March 1971: Life Sciences and Bio-Equipment Group, Aerospace Crew Equipment Department and the Aerospace Medical Research Department consolidate to form the Crew Systems Department.

November 1971: Admimistration Department expands to include the Public Affairs Office, and Engineering Support Division, Technical Publications and Presentation Division, and a Technical Information Division.

January 1972: Aero Material Structures Aero Mechanics become the Air Vehicle Technology Department.

November 1973: The relocation of personnel from the Naval Strategic Systems Navigation Facility in Brooklyn, N.Y. begins. This group, combined with the Navigation Section of the Air Vehicle Technology Department and the Aero Electronic Technology Department, form the Naval Navigation Laboratory.

June 1975: The Technical Services Department is created from Engineering Shops, the Environmental Facility Support and Standards Division, the Presentation and Information Division, and the Structural and Aircraft Fire Division.

October 1977: An increased workload, personnel reductions, and a need to improve efficiency lead to a reorganization. Six technical directorates include: Systems, Sensors and Avionics Technology; Communication, Navigation Technology; Software and Computer; Aircraft and Crew Systems Technology; and Command Projects. The three support groups are the Administrative, Engineering, and Planning Assessment Resources. Additionally, the Naval Air Facility is merged with NADC.

May 1983: The Computer Services Department is established to provide general computing services required to support the center and all technical programs.

1991: Defense Management Review recommends consolidation of R&D laboratories and T&E facilities.

1991: Base Closure and Realignment Commission recommended approval of the Warfare Centers.

1992: Officially became the Naval Air Warfare Center Aircraft Division Warminster.

PROJECTED DFS BUDGET (\$K)



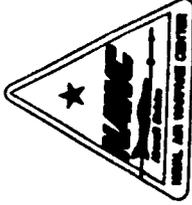
| <u>Funding Area</u> | <u>FY95</u> | <u>FY96</u> | <u>FY97</u> | <u>FY98</u> | <u>FY99</u> |
|---|--------------|--------------|--------------|--------------|--------------|
| Science and Technology (6.1, 6.2, and 6.3) | 1300 | 1040 | 790 | 540 | 500 |
| Demonstration/Validation (6.4) | 100 | 750 | 850 | 700 | 0 |
| Engineering and Manufacturing Development (6.5) | 450 | 300 | 150 | 560 | 760 |
| External to NAVAIR Programs | 100 | 205 | 585 | 585 | 335 |
| TOTAL | 1950K | 2295K | 2375K | 2385K | 1595K |
| TOTAL x 0.75 | 1463K | 1721K | 1781K | 1789K | 1196K |

Notes:

TOTAL x 0.75 represents a reasonable expectation accounting for budget cuts and program slips.

Out-year funding projection may fall due to loss of DFS staff responsible for the funded project concepts.

DFS EXPECTED INCOME AND UTILIZATION



| | FY93 | FY94 | FY95 | FY96 | FY97 | FY98 |
|--------------|-------|-------|-------|-------|-------|-------|
| Gross Income | 1472K | 1304K | 1463K | 1721K | 1781K | 1789K |
| Utilization | 67% | 67% | 67% | 70% | 71% | 71% |

Document Separator

This page contains a pamphlet that was too large to be scanned in for electronic view regarding RF Microelectronics Laboratory, Naval Command Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, PA.

This page contains a pamphlet that was too large to be scanned in for electronic view regarding Navigation Systems Development and Integration Division, Naval Command Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, PA.

Inertial Test Requirements/Capabilities

| | NRaD | Holloman, AFB | Eglin, AFB | AGMC, OH | Microelectronics |
|--|--|---|--|---|--|
| Type of Facility | Sensor/System RDT&E | Sensor/System T&E | System Integration Lab - 1 simulator | Repair Facility No RDT&E! | Electronic component prod. |
| Primary Platform Application | Ships/Submarines (low-dynamic, long-term drift performance - e.g., 1 nmi over 14 to 60 days for submarines) | Air vehicles (high-dynamic, short-term drift performance - 1 nmi/hr for 8 hour mission.) | Missiles (high-dynamic, short-term drift performance - 1 nmi/hr for 2 hour mission) | Component, no system capability. Primarily, for air vehicles although some ship work. | N/A. |
| Quiet Test Environment | Yes, 10^{-7} g's No restrictions! | Yes, 10^{-6} g's ¹ . | No, 10^{-4} g's | Yes, 10^{-5} to 10^{-7} only short-term data available. | No comparable requirement. ² |
| Demonstrated long-term test pier stability | Yes, tilt less than 1 arc second/month | No data available. ³ | No data available, lack test piers. | No data available. ³ | No ² |
| Specialized Building design | Yes, rigorous design. | Yes, less rigorous | No | No, less rigorous. | No |
| Planned Improvements | None | None, but.... ⁴ | None | Closing (BRAC93) ⁵ | None |

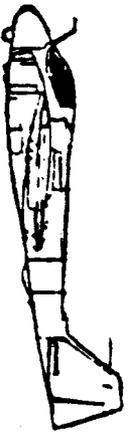
1. Noise limiting restrictions required on local foot, vehicle, air traffic and air conditioning usage.

2. As long as vibration effects are relatively equal between etcher and wafer, vibration is not a problem and 10^{-7} is regarded as "overkill" by experts (Tony Carpino at IBM Manassus Va., and Dr. Marty Peckerar at NRL).

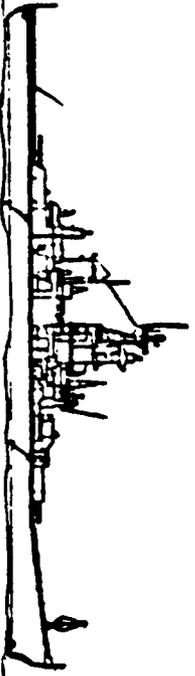
3. Most stringent requirements are on the order of 1/2 to 1 arc second per day. No long-term data because it is not an air requirement.

4. Holloman proposed new, quieter test facility in Sunspot, NM (\$ 73M in FY-91 dollars) but were not funded.

5. Undergoing privatization but encountering problems with proprietary data rights.



NAVIGATION FACILITIES



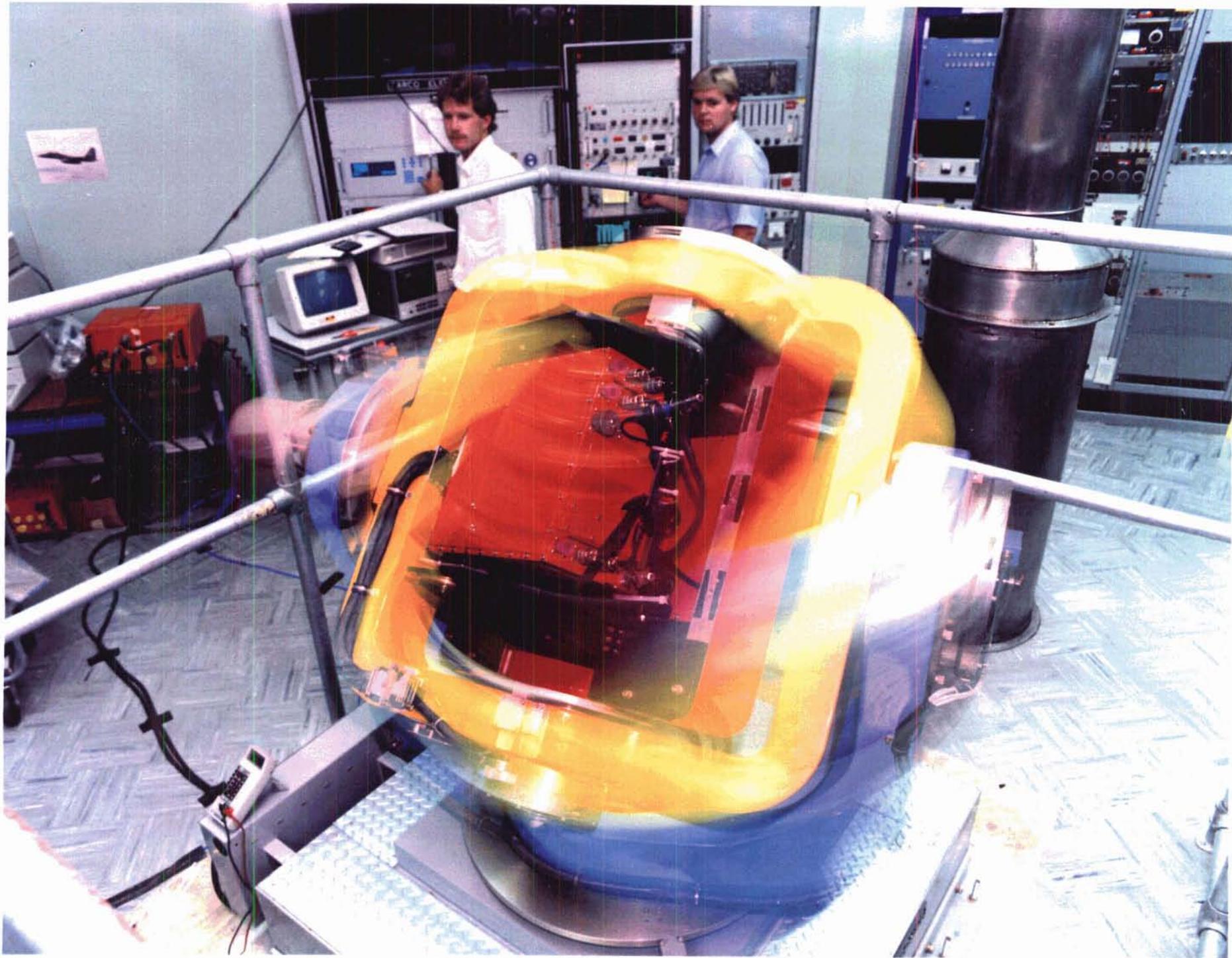
INERTIAL NAVIGATION FACILITY (INFAC) BUILDING 108

DESCRIPTION: The inertial navigation building (108) was specially designed and located to create a seismically stable environment. The building is constructed on bedrock and is remote from traffic to minimize ground conducted noise and instability. INFAC is circular in shape with a diameter of 155 feet. It was built below grade with a convex roof to minimize wind effects. A smaller separate building houses the machinery and equipment which provides INFAC with power, heat, and water to further reduce the introduction of shock and vibration.

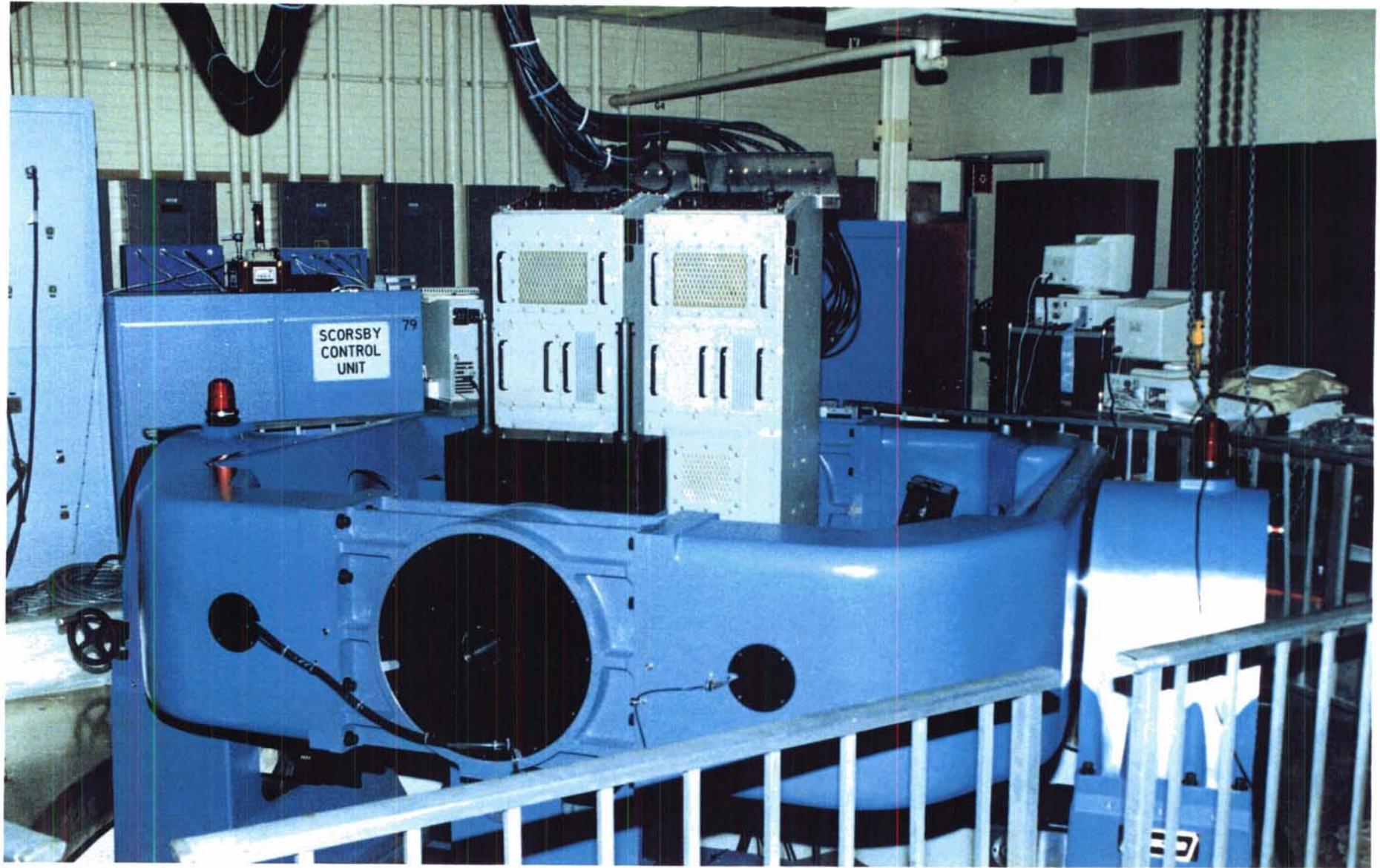
The building houses the: Quiet Test Laboratory; Aircraft Motion Simulator and; Special Design and Fabrication Laboratories.

- USAGE:**
- (1) Precise measurement of inertial sensors performance characteristics
 - (2) Aircraft and marine inertial sensor design and fabrication
 - (3) Dynamic test of aircraft navigation systems
 - (4) Office space for associated engineers and scientists











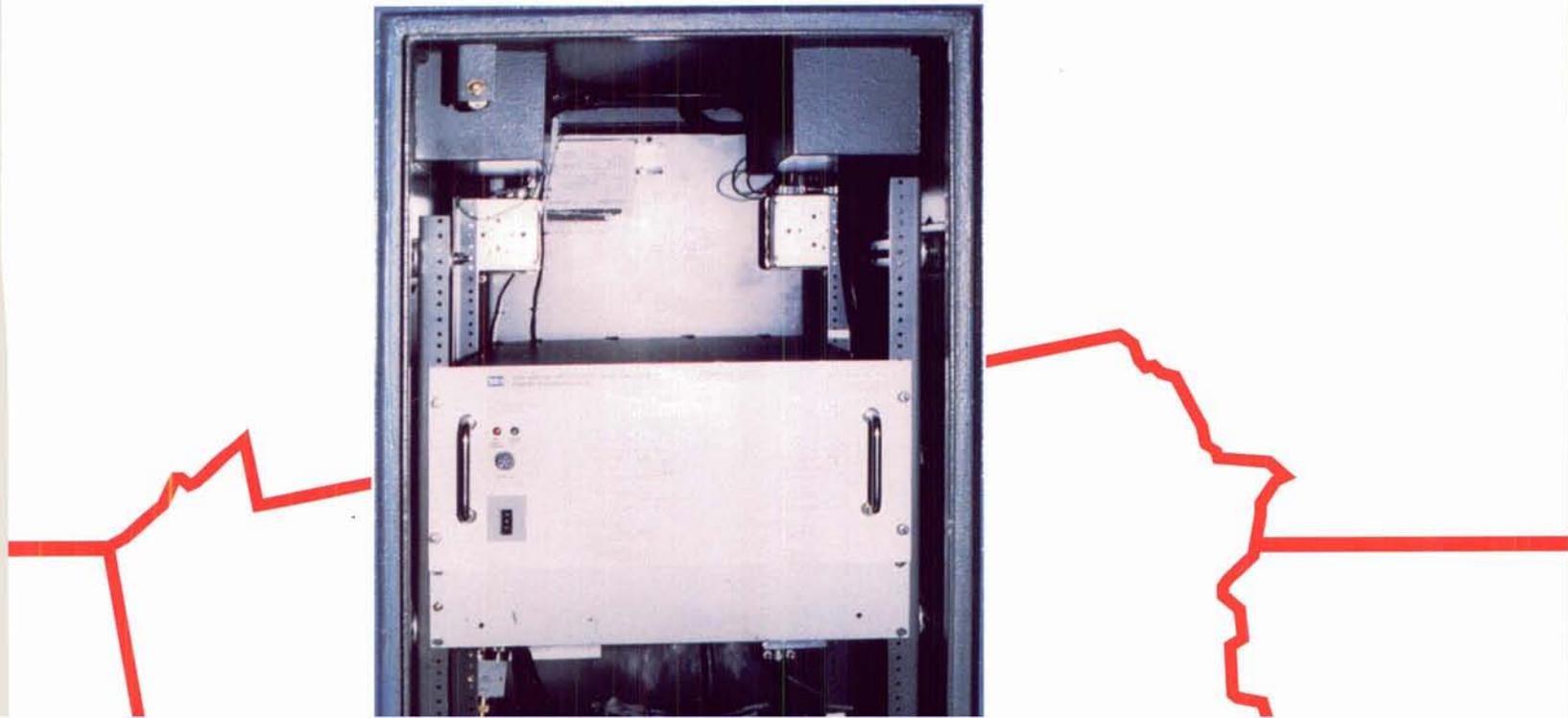
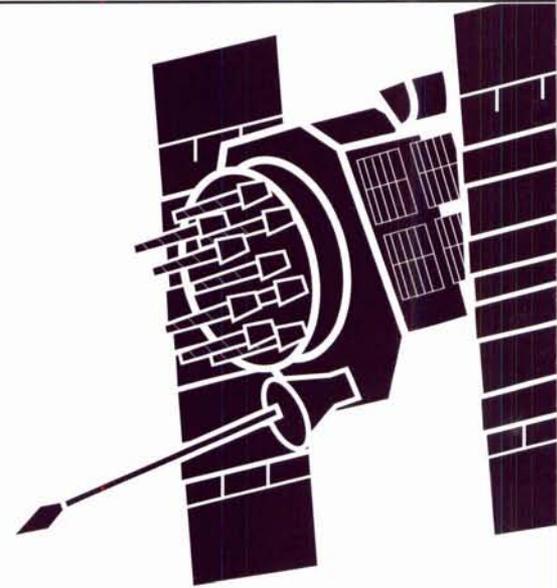
Naval Command,
Control and Ocean
Surveillance Center
RDT&E Division
Detachment

Warminster, PA
18974-0591



Global Positioning System (GPS) Laboratory

A Unique GPS UE Lab





The GPS Laboratory comprises both a realtime user equipment-in-the-loop facility and a data processing and off-line simulation facility. The antenna tower (enlarged in photo at right) is used to obtain live satellite signals and can be seen on the roof.



NRaD has an extensive collection of receiver equipment in-the-loop test data, serving as a basis for present and future analyses.

WELCOME TO THE GPS LABORATORY

Since 1980, the GPS Laboratory at NRaD's Warminster Detachment has been the Navy's lead laboratory for developing GPS receivers. It is a unique 13,000 square-foot state-of-the-art facility — providing GPS user equipment (UE) with a development, integration, and test and evaluation environment. Through realtime simulation of both GPS satellite signals and host-vehicle communications, the facility exercises GPS UE hardware and software dynamically, under precise laboratory conditions; and these environments can be replicated exactly the same, as many times as needed. The broad repertoire of laboratory capabilities spans bid sample testing, such as done for the Precise Lightweight GPS Receiver (PLGR) — to remedial action verification of the Rockwell Collins 3A and 3S Receivers; from providing the environment for the Software Support Activity (SSA) for the GPS Flight Software (GFS) aboard the Tomahawk Land-Attack Missile (TLAM) — to evaluating navigation performance and operational use for candidate receivers used in Somalia. The laboratory's unique ability to perform this range of testing is provided through a special combination of features housed within one facility.

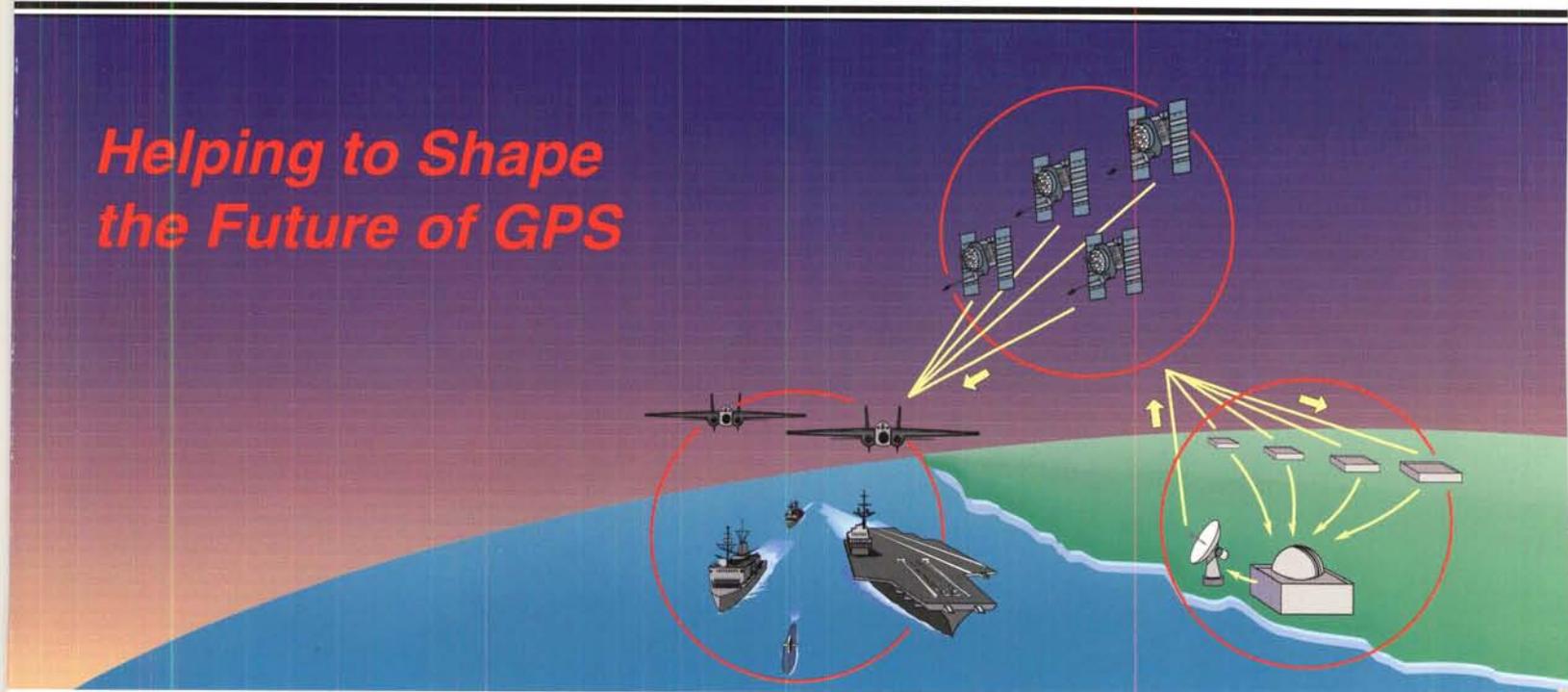
A UNIQUE GPS LABORATORY

The laboratory's Satellite Signal Simulator (SSS) is a system of processors and transmitters that calculates trajectory data and generates realistic RF signals that a GPS receiver would encounter in a live satellite vehicle (SV) environment. The receiver could be on any platform, experiencing any dynamics on any point on earth, at any point in time, thereby enabling extremely accurate testing and evaluation of the receiver's performance. And, as the original developer of the SSS, NRaD is fully capable of modifying the software and firmware for new applications. One example of such an extension of SSS capabilities is the enhancement developed to test both code and carrier-based differential GPS (DGPS) by synchronizing multiple simulators.

To achieve the testing accuracy required for GPS, cesium clocks allow precise time-coordinated RF and host-platform simulation. NRaD has also developed very precise calibration techniques for its simulators, using the monitor station receiver element (MSRE), which is the same receiver the GPS control segment uses for monitoring the satellites.

Flexibility in simulation is accomplished by downloading almanac data into the SSS, enabling simulation of a mix of healthy and

Helping to Shape the Future of GPS



NRaD's GPS LABORATORY

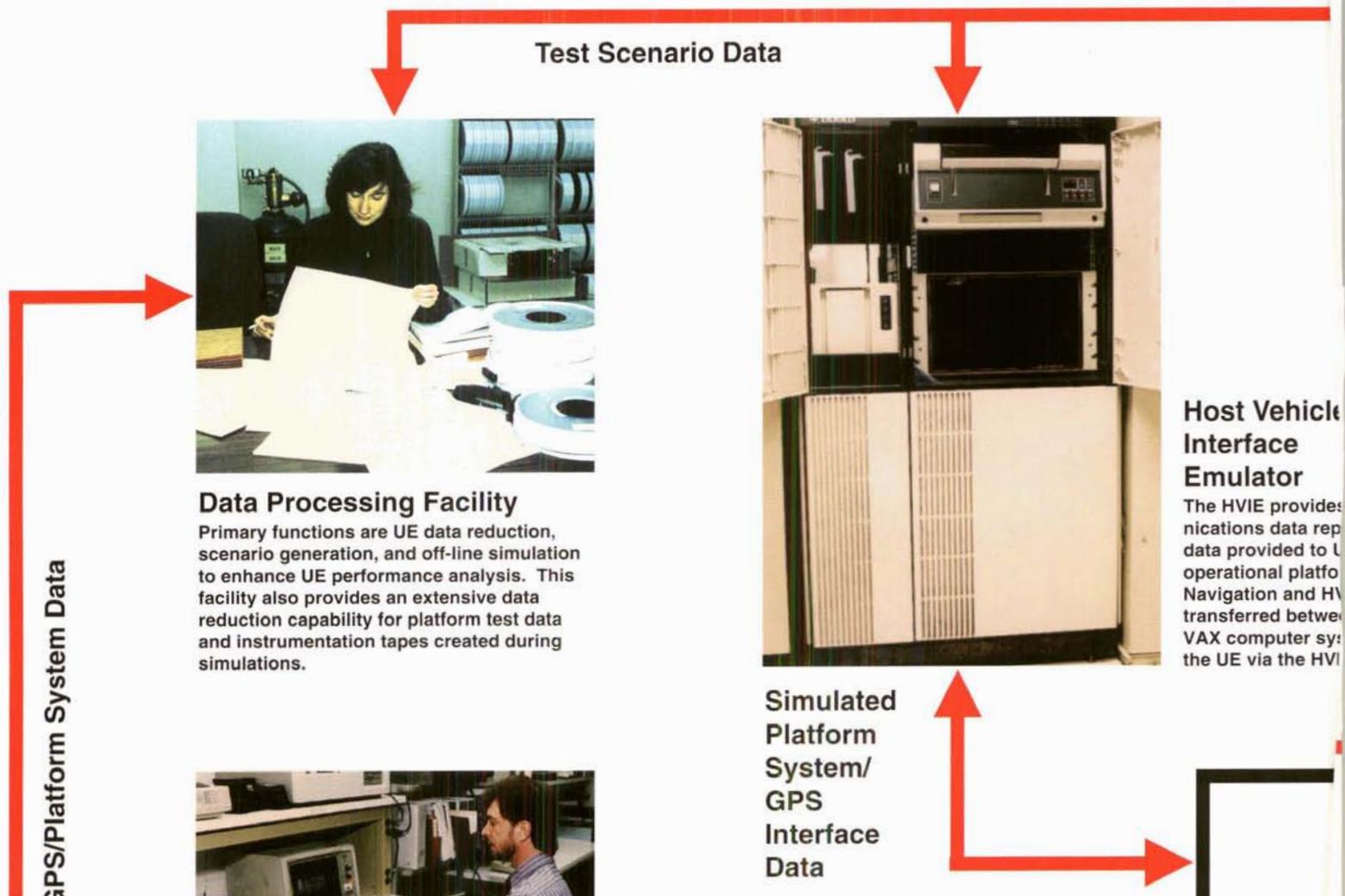
NRaD, a prime leader in RDT&E for GPS, has the specialized background and ability to readily and efficiently develop, integrate, test, and evaluate Government and commercial GPS user equipment . . . in a unique facility featuring state-of-the-art technology and an innovative and dynamic test environment. Thus, NRaD's GPS Laboratory will continue to support and enhance the Global Positioning System as it enters the 21st Century and a new era of navigation.

For further information about NRaD's GPS Laboratory, contact NRaD's GPS Program Office in Warminster, PA, at DSN 441-1200 or (215) 441-1200.



The GPS Laboratory Provides a Closed-Loop Environment

The GPS Laboratory's closed-loop environment enables an accurate recreation of field conditions for evaluating the performance and operation of GPS sets.





(Clockwise) Rockwell Collins 3A Receiver, MAGR Receiver, PLGR Receiver and the Rockwell Collins 3S Receiver are only a few of the GPS receivers tested in NRaD's GPS Laboratory.

INTERFACES

MIL-STD-1553 and Discretes
PTTI
MIL-STD-1397A/B
MK-82
ARINC 575 (INS)
ARINC 429 (Flight Instruments)
Synchro
UE Instrumentation Port

SENSOR MODELS

Inertial Navigation System (INS)
Barometric Gyrocompass
Directional Gyrocompass
Vertical Gyrocompass
Doppler Radar
EM Log
Magnetic Compass
True Air Speed (TAS) Indicator

THE GPS LABORATORY IS VERSATILE AND ADAPTABLE

Since its inception 10 years ago, NRaD's GPS Laboratory has continued to evolve and adapt to the rapidly changing world of GPS. Working with GPS requirements and technologies that change almost daily has honed the laboratory's capabilities and work processes into the most effective and efficient GPS resources currently available. Present laboratory incentives emphasize differential GPS, embedded GPS, and highly accurate, highly reliable GPS.

In order to develop, test, and evaluate (DT&E) these advanced GPS concepts, unique laboratory capabilities are continuously in use and under development in NRaD's GPS Laboratory. These capabilities include independent time-coordinated control of two GPS simulators in realtime, with vehicle dynamics; GPS quality-time synchronization of simulations; differential quality calibration of simulators (carrier phase levels); and realtime control of simulated satellite ranges at subcentimeter levels (carrier phase levels). Other tests involve surveying the quality of output from GPS satellite signal generators; controlling the scenario of carrier phase events (cycle slip on one satellite vehicle); and simulating differential accuracy, which is verified independently by the National Oceanic and Atmospheric Administration (NOAA). Also simulated and tested are specialized GPS satellite constellations and SV characteristics (e.g., spoofers and pseudolites).

Related DT&E capabilities include "What-If" studies involving modifications to GPS signal structure, pseudolites, GPS acquisition, reacquisition, tracking, SV selection, spoofing, and GPS denial. Other areas include DGPS receiver design and performance, kinematic differential GPS, use of GPS for landing approaches, GPS integrity and GPS integrity monitors, receiver-aided integrity monitoring (RAIM), and carrier phase-tracking receivers.



NRaD is the Software Support Activity (SSA) for the GPS Flight Software (GFS) in the GPS receiver embedded in the Tomahawk Land-Attack Missile (TLAM). The SSA is responsible for maintain-



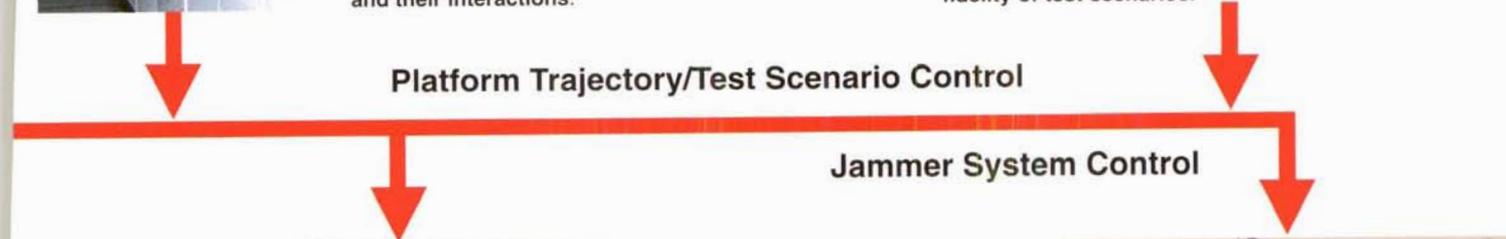
VAX Computer System

This system coordinates all the facility functions and their interactions.



Cesium Time Standard

This standard ensures synchronization between simulated satellite signals and host vehicle data being transferred to the receiver under test, thereby enhancing the fidelity of test scenarios.



Satellite Signal Simulator

NRaD developed the SSS to provide either 10-satellite or two 5-satellite constellations to emulate actual satellite signals under dynamic conditions. The subsequent 7200 series of commercial simulators was based on this SSS unit.



Jammer System

NRaD developed the dynamic jammer system to determine the receiver's ability to track satellites in various jamming environments. Two different signal generators provide sweep-CW, RM-tone, and AM-tone signals. A third source outputs noise for which power, center frequency, and bandwidth can be tuned. All three can operate simultaneously.

...commu-
representing
IEs on
rms.
/ data are
en the
stem and
E.

Simulated Satellite
RF Signal

RF Jamming



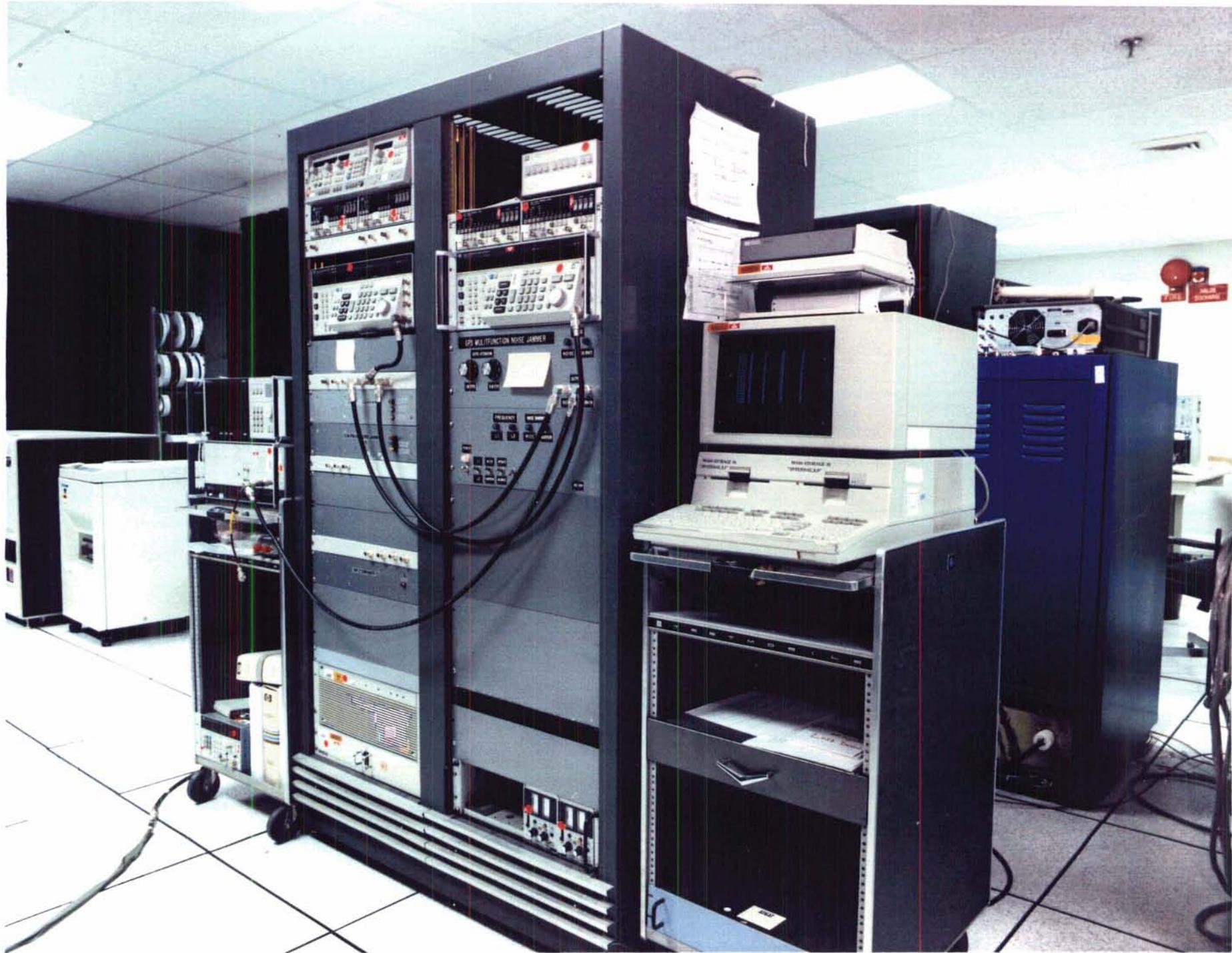
This page contains a pamphlet that could not be scanned in for electronic view regarding RF Microelectronics Laboratory

This page contains a pamphlet that could not be scanned in for electronic view regarding Navigation Systems Development and Integration Division



G 5





Document Separator



The Navy's Navigation Laboratory in Warminster, Pa



NAVIGATION CAPABILITIES



Overview

Mission:

- **NCCOSC RDT&E Division Det Warminster, PA is the Navy's Navigation Laboratory**
- **Responsible for the Research, Development, Test and Evaluation of Ship, Submarine and Aircraft Navigation Sensors and Systems**

People:

- **200 Engineers, Scientists, and Technicians with Specialized On-the-Job Navigation Training**

Facilities:

- **The Laboratory is a Complex of Buildings and Specialized Laboratories Dedicated to Navigation and Air C³**
 - **Designed Specifically for the Breadth of Navy Air and Marine Platform Navigation Requirements**
 - **Quiet Test Facility**
 - **Ships Motion Simulator or SCORSBY**
 - **GPS Receiver Test Laboratory**
 - **Communications Labs**
 - **Ocean Survey Program Lab**

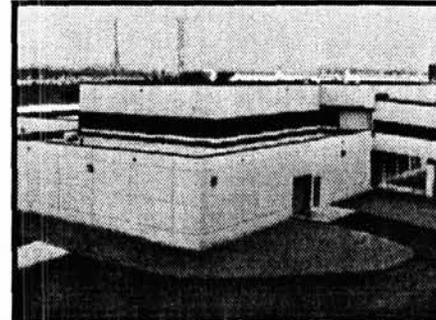


NCCOSC RDT&E Det Warminster PA Navy Navigation Laboratory Unique RDT&E Facilities



Inertial Test Facility

- Only One of Its Kind in the World
- Highest Accuracy Sensor Measurements
- Super Quiet (10⁻⁷g) / Long Term Stability Test Environment
- Specialized Building Design
- Not Relocatable
- \$30M Investment



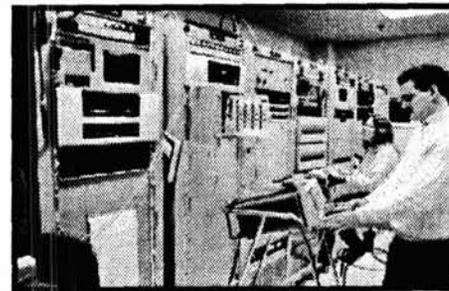
GPS Laboratory

- GPS User Equipment RDT&E
- Real Time, High Fidelity, Full Spectrum Operational Environment Simulation Lab
- Integral Part of GPS JPO DT&E Infrastructure
- \$12M Investment



Ships Motion Test Facility

- Marine Inertial Nav System RDT&E
- Very Accurate Attitude (1-2 ARC SEC) Reference
- Heavy System Capacity (3000 lbs)
- Supports NAVSEA, SPAWAR Programs
- Difficult / Costly to Move
- \$5.5M Investment



Ocean Survey Program Lab

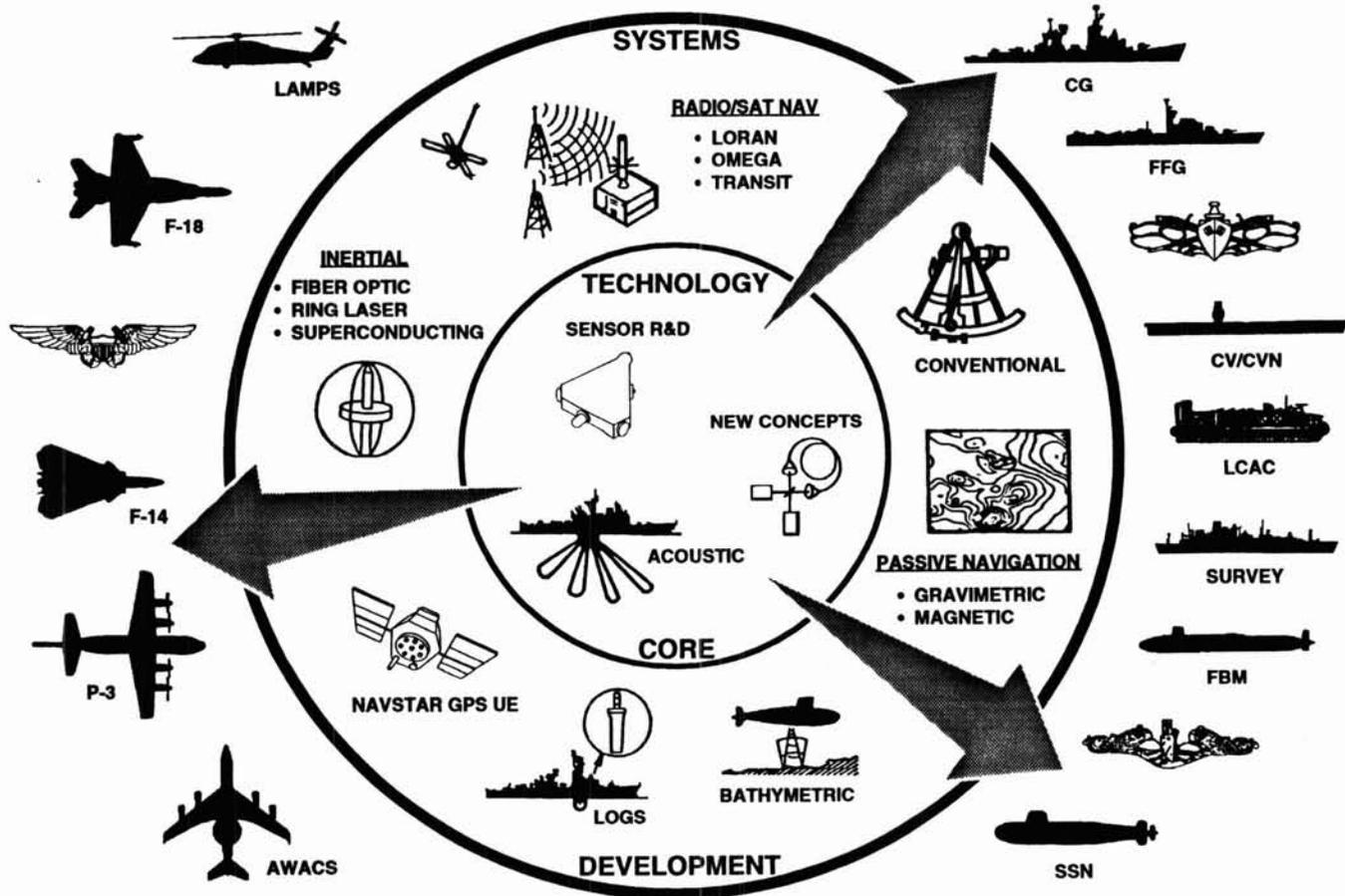
- Survey System Development / Integration
- Complete Navigation, Bathymetry & Oceanography System Dev / Integ Lab
- Supports Top Priority U.S. and U.K. Strategic Programs
- \$12.5M Investment

Collocation of These Facilities is Essential to Conduct Navigation RDT&E and Fleet Support



New Navigation Technology Into the Fleet

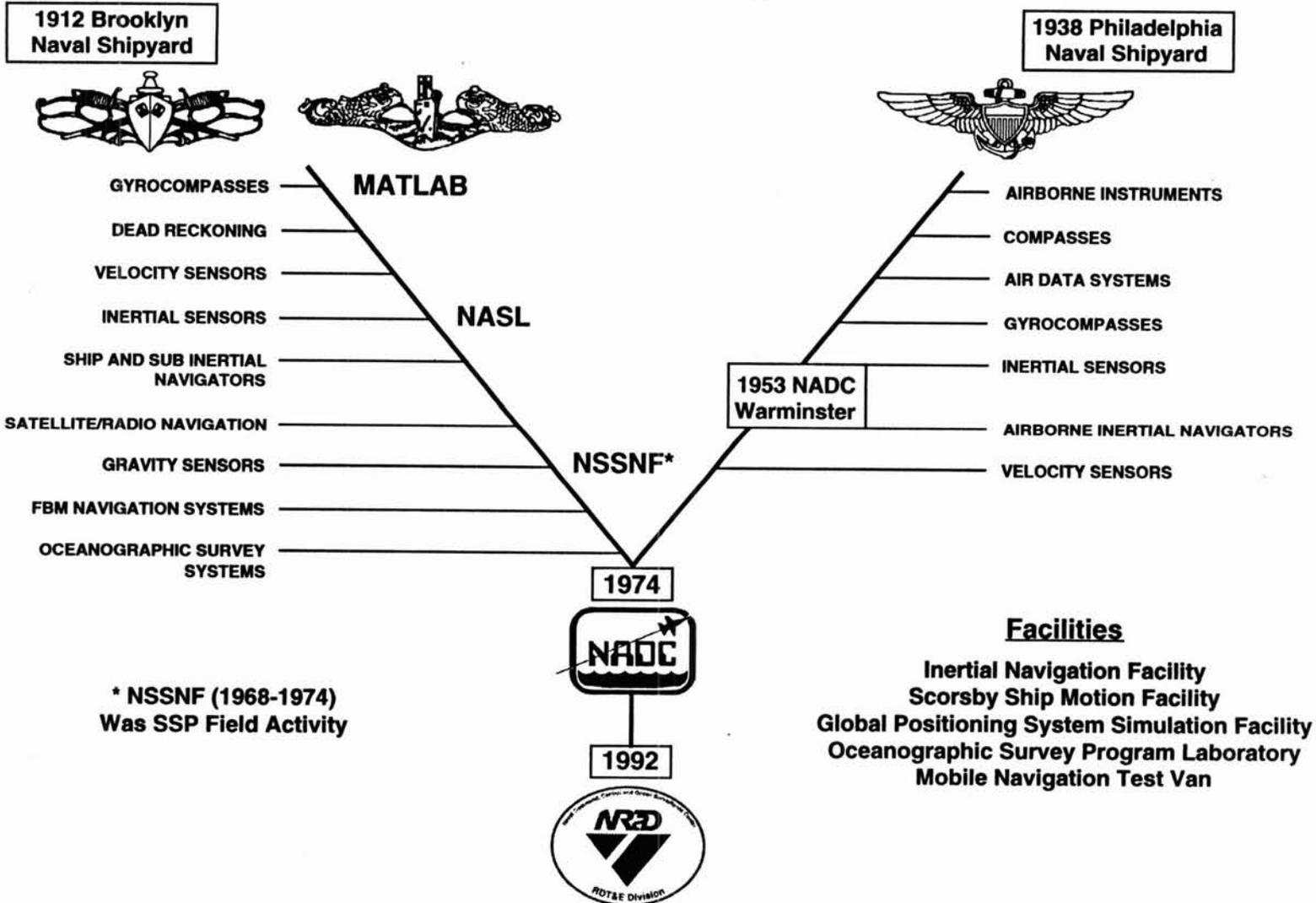
Navigation System & Platform Integration



Navigation Architecture



Over 80 Years of Navigation System Development





NRaD WARMINSTER Navigation

- **NRaD Represents DoD's Predominant Navigation R&D Capability**
- **Involved in Joint Programs as Central Engineering Activity for GPS receiver testing and designer of networking tools for Joint Tactical Information Distribution System (or JTIDS).**
- **NRaD has a growing business base with Navy, Air Force, Coast Guard, FAA, United Kingdom, Industry, and Academia providing task funding.**
- **NRaD has been working with the community to exploit the unique capability in navigation residing here. There is a genuine potential for growth, particularly in the commercial sector.**



NRaD Warminster's Viability

- **Project Funds (\$72.5M) Fully Support Operations**
- **Most efficient NRaD Department (measured by production rate).**
- **San Diego performs all overhead functions other than base operations. This has operated smoothly since inception in 1992.**
- **State-of-the-Art, wide-area, information network allows rapid exchange of information with headquarters.**



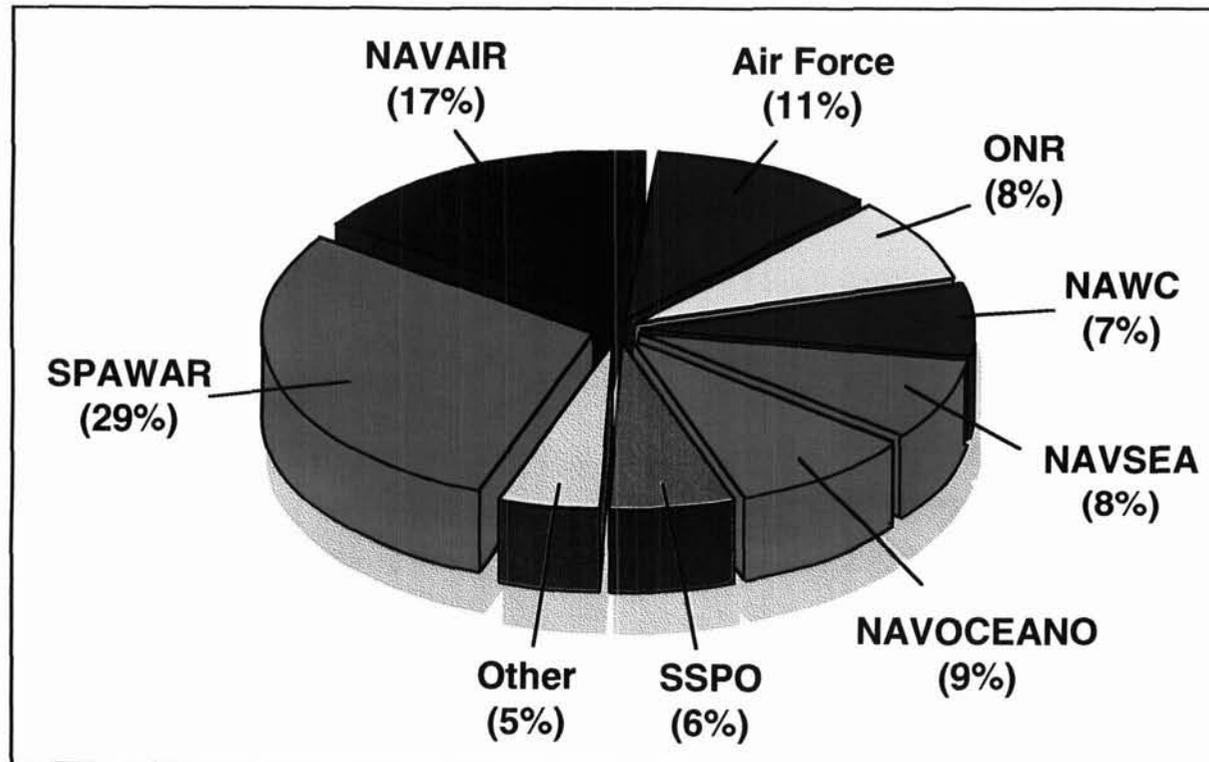
Facility Value

- **Military worth is demonstrated by increasing sponsor funding and fleet support.**
- **Commercial Potential in:**
 - **GPS receiver design and testing**
 - **Bottom-mapping (oil explorations, state rivers and ports, etc.)**
 - **Communications technology**



Funding by Sponsor

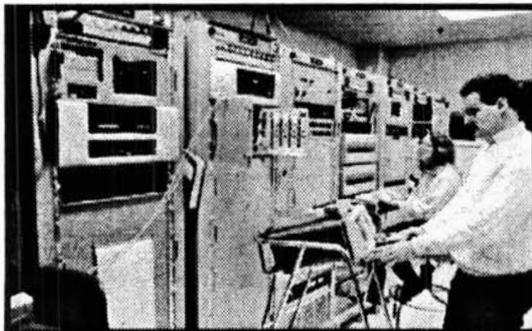
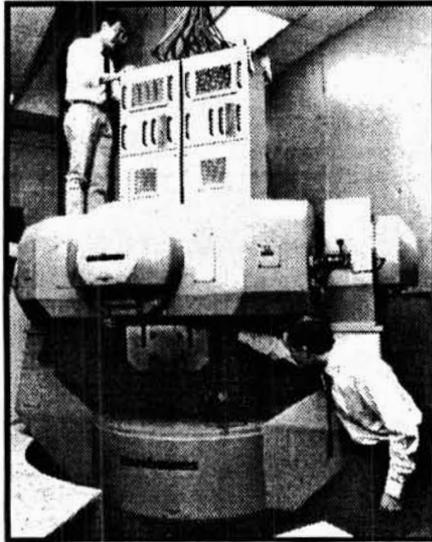
FY 1995



- | | |
|-----------|---|
| SPAWAR | - Space and Naval Warfare Systems Command |
| NAVAIR | - Naval Air Systems Command |
| NAVSEA | - Naval Sea Systems Command |
| ONR | - Office of Naval Research |
| NAWC | - Naval Air Warfare Center |
| NAVOCEANO | - Naval Oceanographic Office |
| SSPO | - Strategic Systems Project Office |
| Other | - FAA, USCG, United kingdom, Penn State |



Military Products



- **Navigation Sensors**
- **Inertial Navigation Systems**
- **Integrated Navigation Systems**
- **GPS Receiver Designs**
- **Ocean-Bottom Mapping Systems**
- **Navigation Sensor/System Evaluation**
- **Communications System Design and Evaluation**
- **RF Electronic Modules for Radar and Communications**



On-Going Navigation System Program Development

- **Objectives**
 - Reduced Cost
 - Reduced Size & Weight
 - Increased Reliability
 - Ease of New Technology Insertion

- **New System Architectures**
 - Ring Laser Gyro Navigators
 - Fiber Optic Gyro Navigators
 - Superconducting Gyros
 - Micromachined Gyros and Accelerometers
 - Microelectronics Developments
 - Gravity Navigation
 - Global Positioning System Integration

- **User Platforms**
 - New Attack Submarines
 - Trident SSBN Submarines
 - CVN76 Aircraft Carrier
 - Aegis Flt 2 Ships
 - LPH, LHA, LSP, L(X) Ships
 - LCAC Landing Craft
 - UH-1N, CH-46, C-130, HK-130, HC-130, EA-6B, CH-53 Aircraft

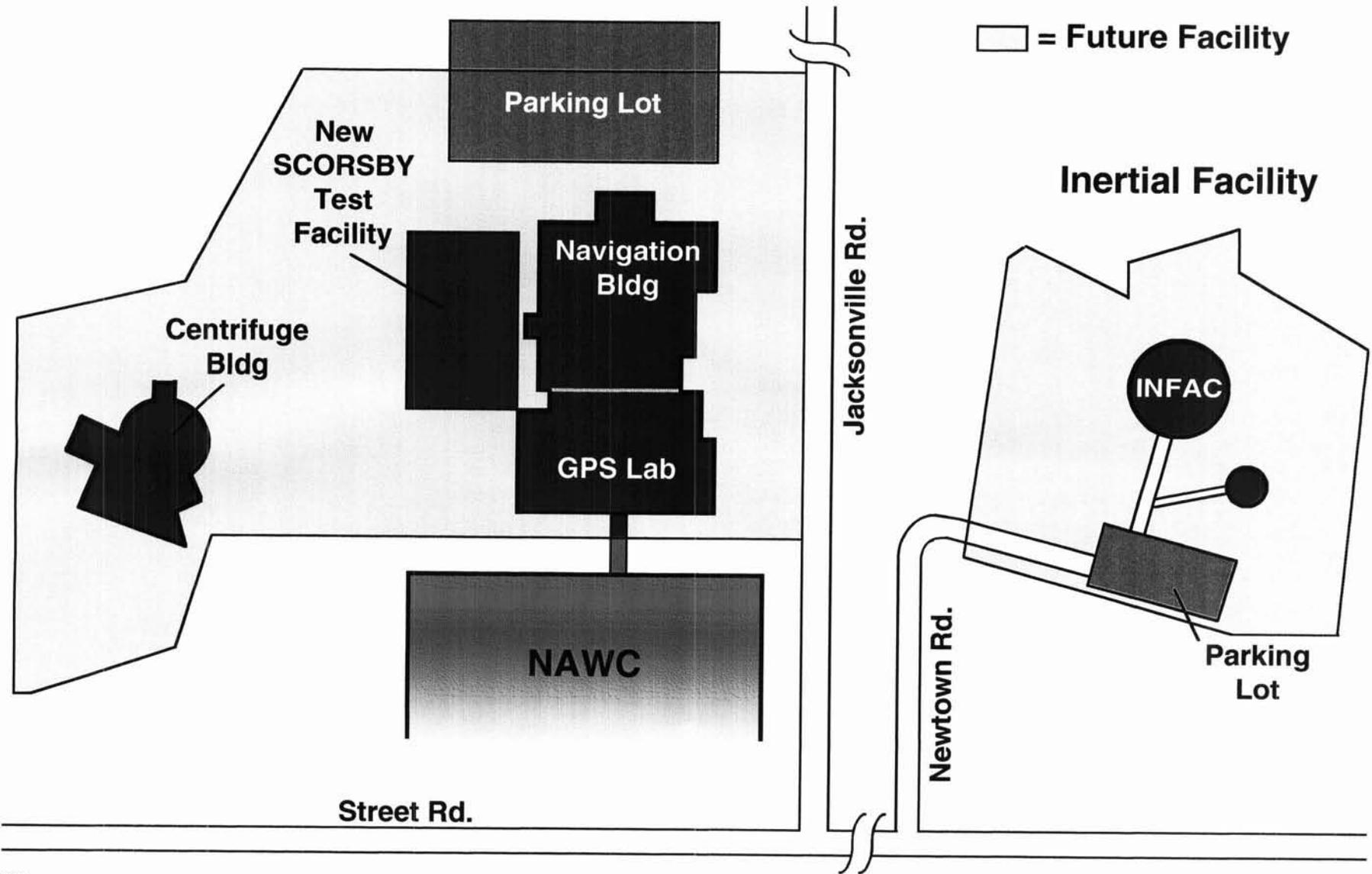


Warminster Navigation Facilities and BRAC'91 Actions

- **Transferred 244 Naval Air Development Center employees (later a part of the Naval Air Warfare Center) to the RDT&E Division of the Naval Command Control and Ocean Surveillance Center (known as both NCCOSC, RDT&E Division and NRaD).**
- **Specified a Warminster footprint of approximately 50 acres to include navigation buildings, Dynamic Flight Simulator and Inertial Facility.**
- **Provided funding to build a new 15,000 sq. ft. building to house both the SCORSBY's (ship motion simulators) and a microelectronic lab and to rehab office space in the centrifuge building for NRaD personnel displaced from NAWC spaces.**
- **Inertial Facility recognized as unique and immovable and required by the Navy.**



BRAC'91 Decision Future NRaD Warminster Footprint (35-45 Acres)





BRAC'95 Recommendations

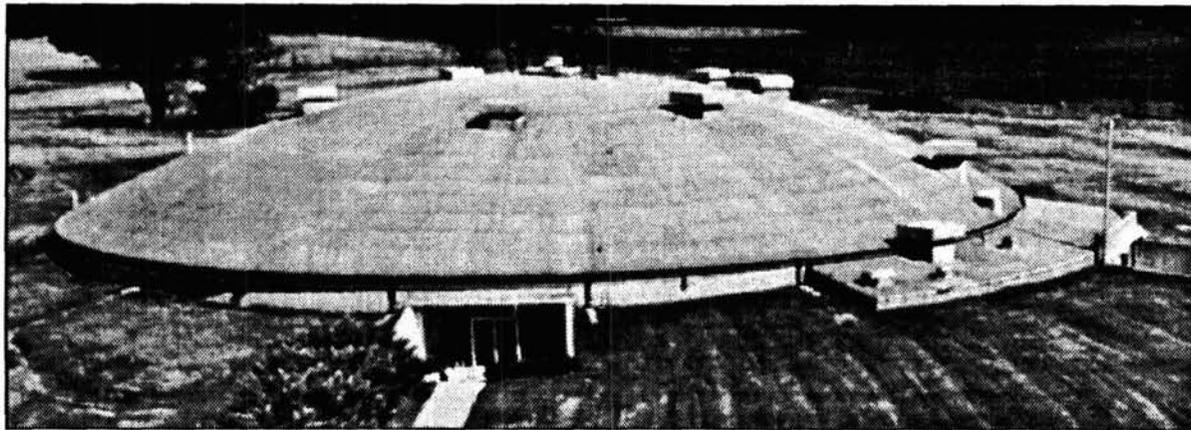
- **Relocate Functions**
 - San Diego, CA
 - Bay St. Louis, MS

- **Transfer Inertial Facility**
 - University/Industry
 - Maintain DoD Access



NCCOSC RDT&E Det. Warminster's Inertial Facility

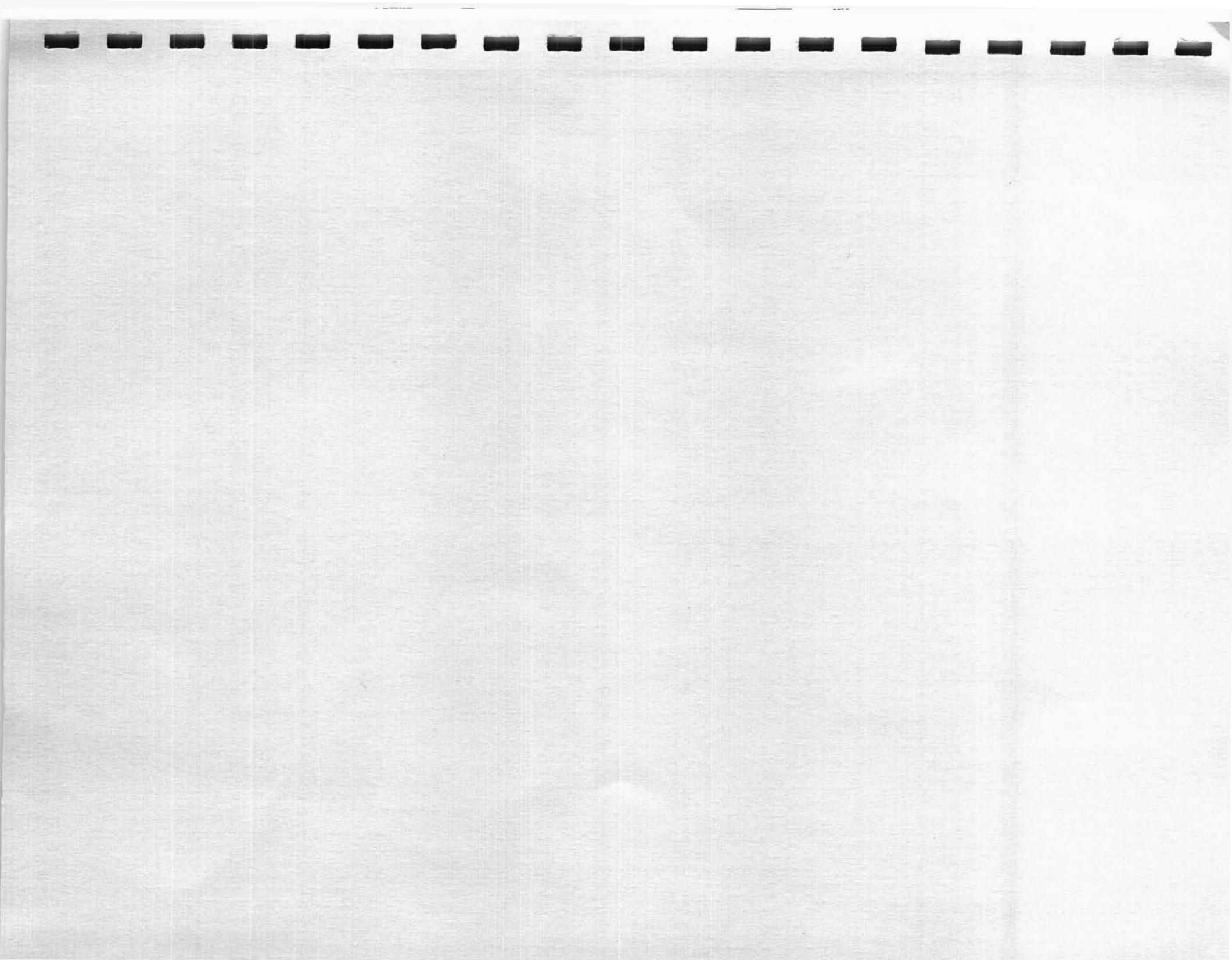
- **Only Building of Its Kind in the World**
- **Extremely Low Noise Environment**
 - Unique Nature of Bedrock Provides High Stability
 - Vibration (Approximately 1×10^{-7} g's)
 - Long Term Stability (Less Than 1 Arc Second/Month)
- **Environmental Noise Control**
 - Unique Design Minimizes Noise



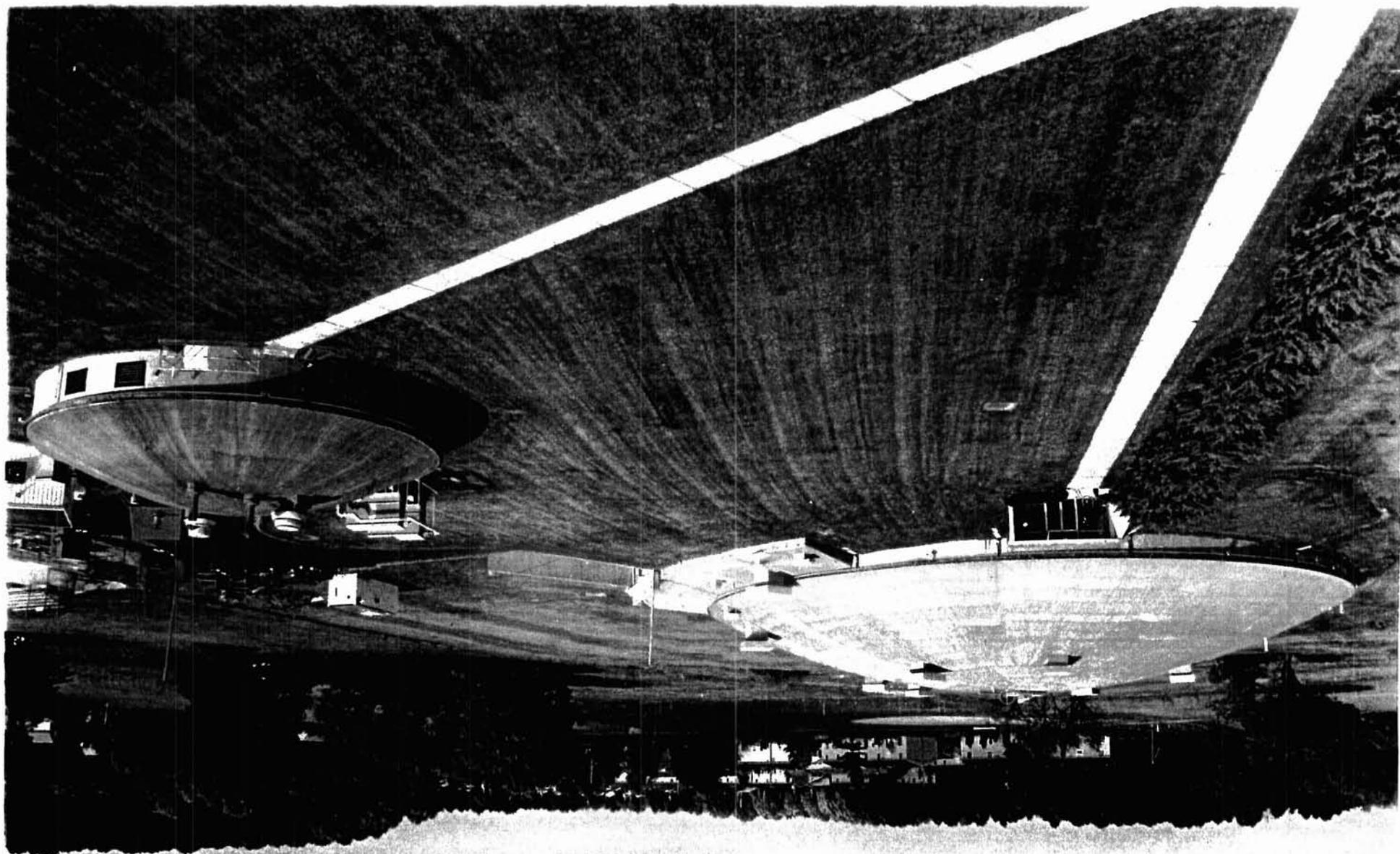


Summary

- **The Navy's Navigation Laboratory in Warminster, PA**
- **Navigation Corporate Memory - Over 80 Years**
- **Predominant DoD Navigation Laboratory Capability**
- **New Navigation Technology Development**
- **Total Navigation Capability (Cradle to Grave)**
 - **Major Facilities Collocated; Non Portable**
 - **Over 200 Navigation Engineers & Scientists Onboard**
 - **Extensive Product Line**
 - **All Navy Platforms Supported**
 - **Sensor R&D Through Total Integrated Systems**
- **Large Customer Base - \$72.5M in FY94**



Document Separator



QUIET TEST LABORATORY

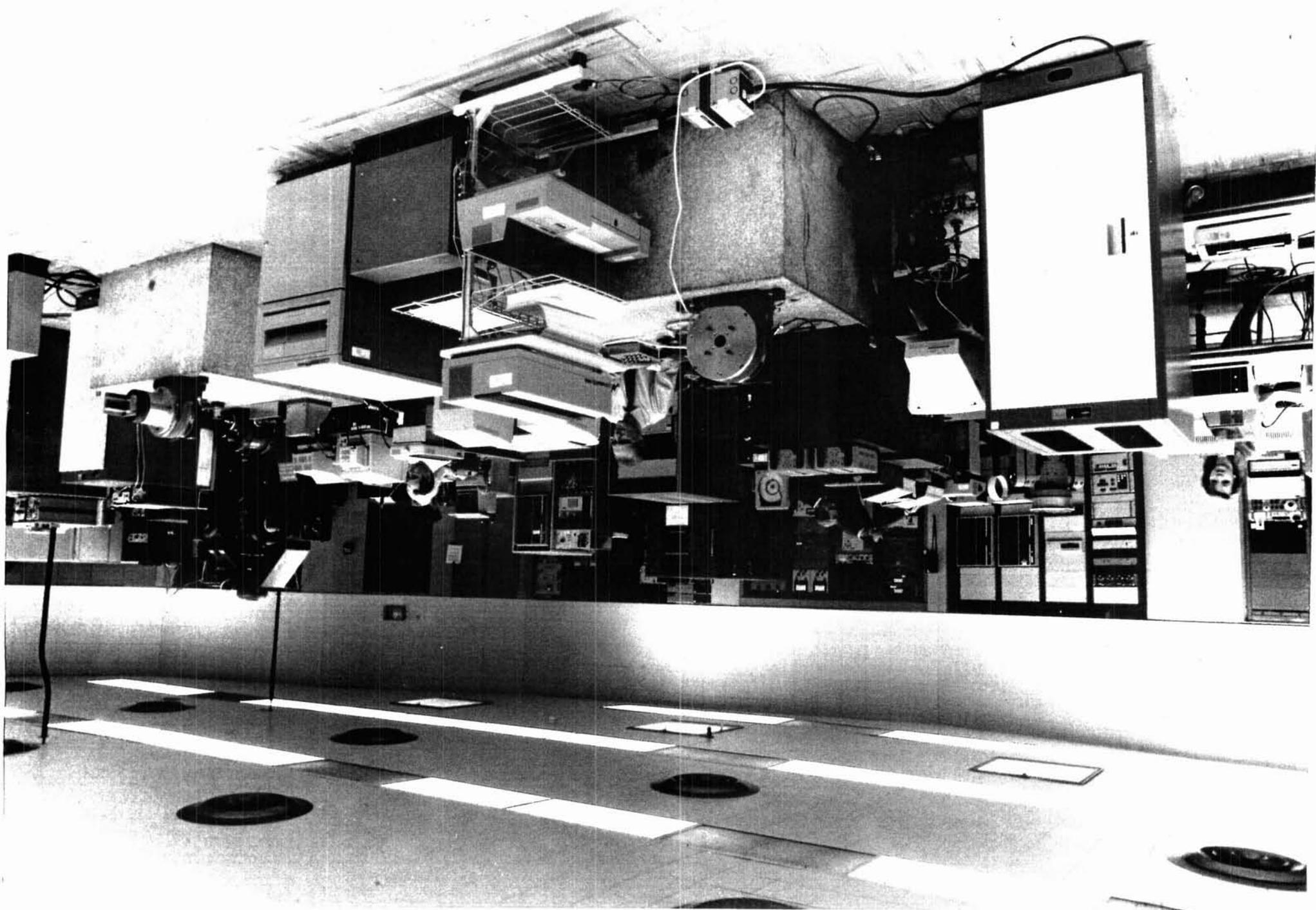
LOCATION: INFAC, (Building 108)

DESCRIPTION: The inertial navigation facility houses the Quiet Test Laboratory. It is 3700 square feet in area and contains 12 granite test piers which are directly bonded to the underlying bedrock. High accuracy test stations are mounted on each of the Test Piers enabling simultaneous investigation of various gyroscope and accelerometer technologies. Direct sighting of the North Star is achieved from the pier area to precisely align the test table with the earth's axis of rotation. Test chambers and special test equipments are used for investigating environmental efforts.

CAPABILITIES: Precise and long term stability measurement of inertial sensor performance for aircraft and marine navigation application.

USAGE:

- (1) Explore new concepts and advanced technologies
- (2) Evaluate new sensor designs and improvements
- (3) Determine environmental sensitivities
- (4) Evaluate inertial sensor adequacy to meet navigation system requirements.



AIRCRAFT MOTION SIMULATOR FACILITY

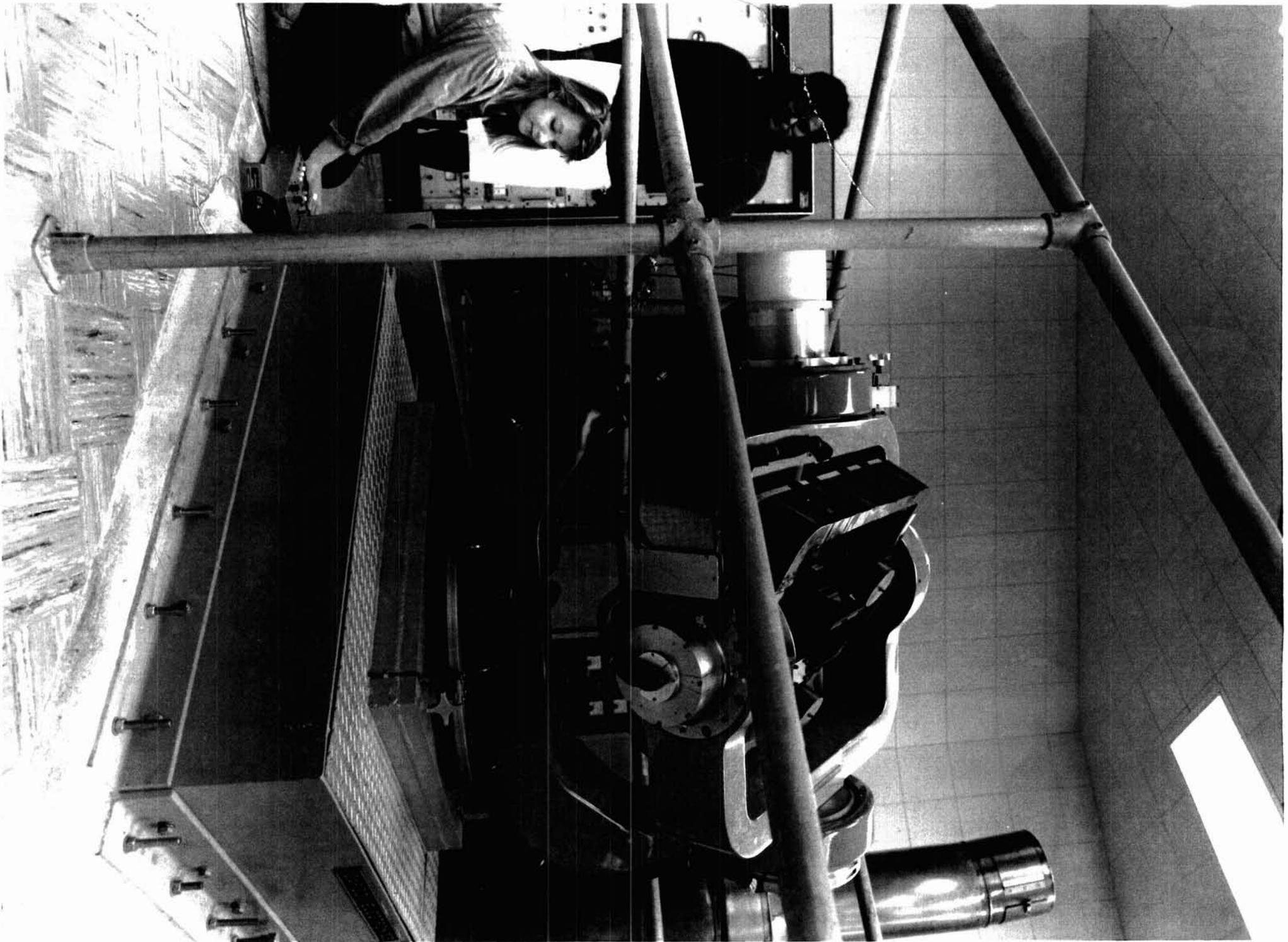
LOCATION: INFAC (Building 108)

DESCRIPTION: A fully automated facility for providing dynamic motion environments for aircraft navigation systems. It contains a three axis test platform, electronics to operate the system, a PDP 11 computer and a Calcomp Plotter. The facility occupies a dedicated section of the Quiet Test Laboratory.

CAPABILITIES: High aircraft dynamic rates applied to the navigation system in all three axes (roll, pitch, and heading). Fully programmable flight profiles. Automated recording and data reduction. MIL-STD-1553 support including bus analyzer.

USAGE:

- (1) Characterize dynamic system outputs to users (e.g. flight control, avionics, etc.)
- (2) Evaluate new aircraft system designs and improvements.
- (3) Evaluate system sensitivity to flight profiles.
- (4) Evaluate system sensitivity to aircraft vibration.
- (5) Duplicate, investigate, and resolve reported problems.



SIMULATED SHIPS MOTIONS FACILITY (SCORSBY)

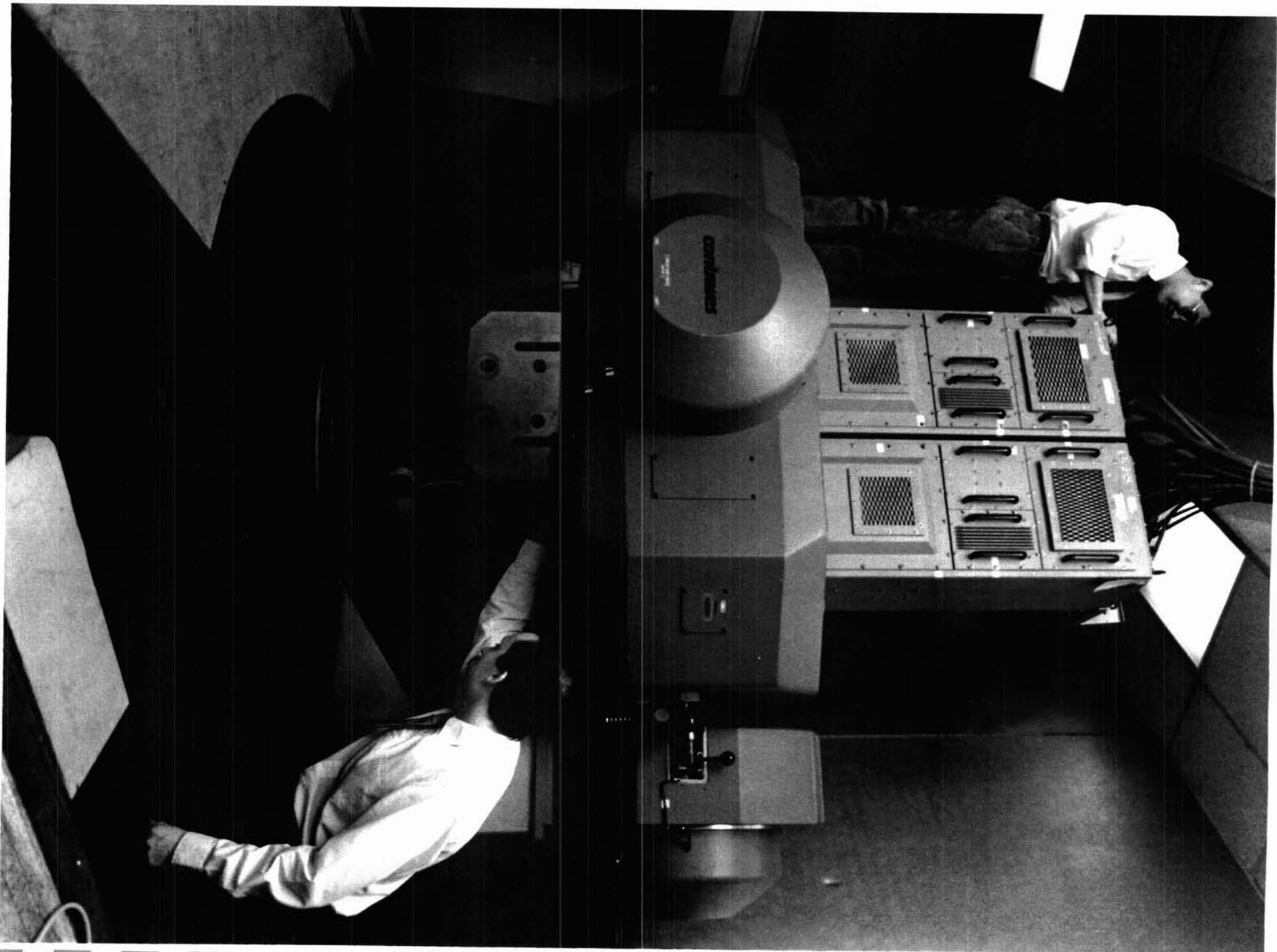
LOCATION: Building 1

DESCRIPTION: This 4,000 square foot facility houses 3 large ship motion simulators and associated fabrication laboratories. Each simulator is designed to accommodate navigation systems weighing up to 3,000 pounds. One of the Scorsbys is enclosed within an environmental test chamber. Direct sighting of the North Star is achieved through an optical tube which penetrates the outer building wall and provides a precise heading reference for the facility.

CAPABILITIES: Dynamic controlled ship's motions applied to the navigation system(s) in all three axes (roll, pitch, and heading). The motions can be programmed in various mission scenarios, either individually or simultaneously, with varying amplitude and period. Precise dynamic readout and recording of all navigation output parameters.

USAGE:

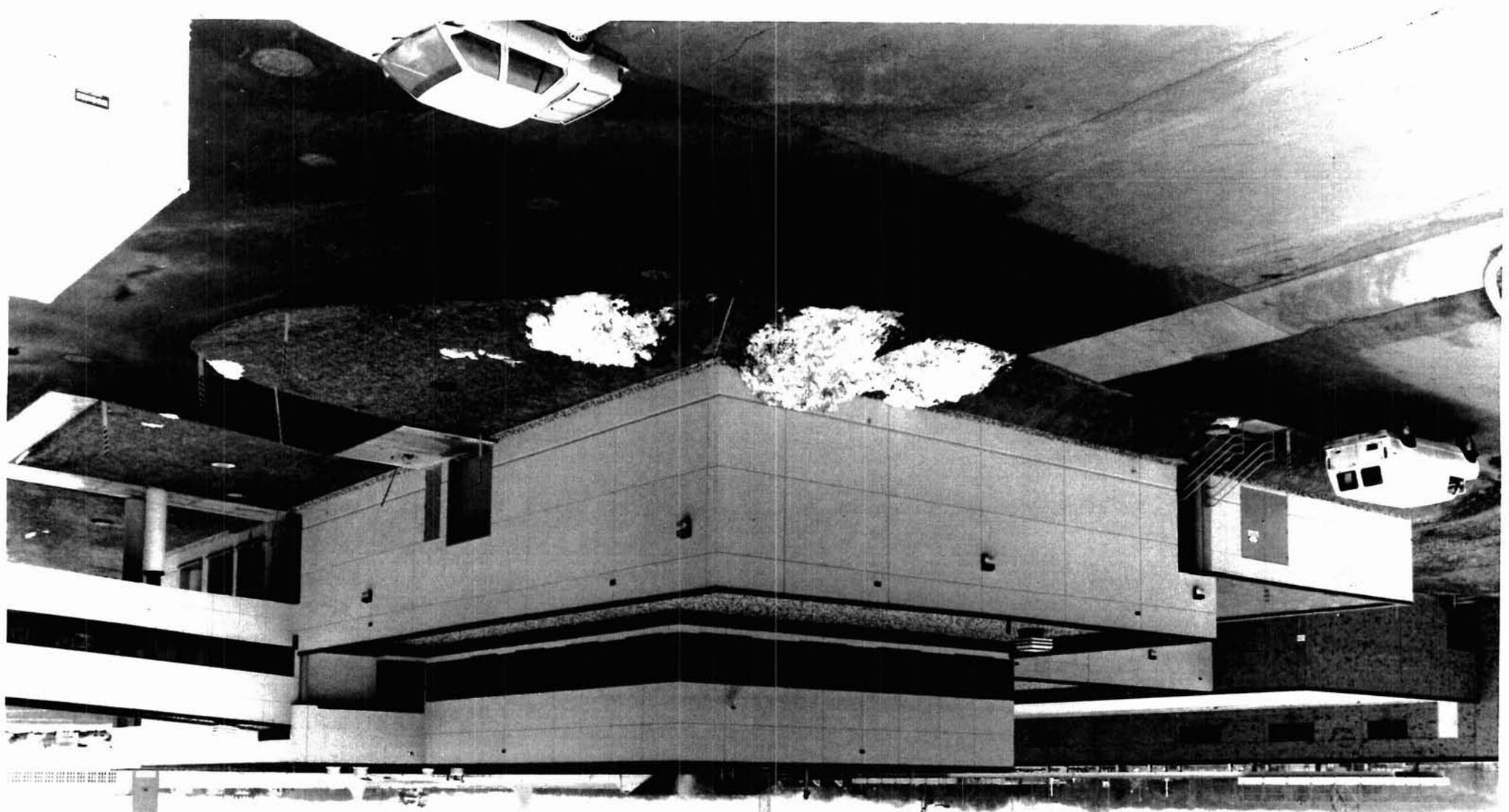
- (1) Characterize system's dynamic outputs to users (e.g. aircraft and missile alignment systems).
- (2) Evaluate new system designs and improvements.
- (3) Characterize system sensitivity to environmental factors.
- (4) Duplicate, investigate and resolve reported problems.



GLOBAL POSITIONING SYSTEM (GPS) BUILDING 138

DESCRIPTION: Building 138 was designed to provide for the necessary office and laboratory space required for the GPS engineering function. The building has approximately 32,000 square feet of floor space, and is connected to Building 125.

USAGE: Office space for GPS engineers and scientists. GPS laboratories.



GLOBAL POSITIONING SYSTEM (GPS) LABORATORY

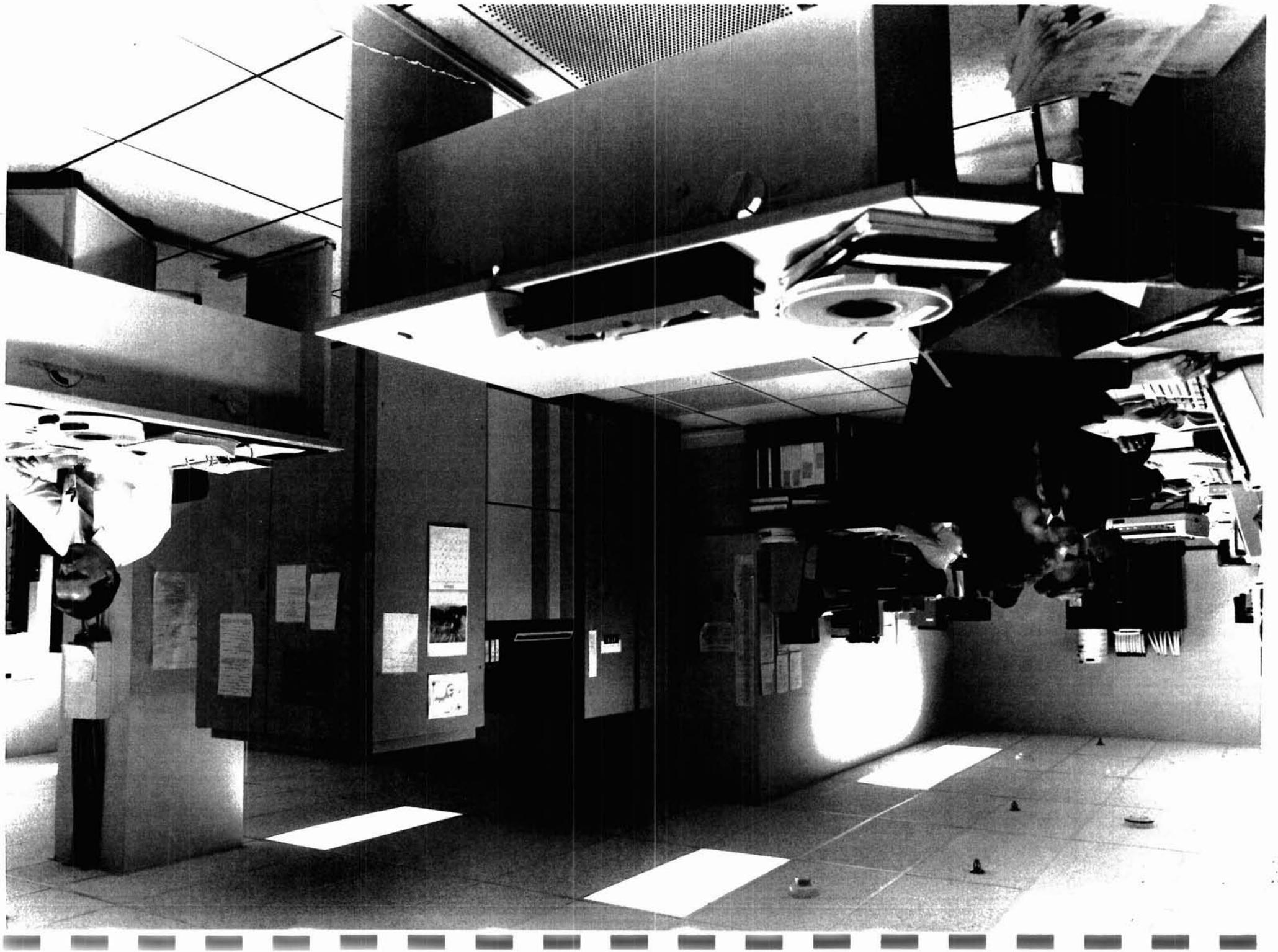
LOCATION: Building 138

DESCRIPTION: The GPS Laboratory is a TEMPEST - secure and environmentally controlled facility. It is centered about the Integrated Satellite Signal Generator (shown below) that stimulates GPS User Equipment (UE). This laboratory also houses the Data Processing and Simulation Software Facility, and a RF Screen Room. These facilities occupy 13,000 square feet.

CAPABILITIES: Simulates field operational environments for aircraft and marine GPS UE's. Simulations include: user platform trajectories/scenarios; RF spectrum effects; satellite constellation dynamics; and user platform avionics/electronics systems. Data reduction and analysis facilities are used to study laboratory and field generated data.

USAGE:

- (1) Conduct operational and performance evaluation of GPS UE.
- (2) Certify GPS software and hardware design changes and verify remedial action prior to fleet introduction.
- (3) Establish UE performance baselines.
- (4) Characterize various UE capabilities.
- (5) Recreate, investigate, and resolve field reported problems.
- (6) Develop integrated navigation systems containing GPS.



NAVIGATION ENGINEERING BUILDING 125

DESCRIPTION: Building 125 was designed to provide for the majority of office space required for the consolidation of aircraft navigation and marine navigation functions. It also contains limited laboratory space. The building has over 30,000 square feet of floor space.

USAGE: Office space for navigation engineers and scientists. Laboratories for the Oceanographic (FBM) System Program.



OCEANOGRAPHIC SYSTEMS PROGRAM (OSP) LABORATORY

LOCATION: Building 125

DESCRIPTION: A 4,500 square foot laboratory (OSP) containing state-of-the-art navigation, bathymetric sonar and survey data refinement systems. It supports the Ocean Survey Program by duplicating the existing and future mission survey equipment suites aboard four OSP vessels.

CAPABILITIES: Simulates complete mission survey operations as conducted aboard ship for development of precise navigation, bathymetric and other geophysical systems.

USAGE:

- (1) Design, develop, and integrate advanced navigation, sonar, and survey data refinement systems.
- (2) Develop advanced algorithms for high resolution wide swath sonar signal processing and survey data refinement.
- (3) Conduct ocean surveillance and emerging ASW technology developments.
- (4) Develop and assess new survey navigation concepts.
- (5) Assess and improve survey system design and performance.



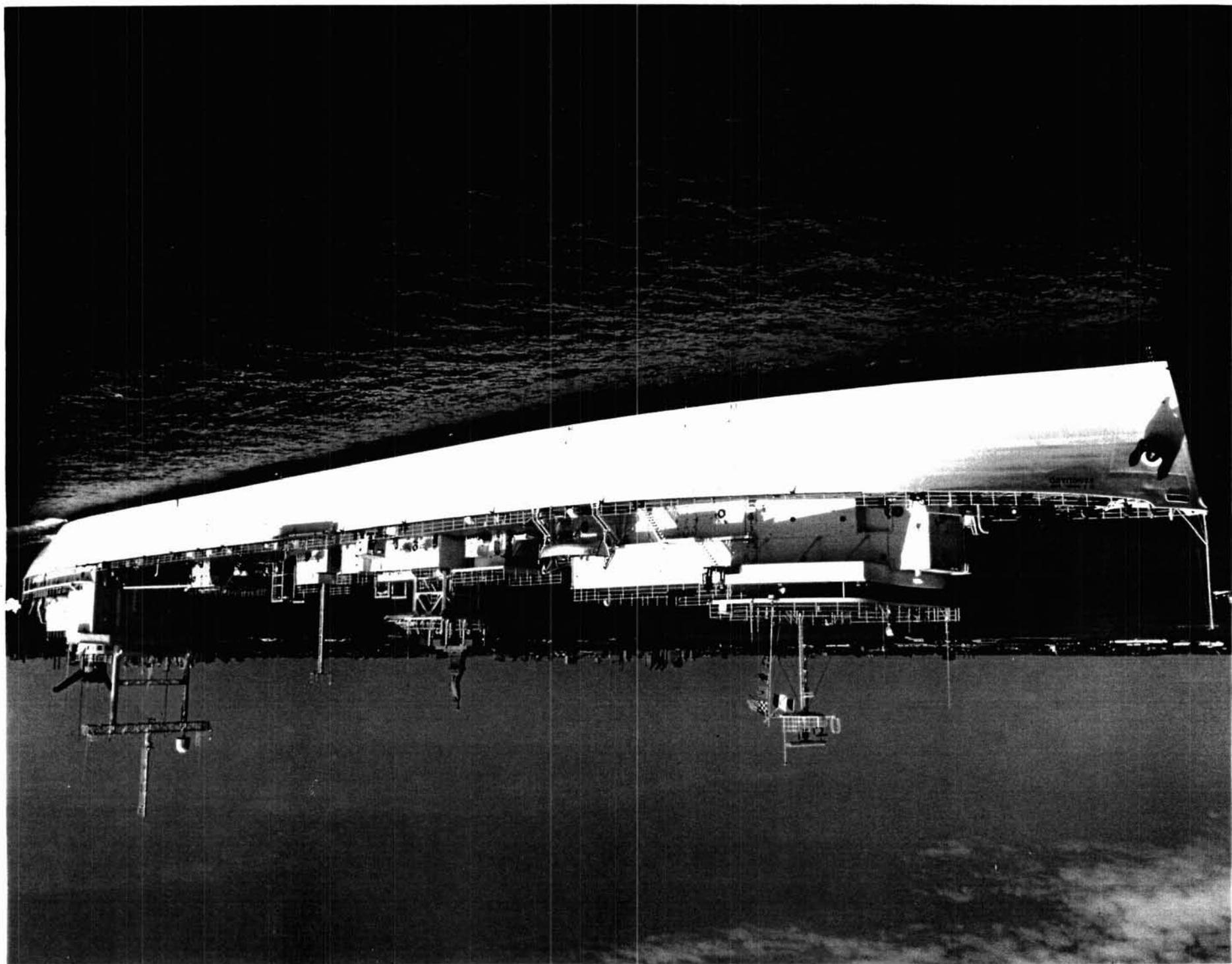
USNS VANGUARD (T-AG 194)

DESCRIPTION: The USNS VANGUARD is a navigation test ship which is equipped with the latest state-of-the-art navigation equipment. The ship was constructed in 1944 as a tanker, the SS Mission San Fernando. In March 1967 she was converted to a NASA Apollo Range Instrumentation Ship and renamed the USNS VANGUARD. In 1979 the Strategic Systems Program Office of the U.S. Navy acquired the USNS VANGUARD from NASA. The ship was converted to a Navigation Test Vehicle in 1980. She is a unique floating navigation laboratory.

The navigation equipment on board the USNS VANGUARD includes:

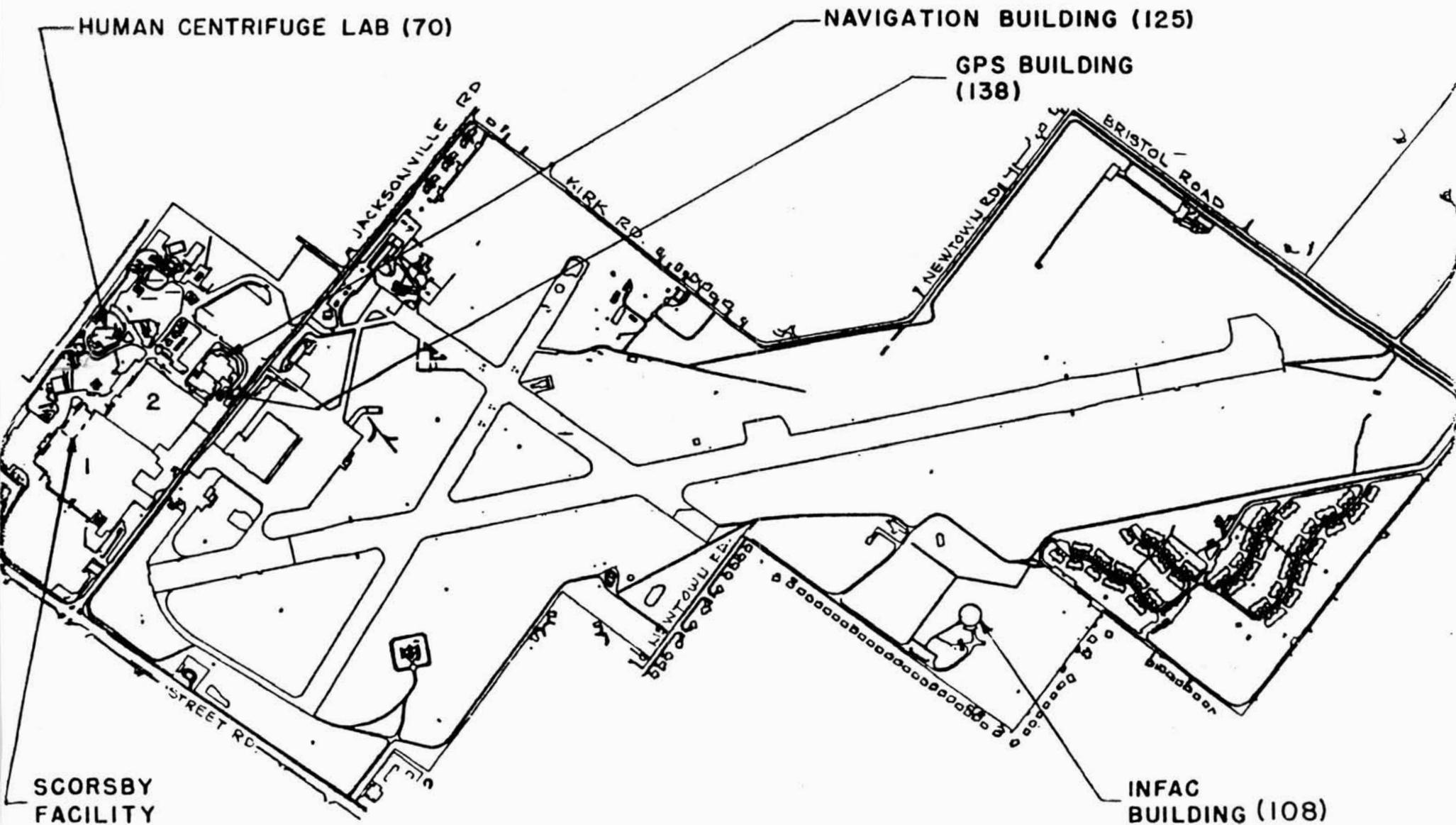
- Redundant Ship's Inertial Navigation Systems (SINS) for position, velocity, and attitude data
- Satellite navigation system receivers
- Electronic radio navigation system receivers (e.g., LORAN, LORAC)
- Bathymetric navigation systems
- Atomic clocks and frequency standards
- Velocity-determining devices, including a Correlation Sonar
- Electrostatically supported Gyro Monitor and Navigators
- Gravity-sensing and measuring equipment
- Various computers for system control, display, monitoring, and data recording

USAGE: The VANGUARD's primary mission is to advance the development of the navigation subsystem of the Fleet Ballistic Missile Strategic Weapon System for the U.S. Navy submarine force. It is also used for development and test of new technology navigation sensors and systems for various Navy platform applications. The VANGUARD is especially suited for this mission because she provides the space, facilities, speed, cruising radius, stability, and sea-worthiness needed for the efficient pursuit of such studies.



NAVAL COMMAND CONTROL AND OCEAN SURVEILLANCE CENTER WARMINSTER, PA. DET.

NAVIGATION FACILITY BLDG. LOCATIONS



NAVAL COMMAND,
CONTROL AND
OCEAN
SURVEILLANCE
CENTER

Warminster, Pa.

Document Separator

DRAFT

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

SUMMARY SHEET

NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION WARMINSTER, PENNSYLVANIA

INSTALLATION MISSION

A full spectrum RDT&E and in-service engineering center for weapons systems associated with air warfare, missiles and missile subsystems, aircraft weapons integration and airborne electronic warfare systems. The Center is the Navy's principal engineering and fleet support activity for naval aircraft, engines, avionics and aircraft support systems.

DOD RECOMMENDATION

Close the Naval Air Warfare Center, Aircraft Division, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Air Warfare Center, Aircraft Division, Patuxent River, Maryland.

DOD JUSTIFICATION

There is an overall reduction in operational forces and a sharp decline of the Navy budget through fiscal year 2001. Closure of this activity reduces excess capacity with the resultant efficiencies and economies in the consolidation of the relocated functions with its parent command at the new receiving site. This closure completes the process of realignment initiated in BRAC 91.

COST CONSIDERATIONS DEVELOPED BY DOD

- One-Time Costs:\$8.4 million
- Net Costs (Savings) During Implementation:\$33.1 million
- Annual Recurring Savings:\$7.6 million
- Return on Investment Year: Immediate
- Net Present Value Over 20 years:\$104.6 million

MANPOWER IMPLICATIONS OF THIS RECOMMENDATION (EXCLUDES CONTRACTORS)

| | <u>Military</u> | <u>Civilian</u> | <u>Students</u> |
|-----------------|-----------------|-----------------|-----------------|
| Baseline | 136 | 5,204 | 0 |

DRAFT

| | | | |
|--------------|----|-----|---|
| Reductions | 11 | 82 | 0 |
| Realignments | 05 | 212 | 0 |
| Total | 16 | 294 | 0 |

MANPOWER IMPLICATIONS OF ALL RECOMMENDATIONS AFFECTING THIS INSTALLATION (INCLUDES ON-BASE CONTRACTORS AND STUDENTS)

| <u>Recommendation</u> | <u>Out</u> | | <u>In</u> | | <u>Net Gain (Loss)</u> | |
|-----------------------|-----------------|-----------------|-----------------|-----------------|------------------------|-----------------|
| | <u>Military</u> | <u>Civilian</u> | <u>Military</u> | <u>Civilian</u> | <u>Military</u> | <u>Civilian</u> |
| TOTAL | 16 | 332 | 0 | 0 | (16) | (332) |

ENVIRONMENTAL CONSIDERATIONS

Closure will have a positive effect on the environment because functions and personnel will be relocated out of an area that is in severe non-attainment for ozone and from an activity that is included on the National Priorities List. Although the number of personnel being relocated is not considered of sufficient size to adversely the environment at that site, a conformity determination may be required to determine this impact.

REPRESENTATION

Governor: Tom Ridge

Senators: Arlen Specter
Rick Santorum

Representatives: Jon D. Fox
James C. Greenwood
Paul McHale

ECONOMIC IMPACT

Potential Employment Loss: 1080 jobs (348 direct and 732 indirect jobs)
PA-NJ PMSA Job Phila, PA Base : 2,604,793
Percentage: <0.1 percent decrease
Cumulative Economic Impact (1994-2001): 1.2 percent decrease

DRAFT

MILITARY ISSUES

None at this time.

COMMUNITY CONCERNS/ISSUES

None at this time.

ITEMS OF SPECIAL EMPHASIS

None at this time.

Lester C. Farrington/Cross Service Team

Document Separator

BASE VISIT REPORT

**NAVAL AIR WARFARE CENTER , AIRCRAFT DIVISION
and
NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER, RDT&E
DIVISION DETACHMENT
WARMINSTER, PENNSYLVANIA**

OPEN WATER TEST FACILITY, ORELAND, PENNSYLVANIA

APRIL 7, 1995

LEAD COMMISSIONER:

Commissioner Al Cornella

ACCOMPANYING COMMISSIONER:

None.

COMMISSION STAFF:

Mr. Lester C. Farrington, Cross Service Team Analyst
Mr. David Epstein, Navy Team Analyst

LIST OF ATTENDEES:

NAWC Representatives
CAPT William L. McCracken, Commander
Thomas Castaldi-Executive Director
Stuart Simon-Deputy Director
Franz Bonn-Transition Manager
Joseph Cody-Base Transition Office
Richard Coughlan-Head of Acoustics Dev.
David Polish-Public Affairs Officer
Thomas Milhous-Head of Crew Systems
Dr. Philip Whitley-Crew Systems
Herb Seligman-Navigational Systems Dev.
Steve Ganop-Integrated Navigation Systems
Jim Eck-Naval Command, Control and Ocean Surveillance
Center, RDT&E Div. Detachment

Congressional Staff

Pete Johnson-Congressman James Greenwood's Staff 8th District

BASE'S PRESENT MISSION:

NAWC Aircraft Division is the principal Navy research, development, test and evaluation center for aircraft, airborne anti-submarine warfare and aircraft systems. The Naval Command, Control and Ocean Surveillance Center is a high-accuracy navigation sensor laboratory that conducts research and development of new technology sensors, including various types of gyros. NAWC's Open Water Test Facility tests active and passive transducers and sonobuoy subsystems.

SECRETARY OF DEFENSE RECOMMENDATION:

Close the NAWC, Aircraft Division, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Air Warfare Center, Aircraft Division, Patuxent River, Maryland.

Close the Naval Command, Control and Ocean Surveillance Center and relocate appropriate functions, personnel equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Div., San Diego, California; and the Naval Oceanographic Office, Bay St. Louis, Mississippi.

Close the NAWC's Open Water Test Facility in Oreland, Pennsylvania.

SECRETARY OF DEFENSE JUSTIFICATION:

Overall reduction in operational forces and sharp decline of the Navy budget through FY 2001 is resulting in reduced technical workload and excess capacity. These closures complete the process of realignment initiated in BRAC 91. Excess capacity is being reduced by eliminating redundant capability and requirements that can be met elsewhere in Navy.

MAIN FACILITIES REVIEWED:

NAVIGATION LABORATORY(NRAD)

- Inertial Navigation Test Facility
- Global Positioning System Laboratory
- Ships Motion Test Facility

CREW SYSTEMS FACILITIES

- Human Centrifuge
- Dynamic Flight Simulator

OPEN WATER TEST FACILITY (not viewed by Messrs. Cornella and Epstein)

KEY ISSUES IDENTIFIED

The primary issue revolves around control over and Navy use of the major RDT&E facilities at NAWC-Warminster that are unique and may be needed to meet current and future Navy requirements. Three structures--the Inertial Navigation Facility, Centrifuge and Dynamic Flight Simulator--were retained after BRAC 91 . These facilities are massive and cannot cost-effectively be moved. Closure and excessing of the facilities provides the opportunity for transfer to the public educational or commercial sectors , and thus maintaining access by Navy on as as-needed basis. During BRAC 91, it was decided that these facilities be retained. A reuse plan for NAWC has been prepared for business and recreational use.

While BRAC 95 closes the remainder of NAWC-Warminster, the issue is that whatever activity ends up controlling the aforementioned R&D facilities, the Navy wants to have priority use of these unique facilities to meet their requirements. However, a potential issue may develop over the extent that the Navy will have to fund these activities after the facility is closed.

While closure of the Open Water Test Facility at Oreland and transfer of workload to Crane, Indiana is not an issue, a fixed tow rail in combination with a quiet ambient noise level is needed. The tow rail exists at Oreland and not at Crane. It can be purchased or moved depending whichever is more cost-effective. NAWC plans to recommend to Navy that Crane be given BRAC funding to upgrade their in water facility with a fixed tow rail to transition flow noise testing from NAWC's Oreland facility. This was apparently an oversight in developing closure plans for NAWC Warminster during BRAC 95.

COMMUNITY CONCERNS RAISED:

None.

REQUESTS FOR STAFF AS A RESULT OF VISIT:

Follow-up with Navy to substantiate future requirements for the major facilities to be left at NAWC Warminster. Also review justification and cost information of upgrading the Crane facility if formally presented to DBCRC.

Document Separator

Naval Air Warfare Center, Aircraft Division, Warminster, Pennsylvania

Recommendation: Close the Naval Air Warfare Center, Aircraft Division, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Air Warfare Center, Aircraft Division, Patuxent River, Maryland.

Justification: There is an overall reduction in operational forces and a sharp decline of the DON budget through FY 2001. Specific reductions for technical centers are difficult to determine, because these activities are supported through customer orders. However, the level of forces and the budget are reliable indicators of sharp declines in technical center workload through FY 2001, which leads to a recognition of excess capacity in these activities. This excess and the imbalance in force and resource levels dictate closure/realignment or consolidation of activities wherever practicable. The closure of this activity reduces excess capacity with the resultant efficiencies and economies in the consolidation of the relocated functions with its parent command at the new receiving site. Additionally, it completes the process of realignment initiated in BRAC 91, based on a clearer understanding of what is now required to be retained in-house. Closure and excessing of the Human Centrifuge/Dynamic Flight Simulator Facility further reduces excess capacity and provides the opportunity for the transfer of this facility to the public educational or commercial sectors, thus maintaining access on an as-needed basis.

Return on Investment: The return on investment data below applies to the closure of NAWC Warminster and the closure of Naval Command, Control and Ocean Surveillance Center (NCCOSC), RDT&E Division Detachment, Warminster. The total estimated one-time cost to implement this recommendation is \$8.4 million. The net of all costs and savings during the implementation period is a savings of \$33.1 million. Annual recurring savings after implementation are \$7.6 million with an immediate return on investment expected. The net present value of the costs and savings over 20 years is a savings of \$104.6 million.

Impacts:

Economic Impact on Communities: The economic data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1,080 jobs (348 direct jobs and 732 indirect jobs) over the 1996-to-2001 period in the Philadelphia, Pennsylvania-New Jersey PMSA economic area, which is less than 0.1 percent of economic area employment. The cumulative economic impact of all BRAC 95 recommendations and all prior-round BRAC actions in the economic area over the 1994-to-2001 period could result in a maximum potential decrease equal to 1.2 percent of employment in the economic area.

Community Infrastructure Impact: There is no known community infrastructure impact at any receiving installation.

Environmental Impact: The closure of both NAWC Warminster and NCCOSC Det Warminster will have a positive effect on the environment because their appropriate functions and personnel will be relocated out of an area that is in severe non-attainment for ozone and from an activity that is included on the National Priorities List. The personnel being relocated to NAWC Patuxent River represent an increase in personnel of less than 1 percent, which is not considered of sufficient size to adversely impact the environment at that site. However, a conformity determination may be required to determine this impact. The utility infrastructure capacity at NAWC Patuxent River is sufficient to handle the additional loading. There is no adverse impact on threatened/endangered species, sensitive habitats and wetlands, or cultural/historical resources occasioned by this recommendation.

Naval Air Station, Key West, Florida

Recommendation: Realign Naval Air Station, Key West, Florida, to a Naval Air Facility and dispose of certain portions of Truman Annex and Trumbo Point (including piers, wharfs and buildings).

Justification: Despite the large reduction in operational infrastructure accomplished during the 1993 round of base closure and realignment, since DON force structure experiences a reduction of over 10 percent by the year 2001, there continues to be additional excess capacity that must be eliminated. In evaluating operational bases, the goal was to retain only that infrastructure necessary to support the future force structure without impeding operational flexibility for deployment of that force. In the case of NAS Key West, its key importance derives from its airspace and training ranges, particularly in view of other aviation consolidations. Full access to those can be accomplished by retaining a downsized Naval Air Facility rather than a large naval air station. This realignment disposes of the waterfront assets of this facility and retains both the airspace and the ranges under its control for continued use by the Fleet for operations and training.

Return on Investment: The total estimated one-time cost to implement this recommendation is \$0.4 million. The net of all costs and savings during the implementation period is a savings of \$8.2 million. Annual recurring savings after implementation are \$1.8 million with an immediate return on investment expected. The net present value of the costs and savings over 20 years is a savings of \$25.5 million.

UNCLASSIFIED

**DOD Base Closure and Realignment
Report to the Commission**



DEPARTMENT OF THE NAVY

ANALYSES

AND

RECOMMENDATIONS
(Volume IV)

March 1995

UNCLASSIFIED

Naval Air Warfare Center, Aircraft Division, Warminster, Pennsylvania

Recommendation: Close the Naval Air Warfare Center, Aircraft Division, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Air Warfare Center, Aircraft Division, Patuxent River, Maryland.

Justification: There is an overall reduction in operational forces and a sharp decline of the DON budget through FY 2001. Specific reductions for technical centers are difficult to determine, because these activities are supported through customer orders. However, the level of forces and the budget are reliable indicators of sharp declines in technical center workload through FY 2001, which leads to a recognition of excess capacity in these activities. This excess and the imbalance in force and resource levels dictate closure/realignment or consolidation of activities wherever practicable. The closure of this activity reduces excess capacity with the resultant efficiencies and economies in the consolidation of the relocated functions with its parent command at the new receiving site. Additionally, it completes the process of realignment initiated in BRAC 91, based on a clearer understanding of what is now required to be retained in-house. Closure and excessing of the Human Centrifuge/Dynamic Flight Simulator Facility further reduces excess capacity and provides the opportunity for the transfer of this facility to the public educational or commercial sectors, thus maintaining access on an as-needed basis.

Return on Investment: The return on investment data below applies to the closure of NAWC Warminster and the closure of Naval Command, Control and Ocean Surveillance Center (NCCOSC), RDT&E Division Detachment, Warminster. The total estimated one-time cost to implement this recommendation is \$8.4 million. The net of all costs and savings during the implementation period is a savings of \$33.1 million. Annual recurring savings after implementation are \$7.6 million with an immediate return on investment expected. The net present value of the costs and savings over 20 years is a savings of \$104.6 million.

Impacts:

Economic Impact on Communities: The economic data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1,080 jobs (348 direct jobs and 732 indirect jobs) over the 1996-to-2001 period in the Philadelphia, Pennsylvania-New Jersey PMSA economic area, which is less than 0.1 percent of economic area employment. The cumulative economic impact of all BRAC 95 recommendations and all prior-round BRAC actions in the economic area over the 1994-to-2001 period could result in a maximum potential decrease equal to 1.2 percent of employment in the economic area.

Community Infrastructure Impact: There is no known community infrastructure impact at any receiving installation.

Environmental Impact: The closure of both NAWC Warminster and NCCOSC Det Warminster will have a positive effect on the environment because their appropriate functions and personnel will be relocated out of an area that is in severe non-attainment for ozone and from an activity that is included on the National Priorities List. The personnel being relocated to NAWC Patuxent River represent an increase in personnel of less than 1 percent, which is not considered of sufficient size to adversely impact the environment at that site. However, a conformity determination may be required to determine this impact. The utility infrastructure capacity at NAWC Patuxent River is sufficient to handle the additional loading. There is no adverse impact on threatened/endangered species, sensitive habitats and wetlands, or cultural/historical resources occasioned by this recommendation.

Naval Air Station, Key West, Florida

Recommendation: Realign Naval Air Station, Key West, Florida, to a Naval Air Facility and dispose of certain portions of Truman Annex and Trumbo Point (including piers, wharfs and buildings).

Justification: Despite the large reduction in operational infrastructure accomplished during the 1993 round of base closure and realignment, since DON force structure experiences a reduction of over 10 percent by the year 2001, there continues to be additional excess capacity that must be eliminated. In evaluating operational bases, the goal was to retain only that infrastructure necessary to support the future force structure without impeding operational flexibility for deployment of that force. In the case of NAS Key West, its key importance derives from its airspace and training ranges, particularly in view of other aviation consolidations. Full access to those can be accomplished by retaining a downsized Naval Air Facility rather than a large naval air station. This realignment disposes of the waterfront assets of this facility and retains both the airspace and the ranges under its control for continued use by the Fleet for operations and training.

Return on Investment: The total estimated one-time cost to implement this recommendation is \$0.4 million. The net of all costs and savings during the implementation period is a savings of \$8.2 million. Annual recurring savings after implementation are \$1.8 million with an immediate return on investment expected. The net present value of the costs and savings over 20 years is a savings of \$25.5 million.

Community Infrastructure Impact: There is no community infrastructure impact since there are no receiving installations for this recommendation.

Environmental Impact: The closure of the NAWC OWTF Oreland will have a beneficial effect on the environment since any impact of military activities on jurisdictional wetlands will be eliminated. Because this closure has no accompanying transfer of functions or personnel, there are no other environmental impacts associated with this closure. There will be no adverse impact on threatened/endangered species, sensitive habitats, or cultural/historical resources occasioned by this recommendation.

Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania

Recommendation: Close the Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, California; and the Naval Oceanographic Office, Bay St. Louis, Mississippi.

Justification: There is an overall reduction in operational forces and a sharp decline of the DON budget through FY 2001. Specific reductions for technical centers are difficult to determine, because these activities are supported through customer orders. However, the level of forces and the budget are reliable indicators of sharp declines in technical center workload through FY 2001, which leads to a recognition of excess capacity in these activities. This excess and the imbalance in force and resource levels dictate closure/realignment or consolidation of activities wherever practicable. The closure of this activity reduces excess capacity with the resultant efficiencies and economies in the management of the relocated functions at the new receiving sites. Additionally, it completes the process of realignment initiated in BRAC 91, based on a clearer understanding of what is now required to be retained in-house. Closure and excessing of the Inertial Navigational Facility further reduces excess capacity and provides the opportunity for the transfer of these facilities to the public educational or commercial sectors, thus maintaining access on an as-needed basis.

Return on Investment: The return on investment data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. The total estimated one-time cost to implement this recommendation is \$8.4 million. The net of all costs and savings during the implementation period is a savings of \$33.1 million. Annual recurring savings after implementation are \$7.6 million with an immediate return on investment expected. The net present value of the costs and savings over 20 years is a savings of \$104.6 million.

Impacts:

Economic Impact on Communities: The economic data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1,080 jobs (348 direct jobs and 732 indirect jobs) over the 1996-to-2001 period in the Philadelphia, Pennsylvania-New Jersey PMSA economic area, which is less than 0.1 percent of economic area employment. The cumulative economic impact of all BRAC 95 recommendations and all prior-round BRAC actions in the economic area over the 1994-to-2001 period could result in a maximum potential decrease equal to 1.0 percent of employment in the economic area.

Community Infrastructure Impact: There is no known community infrastructure impact at any receiving installation.

Environmental Impact: The closure of both NAWC Warminster and NCCOSC Det Warminster will have a positive effect on the environment because their appropriate functions and personnel will be relocated out of an area that is in severe non-attainment for ozone and from an activity that is included on the National Priorities List. The personnel being relocated to NCCOSC San Diego represent an increase in personnel of less than six percent, which is not considered of sufficient size to adversely impact the environment at that sites. However, a conformity determination may be required to determine this impact. At both receiving sites, the utility infrastructure capacity is sufficient to handle the additional loading. There is no adverse impact on threatened/endangered species, sensitive habitats and wetlands, or cultural/historical resources occasioned by this recommendation.

Fleet and Industrial Supply Center, Charleston, South Carolina

Recommendation: Close the Fleet and Industrial Supply Center, Charleston, South Carolina.

Justification: Fleet and Industrial Supply Centers are follower activities whose existence depends upon active fleet units in their homeport area. Prior BRAC actions closed or realigned most of this activity's customer base, and most of its personnel have already transferred to the Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering, East Coast Division, Charleston, South Carolina. Further, in accordance with the FY 2001 Force Structure Plan, force structure reductions through the year 2001 erode the requirement for support of active forces even further. This remaining workload can efficiently be handled by other FISCs or other naval activities.

NAVY INSTALLATION LIST -- BRAC 95

TECHNICAL CENTERS/LABORATORIES

Commander-in-Chief, Atlantic Fleet

- Atlantic Fleet Weapons Training Facility, PR
- Fleet Technical Support Center, Atlantic, Norfolk, VA
- Fleet Technical Support Center, Atlantic, Norfolk Detachment, Mayport, FL
- Fleet Technical Support Center, Atlantic, Norfolk Detachment, Norfolk, VA

Commander-in-Chief, Pacific Fleet

- Pacific Missile Range Facility, Hawaii Area, Barking Sands, HI
- Fleet Technical Support Center, San Diego, CA
- Fleet Technical Support Center, Pearl Harbor, HI

Chief of Naval Operations

- Operational Test and Evaluation Force, Norfolk, VA

Bureau of Medicine and Surgery

- (c) Naval Medical Research Institute, Bethesda, MD
- (c) Naval Health Research Center, San Diego, CA
- Naval Aerospace Medical Research Laboratory, Pensacola, FL
- (c) Naval Biodynamics Laboratory, New Orleans, LA
- Naval Submarine Medical Research Laboratory, Groton, CT
- Naval Dental Research Institute, Great Lakes, IL

Bureau of Naval Personnel

- (c) Navy Personnel Research and Development Center, San Diego, CA

Chief of Naval Research

- Naval Research Laboratory, Washington, DC
- (c) Naval Research Laboratory Detachment, Underwater Sound Reference Laboratory, Orlando, FL
- (rd) Office of Naval Research, Arlington, VA

Naval Air Systems Command

- Naval Air Warfare Center Headquarters, Washington, DC
- Naval Air Warfare Center, Weapons Division, China Lake, CA
- Naval Air Warfare Center, Weapons Division, Point Mugu, CA
- (c) Naval Air Warfare Center, Aircraft Division, Indianapolis, IN
- Naval Air Warfare Center, Aircraft Division, Patuxent River, MD
- (c) Naval Air Warfare Center, Aircraft Division, Patuxent River Detachment, Warminster, PA

- (c) Naval Air Warfare Center, Aircraft Division, Patuxent River Detachment, Deep Water Test Facility, Oreland, PA
- (ce) Naval Air Warfare Center, Aircraft Division, Lakehurst, NJ
- Naval Air Training Systems Division, Orlando, FL
- (c) Naval Air Technical Services Facility, Philadelphia, PA
- (c) Naval Aviation Engineering Service Unit, Philadelphia, PA

Naval Sea Systems Command

- Naval Surface Warfare Center, Headquarters, Arlington, VA
- Naval Surface Warfare Center, Crane Division, Crane, IN
- (ce) Naval Surface Warfare Center, Crane Division Detachment, Louisville, KY
- Naval Surface Warfare Center, Crane Division Detachment, Hydroacoustic Test Area, Sullivan, IN
- Naval Surface Warfare Center, Dahlgren Division, Dahlgren, VA
- (c) Naval Surface Warfare Center, Dahlgren Division Detachment, White Oak, MD
- Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station, Panama City, FL
- Naval Surface Warfare Center, Port Hueneme Division, Port Hueneme, CA
- Naval Surface Warfare Center, Carderock Division, Carderock, MD
- Naval Surface Warfare Center, Carderock Division Detachment, Philadelphia, PA
- (c) Naval Surface Warfare Center, Carderock Division Detachment, Annapolis, MD
- Naval Surface Warfare Center, Carderock Division, Acoustic Research Detachment, Bayview, ID
- Naval Surface Warfare Center, Indian Head Division, Indian Head, MD
- Naval Surface Warfare Center, Indian Head Division Detachment, Yorktown, VA
- Naval Sea Logistics Center, Mechanicsburg, PA
- Naval Sea Operations Support Detachment Technical Representative, Moorestown, NJ
- Naval Undersea Warfare Center, Headquarters, Newport, RI
- (c) Naval Undersea Warfare Center, Newport Division, Newport, RI
- (r) Naval Undersea Warfare Center, Newport Division Detachment, New London, CT
- Naval Undersea Warfare Center, Keyport Division, Keyport, WA
- SEASPARROW Project Support Office, Arlington, VA
- Naval Warfare Assessment Division, Corona, CA
- AEGIS Combat Center, Wallops Island, VA
- Naval Explosive Ordnance Disposal Technology Division, Indian Head, MD

Naval Ordnance Center, Indian Head, MD

Space and Naval Warfare Systems Command

- Naval Command, Control, and Ocean Surveillance Center, Headquarters, San Diego, CA
- Naval Command, Control, and Ocean Surveillance Center, RDT&E Division, San Diego, CA
- (c) Naval Command, Control, and Ocean Surveillance Center, RDT&E Division, San Diego Detachment, Warminster, PA
- Naval Command, Control, and Ocean Surveillance Center, In-service Engineering, East Coast Division, Charleston, SC
- (ce) Naval Command, Control, and Ocean Surveillance Center, In-service Engineering, East Coast Division, Charleston Detachment, Norfolk, VA
- (c) Naval Command, Control, and Ocean Surveillance Center, In-service Engineering, West Coast Division, San Diego, CA
- Naval Command, Control, and Ocean Surveillance Center, In-service Engineering, West Coast Division, San Diego Detachment, Pearl Harbor, HI
- (c) Naval Management Systems Support Office, Chesapeake, VA
- Naval Technical Representative Office, Laurel, MD

Naval Facilities Engineering Service Center

Naval Facilities Engineering Service Center, Port Hueneme, CA

Naval Supply Systems Command

Navy Clothing and Textile Research Facility, Natick, MA

- (c) Closure candidate
- (ce) Closure-except candidate
- (r) Realignment candidate
- (rd) Redirect candidate



Fact Sheet

NAVAL AIR WARFARE CENTER • AIRCRAFT DIVISION WAPMINSTER
P.O. BOX 5152 • WARMINSTER, PA 18974-0591
(215) 441-3444 • DSN 441-3444 • FAX (215) 441-1995

The Naval Air Warfare Center Aircraft Division Warminster ((NAWCADWAR) is the principal Navy research, development, test, and evaluation center for aircraft, airborne Anti-Submarine Warfare (ASW), and aircraft systems (less aircraft-launched weapon systems). It is located approximately 28 miles northeast of Philadelphia in Warminster, PA. NAWCADWAR is one of five sites that comprise the newly created Naval Air Warfare Center Aircraft Division, which is headquartered at Patuxent River Naval Air Station, MD.

Operations

NAWCADWAR is the primary research and development center for airborne ASW, aircrew life support systems, and tactical aircraft (minus weapons).

Modern airborne ASW capability began here and now includes programs to develop revolutionary acoustic and non-acoustic sensors. These sensors are sonobuoys dropped from aircraft. They locate submarines actively, by echo returns, or passively, by undetectable listening.

NAWCADWAR is the lead in-house development laboratory for major upgrades to the LAMPS, carrier-based helicopters, software and signal processing upgrades for carrier ASW aircraft and the carrier ASW comprehensive control module. NAWCADWAR provides upgrades and life support for existing fleet aircraft such as the F/A-18, F-14, and the E-2 aircraft.

This facility also provides weapons systems engineering and verification for the P-3C Update IV avionics systems, and acoustics channel expansion program to enhance the Navy's ability to detect and track submarines.

NAWCADWAR is charged with performing vital engineering and tests for aircraft reconnaissance systems using unmanned autonomous vehicles. Additionally, this site provides long-term support to aircraft development in diverse specialties such as flight controls, crew equipment, materials and sensors technologies, simulations, laboratories, and stealth-type high performance airborne systems.

Projects

The research, development, testing, and evaluation is conducted by three systems departments and three technical departments. The systems departments are ASW, Tactical Air, and Warfare Systems Analysis. The technical departments are the, Air Vehicles and Crew Systems, Mission Avionics, and Systems and Software.

The following are significant on-going projects:

Land-based, Fixed-Wing ASW Patrol Aircraft.

Design, development, integration, and test support of computer equipment, and programming avionics improvements for the Lockheed P-3 Orion long-range, fixed-wing ASW patrol aircraft.

Advanced Systems and Sensors Integration

Research and development for air-launched sonobuoys used to detect underwater activity and transmit data back to aircraft flying overhead.

Crew System

Provide comprehensive support to aircrews. Includes all aspect of cockpit and crew station design such as life support, escape, protective gear, survival and rescue equipment.

Carrier-based ASW Module (CV-ASWM)

Develop VS System computer equipment and programs to protect carrier battle groups to include: life support cycles, technical support, liaison, and technology transfer. Additionally, this includes the development and use of airborne electronics. Together, this support helps to provide threat warning, surface surveillance, and long-range protection.

Vertical Flight

Technical center for all Navy anti-submarine helicopter programs. Provide support for key LAMPS, MK-III and SH-60F helicopter systems.

F-14 Development

Lead field activity for F-14D aircraft combat system development for both current and advanced application.

ASW Laser Radar

Lead laboratory in the development of a sonar system for airborne ASW laser radar. It is investigation efficient high average power blue-green pulsed lasers, efficient optical receivers, high speed scanners and real-time signal processing.

Infra-Red Search and Track (IRST)

Development of an infra-red sensor system to improve tactical aircraft capability to detect and engage threat aircraft at increased distances.

Naval Aircrew Common Ejection Seat (NACES)

Development of a common ejection seat for F/A-18, T-45, and F-14D aircraft.

Structural Appraisal of Fatigue Effect

Development and implementation of service life monitoring programs to assure the structural integrity of Navy aircraft.

Synthetic Aperture Radar

Development of a multi-frequency and polarimetric synthetic aperture airborne radar system for ocean and terrain sensing.

History

This site was originally established during World War II to meet the growing needs of a nation at war. In 1944, the Navy acquired the Brewster Aeronautical Corporation consisting of one million square feet of space, in addition to an adjoining airfield and aircraft hangars. Designated the Naval Aircraft Modification Unit (NAMU), the mission was to convert and modify Navy aircraft prior to delivery to combat units.

After the war ended, increased emphasis was placed on research and development activity.

August 1947: NAMU was redesignated the Naval Air Development Station and established as an independent and self-sufficient naval activity.

1947-1949: Several activities were transferred to Warminster, that included a reorganization to facilitate more efficient research and development in unmanned aircraft, electronic systems and components, and aviation armament. The site was renamed the Naval Air Development Center (NADC). Support functions become assigned to NADC to include: administration, industrial relations, security, medical, public works, operations, supply, and naval air station.

July 1950: Aeronautical Computer Laboratory added.

Initially as small engineering team later becomes a laboratory using the TYPHOON, the largest analog computer of its day.

June 1952: Avialton Medical Acceleration laboratory added. The world's largest centrifuge is dedicated. It is here that the Project Mercury astronauts received training.

December 1953: Aeronautical Instruments and Aeronautical Photographic experimental laboratories transferred to NADC from the Naval Air Materiel Center, Philadelphia. Three new branches added; simulation, inertial navigation, and systems and computers.

1958: Antisubmarine Warfare Laboratory established.

1963: Naval Air Station is redesignated the Naval Air Facility.

July 1965: Reorganization consolidates existing laboratories into four functional departments (Aero Electronics Technology Department, Aero Mechanics Department, Aerospace Medical Research Department) and adds the Systems Project Department. A computerized management information system is implemented.

February 1968: The Systems Project Department and the Air Warfare Department are disestablished. Resources are merged into a single department, the Systems Analysis and Engineering Department.

September 1968: Members of the Aerospace Medical Research Department, and the Aerospace Crew Equipment Department, form the Life Science and Bio-Equipment Group that is tasked to develop and conduct research in human behavior and associated tangents.

March 1971: Life Sciences and Bio-Equipment Group, Aerospace Crew Equipment Department and the Aerospace Medical Research Department consolidate to form the Crew Systems Department.

November 1971: Administration Department expands to include the Public Affairs Office, and Engineering Support Division, Technical Publications and Presentation Division, and a Technical Information Division.

January 1972: Aero Material Structures Aero Mechanics become the Air Vehicle Technology Department.

November 1973: The relocation of personnel from the Naval Strategic Systems Navigation Facility in Brooklyn, N.Y. begins. This group, combined with the Navigation Section of the Air Vehicle Technology Department and the Aero Electronic Technology Department, form the Naval Navigation Laboratory.

June 1975: The Technical Services Department is created from Engineering Shops, the Environmental Facility Support and Standards Division, the Presentation and Information Division, and the Structural and Aircraft Fire Division.

October 1977: An increased workload, personnel reductions, and a need to improve efficiency lead to a reorganization. Six technical directorates include: Systems, Sensors and Avionics Technology; Communication, Navigation Technology; Software and Computer; Aircraft and Crew Systems Technology; and Command Projects. The three support groups are the Administrative, Engineering, and Planning Assessment Resources. Additionally, the Naval Air Facility is merged with NADC.

May 1983: The Computer Services Department is established to provide general computing services required to support the center and all technical programs.

1991: Defense Management Review recommends consolidation of R&D laboratories and T&E facilities.

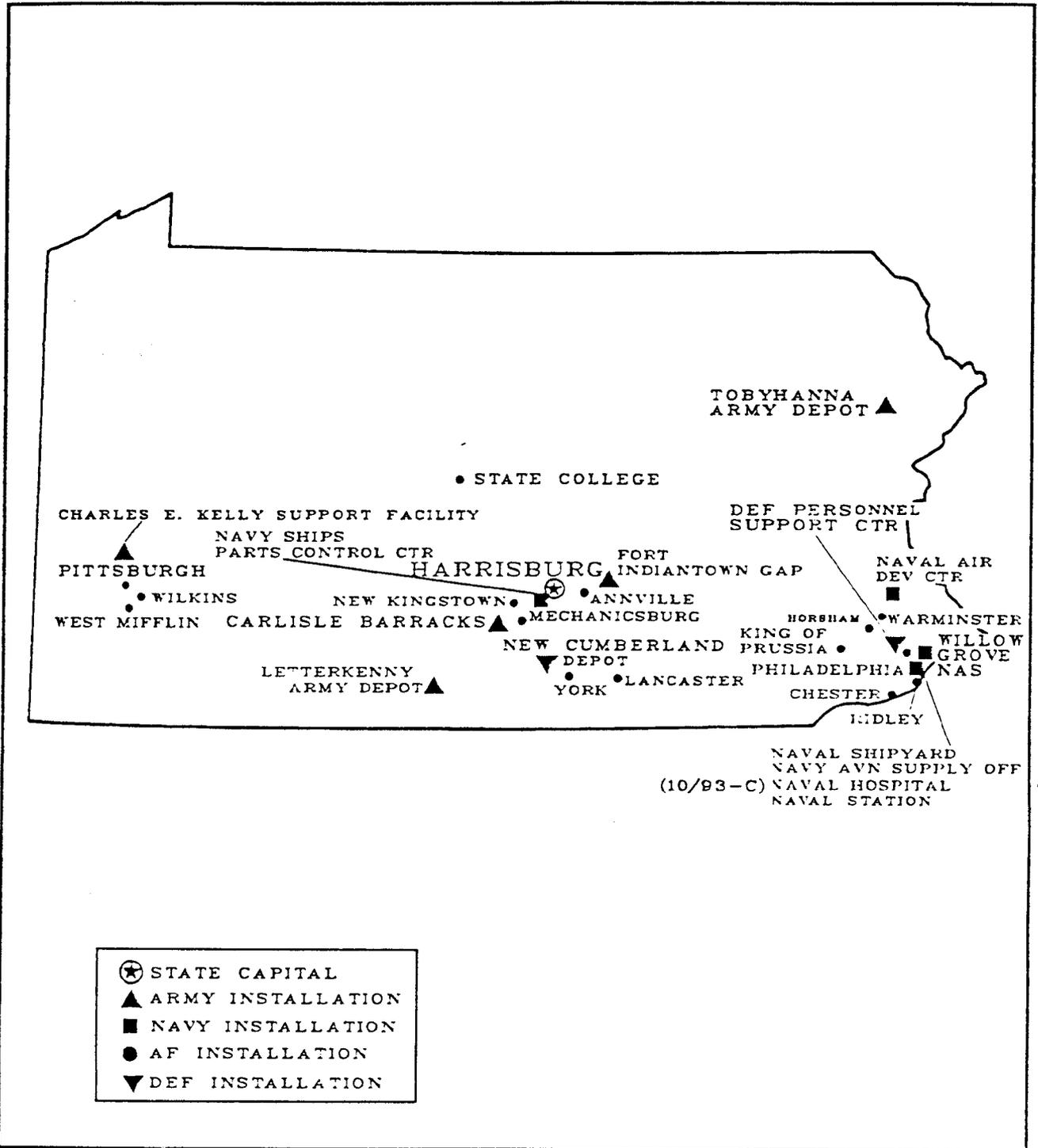
1991: Base Closure and Realignment Commission recommended approval of the Warfare Centers.

1992: Officially became the Naval Air Warfare Center Aircraft Division Warminster.

Document Separator

MAP NO. 39

PENNSYLVANIA



Prepared By: Washington Headquarters Services
Directorate for Information
Operations and Reports

PENNSYLVANIA

FISCAL YEAR 1994

(DOLLARS IN THOUSANDS)

| Personnel/Expenditures | Total | Army | Navy & Marine Corps | Air Force | Other Defense Activities |
|---|-------------|-------------|---------------------|-----------|--------------------------|
| I. Personnel - Total | 120,592 | 61,169 | 35,687 | 12,641 | 11,095 |
| Active Duty Military | 5,301 | 2,372 | 2,329 | 600 | 0 |
| Civilian | 40,134 | 10,800 | 16,624 | 1,615 | 11,095 |
| Reserve & National Guard | 75,157 | 47,997 | 16,734 | 10,426 | 0 |
| II. Expenditures - Total | \$5,406,159 | \$1,825,994 | \$2,331,093 | \$498,569 | \$750,503 |
| A. Payroll Outlays - Total | 2,646,030 | 884,276 | 1,079,854 | 264,149 | 417,751 |
| Active Duty Military Pay | 260,765 | 81,988 | 157,102 | 21,675 | 0 |
| Civilian Pay | 1,551,437 | 375,417 | 716,017 | 42,252 | 417,751 |
| Reserve & National Guard Pay | 261,364 | 193,322 | 25,226 | 42,816 | 0 |
| Retired Military Pay | 572,464 | 233,549 | 181,509 | 157,406 | 0 |
| B. Prime Contracts Over \$25,000 Total | 2,760,129 | 941,718 | 1,251,239 | 234,420 | 332,752 |
| Supply and Equipment Contracts | 961,199 | 247,042 | 330,756 | 99,375 | 284,026 |
| RDT&E Contracts | 757,703 | 417,602 | 227,603 | 84,507 | 27,991 |
| Service Contracts | 891,314 | 158,002 | 662,827 | 49,352 | 21,133 |
| Construction Contracts | 87,866 | 57,025 | 30,053 | 1,186 | 396- |
| Civil Function Contracts | 62,047 | 62,047 | 0 | 0 | 0 |

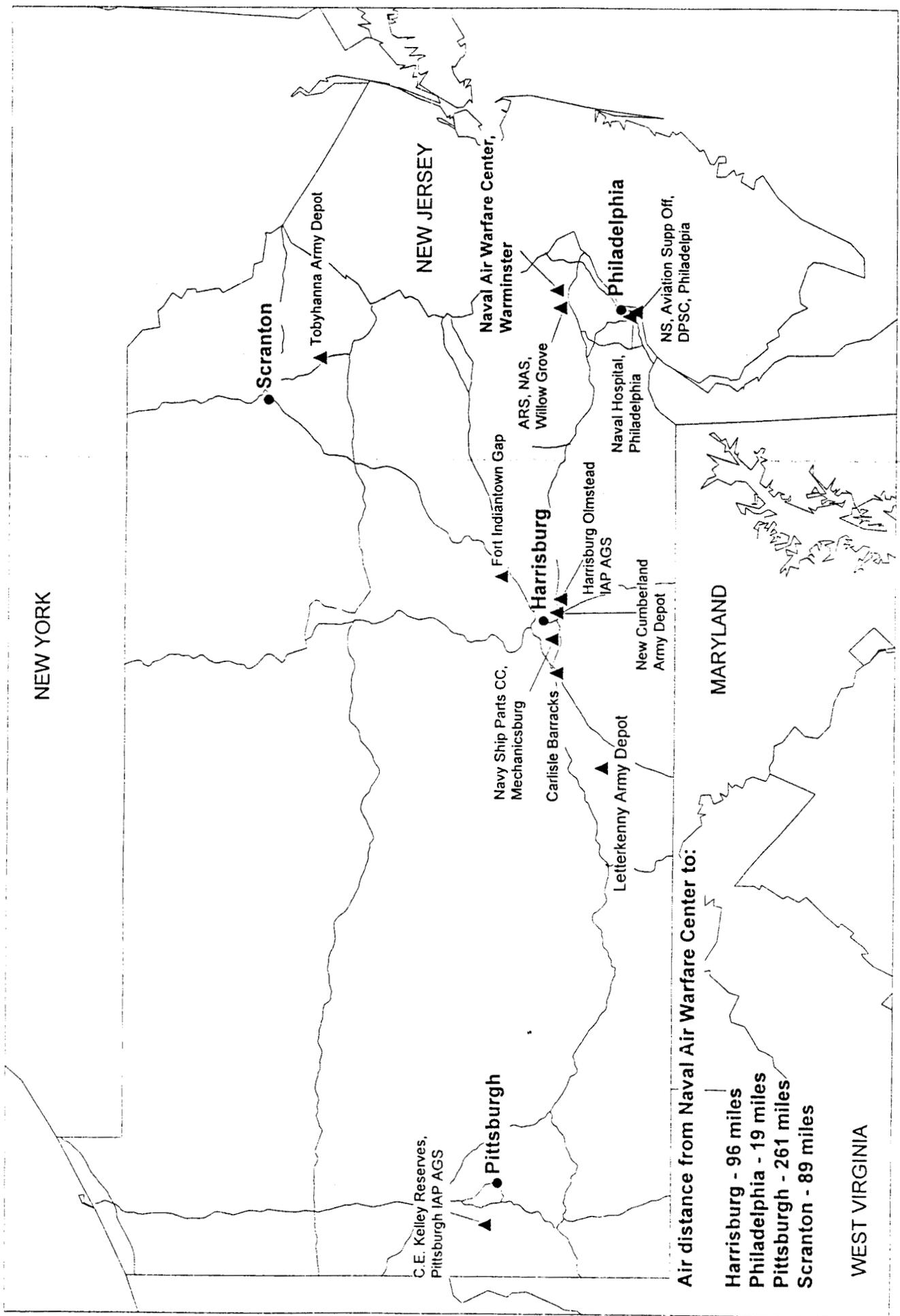
| Major Locations of Expenditures | Expenditures | | | Major Locations of Personnel | Military and Civilian Personnel | | |
|---------------------------------|--------------|-----------------|-----------------|------------------------------|---------------------------------|----------------------|----------|
| | Total | Payroll Outlays | Prime Contracts | | Total | Active Duty Military | Civilian |
| Philadelphia | \$1,591,152 | \$793,217 | \$797,935 | Philadelphia | 17,289 | 1,401 | 15,886 |
| West Mifflin | 298,263 | 761 | 297,502 | Mechanicsburg | 6,025 | 122 | 5,903 |
| Mechanicsburg | 284,400 | 251,547 | 32,853 | Tobyhanna | 3,396 | 59 | 3,337 |
| Pittsburgh | 216,321 | 47,443 | 168,878 | Letterkenny Army Dep | 3,088 | 61 | 3,027 |
| Letterkenny Army Dep | 141,367 | 137,360 | 4,007 | New Cumberland | 2,568 | 229 | 2,400 |
| Warminster | 125,056 | 117,102 | 7,954 | Warminster | 2,143 | 82 | 2,061 |
| Tobyhanna | 124,316 | 124,271 | 45 | Pittsburgh | 1,802 | 449 | 1,353 |
| Chambersburg | 123,340 | 6,274 | 117,066 | Indiantown Gap | 1,782 | 112 | 1,670 |
| Wilkins Township | 115,768 | 0 | 115,768 | Willow Grove | 1,570 | 733 | 837 |
| Horsham | 100,843 | 3,334 | 97,509 | Carlisle Barracks | 1,254 | 710 | 544 |

| Prime Contracts Over \$25,000 (Prior Three Years) | Total | Army | Navy & Marine Corps | Air Force | Other Defense Activities |
|---|-------------|-------------|---------------------|-----------|--------------------------|
| Fiscal Year 1993 | \$2,968,230 | \$1,024,442 | \$1,263,504 | \$266,493 | \$393,791 |
| Fiscal Year 1992 | 3,064,717 | 1,457,558 | 901,077 | 266,695 | 417,396 |
| Fiscal Year 1991 | 2,948,522 | 2,116,353 | 1,115,975 | 266,042 | 446,152 |

| Top Five Contractors Receiving the Largest Dollar Volume of Prime Contract Awards in this State | Total Amount | Major Area of Work | |
|---|--------------------|--|-----------|
| | | FSC or Service Code Description | Amount |
| 1. WESTINGHOUSE ELECTRIC CORP | \$473,395 | Operation/Govt-Owned Contractor-Operated R | \$297,126 |
| 2. BOEING SKORSKY LHX PROGRAM OFF | 304,599 | FUTE/Aircraft-Advanced Development | 304,599 |
| 3. BOEING COMPANY THE | 209,834 | Maint & Repair of Eq/Aircraft Comps & Accy | 97,138 |
| 4. FMC CORPORATION | 86,595 | Guns, over 150 mm through 200 mm | 86,554 |
| 5. GENERAL ELECTRIC COMPANY | 82,363 | RDT&E/Other Defense-Advanced Development | 22,342 |
| Total of Above | \$1,156,806 | (41.9% of total awards over \$25,000) | |

Prepared by: Washington Headquarters Services
 Directorate for Information
 Operations and Reports

Naval Air Warfare Center, Warminster



Air distance from Naval Air Warfare Center to:

- Harrisburg - 96 miles
- Philadelphia - 19 miles
- Pittsburgh - 261 miles
- Scranton - 89 miles

WEST VIRGINIA

CLOSURE HISTORY - INSTALLATIONS IN PENNSYLVANIA

24-Mar-95

| SVC | INSTALLATION NAME | ACTION YEAR | ACTION SOURCE | ACTION STATUS | ACTION SUMMARY | ACTION DETAIL |
|-----|---|-------------|---------------|---------------|----------------|--|
| A | CARLISLE BARRACKS CHARLES E. KELLY SUPPORT FACILITY FORT INDIANTOWN GAP LETTERKENNY ARMY DEPOT | 88/91/93 | DEFBRAC/DBCRC | ONGOING | REALGNDN | <p>1988 DEFBRAC: Supply and material-readiness missions realigned from Lexington-Bluegrass Army Depot, KY; completed FY 93</p> <p>1991 DBCRC: Realign Depot Systems Command with the Systems Integration Management Activity-East (SIMA-E) to Rock Island Arsenal, IL, and form the Industrial Operations Command (SIMA-E changed by 1993 Defense Base Closure Commission); scheduled FY 95</p> <p>1993 DBCRC: Tactical missile maintenance realigned from Anniston Army Depot, AL; Red River Army Depot, TX; NADEP Alameda, CA; NADEP Norfolk, VA; NWS Seal Beach, CA; MCLB Barstow, CA; and Ogden ALC, Hill AFB, UT; scheduled FY 94-95</p> <p>Retain Systems Integration Management Activity-East (Change to 1991 Defense Base Closure Commission recommendation)</p> |
| | NEW CUMBERLAND DEPOT | | | | | |
| | SCRANTON ARMY AMMUNITION PLANT | 90 | PRESS | ONGOING | LAYAWAY | 1990 PRESS: Layaway; scheduled FY 95 |
| | TACONY WAREHOUSE | 88 | DEFBRAC | ONGOING | CLOSE | 1988 DEFBRAC: Close; completed FY 92; pending disposal |
| | TOBYHANNA ARMY DEPOT | 88/93 | DEFBRAC/DBCRC | ONGOING | REALGNUP | <p>1988 DEFBRAC: Communications-electronics mission realigned from Lexington-Bluegrass Army Depot, KY; scheduled FY 93-94</p> <p>1993 DBCRC: Maintenance and repair function of the Intelligence Material Management Center realigned from Vint Hill Farms, VA; scheduled FY 96</p> |

CLOSURE HISTORY - INSTALLATIONS IN PENNSYLVANIA

24-Mar-95

| SVC | INSTALLATION NAME | ACTION YEAR | ACTION SOURCE | ACTION STATUS | ACTION SUMMARY | ACTION DETAIL |
|-----------|--|-------------|---------------|---------------|----------------|---|
| AF | | | | | | |
| | GREATER PITTSBURGH IAP AGS | | | | | |
| | HARRISBURG OLMSTED IAP AGS | | | | | |
| | WILLOW GROVE ARS | | | | | |
| D | | | | | | |
| | DEFENSE CLOTHING FACTORY | 93 | DBCRC | COMPLETE | CLOSE | 1993 DBCRC: Accept DoD recommendation to close. |
| | DEFENSE CONTRACT MANAGEMENT DISTRICT M | 93 | DBCRC | COMPLETE | CLOSE | 1993 DBCRC: Accept DoD recommendation. Close DCMD Midatlantic, Philadelphia, PA, and relocate its mission to the remaining three DCMDs. |
| | DEFENSE DISTRIBUTION DEPOT LETTERKENNY | 93 | DBCRC | COMPLETE | REJECT | 1993 DBCRC: Reject DoD recommendation to closed DDLP and relocate its mission to other DDDs. Maintain DDLP at the Chambersburg, PA, site to retain key support functions it provides Letterkenny Army Depot. |
| | DEFENSE INDUSTRIAL SUPPLY CENTER | 93 | DBCRC | COMPLETE | REJECT | 1993 DBCRC: Reject DoD recommendation to close. Maintain DISC at ASO compound to realize the most cost-effective option. |
| | DEFENSE PERSONNEL SUPPORT CENTER | | | | | |
| | DEFENSE PERSONNEL SUPPORT CENTER | 93 | DBCRC | COMPLETE | CLOSE | 1993 DBCRC: Reject DoD recommendation to close and move to New Cumberland. Close and move to ASO to realize best cost efficiencies. |
| N | | | | | | |
| | NAS, WILLOW GROVE | | | | | |
| | NAVAL AIR DEVELOPMENT CTR, WARMINSTER | 91 | DBCRC | ONGOING | REALIGNDN | 1991 DBCRC: Recommended realignment as part of the Aircraft Division, Naval Air Warfare Center. |
| | NAVAL HOSPITAL PHILADELPHIA | 88 | DEFBRAC | CLOSED | CLOSE | 1988 DEFBRAC: BRAC1 recommended closing Naval Hospital Philadelphia because the existing facilities are unsafe and inadequate, and cannot be efficiently modernized. Retain the Naval Ship Systems Engineering Station, a hospital tenant, in the Philadelphia area. |

CLOSURE HISTORY - INSTALLATIONS IN PENNSYLVANIA

24-Mar-95

| SVC | INSTALLATION NAME | ACTION YEAR | ACTION SOURCE | ACTION STATUS | ACTION SUMMARY | ACTION DETAIL |
|-----|---|-------------|---------------|---------------|----------------|--|
| | NAVAL STATION PHILADELPHIA | 90/91 | PRESS/DBCRC | ONGOING | CLOSE | <p>1990 PRESS: DOD Secretary proposed NAVSTA Philadelphia as a closure in his 1990 press release.</p> <p>1991 DBCRC: Recommended closing NAVSTA Philadelphia, reassigning its ships to other Atlantic Fleet Homeports and relocating the Naval Damage Control Training Center to NTC Great Lakes, IL.</p> |
| | NAVY AVIATION SUPPLY OFFICE | 93 | DBCRC | CANCELLED | CLOSE | <p>1993 DBCRC: Cancelled the OSD recommended closure of the ASO, Philadelphia, PA and relocation of needed personnel, equipment, and support to the Ship Parts Control Center (SPCC) Mechanicsburg, PA.</p> |
| | NAVY SHIPS PARTS CONTROL CTR NRC ALTOONA | 93 | DBCRC | CLOSED | CLOSE | <p>1993 DBCRC: Recommended closure of NRC Altoona, PA because its capacity is in excess of projected requirements.</p> |
| | PERA (SURFACE) HQ, PHILADELPHIA | 93 | DBCRC | ONGOING | DISESTAB | <p>1993 DBCRC: Directed the disestablishment of PERA Philadelphia and relocation of needed functions, personnel, equipment, and support to the Supervisor of Shipbuilding, Conversion and Repair, San Diego, CA, Portsmouth, VA and Newport News, VA.</p> |
| | PHILADELPHIA NAVAL SHIPYARD | 90/91 | PRESS/DBCRC | ONGOING | CLOSE | <p>1990 PRESS: DOD Secretary proposed NSY Philadelphia as a closure in his 1990 press release.</p> <p>1991 DBCRC: Recommended closing and preserving the shipyard for emergent requirements. The propeller facility's Naval Inactive Ships Maintenance Facility and Naval Ship System Engineering Station will remain.</p> |

Document Separator

18TH STORY of Level 1 printed in FULL format.

Copyright 1995 The Morning Call, Inc.
The Morning Call (Allentown)

March 2, 1995, Thursday, SECOND EDITION

SECTION: LOCAL/REGION, Pg. B1

LENGTH: 567 words

HEADLINE: LAST CLOSURES AT NAWC ARE FINALLY MADE PUBLIC

BYLINE: PETE LEFFLER; The Morning Call

DATELINE: WASHINGTON

BODY:

A Pentagon proposal to close the Naval Air Warfare Center in Warminster simply completes a downsizing process begun in 1991, the military says in documents justifying the action.

Not quite.

Until now, the Defense Department showed no interest -- in public at least -- in closing two final sections of the 800-acre base:

*A unique and arguably historic flight simulator used to train astronauts Alan B. Shepard, John Glenn and Neil Armstrong among others.

An engineering lab developing navigation and communications systems.

But rumors led many people to suspect just such a move, so they were not surprised to hear Defense Secretary William J. Perry ask for it Monday.

"Re-use has become no use," Bucks Commissioners Chairman Andrew Warren said yesterday. "That's unfortunate."

Four years ago the Pentagon asked Congress to "realign" the base by sending most but not all of its then-2,000 jobs to a military facility in Maryland.

That process should be completed by 1997, said Sheila Bass, acting administrator of the Federal Lands Reuse Authority of Bucks County. Her group yesterday reported its ideas for developing the property to Warren and the other commissioners.

Those plans include the creation of a business park, single-family houses, research facilities, a hotel and conference facility and 258 acres of parks and recreation land.

About 1,600 people still work at the base, making it Bucks County's largest employer. But the first grouping of workers is expected to get notices this summer telling them to head south.

Meanwhile, Perry yesterday submitted to the independent Defense Base Closure and Realignment Commission a request to close the base's last two divisions as part of a national downsizing.

The Morning Call (Allentown), March 2, 1995

After lengthy hearings, the commission will make its own recommendations to President Clinton by July 1. Clinton and Congress must accept or reject that] as a whole.

Four years ago the Pentagon called the centrifuge too valuable to lose. Today, military leaders say they can make do with similar but less extensive facilities elsewhere. The separate engineering lab would be moved to San Diego and St. Louis.

The two facilities account for 348 civilian and military jobs, according to Defense Department figures. Four years ago the Pentagon said those jobs would remain in Warminster.

If they go, the only Defense-related facility left behind would be the residences of personnel from nearby Willow Grove Naval Air Station, Bass said.

Bass said her group had "heard some scuttlebutt" about the Pentagon's ultimate plans to close the base completely.

But the group was prevented by law from studying re-use options for the centrifuge and lab prior to the final decision on their status. Officials at the base do not know precisely what equipment the military plans on leaving.

In the pioneering days of America's race for space, the centrifuge flung astronaut the end of its 50-foot arm. Lately, it's been used to study unconsciousness caused by extreme speed.

Bass hopes it can one day be used for biomedical and university research in t private sector. "We believe it's still very marketable," she said.

Warren would have liked the opportunity to study everything at once.

"If the federal government had intended to totally take everything out of Bucks County from the beginning," he said, "they should have said that."

LOAD-DATE-MDC: March 3, 1995

6TH STORY of Level 1 printed in FULL format.

Copyright 1995 The Morning Call, Inc.
The Morning Call (Allentown)

March 16, 1995, Thursday, SECOND EDITION

SECTION: LOCAL/REGION, Pg. B1, MARCOVITZ

LENGTH: 622 words

HEADLINE: LABS' CLOSING WILL END LINK TO SPACE ERA

BYLINE: HAL MARCOVITZ; The Morning Call

BODY:

I didn't know anything about Norman Thagard until I read about him in the newspaper.

Thagard is an astronaut. Right now, he is making his fifth trip into space. This time, he's flying in a Russian rocket. Thagard is the first American to go into space in a Russian rocket.

When I was a kid space shots were a big deal. The astronauts were named Cooper and Carpenter and Glenn and everybody knew who they were. The day of a space flight was practically a national holiday.

I remember sitting in front of a black-and-white TV in school watching fuzzy pictures of a launch pad at Cape Canaveral and wondering what it must be like to fly in space.

Of course, it was inconceivable back in the '60s to imagine our astronauts flying in Russian space capsules. After all, it was Sputnik, the Cold War and the fear of Soviet domination of space that was driving the American space program back then.

When I read about Thagard's flight I found myself thinking about the Naval Air Warfare Center in Warminster.

Last week, the Pentagon announced that it intends to close the four remaining laboratories at NAWC. In 1991, when NAWC was first slated for what the Defense Department calls "realignment," the government decided at the time to leave those four labs open because they would be too expensive to shut down and rebuild elsewhere.

But now, in the latest round of base closings, it appears the Defense Department has changed its mind. The labs will be scrapped and soon nothing that has to do with military test will be left at NAWC.

One of the labs that will be shut

down is the Dynamic Flight Simulator, otherwise known as the centrifuge. The centrifuge is a huge whirligig with a cockpit fixed to the end of a 50-foot arm that swings round and round. A pilot sits in the cockpit in order to experience G forces.

The Morning Call (Allentown), March 16, 1995

G forces are multiples of the pull of gravity. They increase as a jet plane or rocket accelerates, or in this case, as the centrifuge accelerates.

Anyway, back in the '60s the astronauts trained in the centrifuge at NAWC, which means the Naval Air Warfare Center in Bucks County played an important role in the early space program.

I called NAWC to talk to somebody about all that and I ended up with Dennis Kiefer, the director of the Dynamic Flight Simulator. Kiefer said he has worked on the centrifuge for the past 20 years and can't imagine what life would be like when it is closed down, which will probably happen in 1997.

"Our centrifuge runs constantly," Kiefer said. "Right now, we're fitting it with an F-18 cockpit. We thought we had programs scheduled for the next five years."

Kiefer said he was shocked by the decision to shut down the centrifuge. With a 50-foot arm, Kiefer said, the centrifuge in Bucks County is the largest one in the world.

There are four other military centrifuges in the United States. The Air Force owns centrifuges in Texas, New Mexico and Ohio. But the centrifuges in Texas and New Mexico are being closed down and the one in Ohio doesn't work, although there are plans to fix it.

The Navy owns a centrifuge in California and that one will remain open. The California centrifuge is about half the size of the one in Warminster, according to Kiefer.

Kiefer told me that the larger the centrifuge, the more G's the pilot can pull during the simulation.

I asked Kiefer what sort of civilian use you can get out of a military centrifuge. "Maybe entertainment," Kiefer answered, just a wee bit sarcastically.

Well, I hope Norman Thagard has a safe flight up there in that Russian rocket ship. When he gets back, I'd like to ask him how many G's he pulled on the way up.

I bet there's a lot of interest in that question around NAWC.

LOAD-DATE-MDC: March 17, 1995

Document Separator

DRAFT

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

SUMMARY SHEET

NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER RDT&E DIVISION DETACHMENT WARMINSTER, PENNSYLVANIA

INSTALLATION MISSION

A high-accuracy navigation sensor laboratory that conducts long-term research and development of new technology sensors including ring laser, fiber-optic, and superconducting gyros.

DOD RECOMMENDATION

- Close the Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, California; and the Naval Oceanographic Office, Bay St. Louis, Mississippi.

DOD JUSTIFICATION

- There is an overall reduction in operational forces and a sharp decline of the Navy's budget through fiscal year 2001. Closure of this activity reduces excess capacity with the resultant efficiencies and economies in the management of the relocated functions at the new receiving sites.

PLEASE NOTE: The information that follows includes BOTH the closure of NAWC/Warminster AND NCCOSC/Warminster.

COST CONSIDERATIONS DEVELOPED BY DOD

One-Time Costs: \$8.4 million

Net Savings During Implementation: \$33.1 million

Annual Recurring Savings: \$7.6 million

Return on Investment Year: Immediate

Net Present Value Over 20 years: \$104.6 million

DRAFT

DRAFT

MANPOWER IMPLICATIONS OF THIS RECOMMENDATION (EXCLUDES CONTRACTORS)

| | <u>Military</u> | <u>Civilian</u> | <u>Students</u> |
|-----------------|-----------------|-----------------|-----------------|
| Baseline | 136 | 5,204 | 0 |
| Reductions | 11 | 82 | 0 |
| Realignments | 05 | 212 | 0 |
| Total | 16 | 294 | 0 |

MANPOWER IMPLICATIONS OF ALL RECOMMENDATIONS AFFECTING THIS INSTALLATION (INCLUDES ON-BASE CONTRACTORS AND STUDENTS)

| <u>Recommendation</u> | <u>Out</u> | | <u>In</u> | | <u>Net Gain (Loss)</u> | |
|-----------------------|-----------------|-----------------|-----------------|-----------------|------------------------|-----------------|
| | <u>Military</u> | <u>Civilian</u> | <u>Military</u> | <u>Civilian</u> | <u>Military</u> | <u>Civilian</u> |
| TOTAL | 16 | 322 | 0 | 0 | (16) | (332) |

ENVIRONMENTAL CONSIDERATIONS

- Closure will have a positive effect on the environment because functions and personnel will be relocated out of an area that is in severe non-attainment for ozone and from an activity that is included on the National Priorities List. No adverse impact on threatened/endangered species, sensitive habitats and wetlands, or cultural/historical resources.

REPRESENTATION

Governor: Tom Ridge
Senators: Arlen Specter
Rick Santorum
Representatives: Jon D. Fox
James C. Greenwood
Paul McHale

DRAFT

ECONOMIC IMPACT

- Potential Employment Loss: 1080 jobs (348 direct and 732 indirect)
- Phila, PA-NJ PMSA Job Base: 2,604,793
- Percentage: <0.1 percent decrease
- Cumulative Economic Impact (1994-2001): 1.0 percent decrease

MILITARY ISSUES

- See Summary Sheet for NAWC-Warminster.

COMMUNITY CONCERNS/ISSUES

- None.

ITEMS OF SPECIAL EMPHASIS

- None.

Lester Farrington/Cross Service/04/25/95 3:52 PM

Community Infrastructure Impact: There is no community infrastructure impact since there are no receiving installations for this recommendation.

Environmental Impact: The closure of the NAWC OWTF Oreland will have a beneficial effect on the environment since any impact of military activities on jurisdictional wetlands will be eliminated. Because this closure has no accompanying transfer of functions or personnel, there are no other environmental impacts associated with this closure. There will be no adverse impact on threatened/endangered species, sensitive habitats, or cultural/historical resources occasioned by this recommendation.

Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania

Recommendation: Close the Naval Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, California; and the Naval Oceanographic Office, Bay St. Louis, Mississippi.

Justification: There is an overall reduction in operational forces and a sharp decline of the DON budget through FY 2001. Specific reductions for technical centers are difficult to determine, because these activities are supported through customer orders. However, the level of forces and the budget are reliable indicators of sharp declines in technical center workload through FY 2001, which leads to a recognition of excess capacity in these activities. This excess and the imbalance in force and resource levels dictate closure/realignment or consolidation of activities wherever practicable. The closure of this activity reduces excess capacity with the resultant efficiencies and economies in the management of the relocated functions at the new receiving sites. Additionally, it completes the process of realignment initiated in BRAC 91, based on a clearer understanding of what is now required to be retained in-house. Closure and excessing of the Inertial Navigational Facility further reduces excess capacity and provides the opportunity for the transfer of these facilities to the public educational or commercial sectors, thus maintaining access on an as-needed basis.

Return on Investment: The return on investment data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. The total estimated one-time cost to implement this recommendation is \$8.4 million. The net of all costs and savings during the implementation period is a savings of \$33.1 million. Annual recurring savings after implementation are \$7.6 million with an immediate return on investment expected. The net present value of the costs and savings over 20 years is a savings of \$104.6 million.

Impacts:

Economic Impact on Communities: The economic data below applies to the closure of NAWC Warminster and the closure of NCCOSC Det Warminster. Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 1,080 jobs (348 direct jobs and 732 indirect jobs) over the 1996-to-2001 period in the Philadelphia, Pennsylvania-New Jersey PMSA economic area, which is less than 0.1 percent of economic area employment. The cumulative economic impact of all BRAC 95 recommendations and all prior-round BRAC actions in the economic area over the 1994-to-2001 period could result in a maximum potential decrease equal to 1.0 percent of employment in the economic area.

Community Infrastructure Impact: There is no known community infrastructure impact at any receiving installation.

Environmental Impact: The closure of both NAWC Warminster and NCCOSC Det Warminster will have a positive effect on the environment because their appropriate functions and personnel will be relocated out of an area that is in severe non-attainment for ozone and from an activity that is included on the National Priorities List. The personnel being relocated to NCCOSC San Diego represent an increase in personnel of less than six percent, which is not considered of sufficient size to adversely impact the environment at that sites. However, a conformity determination may be required to determine this impact. At both receiving sites, the utility infrastructure capacity is sufficient to handle the additional loading. There is no adverse impact on threatened/endangered species, sensitive habitats and wetlands, or cultural/historical resources occasioned by this recommendation.

Fleet and Industrial Supply Center, Charleston, South Carolina

Recommendation: Close the Fleet and Industrial Supply Center, Charleston, South Carolina.

Justification: Fleet and Industrial Supply Centers are follower activities whose existence depends upon active fleet units in their homeport area. Prior BRAC actions closed or realigned most of this activity's customer base, and most of its personnel have already transferred to the Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering, East Coast Division, Charleston, South Carolina. Further, in accordance with the FY 2001 Force Structure Plan, force structure reductions through the year 2001 erode the requirement for support of active forces even further. This remaining workload can efficiently be handled by other FISCs or other naval activities.

BASE VISIT REPORT

**NAVAL AIR WARFARE CENTER , AIRCRAFT DIVISION
and
NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER, RDT&E
DIVISION DETACHMENT
WARMINSTER, PENNSYLVANIA**

OPEN WATER TEST FACILITY, ORELAND, PENNSYLVANIA

APRIL 7, 1995

LEAD COMMISSIONER:

Commissioner Al Cornella

ACCOMPANYING COMMISSIONER:

None.

COMMISSION STAFF:

Mr. Lester C. Farrington, Cross Service Team Analyst
Mr. David Epstein, Navy Team Analyst

LIST OF ATTENDEES:

NAWC Representatives

CAPT William L. McCracken, Commander
Thomas Castaldi-Executive Director
Stuart Simon-Deputy Director
Franz Bonn-Transition Manager
Joseph Cody-Base Transition Office
Richard Coughlan-Head of Acoustics Dev.
David Polish-Public Affairs Officer
Thomas Milhous-Head of Crew Systems
Dr. Philip Whitley-Crew Systems
Herb Seligman-Navigational Systems Dev.
Steve Ganop-Integrated Navigation Systems
Jim Eck-Naval Command, Control and Ocean Surveillance
Center, RDT&E Div. Detachment

Congressional Staff

Pete Johnson-Congressman James Greenwood's Staff 8th District

BASE'S PRESENT MISSION:

NAWC Aircraft Division is the principal Navy research, development, test and evaluation center for aircraft, airborne anti-submarine warfare and aircraft systems. The Naval Command, Control and Ocean Surveillance Center is a high-accuracy navigation sensor laboratory that conducts research and development of new technology sensors, including various types of gyros. NAWC's Open Water Test Facility tests active and passive transducers and sonobuoy subsystems.

SECRETARY OF DEFENSE RECOMMENDATION:

Close the NAWC, Aircraft Division, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Air Warfare Center, Aircraft Division, Patuxent River, Maryland.

Close the Naval Command, Control and Ocean Surveillance Center and relocate appropriate functions, personnel equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Div., San Diego, California; and the Naval Oceanographic Office, Bay St. Louis, Mississippi.

Close the NAWC's Open Water Test Facility in Oreland, Pennsylvania.

SECRETARY OF DEFENSE JUSTIFICATION:

Overall reduction in operational forces and sharp decline of the Navy budget through FY 2001 is resulting in reduced technical workload and excess capacity. These closures complete the process of realignment initiated in BRAC 91. Excess capacity is being reduced by eliminating redundant capability and requirements that can be met elsewhere in Navy.

MAIN FACILITIES REVIEWED:

NAVIGATION LABORATORY(NRAD)

- Inertial Navigation Test Facility
- Global Positioning System Laboratory
- Ships Motion Test Facility

CREW SYSTEMS FACILITIES

- Human Centrifuge
- Dynamic Flight Simulator

OPEN WATER TEST FACILITY (not viewed by Messrs. Cornella and Epstein)

KEY ISSUES IDENTIFIED

The primary issue revolves around control over and Navy use of the major RDT&E facilities at NAWC-Warminster that are unique and may be needed to meet current and future Navy requirements. Three structures--the Inertial Navigation Facility, Centrifuge and Dynamic Flight Simulator--were retained after BRAC 91 . These facilities are massive and cannot cost-effectively be moved. Closure and excessing of the facilities provides the opportunity for transfer to the public educational or commercial sectors , and thus maintaining access by Navy on as as-needed basis. During BRAC 91, it was decided that these facilities be retained. A reuse plan for NAWC has been prepared for business and recreational use.

While BRAC 95 closes the remainder of NAWC-Warminster, the issue is that whatever activity ends up controlling the aforementioned R&D facilities, the Navy wants to have priority use of these unique facilities to meet their requirements. However, a potential issue may develop over the extent that the Navy will have to fund these activities after the facility is closed.

While closure of the Open Water Test Facility at Oreland and transfer of workload to Crane, Indiana is not an issue, a fixed tow rail in combination with a quiet ambient noise level is needed. The tow rail exists at Oreland and not at Crane. It can be purchased or moved depending whichever is more cost-effective. NAWC plans to recommend to Navy that Crane be given BRAC funding to upgrade their in water facility with a fixed tow rail to transition flow noise testing from NAWC's Oreland facility. This was apparently an oversight in developing closure plans for NAWC Warminster during BRAC 95.

COMMUNITY CONCERNS RAISED:

None.

REQUESTS FOR STAFF AS A RESULT OF VISIT:

Follow-up with Navy to substantiate future requirements for the major facilities to be left at NAWC Warminster. Also review justification and cost information of upgrading the Crane facility if formally presented to DBCRC.

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

*Naval Air Warfare Center,
 Aircraft Div., Warminster PA*

Starting Year : 1996
 Final Year : 1998
 ROI Year : Immediate

*Naval CC & Ocean Surv. Center
 RDT & E Div. Det., Warminster, PA*

NPV in 2015(\$K): -104,569
 1-Time Cost(\$K): 8,356

| Net Costs (\$K) Constant Dollars | 1996 | | | | | | Total | Beyond |
|----------------------------------|-------------|-------------|---------------|---------------|---------------|---------------|----------------|---------------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | | |
| MilCon | -3,030 | 0 | 0 | -1,300 | 0 | 0 | -4,330 | 0 |
| Person | -281 | -2,668 | -4,888 | -4,888 | -4,888 | -4,888 | -22,501 | -4,888 |
| Overhd | -119 | -812 | -2,290 | -2,468 | -2,468 | -2,468 | -10,624 | -2,468 |
| Moving | 2,650 | 2,954 | 0 | 0 | 0 | 0 | 5,604 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | -1,000 | 0 | -200 | -1,200 | -200 |
| TOTAL | -780 | -526 | -7,178 | -9,656 | -7,356 | -7,556 | -33,051 | -7,556 |

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------------------------|-----------|-----------|----------|----------|----------|----------|-----------|
| POSITIONS ELIMINATED | | | | | | | |
| Off | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enl | 10 | 0 | 0 | 0 | 0 | 0 | 10 |
| Civ | 13 | 69 | 0 | 0 | 0 | 0 | 82 |
| TOT | 24 | 69 | 0 | 0 | 0 | 0 | 93 |

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|----------------------------|------------|------------|----------|----------|----------|----------|------------|
| POSITIONS REALIGNED | | | | | | | |
| Off | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enl | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Stu | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| TOT | 116 | 101 | 0 | 0 | 0 | 0 | 217 |

Summary:

Close NAWC/NCCOSC WARMINSTER

SCENARIO 030

Dick,

I've taken a quick look at this and highlighted a few areas for you to check on.

Bob

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 2/2
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| | Costs (\$K) Constant Dollars | | | | | | Total | Beyond |
|--------------|------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | | |
| MilCon | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 | 0 |
| Person | 300 | 360 | 27 | 27 | 27 | 27 | 769 | 27 |
| Overhd | 913 | 1,348 | 1,170 | 992 | 992 | 992 | 6,406 | 992 |
| Moving | 2,655 | 2,954 | 0 | 0 | 0 | 0 | 5,608 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 5,138 | 4,662 | 1,197 | 1,019 | 1,019 | 1,019 | 14,054 | 1,019 |

| | Savings (\$K) Constant Dollars | | | | | | Total | Beyond |
|--------------|--------------------------------|--------------|--------------|---------------|--------------|--------------|---------------|--------------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | | |
| MilCon | 4,300 | 0 | 0 | 1,300 | 0 | 0 | 5,600 | 0 |
| Person | 581 | 3,028 | 4,915 | 4,915 | 4,915 | 4,915 | 23,270 | 4,915 |
| Overhd | 1,032 | 2,160 | 3,459 | 3,459 | 3,459 | 3,459 | 17,030 | 3,459 |
| Moving | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 1,000 | 0 | 200 | 1,200 | 200 |
| TOTAL | 5,918 | 5,188 | 8,374 | 10,674 | 8,374 | 8,574 | 47,104 | 8,574 |

NET PRESENT VALUES REPORT (COBRA v5.08)
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Year | Cost(\$) | Adjusted Cost(\$) | NPV(\$) |
|------|------------|-------------------|--------------|
| ---- | ----- | ----- | ----- |
| 1996 | -780,367 | -769,853 | -769,853 |
| 1997 | -525,735 | -504,770 | -1,274,624 |
| 1998 | -7,177,629 | -6,706,971 | -7,981,594 |
| 1999 | -9,655,630 | -8,781,004 | -16,762,599 |
| 2000 | -7,355,630 | -6,510,309 | -23,272,908 |
| 2001 | -7,555,630 | -6,508,345 | -29,781,254 |
| 2002 | -7,555,630 | -6,334,156 | -36,115,410 |
| 2003 | -7,555,630 | -6,164,629 | -42,280,039 |
| 2004 | -7,555,630 | -5,999,639 | -48,279,678 |
| 2005 | -7,555,630 | -5,839,064 | -54,118,742 |
| 2006 | -7,555,630 | -5,682,788 | -59,801,530 |
| 2007 | -7,555,630 | -5,530,694 | -65,332,224 |
| 2008 | -7,555,630 | -5,382,670 | -70,714,894 |
| 2009 | -7,555,630 | -5,238,609 | -75,953,503 |
| 2010 | -7,555,630 | -5,098,402 | -81,051,906 |
| 2011 | -7,555,630 | -4,961,949 | -86,013,855 |
| 2012 | -7,555,630 | -4,829,147 | -90,843,002 |
| 2013 | -7,555,630 | -4,699,900 | -95,542,902 |
| 2014 | -7,555,630 | -4,574,112 | -100,117,014 |
| 2015 | -7,555,630 | -4,451,691 | -104,568,705 |

TOTAL ONE-TIME COST REPORT (COBRA v5.08) - Page 1/6
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

(All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-----------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 1,270,000 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 1,270,000 |
| Personnel | | |
| Civilian RIF | 383,952 | |
| Civilian Early Retirement | 147,674 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 18,557 | |
| Unemployment | 56,376 | |
| Total - Personnel | | 606,559 |
| Overhead | | |
| Program Planning Support | 731,782 | |
| Mothball / Shutdown | 138,750 | |
| Total - Overhead | | 870,532 |
| Moving | | |
| Civilian Moving | 4,673,874 | |
| Civilian PPS | 720,000 | |
| Military Moving | 19,619 | |
| Freight | 195,023 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 5,608,516 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | | |
| Total One-Time Costs | | 8,355,607 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 5,600,000 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 4,512 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 5,604,512 |
| ----- | | |
| Total Net One-Time Costs | | 2,751,095 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NCCOSC NRAD SAN DGO, CA
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-----------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 1,270,000 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 1,270,000 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | | ----- |
| Total One-Time Costs | | 1,270,000 |
| ----- | | ----- |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | ----- |
| Total One-Time Savings | | 0 |
| ----- | | ----- |
| Total Net One-Time Costs | | 1,270,000 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAVOCEANO, MS
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-------|-----------|
| ----- | ----- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | ----- | ----- |
| Total One-Time Costs | | 0 |
| ----- | ----- | ----- |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | ----- | ----- |
| Total One-Time Savings | | 0 |
| ----- | ----- | ----- |
| Total Net One-Time Costs | | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NNMC BETHESDA, MD
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | | |
| Total One-Time Costs | | 0 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 0 |
| ----- | | |
| Total Net One-Time Costs | | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AD PAX RIVER, MD
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | ----- | ----- |
| Total One-Time Costs | | 0 |
| ----- | ----- | ----- |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | ----- | ----- |
| Total One-Time Savings | | 0 |
| ----- | ----- | ----- |
| Total Net One-Time Costs | | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|-----------|-----------|
| ----- | ----- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 383,952 | |
| Civilian Early Retirement | 147,674 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 18,557 | |
| Unemployment | 56,376 | |
| Total - Personnel | | 606,559 |
| Overhead | | |
| Program Planning Support | 731,782 | |
| Mothball / Shutdown | 138,750 | |
| Total - Overhead | | 870,532 |
| Moving | | |
| Civilian Moving | 4,673,874 | |
| Civilian PPS | 720,000 | |
| Military Moving | 19,619 | |
| Freight | 195,023 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 5,608,516 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 0 | |
| Total - Other | | 0 |
| ----- | ----- | ----- |
| Total One-Time Costs | | 7,085,607 |
| ----- | ----- | ----- |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 5,600,000 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 4,512 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| Total One-Time Savings | | 5,604,512 |
| ----- | ----- | ----- |
| Total Net One-Time Costs | | 1,481,095 |

Department : Navy
Option Package : NAWC WARMINSTER 2
Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

All Costs in \$K

| Base Name | Total MilCon | IMA Cost | Land Purch | Cost Avoid | Total Cost |
|---------------------|-----------------|-------------|---------------|---------------|---------------|
| NCCOSC NRAD SAN DGO | 1,270 | 0 | 0 | 0 | 1,270 |
| NAVOCEANO | 0 | 0 | 0 | 0 | 0 |
| NNMC BETHESDA | 0 | 0 | 0 | 0 | 0 |
| NAWC AD PAX RIVER | 0 | 0 | 0 | 0 | 0 |
| NAWC AC WARMINSTER | 0 | 0 | 0 | -5,600 | -5,600 |
| Totals: | 1,270 | 0 | 0 | -5,600 | -4,330 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

MilCon for Base: NCCOSC NRAD SAN DGO, CA

All Costs in \$K

| Description: | MilCon Categ | Using Rehab | Rehab Cost* | New MilCon | New Cost* | Total Cost* |
|---------------------------------------|-----------------|----------------|----------------|---------------|--------------|----------------|
| RF MICROELECTRONICS Clean Room | OTHER | 0 | n/a | 0 | n/a | 270 |
| SHIP MOTION SIMULATO Concrete Well | OTHER | 0 | n/a | 0 | n/a | 1,000 |

| | |
|----------------------------|-------|
| Total Construction Cost: | 1,270 |
| + Info Management Account: | 0 |
| + Land Purchases: | 0 |
| - Construction Cost Avoid: | 0 |
| TOTAL: | 1,270 |

* All MilCon Costs include Design, Site Preparation, Contingency Planning, and SIOH Costs where applicable.

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

MilCon for Base: NAWC AC WARMINSTER, PA

All Costs in \$K

| Description: | MilCon Categ | Using Rehab | Rehab Cost* | New MilCon | New Cost* | Total Cost* |
|----------------------------|-----------------|----------------|----------------|---------------|--------------|----------------|
| ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| Total Construction Cost: | | | | | | 0 |
| + Info Management Account: | | | | | | 0 |
| + Land Purchases: | | | | | | 0 |
| - Construction Cost Avoid: | | | | | | 5,600 |
| ----- | | | | | | |
| TOTAL: | | | | | | -5,600 |

* All MilCon Costs include Design, Site Preparation, Contingency Planning, and SIOH Costs where applicable.

PERSONNEL SUMMARY REPORT (COBRA v5.08)
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

PERSONNEL SUMMARY FOR: NCCOSC NRAD SAN DGO, CA

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 45 | 91 | 0 | 5,204 |

PERSONNEL REALIGNMENTS:

From Base: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 99 | 65 | 0 | 0 | 0 | 0 | 164 |
| TOTAL | 99 | 65 | 0 | 0 | 0 | 0 | 164 |

TOTAL PERSONNEL REALIGNMENTS (Into NCCOSC NRAD SAN DGO, CA):

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 99 | 65 | 0 | 0 | 0 | 0 | 164 |
| TOTAL | 99 | 65 | 0 | 0 | 0 | 0 | 164 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 45 | 91 | 0 | 5,368 |

PERSONNEL SUMMARY FOR: NAVOCEANO, MS

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 29 | 41 | 0 | 36 |

PERSONNEL REALIGNMENTS:

From Base: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| TOTAL | 0 | 36 | 0 | 0 | 0 | 0 | 36 |

TOTAL PERSONNEL REALIGNMENTS (Into NAVOCEANO, MS):

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| TOTAL | 0 | 36 | 0 | 0 | 0 | 0 | 36 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 29 | 41 | 0 | 36 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

PERSONNEL SUMMARY FOR: NMMC BETHESDA, MD

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 1,075 | 1,754 | 202 | 1,733 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 1,075 | 1,754 | 202 | 1,733 |

PERSONNEL SUMMARY FOR: NAWC AD PAX RIVER, MD

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 463 | 2,361 | 23 | 3,119 |

PERSONNEL REALIGNMENTS:

From Base: NAWC AC WARMINSTER, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| TOTAL | 17 | 0 | 0 | 0 | 0 | 0 | 17 |

TOTAL PERSONNEL REALIGNMENTS (Into NAWC AD PAX RIVER, MD):

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| TOTAL | 17 | 0 | 0 | 0 | 0 | 0 | 17 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 464 | 2,365 | 23 | 3,131 |

PERSONNEL SUMMARY FOR: NAWC AC WARMINSTER, PA

BASE POPULATION (FY 1996):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 2 | 14 | 0 | 311 |

FORCE STRUCTURE CHANGES:

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | -17 | 0 | 0 | 0 | 0 | 0 | -17 |
| TOTAL | -17 | 0 | 0 | 0 | 0 | 0 | -17 |

BASE POPULATION (Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 2 | 14 | 0 | 294 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

PERSONNEL REALIGNMENTS:

To Base: NCCOSC NRAD SAN DGO, CA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 99 | 65 | 0 | 0 | 0 | 0 | 164 |
| TOTAL | 99 | 65 | 0 | 0 | 0 | 0 | 164 |

To Base: NAVOCEANO, MS

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| TOTAL | 0 | 36 | 0 | 0 | 0 | 0 | 36 |

To Base: NAWC AD PAX RIVER, MD

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| TOTAL | 17 | 0 | 0 | 0 | 0 | 0 | 17 |

TOTAL PERSONNEL REALIGNMENTS (Out of NAWC AC WARMINSTER, PA):

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Enlisted | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| Students | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| TOTAL | 116 | 101 | 0 | 0 | 0 | 0 | 217 |

SCENARIO POSITION CHANGES:

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------|------|------|------|------|------|------|-------|
| Officers | -1 | 0 | 0 | 0 | 0 | 0 | -1 |
| Enlisted | -10 | 0 | 0 | 0 | 0 | 0 | -10 |
| Civilians | -13 | -69 | 0 | 0 | 0 | 0 | -82 |
| TOTAL | -24 | -69 | 0 | 0 | 0 | 0 | -93 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| 0 | 0 | 0 | 0 |

TOTAL PERSONNEL IMPACT REPORT (COBRA v5.08) - Page 1/6
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| Early Retirement* | 10.00% | 11 | 11 | 0 | 0 | 0 | 0 | 22 |
| Regular Retirement* | 5.00% | 6 | 5 | 0 | 0 | 0 | 0 | 11 |
| Civilian Turnover* | 15.00% | 17 | 15 | 0 | 0 | 0 | 0 | 32 |
| Civs Not Moving (RIFs)*+ | | 7 | 6 | 0 | 0 | 0 | 0 | 13 |
| Civilians Moving (the remainder) | | 70 | 64 | 0 | 0 | 0 | 0 | 134 |
| Civilian Positions Available | | 41 | 37 | 0 | 0 | 0 | 0 | 78 |
| CIVILIAN POSITIONS ELIMINATED | | 13 | 69 | 0 | 0 | 0 | 0 | 82 |
| Early Retirement | 10.00% | 1 | 7 | 0 | 0 | 0 | 0 | 8 |
| Regular Retirement | 5.00% | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| Civilian Turnover | 15.00% | 2 | 10 | 0 | 0 | 0 | 0 | 12 |
| Civs Not Moving (RIFs)*+ | | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| Priority Placement# | 60.00% | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| Civilians Available to Move | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilians Moving | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | 111 | 101 | 0 | 0 | 0 | 0 | 212 |
| Civilians Moving | | 70 | 68 | 0 | 0 | 0 | 0 | 138 |
| New Civilians Hired | | 41 | 33 | 0 | 0 | 0 | 0 | 74 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 12 | 18 | 0 | 0 | 0 | 0 | 30 |
| TOTAL CIVILIAN RIFS | | 8 | 10 | 0 | 0 | 0 | 0 | 18 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| TOTAL CIVILIAN NEW HIRES | | 41 | 33 | 0 | 0 | 0 | 0 | 74 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

+ The Percentage of Civilians Not Willing to Move (Voluntary RIFs) varies from base to base.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NCCOSC NRAD SAN DGO, CA | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | | | | | | | |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | | | | | | | |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | | | | | | | |
| Civilians Moving | | 63 | 41 | 0 | 0 | 0 | 0 | 104 |
| New Civilians Hired | | 36 | 24 | 0 | 0 | 0 | 0 | 60 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFs | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 36 | 24 | 0 | 0 | 0 | 0 | 60 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NAVOCEANO, MS | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| Civilians Moving | | 0 | 27 | 0 | 0 | 0 | 0 | 27 |
| New Civilians Hired | | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFs | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 0 | 9 | 0 | 0 | 0 | 0 | 9 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NMMC BETHESDA, MD | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Civilians Hired | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NAWC AD PAX RIVER, MD | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|--|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | | | | | | | |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | | | | | | | |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* | 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | | | | | | | |
| Civilians Moving | | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| New Civilians Hired | | 7 | 0 | 0 | 0 | 0 | 0 | 7 |
| Other Civilian Additions | | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFs | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 5 | 0 | 0 | 0 | 0 | 0 | 5 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

PERSONNEL IMPACT REPORT (COBRA v5.08) - Page 6/6
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NAWC AC WARMINSTER, PA | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|--|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | | | | | | | |
| Early Retirement* | 10.00% | 11 | 11 | 0 | 0 | 0 | 0 | 22 |
| Regular Retirement* | 5.00% | 6 | 5 | 0 | 0 | 0 | 0 | 11 |
| Civilian Turnover* | 15.00% | 17 | 15 | 0 | 0 | 0 | 0 | 32 |
| Civs Not Moving (RIFs)* | 6.00% | 7 | 6 | 0 | 0 | 0 | 0 | 13 |
| Civilians Moving (the remainder) | | 70 | 64 | 0 | 0 | 0 | 0 | 134 |
| Civilian Positions Available | | 41 | 37 | 0 | 0 | 0 | 0 | 78 |
| CIVILIAN POSITIONS ELIMINATED | | | | | | | | |
| Early Retirement | 10.00% | 1 | 7 | 0 | 0 | 0 | 0 | 8 |
| Regular Retirement | 5.00% | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| Civilian Turnover | 15.00% | 2 | 10 | 0 | 0 | 0 | 0 | 12 |
| Civs Not Moving (RIFs)* | 6.00% | 1 | 4 | 0 | 0 | 0 | 0 | 5 |
| Priority Placement# | 60.00% | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| Civilians Available to Move | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilians Moving | | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | | | | | | | |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Civilians Hired | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 12 | 18 | 0 | 0 | 0 | 0 | 30 |
| TOTAL CIVILIAN RIFs | | 8 | 10 | 0 | 0 | 0 | 0 | 18 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 8 | 41 | 0 | 0 | 0 | 0 | 49 |
| TOTAL CIVILIAN NEW HIRES | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 1/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| ONE-TIME COSTS -----(\$K)----- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| CONSTRUCTION | | | | | | | |
| MILCON | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIF | 171 | 213 | 0 | 0 | 0 | 0 | 384 |
| Civ Retire | 59 | 89 | 0 | 0 | 0 | 0 | 148 |
| CIV MOVING | | | | | | | |
| Per Diem | 294 | 263 | 0 | 0 | 0 | 0 | 557 |
| POV Miles | 31 | 25 | 0 | 0 | 0 | 0 | 56 |
| Home Purch | 823 | 769 | 0 | 0 | 0 | 0 | 1,592 |
| HHG | 551 | 515 | 0 | 0 | 0 | 0 | 1,067 |
| Misc | 49 | 47 | 0 | 0 | 0 | 0 | 96 |
| House Hunt | 278 | 238 | 0 | 0 | 0 | 0 | 516 |
| PPS | 115 | 605 | 0 | 0 | 0 | 0 | 720 |
| RITA | 413 | 376 | 0 | 0 | 0 | 0 | 789 |
| FREIGHT | | | | | | | |
| Packing | 19 | 17 | 0 | 0 | 0 | 0 | 35 |
| Freight | 61 | 99 | 0 | 0 | 0 | 0 | 159 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 25 | 31 | 0 | 0 | 0 | 0 | 56 |
| OTHER | | | | | | | |
| Program Plan | 316 | 237 | 178 | 0 | 0 | 0 | 732 |
| Shutdown | 63 | 76 | 0 | 0 | 0 | 0 | 139 |
| New Hire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 16 | 0 | 0 | 0 | 0 | 0 | 16 |
| Misc | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| OTHER | | | | | | | |
| Elim POS | 18 | 0 | 0 | 0 | 0 | 0 | 18 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 4,577 | 3,600 | 178 | 0 | 0 | 0 | 8,356 |

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 2/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| RECURRINGCOSTS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------|-------|-------|-------|--------|-------|-------|--------|--------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 99 | 99 | 99 | 99 | 99 | 99 | 592 | 99 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 27 | 27 | 27 | 27 | 27 | 27 | 162 | 27 |
| OTHER | | | | | | | | |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 435 | 936 | 893 | 893 | 893 | 893 | 4,943 | 893 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 561 | 1,062 | 1,019 | 1,019 | 1,019 | 1,019 | 5,698 | 1,019 |
| TOTAL COST | 5,138 | 4,662 | 1,197 | 1,019 | 1,019 | 1,019 | 14,054 | 1,019 |
| ONE-TIME SAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | |
| CONSTRUCTION | | | | | | | | |
| MILCON | 4,300 | 0 | 0 | 1,300 | 0 | 0 | 5,600 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 4 | 0 | 0 | 0 | 0 | 0 | 4 | |
| OTHER | | | | | | | | |
| Land Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 4,304 | 0 | 0 | 1,300 | 0 | 0 | 5,604 | |
| RECURRINGSAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 119 | 394 | 563 | 563 | 563 | 563 | 2,765 | 563 |
| BOS | 88 | 941 | 2,071 | 2,071 | 2,071 | 2,071 | 9,315 | 2,071 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 355 | 2,598 | 4,485 | 4,485 | 4,485 | 4,485 | 20,893 | 4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 38 | 77 | 77 | 77 | 77 | 77 | 422 | 77 |
| Enl Salary | 166 | 332 | 332 | 332 | 332 | 332 | 1,825 | 332 |
| House Allow | 21 | 21 | 21 | 21 | 21 | 21 | 129 | 21 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 1,000 | 0 | 200 | 1,200 | 200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 825 | 825 | 825 | 825 | 825 | 825 | 4,950 | 825 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 1,614 | 5,188 | 8,374 | 9,374 | 8,374 | 8,574 | 41,500 | 8,574 |
| TOTAL SAVINGS | 5,918 | 5,188 | 8,374 | 10,674 | 8,374 | 8,574 | 47,104 | 8,574 |

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 3/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95D8OF.SFF

| ONE-TIME NET | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| CONSTRUCTION | | | | | | | | |
| MILCON | -3,030 | 0 | 0 | -1,300 | 0 | 0 | -4,330 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 230 | 302 | 0 | 0 | 0 | 0 | 532 | |
| Civ Moving | 2,635 | 2,954 | 0 | 0 | 0 | 0 | 5,589 | |
| Other | 404 | 345 | 178 | 0 | 0 | 0 | 927 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 34 | 0 | 0 | 0 | 0 | 0 | 34 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 273 | 3,600 | 178 | -1,300 | 0 | 0 | 2,751 | |
| RECURRING NET | | | | | | | | |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | -119 | -394 | -563 | -563 | -563 | -563 | -2,765 | -563 |
| BOS | 10 | -842 | -1,973 | -1,973 | -1,973 | -1,973 | -8,722 | -1,973 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | -355 | -2,598 | -4,485 | -4,485 | -4,485 | -4,485 | -20,893 | -4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | -204 | -408 | -408 | -408 | -408 | -408 | -2,247 | -408 |
| House Allow | 5 | 5 | 5 | 5 | 5 | 5 | 33 | 5 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | -1,000 | 0 | -200 | -1,200 | -200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | -390 | 111 | 68 | 68 | 68 | 68 | -7 | 68 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | -1,053 | -4,126 | -7,356 | -8,356 | -7,356 | -7,556 | -35,802 | -7,556 |
| TOTAL NET COST | -780 | -526 | -7,178 | -9,656 | -7,356 | -7,556 | -33,051 | -7,556 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NCCOSC NRAD SAN DGO, CA

| ONE-TIME COSTS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------------|-------|------|------|------|------|------|-------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- |
| CONSTRUCTION | | | | | | | |
| MILCON | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 6/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NCCOSC NRAD SAN DGO, CA

| ONE-TIME NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|----------------------------------|-------|------|------|------|------|------|-------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 1,270 | 0 | 0 | 0 | 0 | 0 | 1,270 | |
| RECURRING NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 435 | 717 | 717 | 717 | 717 | 717 | 4,020 | 717 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 435 | 717 | 717 | 717 | 717 | 717 | 4,020 | 717 |
| TOTAL NET COST | 1,705 | 717 | 717 | 717 | 717 | 717 | 5,290 | 717 |

Should check on these.

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 7/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NAVOCEANO, MS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|---------------------|------|------|------|------|------|------|-------|
| ONE-TIME COSTS | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| -----(\$K)----- | | | | | | | |
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim POS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 9/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAVOCEANO, MS

| ONE-TIME NET ----(\$K)---- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|--------------------------------|------|------|------|------|------|------|-------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| RECURRING NET ----(\$K)---- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 219 | 176 | 176 | 176 | 176 | 923 | 176 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 0 | 219 | 176 | 176 | 176 | 176 | 923 | 176 |
| TOTAL NET COST | 0 | 219 | 176 | 176 | 176 | 176 | 923 | 176 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 10/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NNMC BETHESDA, MD | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------|------|------|------|------|------|------|-------|
| ONE-TIME COSTS | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 13/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AD PAX RIVER, MD

| ONE-TIME COSTS -----(\$K)----- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCC | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AD PAX RIVER, MD

| ONE-TIME NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|----------------------------------|------|------|------|------|------|------|-------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| RECURRING NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 99 | 99 | 99 | 99 | 99 | 99 | 592 | 99 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 27 | 27 | 27 | 27 | 27 | 27 | 162 | 27 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 126 | 126 | 126 | 126 | 126 | 126 | 755 | 126 |
| TOTAL NET COST | 126 | 126 | 126 | 126 | 126 | 126 | 755 | 126 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 16/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA

| ONE-TIME COSTS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------------------|--------------|--------------|------------|----------|----------|----------|--------------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- |
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIFs | 171 | 213 | 0 | 0 | 0 | 0 | 384 |
| Civ Retire | 59 | 89 | 0 | 0 | 0 | 0 | 148 |
| CIV MOVING | | | | | | | |
| Per Diem | 294 | 263 | 0 | 0 | 0 | 0 | 557 |
| POV Miles | 31 | 25 | 0 | 0 | 0 | 0 | 56 |
| Home Purch | 823 | 769 | 0 | 0 | 0 | 0 | 1,592 |
| HHG | 551 | 515 | 0 | 0 | 0 | 0 | 1,067 |
| Misc | 49 | 47 | 0 | 0 | 0 | 0 | 96 |
| House Hunt | 278 | 238 | 0 | 0 | 0 | 0 | 516 |
| PPS | 115 | 605 | 0 | 0 | 0 | 0 | 720 |
| RITA | 413 | 376 | 0 | 0 | 0 | 0 | 789 |
| FREIGHT | | | | | | | |
| Packing | 19 | 17 | 0 | 0 | 0 | 0 | 35 |
| Freight | 61 | 99 | 0 | 0 | 0 | 0 | 159 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 25 | 31 | 0 | 0 | 0 | 0 | 56 |
| OTHER | | | | | | | |
| Program Plan | 316 | 237 | 178 | 0 | 0 | 0 | 732 |
| Shutdown | 63 | 76 | 0 | 0 | 0 | 0 | 139 |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 16 | 0 | 0 | 0 | 0 | 0 | 16 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 3,307 | 3,600 | 178 | 0 | 0 | 0 | 7,086 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 17/18
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA

| RECURRING COSTS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|----------------------|--------------|--------------|--------------|---------------|--------------|--------------|---------------|--------------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL COSTS | 3,307 | 3,600 | 178 | 0 | 0 | 0 | 7,086 | 0 |
| ONE-TIME SAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | |
| CONSTRUCTION | | | | | | | | |
| MILCON | 4,300 | 0 | 0 | 1,300 | 0 | 0 | 5,600 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 4 | 0 | 0 | 0 | 0 | 0 | 4 | |
| OTHER | | | | | | | | |
| Land Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 4,304 | 0 | 0 | 1,300 | 0 | 0 | 5,604 | |
| RECURRING SAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 119 | 394 | 563 | 563 | 563 | 563 | 2,765 | 563 |
| BOS | 82 | 941 | 2,071 | 2,071 | 2,071 | 2,071 | 9,315 | 2,071 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 355 | 2,598 | 4,485 | 4,485 | 4,485 | 4,485 | 20,893 | 4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 38 | 77 | 77 | 77 | 77 | 77 | 422 | 77 |
| Enl Salary | 166 | 332 | 332 | 332 | 332 | 332 | 1,825 | 332 |
| House Allow | 21 | 21 | 21 | 21 | 21 | 21 | 129 | 21 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 1,000 | 0 | 200 | 1,200 | 200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 825 | 825 | 825 | 825 | 825 | 825 | 4,950 | 825 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 1,614 | 5,188 | 8,374 | 9,374 | 8,374 | 8,574 | 41,500 | 8,574 |
| TOTAL SAVINGS | 5,918 | 5,188 | 8,374 | 10,674 | 8,374 | 8,574 | 47,104 | 8,574 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC AC WARMINSTER, PA

| ONE-TIME NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|----------------------------------|--------|--------|--------|---------|--------|--------|---------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | -4,300 | 0 | 0 | -1,300 | 0 | 0 | -5,600 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 230 | 302 | 0 | 0 | 0 | 0 | 532 | |
| Civ Moving | 2,635 | 2,954 | 0 | 0 | 0 | 0 | 5,589 | |
| Other | 404 | 345 | 178 | 0 | 0 | 0 | 927 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 34 | 0 | 0 | 0 | 0 | 0 | 34 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | -997 | 3,600 | 178 | -1,300 | 0 | 0 | 1,481 | |
| RECURRING NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | -119 | -394 | -563 | -563 | -563 | -563 | -2,765 | -563 |
| BOS | -88 | -941 | -2,071 | -2,071 | -2,071 | -2,071 | -9,315 | -2,071 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | -355 | -2,598 | -4,485 | -4,485 | -4,485 | -4,485 | -20,893 | -4,485 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | -204 | -408 | -408 | -408 | -408 | -408 | -2,247 | -408 |
| House Allow | -21 | -21 | -21 | -21 | -21 | -21 | -129 | -21 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | -1,000 | 0 | -200 | -1,200 | 200 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | -825 | -825 | -825 | -825 | -825 | -825 | -4,950 | -825 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | -1,274 | -4,849 | -8,374 | -8,374 | -8,374 | -8,174 | -39,100 | -8,174 |
| TOTAL NET COST | -2,611 | -1,587 | -8,196 | -10,674 | -8,374 | -8,574 | -40,019 | -8,574 |

*Should
check on
these*

PERSONNEL, SF, RPMA, AND BOS DELTAS (COBRA v5.08)
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base | Personnel | | SF | | |
|---------------------|-----------|---------|----------|---------|---------|
| | Change | %Change | Change | %Change | Chg/Per |
| NCCOSC NRAD SAN DGO | 164 | 3% | 0 | 0% | 0 |
| NAVOCEANO | 36 | 51% | 0 | 0% | 0 |
| NNMC BETHESDA | 0 | 0% | 0 | 0% | 0 |
| NAWC AD PAX RIVER | 17 | 0% | 0 | 0% | 0 |
| NAWC AC WARMINSTER | -310 | -100% | -111,000 | -100% | 358 |

| Base | RPMA(\$) | | | BOS(\$) | | |
|---------------------|----------|---------|---------|------------|---------|---------|
| | Change | %Change | Chg/Per | Change | %Change | Chg/Per |
| NCCOSC NRAD SAN DGO | 0 | 0% | 0 | 0 | 0% | 0 |
| NAVOCEANO | 0 | 0% | 0 | 0 | 0% | 0 |
| NNMC BETHESDA | 0 | 0% | 0 | 0 | 0% | 0 |
| NAWC AD PAX RIVER | 0 | 0% | 0 | 98,755 | 0% | 5,809 |
| NAWC AC WARMINSTER | -563,000 | -100% | 1,816 | -2,071,407 | -100% | 6,682 |

| Base | RPMABOS(\$) | | |
|---------------------|-------------|---------|---------|
| | Change | %Change | Chg/Per |
| NCCOSC NRAD SAN DGO | 0 | 0% | 0 |
| NAVOCEANO | 0 | 0% | 0 |
| NNMC BETHESDA | 0 | 0% | 0 |
| NAWC AD PAX RIVER | 98,755 | 0% | 5,809 |
| NAWC AC WARMINSTER | -2,634,407 | -101% | 8,498 |

RPMA/BOS CHANGE REPORT (COBRA v5.08)
Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
Option Package : NAWC WARMINSTER 2
Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Net Change(\$K) | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------|------|--------|--------|--------|--------|--------|---------|--------|
| RPMA Change | -119 | -394 | -563 | -563 | -563 | -563 | -2,765 | -563 |
| BOS Change | 10 | -842 | -1,973 | -1,973 | -1,973 | -1,973 | -8,722 | -1,973 |
| Housing Change | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CHANGES | -109 | -1,236 | -2,536 | -2,536 | -2,536 | -2,536 | -11,487 | -2,536 |

INPUT DATA REPORT (COBRA v5.08)
 Data As Of 17:20 11/22/1994, Report Created 19:43 03/08/1995

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

| | |
|-------------------------|-------------------|
| Base Name | Strategy: |
| ----- | ----- |
| NCCOSC NRAD SAN DGO, CA | Realignment |
| NAVOCEANO, MS | Realignment |
| NNMC BETHESDA, MD | Realignment |
| NAWC AD PAX RIVER, MD | Realignment |
| NAWC AC WARMINSTER, PA | Closes in FY 1998 |

Summary:

 Close NAWC/NCCOSC WARMINSTER

SCENARIO 030

INPUT SCREEN TWO - DISTANCE TABLE

| | | |
|-------------------------|------------------------|-----------|
| From Base: | To Base: | Distance: |
| ----- | ----- | ----- |
| NCCOSC NRAD SAN DGO, CA | NAWC AC WARMINSTER, PA | 2,762 mi |
| NAVOCEANO, MS | NAWC AC WARMINSTER, PA | 904 mi |
| NNMC BETHESDA, MD | NAWC AC WARMINSTER, PA | 157 mi |
| NAWC AD PAX RIVER, MD | NAWC AC WARMINSTER, PA | 195 mi |

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NAWC AC WARMINSTER, PA to NCCOSC NRAD SAN DGO, CA

| | | | | | | |
|--------------------------|------|------|------|------|------|------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| | ---- | ---- | ---- | ---- | ---- | ---- |
| Officer Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions: | 99 | 65 | 0 | 0 | 0 | 0 |
| Student Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Missn Eqpt (tons): | 118 | 79 | 0 | 0 | 0 | 0 |
| Suppt Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Military Light Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy/Special Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |

Transfers from NAWC AC WARMINSTER, PA to NAVOCEANO, MS

| | | | | | | |
|--------------------------|------|------|------|------|------|------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| | ---- | ---- | ---- | ---- | ---- | ---- |
| Officer Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Enlisted Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions: | 0 | 36 | 0 | 0 | 0 | 0 |
| Student Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Missn Eqpt (tons): | 0 | 166 | 0 | 0 | 0 | 0 |
| Suppt Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Military Light Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy/Special Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NAWC AC WARMINSTER, PA to NAWC AD PAX RIVER, MD

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|--------------------------|------|------|------|------|------|------|
| Officer Positions: | 1 | 0 | 0 | 0 | 0 | 0 |
| Enlisted Positions: | 4 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions: | 12 | 0 | 0 | 0 | 0 | 0 |
| Student Positions: | 0 | 0 | 0 | 0 | 0 | 0 |
| Missn Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Suppt Eqpt (tons): | 0 | 0 | 0 | 0 | 0 | 0 |
| Military Light Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |
| Heavy/Special Vehicles: | 0 | 0 | 0 | 0 | 0 | 0 |

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NCCOSC NRAD SAN DGO, CA

| | | | |
|--------------------------------|-------|-------------------------------|-------|
| Total Officer Employees: | 45 | RPMA Non-Payroll (\$K/Year): | 0 |
| Total Enlisted Employees: | 91 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 0 | BOS Non-Payroll (\$K/Year): | 0 |
| Total Civilian Employees: | 5,204 | BOS Payroll (\$K/Year): | 0 |
| Mil Families Living On Base: | 19.1% | Family Housing (\$K/Year): | 0 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.16 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 1,785 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 353 | Activity Code: | 66001 |
| Enlisted VHA (\$/Month): | 224 | | |
| Per Diem Rate (\$/Day): | 116 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

Name: NAVOCEANO, MS

| | | | |
|--------------------------------|------|-------------------------------|-------|
| Total Officer Employees: | 29 | RPMA Non-Payroll (\$K/Year): | 0 |
| Total Enlisted Employees: | 41 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 0 | BOS Non-Payroll (\$K/Year): | 0 |
| Total Civilian Employees: | 0 | BOS Payroll (\$K/Year): | 0 |
| Mil Families Living On Base: | 0.0% | Family Housing (\$K/Year): | 0 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 0.82 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 262 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 75 | Activity Code: | 62306 |
| Enlisted VHA (\$/Month): | 63 | | |
| Per Diem Rate (\$/Day): | 94 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

Name: NNMC BETHESDA, MD

| | | | |
|--------------------------------|-------|-------------------------------|--------|
| Total Officer Employees: | 1,075 | RPMA Non-Payroll (\$K/Year): | 10,796 |
| Total Enlisted Employees: | 1,754 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 202 | BOS Non-Payroll (\$K/Year): | 27,845 |
| Total Civilian Employees: | 1,733 | BOS Payroll (\$K/Year): | 33,576 |
| Mil Families Living On Base: | 11.0% | Family Housing (\$K/Year): | 301 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.03 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 7,200 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 78 |
| Total Base Facilities(KSF): | 4,086 | CHAMPUS Shift to Medicare: | 55.0% |
| Officer VHA (\$/Month): | 462 | Activity Code: | 00168 |
| Enlisted VHA (\$/Month): | 316 | | |
| Per Diem Rate (\$/Day): | 151 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NAWC AD PAX RIVER, MD

| | | | |
|--------------------------------|-------|-------------------------------|--------|
| Total Officer Employees: | 463 | RPMA Non-Payroll (\$K/Year): | 22,778 |
| Total Enlisted Employees: | 2,361 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 23 | BOS Non-Payroll (\$K/Year): | 64,222 |
| Total Civilian Employees: | 3,119 | BOS Payroll (\$K/Year): | 46,573 |
| Mil Families Living On Base: | 44.0% | Family Housing (\$K/Year): | 2,111 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.03 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 3,985 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 284 | Activity Code: | 00421 |
| Enlisted VHA (\$/Month): | 219 | | |
| Per Diem Rate (\$/Day): | 80 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

Name: NAWC AC WARMINSTER, PA

| | | | |
|--------------------------------|-------|-------------------------------|-------|
| Total Officer Employees: | 2 | RPMA Non-Payroll (\$K/Year): | 563 |
| Total Enlisted Employees: | 14 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 0 | BOS Non-Payroll (\$K/Year): | 2,185 |
| Total Civilian Employees: | 311 | BOS Payroll (\$K/Year): | 1,153 |
| Mil Families Living On Base: | 22.0% | Family Housing (\$K/Year): | 0 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.03 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 111 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 281 | Activity Code: | 62269 |
| Enlisted VHA (\$/Month): | 217 | | |
| Per Diem Rate (\$/Day): | 80 | Homeowner Assistance Program: | No |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | No |

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NCCOSC NRAD SAN DGO, CA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|----------------------------|------|-------------------------------|------|------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqrd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 435 | 717 | 717 | 717 | 717 | 717 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| | | Perc Family Housing ShutDown: | | | | 0.0% |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NAVOCEANO, MS

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-------------------------------|------|------|------|------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 219 | 176 | 176 | 176 | 176 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| Perc Family Housing ShutDown: | | | | | | 0.0% |

Name: NNMC BETHESDA, MD

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-------------------------------|------|------|------|------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| Perc Family Housing ShutDown: | | | | | | 0.0% |

Name: NAWC AD PAX RIVER, MD

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-------------------------------|------|------|------|------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Save(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | | | | | |
| Perc Family Housing ShutDown: | | | | | | 0.0% |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

| Name: NAWC AC WARMINSTER, PA | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-------------------------------|-------|------|------|-------|------|------|
| 1-Time Unique Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Save(\$K): | 825 | 825 | 825 | 825 | 825 | 825 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 4,300 | 0 | 0 | 1,300 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 1,000 | 0 | 200 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 111 | | | | | |
| Perc Family Housing ShutDown: | | | | | | 0.0% |

INPUT SCREEN SIX - BASE PERSONNEL INFORMATION

| Name: NAWC AC WARMINSTER, PA | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|------------------------------|------|------|------|------|------|------|
| Off Force Struc Change: | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Force Struc Change: | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Force Struc Change: | -17 | 0 | 0 | 0 | 0 | 0 |
| Stu Force Struc Change: | 0 | 0 | 0 | 0 | 0 | 0 |
| Off Scenario Change: | -1 | 0 | 0 | 0 | 0 | 0 |
| Enl Scenario Change: | -10 | 0 | 0 | 0 | 0 | 0 |
| Civ Scenario Change: | -13 | -65 | 0 | 0 | 0 | 0 |
| Off Change(No Sal Save): | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Change(No Sal Save): | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Change(No Sal Save): | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretakers - Military: | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretakers - Civilian: | 0 | 0 | 0 | 0 | 0 | 0 |

INPUT SCREEN SEVEN - BASE MILITARY CONSTRUCTION INFORMATION

Name: NCCOSC NRAD SAN DGO, CA

| Description | Categ | New MilCon | Rehab MilCon | Total Cost(\$K) |
|---------------------------------------|-------|------------|--------------|-----------------|
| RF MICROELECTRONICS Clean Room | OTHER | 0 | 0 | 270 |
| SHIP MOTION SIMULATO Concrete Well | OTHER | 0 | 0 | 1,000 |

Department : Navy
 Option Package : NAWC WARMINSTER 2
 Scenario File : C:\COBRA95\NAVY\DONE\WARMN2.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

| | | | |
|----------------------------------|------------------|--------------------------------|------------|
| Percent Officers Married: | 71.70% | Civ Early Retire Pay Factor: | 9.00% |
| Percent Enlisted Married: | 60.10% | Priority Placement Service: | 60.00% |
| Enlisted Housing MilCon: | 98.00% | PPS Actions Involving PCS: | 50.00% |
| Officer Salary(\$/Year): | 76,781.00 | Civilian PCS Costs (\$): | 28,800.00 |
| Off BAQ with Dependents(\$): | 7,925.00 | Civilian New Hire Cost(\$): | 0.00 |
| Enlisted Salary(\$/Year): | 33,178.00 | Nat Median Home Price(\$): | 114,600.00 |
| Enl BAQ with Dependents(\$): | 5,251.00 | Home Sale Reimburse Rate: | 10.00% |
| Avg Unemploy Cost(\$/Week): | 174.00 | Max Home Sale Reimburs(\$): | 22,385.00 |
| Unemployment Eligibility(Weeks): | 18 | Home Purch Reimburse Rate: | 5.00% |
| Civilian Salary(\$/Year): | 54,694.00 | Max Home Purch Reimburs(\$): | 11,191.00 |
| Civilian Turnover Rate: | 15.00% | Civilian Homeowning Rate: | 64.00% |
| Civilian Early Retire Rate: | 10.00% | HAP Home Value Reimburse Rate: | 22.90% |
| Civilian Regular Retire Rate: | 5.00% | HAP Homeowner Receiving Rate: | 5.00% |
| Civilian RIF Pay Factor: | 39.00% | RSE Home Value Reimburse Rate: | 0.00% |
| SF File Desc: | NAVY DBOF BRAC95 | RSE Homeowner Receiving Rate: | 0.00% |

STANDARD FACTORS SCREEN TWO - FACILITIES

| | | | |
|-------------------------------------|--------|-------------------------------------|--------|
| RPMA Building SF Cost Index: | 0.93 | Rehab vs. New MilCon Cost: | 75.00% |
| BOS Index (RPMA vs population): | 0.54 | Info Management Account: | 0.00% |
| (Indices are used as exponents) | | MilCon Design Rate: | 9.00% |
| Program Management Factor: | 10.00% | MilCon SIOH Rate: | 6.00% |
| Caretaker Admin(SF/Care): | 162.00 | MilCon Contingency Plan Rate: | 5.00% |
| Mothball Cost (\$/SF): | 1.25 | MilCon Site Preparation Rate: | 39.00% |
| Avg Bachelor Quarters(SF): | 294.00 | Discount Rate for NPV.RPT/ROI: | 2.75% |
| Avg Family Quarters(SF): | 1.00 | Inflation Rate for NPV.RPT/ROI: | 0.00% |
| APPDET.RPT Inflation Rates: | | | |
| 1996: 0.00% 1997: 2.90% 1998: 3.00% | | 1999: 3.00% 2000: 3.00% 2001: 3.00% | |

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

| | | | |
|-------------------------------|-----------|------------------------------|----------|
| Material/Assigned Person(Lb): | 710 | Equip Pack & Crate(\$/Ton): | 284.00 |
| HHG Per Off Family (Lb): | 14,500.00 | Mil Light Vehicle(\$/Mile): | 0.31 |
| HHG Per Enl Family (Lb): | 9,000.00 | Heavy/Spec Vehicle(\$/Mile): | 3.3E |
| HHG Per Mil Single (Lb): | 6,400.00 | POV Reimbursement(\$/Mile): | 0.1E |
| HHG Per Civilian (Lb): | 1E,000.00 | Avg Mil Tour Length (Years): | 4.17 |
| Total HHG Cost (\$/100Lb): | 35.00 | Routine PCS(\$/Pers/Tour): | 3,763.00 |
| Air Transport (\$/Pass Mile): | 0.20 | One-Time Off PCS Cost(\$): | 4,527.00 |
| Misc Exp (\$/Direct Employ): | 700.00 | One-Time Enl PCS Cost(\$): | 1,403.00 |

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

| Category | UM | \$/UM | Category | UM | \$/UM |
|-----------------------|------|--------|---------------------|-----|-------|
| Horizontal | (SY) | 61 | Optional Category A | () | 0 |
| Waterfront | (LF) | 10,350 | Optional Category B | () | 0 |
| Air Operations | (SF) | 122 | Optional Category C | () | 0 |
| Operational | (SF) | 111 | Optional Category D | () | 0 |
| Administrative | (SF) | 123 | Optional Category E | () | 0 |
| School Buildings | (SF) | 108 | Optional Category F | () | 0 |
| Maintenance Shops | (SF) | 102 | Optional Category G | () | 0 |
| Bachelor Quarters | (SF) | 96 | Optional Category H | () | 0 |
| Family Quarters | (EA) | 78,750 | Optional Category I | () | 0 |
| Covered Storage | (SF) | 94 | Optional Category J | () | 0 |
| Dining Facilities | (SF) | 165 | Optional Category K | () | 0 |
| Recreation Facilities | (SF) | 120 | Optional Category L | () | 0 |
| Communications Facil | (SF) | 165 | Optional Category M | () | 0 |
| Shipyards Maintenance | (SF) | 129 | Optional Category N | () | 0 |
| RDT & E Facilities | (SF) | 160 | Optional Category O | () | 0 |
| POL Storage | (BL) | 12 | Optional Category P | () | 0 |
| Ammunition Storage | (SF) | 160 | Optional Category Q | () | 0 |
| Medical Facilities | (SF) | 168 | Optional Category R | () | 0 |
| Environmental | () | 0 | | | |

Document Separator

29 Nov 1994

Revised NR&D Warminster COBRA Scenario

**BRAC-95 SCENARIO DEVELOPMENT DATA CALL
ENCLOSURE (1) - SCENARIO SUMMARY**

should be used to identify relevant information regarding workload/missions to be transferred. For example, entries in this column should be short phrases such as, "missile workload", "ships", "F-14 squadrons", "tenants", etc., or to provide other clarifying information. This third column need only be completed to identify major components of the closure/realignment scenario, and should not be used to list all tenant names, etc.

Table 1-C: Losing/Gaining Bases Involved in Scenario

| Losing Base(s) | Gaining Base(s) | Workload/Missions Transferring |
|---------------------------------------|---------------------------------|--|
| NCCOSC RDTE DIV DET WARMINSTER, PA | NCCOSC RDTE DIV SAN DIEGO CA | C3I Systems and Integration, Global Positioning System, Navigation Systems |
| | NAVOCEANO BAY ST LOUIS MS | Ocean Survey Program |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Note: Located at NCCOSC RDTE DIV DET WARMINSTER PA is an Inertial Navigation facility that can not be moved due to the unique geographic requirements. It is proposed that this facility and programs could be transferred to a university.

IMPACT TO THE DON IF WARMINSTER FUNCTIONS (PERFORMED BY 263 POSITIONS) ARE DISESTABLISHED IN PLACE - AND NOT RELOCATED

It is our assessment that these functions are essential to the needs of the Navy. Disestablishment in place would result in the loss to the Navy of all capability in the area of Navigation and Aircraft Communications. There are no economies of scale derived from consolidating personnel and facilities at any site other than Warminster. No one in San Diego, CA or Bay St. Louis, MS performs the technical tasks that are performed in Warminster. No savings would accrue from economies of scale in a relocation as all infrastructure support beyond minimal Public Works activities (Approximately \$1.5M per year) are performed by personnel now located in San Diego.

Enclosure (1)

The Inertial Navigation Test Facility which is required to test submarine inertial systems with great precision over long periods of time (30 to 120 days) is a unique facility which would be cost prohibitive to build at any other site in the country (FY-91 Air Force estimate of \$ 71 M with no guarantee that Warmminster performance levels would be attained). This test facility will be required to properly test the Common Ring Laser Gyroscope that is just starting development by NAVSEA. Other navigation test capabilities in Warmminster include the GPS Receiver Laboratory, three Ships Motion Simulators and one Aircraft dynamic simulator able to test complete shipboard and aircraft inertial navigation systems.

Other navigation and communications programs receive a synergistic boost owing to the collocation of all Navy (and nearly all DoD) navigation expertise at one location. The expertise in Aircraft Communications is highly integrated with and supports the navigation system in areas such as Relative Grid and Gridlock of JTIDS and the spoofing and jamming analysis and protection of GPS. NRaD, Warmminster is the DoD Central Engineering Activity for GPS and is also the principal DoD investigator and evaluator of the vulnerabilities of GPS to electronic warfare and terroristic threats.

NRaD, Warmminster supports DoD in the program execution of GPS, Joint Tactical Information Distribution System (or JTIDS) and Multi-function Information Distribution System (orMIDS) acting as a Joint Service activity. On many programs NRaD has formed a partnership with industry to bring new technology to the fleet. Recent efforts include the GPS Integrated Navigation Avionics (or GINA) cards that includes both a miniaturized GPS receiver and a inertial navigation sensor on a computer card (where candidate printed circuit cards were actually tested as part of the source selection process), support to ARPA in the development of an extremely small GPS receiver/fiber-optic gyroscope for missile applications, the award of two highly competitive Navy Advanced Technology Development (ATDs) programs for a Low-Probability-of-Intercept communication system and a digital multi-channel receiver. All of these programs involve significant (greater than 50%) involvement wiith industry. Of the approximately \$ 70M of annual income to the NRaD Warmminster detachment, half is out-sourced to other DoD activities and industry.

Enclosure (1)

CIVILIANS

EACH FUNCTION AND ITS IMPACT TO DON IF ELIMINATED

116

Principal full-spectrum RDT&E Laboratory for Navigation Sensors and Systems for all platforms including ships, submarines and aircraft - IMPACT OF DISESTABLISHED IN PLACE: Navy would have no technical capability in Navigation; DOD would lose 90% of its technical capability in Navigation. No government personnel would be available to perform inherent government activities on programs such as Global Positioning System (or GPS), Navy Navigation Sensor System Interface (or NAVSSI), common ring laser gyro, et. al.. Activities include generation of procurement specifications and interface standards, evaluating GPS receiver proposals, testing contractor furnished equipment as part of the source selection process, evaluating commercial-off-the shelf equipment, performing classified tasks related to the vulnerability of GPS to jamming, spoofing, etc.. Government would lose in-house experience in developing and integrating navigation systems on military platforms (Impact: programs would be delayed and costs would increase). No submarine inertial test capability would be available. Cost of implementation of new systems such as further integration of GPS would increase significantly and schedules would be delayed. There would also be a loss in responsiveness to the fleet with the loss capability of analyzing navigation problems as recently occurred in the evaluation of a Tomahawk misfire. NRaD serves as DoD Central Engineering activity for Receiver testing and performance. This capability will still be required and DoD would have to invest in the creation of a replacement facility and the training of personnel to operate it. The development of this capability in industry would be difficult as the ideal candidates would not be acceptable as "trusted agents" and selection of one would potentially impact future competition. Smaller efforts such as submarine inertial might not be considered affordable by industry.

45

Principal full -spectrum RDT&E Laboratory and life cycle support for Ocean Survey Systems IMPACT OF DISESTABLISHED IN PLACE: Contractor capability would have to be developed - There is no complete survey system (navigation, bathymetry, oceanographic) development and/or expertise in the private sector. Attempts by Department of Commerce and United Kingdom to outsource were unsuccessful. This is a Navy unique function;

Enclosure (1)

therefore there is no similar capability in other DoD or non-DoD government activities. USN is committed under Polaris Sales

Agreement to deliver turnkey Ocean Survey System to the UK with follow-on life cycle support by January 1997. This program requires the wide-spread use of commercial off the shelf (or COTS) equipment but includes considerable amounts of in-house developed software that has evolved over the years owing to our involvement with the US ocean survey ships. Life cycle support of US and UK ships would require development of software support activity requiring investment and training.

53

Principal Navy RDT&E Laboratory for airborne communications equipment and airborne RF electronic devices - IMPACT OF DISESTABLISHED IN PLACE: Loss of technical expertise in the area of aircraft communications and miniature Radio Frequency (RF) electronics. Loss of Inherent Government function provided to Joint Tactical Information Distribution System (or JTIDS) & Multi-function Information Distribution System (or MIDS) Program Managers in the evaluation of proposals, the performance of COEAs (or Cost & Operational Effectiveness Assessments), technical advisors on Industry's competitive equipment, training of military personnel on the use of JTIDS Network Management Tools, etc. Serves as prime technical interface to JCS for Navy Tactical C3I and NATO for MIDS Implementation. Developer of DoD JTIDS Network Planning Development Aid including life cycle software maintenance for it. Loss of personnel and facilities supporting NAVAIR in the development of new electronic communication capabilities for Naval Aviation. Capabilities include Low-Probability of Intercept communications, Digital Receivers, Airborne Radio Relays and integrated avionic systems for new platforms such as JAST.

Fred Wahler's input (See Attachment No.1)

32

Savings identified in consolidation to San Diego

19

Total Number of Civilans

263

Enclosure (1)

Attachment 1 (Information on Philadelphia Detachment:)

Technical Center: Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego Detachment, Philadelphia. UIC 68592

The following information is provided in response to BSAT Request for Clarification of information proposed in Scenario No. 3-20-0221-030. Included in this proposed were the 32 personnel of the Philadelphia Detachment. It should be noted that the scenario proposed on the San Diego and Mississippi. I do not believe that these sites should be the only sites considered for the possible relocation. Omitted from this process was the consultation with the various Navy Program Managers who provide tasking to the Detachment in Philadelphia.

The information provide has been derived from BRAC Date Calls 1 & 5 with the rationale for continuation extracted from a Secretary of Defense Memorandum subject: Terms of Reference-- Defense Science Board Task Force on Defense Laboratory Management.

1. C4I (Ashore, Afloat and Relocatable)

Personnel Joint Maritime Command Information System (JMCIS)

8

Functions: Operational System Development
Acceptance Testing
Software Maintenance
Training/Operational Support
Program Support

Rationale for Retention of function: IMPACT IF DISESTABLISHED IN PLACE: The Navy would no longer have the technical capability required for the development and continued support of the Central Design Data Base Server (CDDBS). This server is the repository for Command and Control and Intelligence information required to support all levels of command. The server is currently being installed aboard all naval vessels, is scheduled for use with the U.S. Coast Guard, and is considered a major candidate for use within the Global Command and Control System (GCCS). Loss of in-house expertise in developing scheduled interfaces with other Navy/Joint systems would delay interoperability and cause the continuation of various stand alone "Stove Pipe" systems. The CDDBS utilizes commercial off-the-shelf hardware requiring an in-house cadre of skilled personnel capable of translating requirement specifications into contractual documents and test plans for use by support contractors. Loss of these personnel would severely delay execution of the Navy JMCIS implementation plan. Abolishment of the CDDBS software maintenance activity would eliminate all capability to resolve fleet and command center data base related problems. Data Base Production Facility would be eliminated. Data Base maintenance and production would cease, requiring all subscribers to operate on the last issue of data. Elimination of this function would require each subscriber to receive, process, and consolidate data base updates

Enclosure (1)

from multiple producers, thus reducing availability of systems for decision making processes.

2. Mission Planning Systems: Tactical Aircraft Mission Planning System (TAMPS)
 Afloat Planning System (APS), Tomahawk
 Rapid Deployment System (RDS), Tomahawk
 Tomahawk Mission Planning Centers
 Joint service Imagery Processing System-Navy
 Tomahawk Mission Distribution System (TMDS)
 Electronic Tomahawk Engagement Planning

Personnel 19

Program
 CVN 76, Strike Planning Center
 Digital Photographic Laboratory
 Afloat Tomahawk Weapon System

Functions: Operational System Development
 Acceptance Testing
 Acquisition, modernization
 Training/Operational Support
 Program support
 Inservice Engineering Activity
 Maintenance
 Repair

Rationale for Retention of function: IMPACT IF DISESTABLISHED IN PLACE: Loss of concentration of expertise in the analysis, integration, development, installation, training and operational support of multiple tactical aircraft and cruise missile planning systems. Loss of a unique facilities providing the capability to interface, test and resolve operational problems related to SPAWAR, NAVAIR, and ONI sponsored systems. Disruption of Cruise Missile Command and Control plan for a single activity to serve as the designated ISEA in support of all cruise missile planning systems. Delay in the installation and support of cruise missile planning systems intended for use by allies. Corporate loss of expertise in the development and maintenance of a common (across all systems) computer based training and on-line documentation system. Loss of responsiveness in the analysis and resolution of problems reported by the shore based cruise missile planning centers, remotely deployed sites, development laboratories and fleet units

3. Intelligence Systems: Joint Maritime Information Exchange (JMIE)
 Automated Merchant Imagery Data Base of Ships

(AMIDSHIPS)

Personnel

5

Functions: Operational System development
 Acceptance Testing
 Training/Operational Support

Enclosure (1)

Rationale for Retention of function: IMPACT IF DISESTABLISHED IN PLACE: Loss of in-house expertise in the integration of the Office of Naval Intelligence (ONI) products into the Joint Maritime Command Information System. Delay in the implementation of integration would require additional funds for the continued support of existing "Stove Pipe" systems and delay the interoperability of these systems under JMCIS. ONI has requested these systems be made JMCIS compliant as soon as possible with additional systems to be designated for compliance as soon as possible. Loss of capability to analyze problems associated with ONI unique products would require additional time and training should they be requested at a later date.

Special facilities: Multi-use GENSER and Sensitive Compartmented facility linking C4I, Intelligence and Mission Planning systems. The facility was developed to support proof of concept principles, engineering development maintenance of peculiar systems and development of training systems for operational forces.

Enclosure (1)

Document Separator

NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE
CENTER, RDT&E DIVISION DETACHMENT, WARMINSTER, PA

CHART F-6

**DOD RECOMMENDS CLOSURE OF THE NAVAL COMMAND,
CONTROL AND OCEAN SURVEILLANCE CENTER, RDT&E
DIVISION DETACHMENT, WARMINSTER, PENNSYLVANIA AND
RELOCATION OF APPROPRIATE FUNCTIONS, PERSONNEL,
EQUIPMENT AND SUPPORT TO OTHER TECHNICAL ACTIVITIES,
PRIMARILY THE
NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE
CENTER, RDT&E DIVISION, SAN DIEGO, CALIFORNIA; AND THE**

**DOD RECOMMENDS CLOSURE OF THE NAVAL COMMAND,
CONTROL AND OCEAN SURVEILLANCE CENTER, RDT&E
DIVISION DETACHMENT, WARMINSTER, PENNSYLVANIA AND
RELOCATION OF APPROPRIATE FUNCTIONS, PERSONNEL,
EQUIPMENT, AND SUPPORT TO OTHER TECHNICAL ACTIVITIES,
PRIMARILY THE NAVAL COMMAND, CONTROL AND OCEAN
SURVEILLANCE CENTER, RDT&E DIVISION, SAN DIEGO,
CALIFORNIA; AND THE NAVAL OCEANOGRAPHIC OFFICE, BAY
ST. LOUIS, MISSISSIPPI.**

CHART F-7

**NO MAJOR ISSUES WERE IDENTIFIED WITH RESPECT TO THIS
CLOSURE.**

ARE THERE ANY QUESTIONS?

BASE ANALYSIS
NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER,
RESEARCH, DEVELOPMENT, TEST, AND EVALUATION DIVISION
DETACHMENT, WARMINSTER, PA

DOD RECOMMENDATION: Close the Naval Command, Control and Ocean surveillance Center, RDT&E Division Detachment, Warminster, PA. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, CA; and the Naval Oceanographic Office.

| CRITERIA | DOD RECOMMENDATION * |
|--------------------------------|-------------------------|
| MILITARY VALUE | 2 of 9 |
| FORCE STRUCTURE | N/A |
| ONE-TIME COSTS (\$ M) | 8.4 |
| ANNUAL SAVINGS (\$ M) | 7.6 |
| RETURN ON INVESTMENT (\$M) | 1996 (Immediate) |
| NET PRESENT VALUE | 104.6 |
| BASE OPERATING BUDGET (\$ M) | 3.9 |
| PERSONNEL ELIMINATED (MIL/CIV) | 11/82 |
| PERSONNEL REALIGNED (MIL/CIV) | 5/212 |
| ECONOMIC IMPACT (BRAC 95/CUM) | 0.0% / -1.2% |
| ENVIRONMENTAL | Positive Effect |

* = All cost and personnel figures included in base analysis for Naval Air Warfare Center, Warminster, PA.

SCENARIO SUMMARY
NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER,
RESEARCH, DEVELOPMENT, TEST, AND EVALUATION DIVISION
DETACHMENT, WARMINSTER, PA

| DoD RECOMMENDATION | |
|--|------------|
| Close the Naval Command, Control and Ocean surveillance Center, RDT&E Division Detachment, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, California; and the Naval Oceanographic Office. | |
| One Time Costs (\$M): 8.4 Annual Savings (\$M): 7.6 Return on Investment: 1996 (Immediate) Net Present Value (\$M): 104.6 | |
| PRO | CON |
| Reduces excess capacity | |

Document Separator

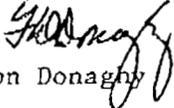
12 June 95

From: F D. Donaghy, NRAD DET Phila
To: Mr. D. Epstein, BRAC

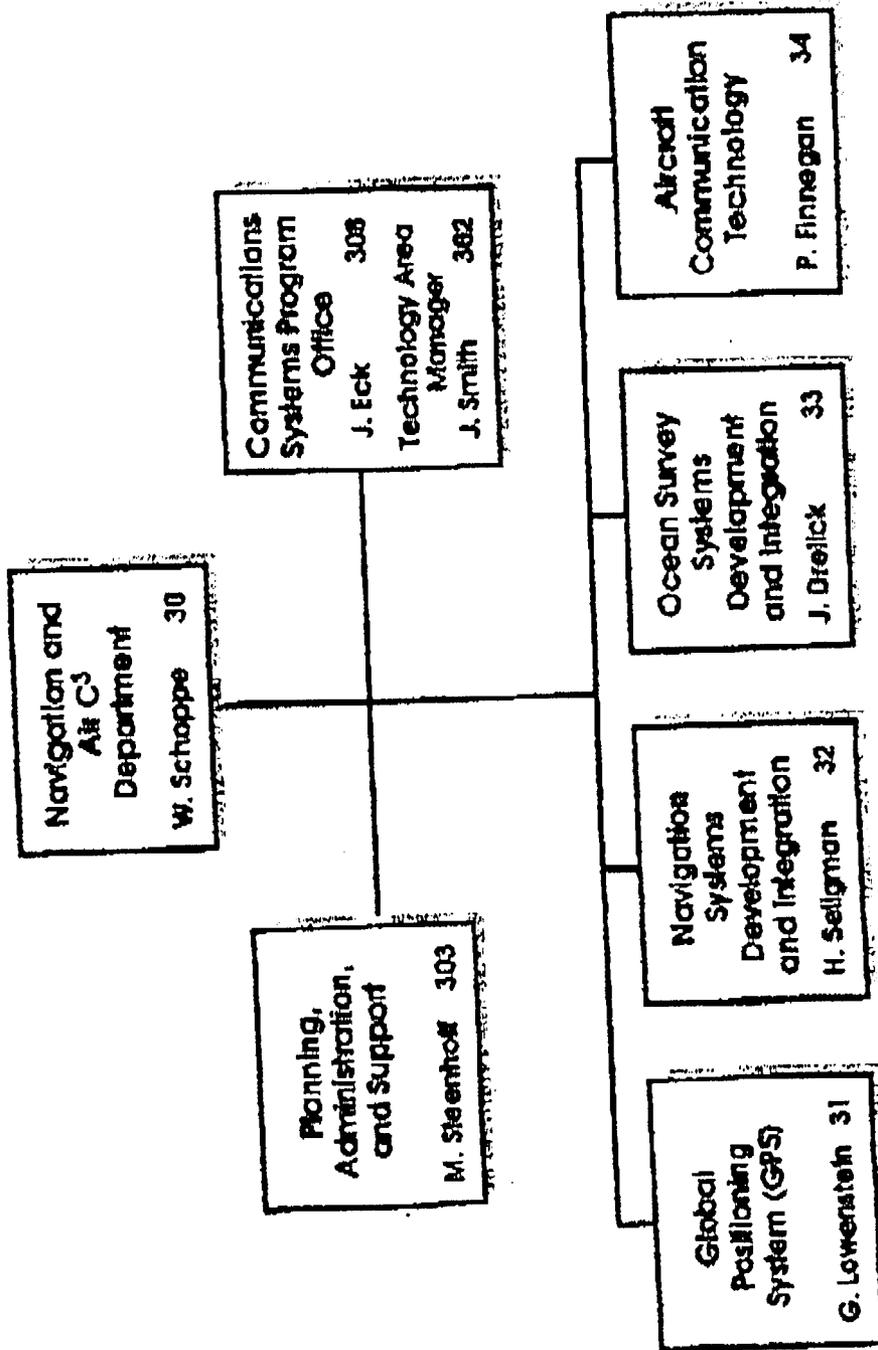
Subj: NCCOSC RDTE Organization Charts

Enclosed are four charts outlining the current organization of NCCOSC RDTE Div. Please note that the Phila Det is assigned by mission area to Code 40(C2 Dept), whereas Warm Det is an independent Department (Code 30) with its own reporting and internal organization/mission area.

Thank you. I will be in the Washington area through Tues 13 June (1600). If you have any questions, I can receive phone calls at 703 604 1002 ("0").


Don Donaghy

Department Organization - Code 30

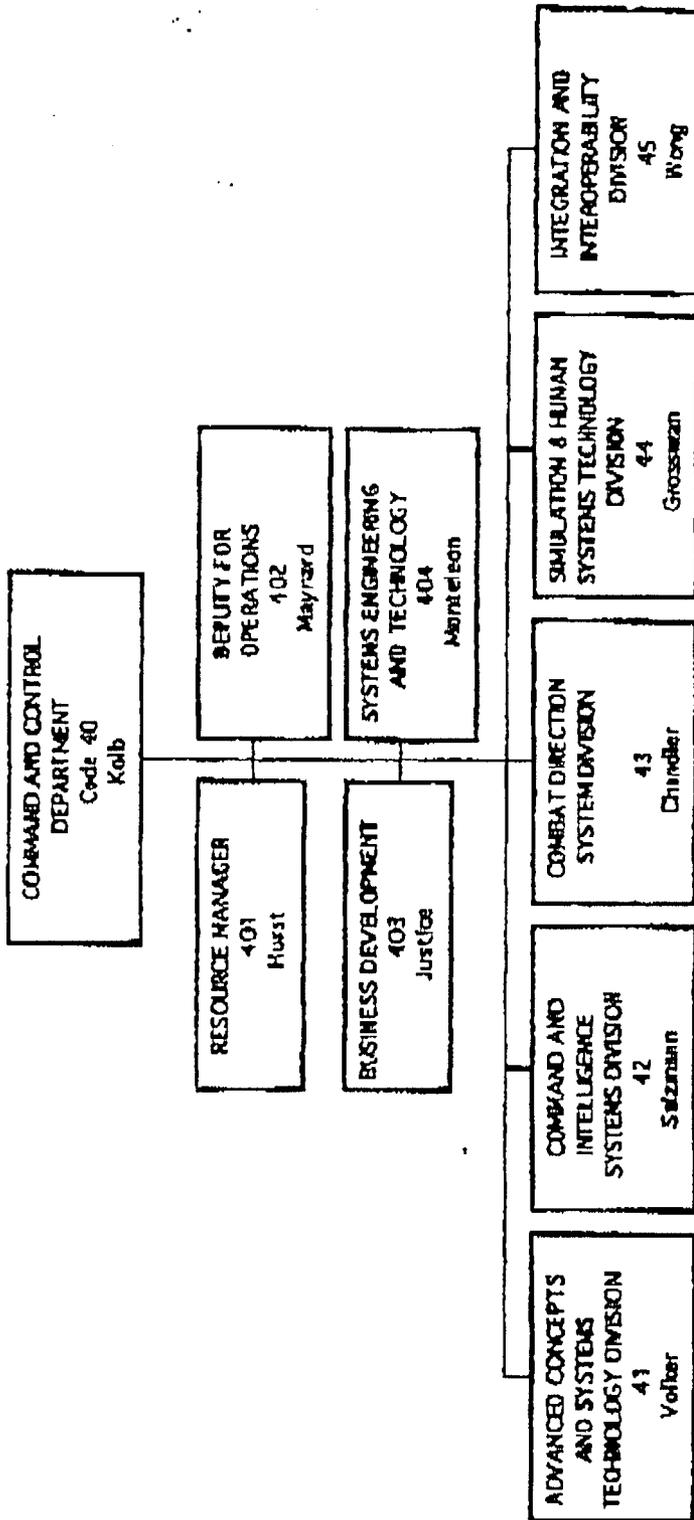


00081-8.30



COMMAND AND CONTROL DEPARTMENT Code 40

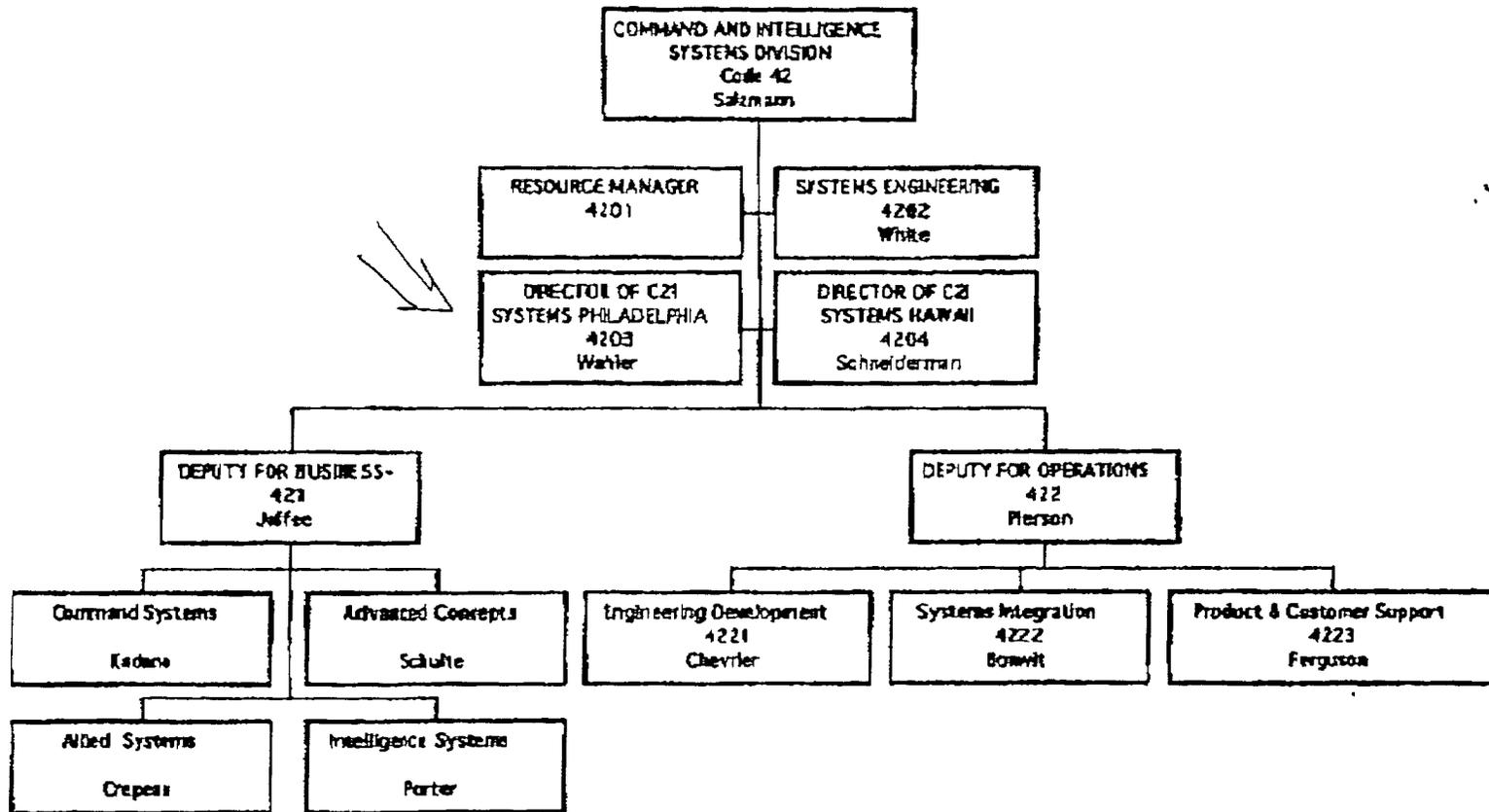
Organization





COMMAND AND INTELLIGENCE SYSTEMS DIVISION Code 42

Organization



JUN-12-1995 10:19
JUN-12-1995 11:01

FROM ONP COMMAND & CONTROL

TO

9917036041278 P.05
703 604 1278 P.005-005

TOTAL P.005

TOTAL P.05

Document Separator



DEPARTMENT OF THE NAVY
OFFICE OF THE SECRETARY
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

LT-0818-F16
BSAT/JT
8 June 1995

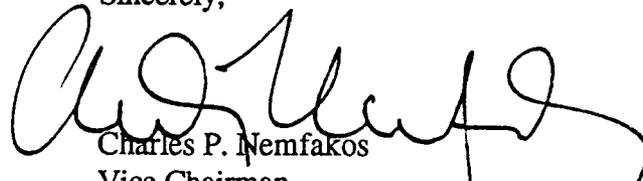
The Honorable Alan J. Dixon
Chairman, Defense Base Closure
and Realignment Commission
1700 North Moore Street
Suite 1425
Arlington, VA 22209

Dear Chairman Dixon:

The response to questions asked by Mr. Alex Yellin on June 7, 1995, concerning Naval Command, Control, and Ocean Surveillance Center, Warminster, is attached. In accordance with Section 2903(c)(5) of the Defense Base Closure and Realignment Act of 1990, I certify the information provided to you in this transmittal is accurate and complete to the best of my knowledge and belief.

I trust this information satisfies your concerns. As always, if I can be of any further assistance, please let me know.

Sincerely,



Charles P. Nemfakos
Vice Chairman,
Base Structure Evaluation Committee

Attachment

**DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION QUESTIONS
CONCERNING NCCOSC WARMINSTER**

Q1. From correspondence received by the Commission, it appears that it is the Navy's opinion that approval of the recommendation for the NCCOSC RDT&E Detachment, Warminster, PA, would cause NCCOSC, San Diego (Code 40), Detachment, Philadelphia, to be closed and moved to San Diego. It is the opinion of the community that they are currently located on the Philadelphia Navy Yard, are part of NCCOSC, San Diego, not NCCOSC, Warminster, and should not be included in any action contemplated by the Commission. Please comment.

A1. The major claimant in its certified response to the Scenario Development Data Call included the Philadelphia Det in the Base Loading totals for NCCOSC RDT&E Division (NRAD) Det Warminster. The Base Loading Data in the major claimants certified response is specifically footnoted and states "includes the Philadelphia Det which will have merged with the Warminster Det by 1996." All of the positions identified in the Base Loading Data were included in the COBRA analysis and it was the intent of the Navy's recommendation that positions currently associated with the Philadelphia Det are included.

Document Separator

Subj: MODIFICATION OF NAVAL ELECTRONIC SYSTEMS ENGINEERING
ACTIVITY DETACHMENT, PHILADELPHIA, PENNSYLVANIA

Proposed: Naval Command, Control and Ocean Surveillance
Center RDT&E Division Detachment, Philadelphia,
PA (NCCOSC RDTE DIV DET PHILADELPHIA, PA)

b. Echelon of Command

Existing: Echelon 1: Chief of Naval Operations
Echelon 2: Space and Naval Warfare Systems Command
Echelon 3: Naval Command, Control and Ocean Surveillance
Center
Echelon 4: Naval Electronic Systems Engineering Activity St.
Ingoes, Maryland
Echelon 5: Naval Electronic Systems Engineering Activity
Detachment Philadelphia, PA

Proposed: Echelon 1: Chief of Naval Operations
Echelon 2: Space and Naval Warfare Systems Command
Echelon 3: Naval Command, Control and Ocean Surveillance Center
Echelon 4: Naval Command, Control and Ocean Surveillance Center
RDT&E Division
Echelon 5: Naval Command, Control and Ocean Surveillance Center
RDT&E Division Detachment Philadelphia, PA

c. Mission:

Existing: To support the mission of the Naval Electronic Systems Engineering
Activity, St. Ingoes, Maryland, in an assigned geographic area; and
perform such other functions and tasks as directed by higher authority.

Proposed: To support the mission of the Naval Command, Control and Ocean
Surveillance Center RDT&E Division, San Diego, California, in an
assigned geographic area; and perform such other functions and tasks
as directed by higher authority.

4. It is requested that modifications proposed in paragraph 3 be made effective 3 October 1993.

5. The NCCOSC RDTE DIV point of contact is Mr. Frank Tirpak who may be contacted at (619)553-4705 or DSN 553-4705.

5216
Ser 02/08
16 Jul 93

From: Commanding Officer, Naval Command, Control and Ocean Surveillance Center
RDT&E Division
To: Chief of Naval Operations (N-09B)
Via: (1) Commander, Naval Command, Control and Ocean Surveillance Center
(2) Commander, Space and Naval Warfare Systems Command

Subj: MODIFICATION OF NAVAL ELECTRONIC SYSTEMS ENGINEERING
ACTIVITY DETACHMENT, PHILADELPHIA, PENNSYLVANIA

Ref: (a) Defense Base Closure and Realignment Commission Report to the
President 1991
(b) OPNAVINST 5450.169D

1. Reference (a) recommended, and Congress approved, closure of Naval Station Philadelphia, Pennsylvania (PA), and transfer of tenants to other bases. This closure thus necessitates the eventual relocation of Naval Electronic Systems Engineering Activity Detachment, Philadelphia, PA (NAVELEXSYSENGACTDET PHILADELPHIA PA).

2. A two-step process is proposed for transfer and relocation of subject Detachment. Step one modifies organizational title from Naval Electronic Systems Engineering Activity Detachment, Philadelphia, PA to Naval Command, Control and Ocean Surveillance Center RDT&E Division Detachment, Philadelphia, PA (NCCOSC RDTE DIV DET PHILADELPHIA PA). The proposed modification to mission statement (see para 3c, below) will result in no change of resources (manpower and money). Also, there is no change of Detachment status or location, and no change to title (i.e., Director) of the civilian head of the Detachment. Step two will request disestablishment of the Detachment at Philadelphia and relocation to the currently established NCCOSC RDTE DIV DET at Warminster, PA. This disestablishment and relocation to Warminster should occur in mid-1995, prior to closure of Naval Station Philadelphia, PA, and will be proposed beforehand in accordance with reference (b).

3. The following modifications are requested:

a. Name

Existing: Naval Electronic Systems Engineering Activity
Detachment, Philadelphia, PA
(NAVELEXSYSENGACTDET PHILADELPHIA PA)

Document Separator

2 June 1995

Mr Jeff Campbell
Executive Secretary
Base Realignment and Closure Commission
1700 N. Moore Street, Suite 1425
Arlington, VA 22209

File # 950607-17

Dear Mr Campbell

Re: BRAC IV RECOMMENDATIONS

The Base Realignment and Closure Commission is currently reviewing the Department of Defense recommendations under BRAC IV legislation. I am an employee of the Department of the Navy at the Naval Command, Control and Ocean Surveillance Center RDTE Division Detachment, Philadelphia (NCCOSC RDTE DIV DET PHILA), an activity adversely impacted by the DoD recommendations.

After careful personal review of the official documentation submitted to the BRAC Commission, and with personal knowledge gained in collecting and preparing my activity's responses to the many the Data Calls preceding the Navy/DoD submission, I believe that the information currently before the Commissioners is incomplete, misleading and inaccurate.

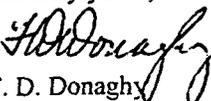
Under the DoD recommendation, the Philadelphia Detachment functions and personnel would be transferred to San Diego, CA as part of the plan to relocate the NCCOSC RDTE Division Detachment at Warminster to San Diego and Bay St. Louis MS by 1997.

The data in the COBRA model, however, does not accurately identify the Philadelphia Detachment's functions, workload or military value in providing support to Navy and Joint programs. As proposed the transfer would severely affect the Detachment's *core capability* to continue its support to these programs. The projected budget estimates to accomplish the move has overlooked personnel and equipment *transfer costs*, and understates the personnel impact by a factor of four as it ignores this Detachment's locally employed out-sourced technical support. There was no discussion of relocating to any nearby DoD-controlled *alternate site* to mitigate or reduce the costs of the transfer.

On behalf of myself, my fellow employees and our technical support staff, I request your attention to this matter. For your information, I have enclosed a BRAC IV transfer of functions rebuttal and an information sheet on the Philadelphia Detachment mission and workload.

Your active and timely interest in this manner would be appreciated.

Sincerely yours,


F. D. Donagh

Mr Francis D. Donagh
3206 Midvale Avenue
Philadelphia PA 19129
(h) 215 844 4106
(w) 215 897 5541

3 May 1995

**NCCOSC RDTE DIV DET PHILADELPHIA (N68592)
BRAC IV TRANSFER OF FUNCTIONS**

Ref: (a) COMSPAWARSYSCOM msg 041825Z Feb 92 Subj: Planning for relocation of tenant activities from NAVBASE Phila complex under Defense Base Closure and Realignment Act of 1990 (BRAC II), P.L. 101-510
(b) Department of Navy Analysis and Recommendations, Volume IV (Report to the DoD Base Closure and Realignment Commission), March 1995

BACKGROUND

- Reference (a) informed Commander, Naval Base Philadelphia of its intention to relocate NCCOSC RDTE Division Detachment, Philadelphia (then, NAVELEXSYSENGACT DET Philadelphia) to the NCCOSC RDTE Division Detachment, Warminster PA in FY95.
- The unilateral decision of COMSPAWARSYSCOM to move the Philadelphia Detachment to Warminster was not predicated by either BRAC II or BRAC III legislation. The move was determined by the planned FY95 closure of the host activity, NAVBASE/Naval Station Philadelphia and the necessity to relocate the Detachment to another site in the Philadelphia area.
- Due to the delay in the BRAC II directed move of NAWC-AD, Warminster personnel and assets to Patuxent River MD in the same 1995 timeframe, a subsequent decision was made, with NAVFACNORDIV concurrence, to permit the Philadelphia Detachment to remain at its present site at the Philadelphia League Island complex site until July 1997. At that time, sufficient space would be available at Warminster to accommodate the Philadelphia and Warminster NRaD Detachment personnel and equipments.

DISCUSSION

- The current recommendation before BRAC IV, attachment X-20, to reference (b), is that the Warminster Detachment be primarily relocated to San Diego CA and Bay St. Louis MS. The justification for the closure of the Warminster Detachment and subsequent transfer of functions to those locations is stated to be an overall reduction of operational forces. The recommendation addresses only those functions (Navigational) performed by the Warminster Detachment.
- In review of reference (b), there is no formal identification of the Philadelphia Detachment in the documentation supporting the closure of the Warminster Detachment. Only one reference is made to the Philadelphia Detachment to recognize its existence - a handwritten notation, unsigned and undated, stating, "the Philadelphia Det will have been merged with Warminster Det by 1996." This statement lacks validity in that:
 - (a) There was never a planned "merger" as two different organizational codes (i.e. Warminster - Code 30 - and Philadelphia - Code 4203) are involved.
 - (b) Co-location in 1996 was impossible due to the lack of available space at Warminster until 1997.
 - (c) NAWC-AD, Warminster, the activity responsible for closing the facility, has never recognized responsibility to accommodate the Philadelphia Detachment at Warminster as a result of BRAC actions not written into BRAC law.
- The recommendation to close the Warminster Detachment addresses only those functions performed by that detachment and does not address the critical and unique Command, Control, Communications, Computers and Intelligence (C4I) functions performed by the Philadelphia Detachment. See attached information sheet for functions performed in support various Navy, Marine Corps and Joint service projects.
- In the COBRA model scenario developed by the Navy, the only data pertaining to the Philadelphia Detachment provided was the number of civil service personnel impacted by closure and transfer of function. Other data relevant to the military value of Philadelphia, such as: current and future mission requirements through the year 2001, impact upon the operational force readiness of the ships, fleet,

USMC and Joint activities it currently supports, and the additional 130 outsourced technical support personnel that directly support the Detachment mission performance were not identified.

- Cost issues were inadequately addressed in the COBRA submission. Up-front cost estimates for those personnel accepting transfer, project assets, severance pay, retraining and other personnel settlement costs total \$2,600,000., \$1,800,000 associated with the BRAC with an additional \$800,000 being paid by the Navy. The total estimate one-time cost to implement the complete closure of the Warminster complex by the Navy is \$8,400,000. This estimate is unrealistically low considering the relocation of an additional 234 NRaD Warminster and NAWC-AD personnel with their associated laboratories and equipment.
- Despite the overall projected reduction in force structure, the Philadelphia Detachment's role in the development, installation and support of C4I systems has increased. In support of the C4I-for-the-Warrior Concept, an increasing number of ships/sites are obtaining C4I, Digital Imagery, Cruise Missile and Tactical Aircraft Mission Planning Systems. The Philadelphia Detachment currently supports 356 sites having one or more of these families of systems.
- The Detachment has no excess capacity. All personnel resources are fully utilized performing core capabilities. No organizational inefficiencies are present. Outsourced technical support/civil service ratio is 4:1.
- The relocation options in the Navy submission were limited to San Diego and Bay St. Louis MS. No consideration was given in the process to available alternate, more cost effective DoD sites in the tri-state/metropolitan area, such as the Aviation Supply Office (ASO) complex in Northeast Philadelphia. Nominating an alternate site would be consistent with the Navy's intentions in the wording of its recommendation "that the Warminster Detachment be *primarily* relocated to San Diego CA and Bay St. Louis MS." Consideration of this site would also preserve the *core technical capabilities* possessed by the Philadelphia Detachment and *reduce costs associated with a relocation*. Another consideration should be the relocation of the Philadelphia Detachment to Fort Monmouth NJ to encourage dialogue and provide mutual support of Joint C4I programs with the U. S. Army. This would also result in a cost savings associated with a relocation.

ISSUE

- Request an adequate examination be made of available DoD facilities in the tri-state/metropolitan area be made to determine if a more cost effective relocation site is available to preserve the core capabilities of the Philadelphia Detachment. Consideration of alternate sites would also preserve the *core technical capabilities* possessed by the Philadelphia Detachment and *reduce costs associated with a relocation*.

For further information, call:

Mr. F. D. Donaghy

(h) 215 844 4106

(b) 215 897 5541

3. Office of Naval Intelligence

a. Systems Directorate, Code 7

Projects Supported - Joint Maritime Information Element (JMIE)

Automated Merchant Imagery Data Base of Ships (AMIDSHIPS)

NOTE: The NRaD Detachment, Philadelphia is the only Navy Activity that has installed or has approved plans to install all the previously described C4I Systems from SPAWAR, NAVAIR and ONI. The benefits derived by the co-location of these systems has proven invaluable when developing interface design specifications and the testing/verification of these interfaces. The proximity of these systems not only fosters a positive dialogue between the various system developers, but offers an ongoing "Lessons Learned" environment for those existing/mature systems currently installed in the fleet.

ASSUMPTION: The recommendation of BRAC 95 to close the NRaD Detachment, Warminster and transfer the technical functions to San Diego, California and Bay St. Louis, Mississippi includes, and is applicable to, the NRaD Detachment Philadelphia.

ISSUES:

1. The data provided to the Space and Naval Warfare Command was in response to two "ordained" scenarios; disestablishment or relocation to San Diego, CA
2. The language contained in the BRAC Report only identifies the Warminster Detachment and describes only those functions performed by that organization.
3. Military Value of the Philadelphia Detachment was not reviewed independently in considering the recommendation for the closure and transfer of functions applicable to the Warminster Detachment.
4. Analysis of customer workload was not considered in reviewing alternative sites for Transfer of Functions.

RECOMMENDATIONS:

1. The Navy (Space and Naval Warfare Command) be requested to review the decision to include the Philadelphia, Detachment with the recommendation for the Warminster, Detachment as stated in the Department of the Navy Analyses and Recommendations Report to the DOD Base Closure and Realignment Commission.
2. The Navy (Space and Naval Warfare Command) be requested to examine the availability of alternative East coast facilities for the relocation of the Philadelphia, Detachment. Areas of consideration being other Naval Activities in the Philadelphia area or Fort Monmouth, New Jersey.
3. The Navy (Space and Naval Warfare Command) review the military value of the Philadelphia Detachment as a separate entity.
4. The Navy (Space and Naval Warfare Command) review the projected customer support provided to the Detachment to ascertain impact of relocation decisions on other Navy system command projects. Upon completion of the review, other customers should be solicited for their comments or recommendations.

3 May 1995

For further information, call:

Mr. F. D. Donaghy

(h) 215 844 4106

(b) 215 897 5541

**INFORMATION SHEET ON THE NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE
CENTER RDT&E DIVISION (NR&D), DETACHMENT, PHILADELPHIA**

MISSION STATEMENT: The mission of the Naval, Command, Control and Ocean Surveillance Center, RDT&E Division Detachment, Philadelphia is to support the mission of the Naval Command, Control and Ocean Surveillance Center RDT&E Division San Diego, California in a geographic area, and to perform such other functions and tasks as directed.

BACKGROUND: The Philadelphia Detachment performs a broad spectrum of work ranging from advance and engineering development, through acquisition, testing, integration and installation services, to inservice and maintenance support of Command, Control, Communications, Computers and Intelligence (C4I) systems in support of air, surface and subsurface warfare areas on both the collateral and supplemental intelligence levels. Currently, support is provided to 356 Navy and Marine Corps ships/sites in the technical areas of:

- Software design, development, documentation and support.
- Data base design, operations, maintenance and documentation.
- Hardware integration, test, evaluation and enhancements.
- Systems engineering, analysis and quality assurance.
- Configuration management plans, configuration control and status accounting for hardware and software
- Preparation and execution of acquisition plans and documents.
- Site and platform installation planning documents and schedules.
- Development of logistics plans, maintenance concepts and related logistics analysis
- Development of training concepts, requirements analysis, course materials, initial training services and follow-on activities for both classroom and computer based instruction.
- Field technical services for platforms and sites.

PRINCIPAL CUSTOMERS:

1. Commander, Space and Naval Warfare Command

a. Integrated Command, Control Communications, Computes and Intelligence (C4I)
Directorate, PD-70

Projects Supported - Joint Maritime Information Command System (JMCIS)
Global Command and Control System (GCCS)
Joint Data Engineering Services

b. Depot Maintenance Interservice Support Office, Code 10-14B

Project Supported - Analytical Point Positioning System (APPS) support provided to the Departments of the Air Force and Army.

2. Commander, Naval Air Systems Command

a. Program Executive Officer, Cruise Missile Project and Unmanned Aerial Vehicles Joint Project Office, Command and Control Program Office, PMA-281

Projects Supported - Tomahawk Mission Planning Center (TMPC)

Afloat Planning System (APS) & Rapid Deployment Suite (RDS)
Joint Service Imagery Processing System - Navy (JSIPS-N)
Mission Distribution System (MDS)
Tactical Support Coordination Module (TSCM)
Electronic Tomahawk Mission Planning Package (ETEPP)
CVN-76 Design Team
CV-IC Reconfiguration

b. Program Executive Officer, Tactical Aircraft Program Office (PEOT)

Projects Supported - Tactical Aircraft Mission Planning System (TAMPS), PMA-233
Photographic Imagery Editing System (PIES), PMA-241
Digital Photo Lab (DPL), PMA-241
CV Photo Lab Redesign, PMA-241

Document Separator

NAWC-AIRCRAFT
DIV.

Open Water Test
Facility

Document Separator

DRAFT

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

SUMMARY SHEET

NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION OPEN WATER TEST FACILITY ORELAND, PENNSYLVANIA

INSTALLATION MISSION

- An open water test facility that tests active and passive transducers and sonobuoy subsystems.

DOD RECOMMENDATION

- Close the Naval Air Warfare Center, Aircraft Division, Open Water Test Facility in Oreland, Pennsylvania.

DOD JUSTIFICATION

- Overall reduction in operational forces and sharp decline of the Navy budget through FY2001 is resulting in reduced technical workload and excess capacity.
- Closure of facility reduces excess capacity by eliminating redundant capability and requirements can be met elsewhere in Navy.

COST CONSIDERATIONS DEVELOPED BY DOD

- | | |
|--------------------------------------|-----------------|
| • One-Time Cost | \$.050 million |
| • Net Savings During Implementation: | \$.033 million |
| • Annual Recurring Savings: | \$.015 million |
| • Break-Even Year: | 1999 (3 years). |
| • Net Present Value Over 20 Years: | \$.2 million |

DRAFT

DRAFT

MANPOWER IMPLICATIONS OF THIS RECOMMENDATION (EXCLUDES CONTRACTORS) None.

| | <u>Military</u> | <u>Civilian</u> | <u>Students</u> |
|-----------------|-----------------|-----------------|-----------------|
| Baseline | | | |
| Reductions | | | |
| Realignments | | | |
| Total | | | |

MANPOWER IMPLICATIONS OF ALL RECOMMENDATIONS AFFECTING THIS INSTALLATION (INCLUDES ON-BASE CONTRACTORS AND STUDENTS) None.

| <u>Recommendation</u> | <u>Out</u> | | <u>In</u> | | <u>Net Gain (Loss)</u> | |
|-----------------------|-----------------|-----------------|-----------------|-----------------|------------------------|-----------------|
| | <u>Military</u> | <u>Civilian</u> | <u>Military</u> | <u>Civilian</u> | <u>Military</u> | <u>Civilian</u> |

TOTAL

ENVIRONMENTAL CONSIDERATIONS

- Closure will have a beneficial effect on the environment since any impact of military activities on jurisdictional wetlands will be eliminated.
- No other environmental impacts since there is no transfer of functions or personnel.

REPRESENTATION

Governor: Tom Ridge
Senators: Arlen Specter
Rick Santorum
Representative: Jon D. Fox, James Greenwood, Paul McHale
Governor Tom Ridge

DRAFT

ECONOMIC IMPACT No jobs in the Philadelphia-New Jersey economic area are affected.

- Potential Employment Loss: x jobs (x direct and x indirect)
- Oreland, PA MSA Job Base: x jobs
- Percentage: x percent decrease
- Cumulative Economic Impact (year-year): x percent decrease

MILITARY ISSUES

- While closure of the Open Water Test Facility at Oreland and transfer of workload to Crane, Indiana is not an issue, a fixed tow rail in combination with a quiet ambient noise level is needed. The tow rail exists at Oreland and not at Crane and was overlooked during BRAC 95 process. It can be purchased or moved depending on which is more cost effective. NAWC plans to recommend to Navy that Crane be given BRAC funding to upgrade their in-water facility with a fixed tow rail to transition flow noise testing from NAWC's Oreland facility.

COMMUNITY CONCERNS/ISSUES

- None.

ITEMS OF SPECIAL EMPHASIS

- None.

Lester C. Farrington/Cross-Service/04/25/95 3:51 PM

Document Separator

BASE VISIT REPORT

**NAVAL AIR WARFARE CENTER , AIRCRAFT DIVISION
and
NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER, RDT&E
DIVISION DETACHMENT
WARMINSTER, PENNSYLVANIA**

OPEN WATER TEST FACILITY, ORELAND, PENNSYLVANIA

APRIL 7, 1995

LEAD COMMISSIONER:

Commissioner Al Cornella

ACCOMPANYING COMMISSIONER:

None.

COMMISSION STAFF:

Mr. Lester C. Farrington, Cross Service Team Analyst
Mr. David Epstein, Navy Team Analyst

LIST OF ATTENDEES:

NAWC Representatives
CAPT William L. McCracken, Commander
Thomas Castaldi-Executive Director
Stuart Simon-Deputy Director
Franz Bonn-Transition Manager
Joseph Cody-Base Transition Office
Richard Coughlan-Head of Acoustics Dev.
David Polish-Public Affairs Officer
Thomas Milhous-Head of Crew Systems
Dr. Philip Whitley-Crew Systems
Herb Seligman-Navigational Systems Dev.
Steve Ganop-Integrated Navigation Systems
Jim Eck-Naval Command, Control and Ocean Surveillance
Center, RDT&E Div. Detachment

Congressional Staff

Pete Johnson-Congressman James Greenwood's Staff 8th District

BASE'S PRESENT MISSION:

NAWC Aircraft Division is the principal Navy research, development, test and evaluation center for aircraft, airborne anti-submarine warfare and aircraft systems. The Naval Command, Control and Ocean Surveillance Center is a high-accuracy navigation sensor laboratory that conducts research and development of new technology sensors, including various types of gyros. NAWC's Open Water Test Facility tests active and passive transducers and sonobuoy subsystems.

SECRETARY OF DEFENSE RECOMMENDATION:

Close the NAWC, Aircraft Division, Warminster, Pennsylvania. Relocate appropriate functions, personnel, equipment, and support to other technical activities, primarily the Naval Air Warfare Center, Aircraft Division, Patuxent River, Maryland.

Close the Naval Command, Control and Ocean Surveillance Center and relocate appropriate functions, personnel equipment, and support to other technical activities, primarily the Naval Command, Control and Ocean Surveillance Center, RDT&E Div., San Diego, California; and the Naval Oceanographic Office, Bay St. Louis, Mississippi.

Close the NAWC's Open Water Test Facility in Oreland, Pennsylvania.

SECRETARY OF DEFENSE JUSTIFICATION:

Overall reduction in operational forces and sharp decline of the Navy budget through FY 2001 is resulting in reduced technical workload and excess capacity. These closures complete the process of realignment initiated in BRAC 91. Excess capacity is being reduced by eliminating redundant capability and requirements that can be met elsewhere in Navy.

MAIN FACILITIES REVIEWED:

NAVIGATION LABORATORY(NRAD)

- Inertial Navigation Test Facility
- Global Positioning System Laboratory
- Ships Motion Test Facility

CREW SYSTEMS FACILITIES

- Human Centrifuge
- Dynamic Flight Simulator

OPEN WATER TEST FACILITY (not viewed by Messrs. Cornella and Epstein)

KEY ISSUES IDENTIFIED

The primary issue revolves around control over and Navy use of the major RDT&E facilities at NAWC-Warminster that are unique and may be needed to meet current and future Navy requirements. Three structures--the Inertial Navigation Facility, Centrifuge and Dynamic Flight Simulator--were retained after BRAC 91. These facilities are massive and cannot cost-effectively be moved. Closure and excessing of the facilities provides the opportunity for transfer to the public educational or commercial sectors, and thus maintaining access by Navy on an as-needed basis. During BRAC 91, it was decided that these facilities be retained. A reuse plan for NAWC has been prepared for business and recreational use.

While BRAC 95 closes the remainder of NAWC-Warminster, the issue is that whatever activity ends up controlling the aforementioned R&D facilities, the Navy wants to have priority use of these unique facilities to meet their requirements. However, a potential issue may develop over the extent that the Navy will have to fund these activities after the facility is closed.

While closure of the Open Water Test Facility at Oreland and transfer of workload to Crane, Indiana is not an issue, a fixed tow rail in combination with a quiet ambient noise level is needed. The tow rail exists at Oreland and not at Crane. It can be purchased or moved depending whichever is more cost-effective. NAWC plans to recommend to Navy that Crane be given BRAC funding to upgrade their in water facility with a fixed tow rail to transition flow noise testing from NAWC's Oreland facility. This was apparently an oversight in developing closure plans for NAWC Warminster during BRAC 95.

COMMUNITY CONCERNS RAISED:

None.

REQUESTS FOR STAFF AS A RESULT OF VISIT:

Follow-up with Navy to substantiate future requirements for the major facilities to be left at NAWC Warminster. Also review justification and cost information of upgrading the Crane facility if formally presented to DBCRC.

Document Separator

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

*NAWC - AD, Open Water
 test Facility,
 Oreland, PA*

Starting Year : 1996
 Final Year : 1996
 ROI Year : 1999 (3 Years)

NPV in 2015(\$K): -175
 1-Time Cost(\$K): 50

| Net Costs (\$K) | Constant Dollars | | | | | | Total | Beyond |
|-----------------|------------------|------------|------------|------------|------------|------------|------------|------------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | | |
| MilCon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Overhd | -8 | -15 | -15 | -15 | -15 | -15 | -83 | -15 |
| Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 50 | 0 | 0 | 0 | 0 | 0 | 50 | 0 |
| TOTAL | 42 | -15 | -15 | -15 | -15 | -15 | -33 | -15 |

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-----------------------------|------|------|------|------|------|------|-------|
| POSITIONS ELIMINATED | | | | | | | |
| Off | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOT | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POSITIONS REALIGNED | | | | | | | |
| Off | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stu | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOT | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Summary:

Close NAWC Det Deep Water Test Facility Oreland.
 No full-time personnel assigned.

SCENARIO 032

Les,
*I've taken a quick look at this & it
 looks straight forward.*
Bob

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Costs (\$K) Constant Dollars | | | | | | | | |
|------------------------------|-----------|----------|----------|----------|----------|----------|-----------|----------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| MilCon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Overhd | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 50 | 0 | 0 | 0 | 0 | 0 | 50 | 0 |
| TOTAL | 50 | 0 | 0 | 0 | 0 | 0 | 50 | 0 |

| Savings (\$K) Constant Dollars | | | | | | | | |
|--------------------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| MilCon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Overhd | 8 | 15 | 15 | 15 | 15 | 15 | 83 | 15 |
| Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Missio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 8 | 15 | 15 | 15 | 15 | 15 | 83 | 15 |

NET PRESENT VALUES REPORT (COBRA v5.08)
 Data As Of 08:32 11/21/1994, Report Created 15:21 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Year | Cost(\$) | Adjusted Cost(\$) | NPV(\$) |
|------|----------|-------------------|----------|
| 1996 | 42,000 | 41,434 | 41,434 |
| 1997 | -15,000 | -14,402 | 27,032 |
| 1998 | -15,000 | -14,016 | 13,016 |
| 1999 | -15,000 | -13,641 | -625 |
| 2000 | -15,000 | -13,276 | -13,901 |
| 2001 | -15,000 | -12,921 | -26,822 |
| 2002 | -15,000 | -12,575 | -39,397 |
| 2003 | -15,000 | -12,238 | -51,636 |
| 2004 | -15,000 | -11,911 | -63,547 |
| 2005 | -15,000 | -11,592 | -75,139 |
| 2006 | -15,000 | -11,282 | -86,421 |
| 2007 | -15,000 | -10,980 | -97,401 |
| 2008 | -15,000 | -10,686 | -108,087 |
| 2009 | -15,000 | -10,400 | -118,487 |
| 2010 | -15,000 | -10,122 | -128,609 |
| 2011 | -15,000 | -9,851 | -138,459 |
| 2012 | -15,000 | -9,587 | -148,047 |
| 2013 | -15,000 | -9,330 | -157,377 |
| 2014 | -15,000 | -9,081 | -166,458 |
| 2015 | -15,000 | -8,838 | -175,296 |

TOTAL ONE-TIME COST REPORT (COBRA v5.08) - Page 1/2
 Data As Of 08:32 11/21/1994, Report Created 15:21 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

(All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|--------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 50,000 | |
| Total - Other | | 50,000 |
| ----- | | |
| Total One-Time Costs | | 50,000 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 0 |
| ----- | | |
| Total Net One-Time Costs | | 50,000 |

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC DEEPWTR ORELAND, PA
 (All values in Dollars)

| Category | Cost | Sub-Total |
|---------------------------------------|--------|-----------|
| ----- | ---- | ----- |
| Construction | | |
| Military Construction | 0 | |
| Family Housing Construction | 0 | |
| Information Management Account | 0 | |
| Land Purchases | 0 | |
| Total - Construction | | 0 |
| Personnel | | |
| Civilian RIF | 0 | |
| Civilian Early Retirement | 0 | |
| Civilian New Hires | 0 | |
| Eliminated Military PCS | 0 | |
| Unemployment | 0 | |
| Total - Personnel | | 0 |
| Overhead | | |
| Program Planning Support | 0 | |
| Mothball / Shutdown | 0 | |
| Total - Overhead | | 0 |
| Moving | | |
| Civilian Moving | 0 | |
| Civilian PPS | 0 | |
| Military Moving | 0 | |
| Freight | 0 | |
| One-Time Moving Costs | 0 | |
| Total - Moving | | 0 |
| Other | | |
| HAP / RSE | 0 | |
| Environmental Mitigation Costs | 0 | |
| One-Time Unique Costs | 50,000 | |
| Total - Other | | 50,000 |
| ----- | | |
| Total One-Time Costs | | 50,000 |
| ----- | | |
| One-Time Savings | | |
| Military Construction Cost Avoidances | 0 | |
| Family Housing Cost Avoidances | 0 | |
| Military Moving | 0 | |
| Land Sales | 0 | |
| One-Time Moving Savings | 0 | |
| Environmental Mitigation Savings | 0 | |
| One-Time Unique Savings | 0 | |
| ----- | | |
| Total One-Time Savings | | 0 |
| ----- | | |
| Total Net One-Time Costs | | 50,000 |

Department : NAVY
Option Package : NAWC ORELAND
Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
Std Fctrs File : C:\COBRA95\NAVY\W95DBOF.SFF

All Costs in \$K

| Base Name | Total MilCon | IMA Cost | Land Purch | Cost Avoid | Total Cost |
|----------------------|-----------------|-------------|---------------|---------------|---------------|
| NAWC DEEPWTR ORELAND | 0 | 0 | 0 | 0 | 0 |
| Totals: | 0 | 0 | 0 | 0 | 0 |

PERSONNEL SUMMARY REPORT (COBRA v5.08)

Data As Of 08:32 11/21/1994, Report Created 15:21 03/08/1995

Department : NAVY
Option Package : NAWC ORELAND
Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

PERSONNEL SUMMARY FOR: NAWC DEEPWTR ORELAND, PA

BASE POPULATION (FY 1996, Prior to BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| ----- | ----- | ----- | ----- |
| 0 | 0 | 0 | 0 |

BASE POPULATION (After BRAC Action):

| Officers | Enlisted | Students | Civilians |
|----------|----------|----------|-----------|
| ----- | ----- | ----- | ----- |
| 0 | 0 | 0 | 0 |

TOTAL PERSONNEL IMPACT REPORT (COBRA v5.08) - Page 1/2
 Data As Of 08:32 11/21/1994, Report Created 15:21 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| | Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|--------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement* | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)** | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement | 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement | 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover | 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)** | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# | 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Civilians Hired | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Civilian Additions | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFs | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

+ The Percentage of Civilians Not Willing to Move (Voluntary RIFs) varies from base to base.

Not all Priority Placements involve a Permanent Change of Station. The rate of PCS placements involving a PCS is 50.00%

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base: NAWC DEEPWTR ORELAND, PA Rate | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total |
|-------------------------------------|------|------|------|------|------|------|-------|
| CIVILIAN POSITIONS REALIGNING OUT | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement* 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement* 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover* 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving (the remainder) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Positions Available | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS ELIMINATED | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Retirement 10.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Regular Retirement 5.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian Turnover 15.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civs Not Moving (RIFs)* 6.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Priority Placement# 60.00% | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Available to Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilian RIFs (the remainder) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIVILIAN POSITIONS REALIGNING IN | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civilians Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Civilians Hired | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Civilian Additions | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN EARLY RETIRMENTS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN RIFs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN PRIORITY PLACEMENTS# | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL CIVILIAN NEW HIRES | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPS placements involving a PCS is 50.00%

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 1/6
 Data As Of 08:32 11/21/1994, Report Created 15:22 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95D80F.SFF

| ONE-TIME COSTS -----(\$K)----- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| CONSTRUCTION | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | |
| CIV SALARY | | | | | | | |
| Civ RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Retire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CIV MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Home Purch | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Hunt | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RITA | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREIGHT | | | | | | | |
| Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Freight | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unemployment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Program Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shutdown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Hire | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | |
| MIL MOVING | | | | | | | |
| Per Diem | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| POV Miles | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HHG | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| Elim PCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 50 | 0 | 0 | 0 | 0 | 0 | 50 |
| TOTAL ONE-TIME | 50 | 0 | 0 | 0 | 0 | 0 | 50 |

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 2/6
 Data As Of 08:32 11/21/1994, Report Created 15:22 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| RECURRINGCOSTS | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------|------|------|------|------|------|------|-------|--------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL COST | 50 | 0 | 0 | 0 | 0 | 0 | 50 | 0 |

| ONE-TIME SAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|-----------------|------|------|------|------|------|------|-------|--|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | |
| CONSTRUCTION | | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| Land Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

| RECURRINGSAVES | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
|-----------------|------|------|------|------|------|------|-------|--------|
| -----(\$K)----- | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 8 | 15 | 15 | 15 | 15 | 15 | 83 | 15 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 8 | 15 | 15 | 15 | 15 | 15 | 83 | 15 |
| TOTAL SAVINGS | 8 | 15 | 15 | 15 | 15 | 15 | 83 | 15 |

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 3/6
 Data As Of 08:32 11/21/1994, Report Created 15:22 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| ONE-TIME NET ----(\$K)---- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|--------------------------------|------|------|------|------|------|------|-------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 50 | 0 | 0 | 0 | 0 | 0 | 50 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 50 | 0 | 0 | 0 | 0 | 0 | 50 | |
| RECURRING NET ----(\$K)---- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | -8 | -15 | -15 | -15 | -15 | -15 | -83 | -15 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | -8 | -15 | -15 | -15 | -15 | -15 | -83 | -15 |
| TOTAL NET COST | 42 | -15 | -15 | -15 | -15 | -15 | -33 | -15 |

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 5/6
 Data As Of 08:32 11/21/1994, Report Created 15:22 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC DEEPWTR ORELAND, PA

| RECURRINGCOSTS ----(\$K)---- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- | Beyond ----- |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-----------------|
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TOTAL COSTS 50 0 0 0 0 0 0 50 0

| ONE-TIME SAVES ----(\$K)---- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- | Beyond ----- |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-----------------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| 1-Time Move | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Land Sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL ONE-TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| RECURRINGSAVES ----(\$K)---- | 1996 ---- | 1997 ---- | 1998 ---- | 1999 ---- | 2000 ---- | 2001 ---- | Total ----- | Beyond ----- |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-----------------|
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Off Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enl Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | 8 | 15 | 15 | 15 | 15 | 15 | 83 | 15 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | 8 | 15 | 15 | 15 | 15 | 15 | 83 | 15 |

TOTAL SAVINGS 8 15 15 15 15 15 15 83 15

APPROPRIATIONS DETAIL REPORT (COBRA v5.08) - Page 6/6
 Data As Of 08:32 11/21/1994, Report Created 15:22 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

Base: NAWC DEEPWTR ORELAND, PA

| ONE-TIME NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | |
|----------------------------------|------|------|------|------|------|------|-------|--------|
| CONSTRUCTION | | | | | | | | |
| MILCON | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Fam Housing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| O&M | | | | | | | | |
| Civ Retir/RIF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Civ Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MIL PERSONNEL | | | | | | | | |
| Mil Moving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OTHER | | | | | | | | |
| HAP / RSE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Environmental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Info Manage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1-Time Other | 50 | 0 | 0 | 0 | 0 | 0 | 50 | |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| TOTAL ONE-TIME | 50 | 0 | 0 | 0 | 0 | 0 | 50 | |
| RECURRING NET -----(\$K)----- | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Total | Beyond |
| FAM HOUSE OPS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| O&M | | | | | | | | |
| RPMA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unique Operat | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Caretaker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Civ Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MIL PERSONNEL | | | | | | | | |
| Mil Salary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| House Allow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTHER | | | | | | | | |
| Procurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recur | -8 | -15 | -15 | -15 | -15 | -15 | -83 | -15 |
| Unique Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL RECUR | -8 | -15 | -15 | -15 | -15 | -15 | -83 | -15 |
| TOTAL NET COST | 42 | -15 | -15 | -15 | -15 | -15 | -33 | -15 |

PERSONNEL, SF, RPMA, AND BOS DELTAS (COBRA v5.08)
 Data As Of 08:32 11/21/1994, Report Created 15:21 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

| Base | Personnel | | SF | | |
|----------------------|-----------|---------|--------|---------|---------|
| | Change | %Change | Change | %Change | Chg/Per |
| NAWC DEEPWTR ORELAND | 0 | 0% | 0 | 0% | 0 |

| Base | RPMA(\$) | | | BOS(\$) | | |
|----------------------|----------|---------|---------|---------|---------|---------|
| | Change | %Change | Chg/Per | Change | %Change | Chg/Per |
| NAWC DEEPWTR ORELAND | 0 | 0% | 0 | 0 | 0% | 0 |

| Base | RPMABOS(\$) | | |
|----------------------|-------------|---------|---------|
| | Change | %Change | Chg/Per |
| NAWC DEEPWTR ORELAND | 0 | 0% | 0 |

INPUT DATA REPORT (COBRA v5.08)
 Data As Of 08:32 11/21/1994, Report Created 15:21 03/08/1995

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

Base Name : Strategy:

 NAWC DEEPWTR ORELAND, PA Closes in FY 1996

Summary:

 Close NAWC Det Deep Water Test Facility Oreland.
 No full-time personnel assigned.

SCENARIO 032

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NAWC DEEPWTR ORELAND, PA

| | | | |
|--------------------------------|------|-------------------------------|--------|
| Total Officer Employees: | 0 | RPMA Non-Payroll (\$K/Year): | 0 |
| Total Enlisted Employees: | 0 | Communications (\$K/Year): | 0 |
| Total Student Employees: | 0 | BOS Non-Payroll (\$K/Year): | 15 |
| Total Civilian Employees: | 0 | BOS Payroll (\$K/Year): | 0 |
| Mil Families Living On Base: | 0.0% | Family Housing (\$K/Year): | 0 |
| Civilians Not Willing To Move: | 6.0% | Area Cost Factor: | 1.10 |
| Officer Housing Units Avail: | 0 | CHAMPUS In-Pat (\$/Visit): | 0 |
| Enlisted Housing Units Avail: | 0 | CHAMPUS Out-Pat (\$/Visit): | 0 |
| Total Base Facilities(KSF): | 0 | CHAMPUS Shift to Medicare: | 0.0% |
| Officer VHA (\$/Month): | 398 | Activity Code: | 00421A |
| Enlisted VHA (\$/Month): | 244 | | |
| Per Diem Rate (\$/Day): | 123 | Homeowner Assistance Program: | NC |
| Freight Cost (\$/Ton/Mile): | 0.07 | Unique Activity Information: | NC |

(See final page for Explanatory Notes)

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NAWC DEEPWTR ORELAND, PA

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---------------------------|------|-------------------------------|------|------|------|------|
| | ---- | ---- | ---- | ---- | ---- | ---- |
| 1-Time Unique Cost (\$K): | 50 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Unique Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| 1-Time Moving Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Env Non-MilCon Reqd(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Cost (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Activ Mission Save (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Cost(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc Recurring Save(\$K): | 8 | 15 | 15 | 15 | 15 | 15 |
| Land (+Buy/-Sales) (\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Schedule(%): | 0% | 0% | 0% | 0% | 0% | 0% |
| Shutdown Schedule (%): | 0% | 0% | 0% | 0% | 0% | 0% |
| MilCon Cost Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Fam Housing Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| Procurement Avoidnc(\$K): | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS In-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| CHAMPUS Out-Patients/Yr: | 0 | 0 | 0 | 0 | 0 | 0 |
| Facil ShutDown(KSF): | 0 | Perc Family Housing ShutDown: | | | 0.0% | |

(See final page for Explanatory Notes)

Department : NAVY
 Option Package : NAWC ORELAND
 Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
 Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

| | | | |
|----------------------------------|------------------|--------------------------------|------------|
| Percent Officers Married: | 71.70% | Civ Early Retire Pay Factor: | 9.00% |
| Percent Enlisted Married: | 60.10% | Priority Placement Service: | 60.00% |
| Enlisted Housing MilCon: | 98.00% | PPS Actions Involving PCS: | 50.00% |
| Officer Salary(\$/Year): | 76,781.00 | Civilian PCS Costs (\$): | 28,800.00 |
| Off BAQ with Dependents(\$): | 7,925.00 | Civilian New Hire Cost(\$): | 0.00 |
| Enlisted Salary(\$/Year): | 33,178.00 | Nat Median Home Price(\$): | 114,600.00 |
| Enl BAQ with Dependents(\$): | 5,251.00 | Home Sale Reimburse Rate: | 10.00% |
| Avg Unemploy Cost(\$/Week): | 174.00 | Max Home Sale Reimburs(\$): | 22,385.00 |
| Unemployment Eligibility(Weeks): | 18 | Home Purch Reimburse Rate: | 5.00% |
| Civilian Salary(\$/Year): | 54,694.00 | Max Home Purch Reimburs(\$): | 11,191.00 |
| Civilian Turnover Rate: | 15.00% | Civilian Homeowning Rate: | 64.00% |
| Civilian Early Retire Rate: | 10.00% | HAP Home Value Reimburse Rate: | 22.90% |
| Civilian Regular Retire Rate: | 5.00% | HAP Homeowner Receiving Rate: | 5.00% |
| Civilian RIF Pay Factor: | 39.00% | RSE Home Value Reimburse Rate: | 0.00% |
| SF File Desc: | NAVY DBOF BRAC95 | RSE Homeowner Receiving Rate: | 0.00% |

STANDARD FACTORS SCREEN TWO - FACILITIES

| | | | |
|-------------------------------------|--------|-------------------------------------|--------|
| RPMA Building SF Cost Index: | 0.93 | Rehab vs. New MilCon Cost: | 75.00% |
| BOS Index (RPMA vs population): | 0.54 | Info Management Account: | 0.00% |
| (Indices are used as exponents) | | MilCon Design Rate: | 9.00% |
| Program Management Factor: | 10.00% | MilCon SIOH Rate: | 6.00% |
| Caretaker Admin(SF/Care): | 162.00 | MilCon Contingency Plan Rate: | 5.00% |
| Mothball Cost (\$/SF): | 1.25 | MilCon Site Preparation Rate: | 39.00% |
| Avg Bachelor Quarters(SF): | 294.00 | Discount Rate for NPV.RPT/ROI: | 2.75% |
| Avg Family Quarters(SF): | 1.00 | Inflation Rate for NPV.RPT/ROI: | 0.00% |
| APPDET.RPT Inflation Rates: | | | |
| 1996: 0.00% 1997: 2.90% 1998: 3.00% | | 1999: 3.00% 2000: 3.00% 2001: 3.00% | |

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

| | | | |
|-------------------------------|-----------|------------------------------|----------|
| Material/Assigned Person(Lb): | 710 | Equip Pack & Crate(\$/Ton): | 284.00 |
| HHG Per Off Family (Lb): | 14,500.00 | Mil Light Vehicle(\$/Mile): | 0.31 |
| HHG Per Enl Family (Lb): | 9,000.00 | Heavy/Spec Vehicle(\$/Mile): | 3.39 |
| HHG Per Mil Single (Lb): | 6,400.00 | POV Reimbursement(\$/Mile): | 0.18 |
| HHG Per Civilian (Lb): | 18,000.00 | Avg Mil Tour Length (Years): | 4.17 |
| Total HHG Cost (\$/100Lb): | 35.00 | Routine PCS(\$/Pers/Tour): | 3,763.00 |
| Air Transport (\$/Pass Mile): | 0.20 | One-Time Off PCS Cost(\$): | 4,527.00 |
| Misc Exp (\$/Direct Employ): | 700.00 | One-Time Enl PCS Cost(\$): | 1,403.00 |

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

| Category | UF | \$/UM | Category | UM | \$/UM |
|-----------------------|------|--------|---------------------|-----|-------|
| ----- | -- | ----- | ----- | -- | ----- |
| Horizontal | (SY) | 61 | Optional Category A | () | 0 |
| Waterfront | (LF) | 10,350 | Optional Category B | () | 0 |
| Air Operations | (SF) | 122 | Optional Category C | () | 0 |
| Operational | (SF) | 111 | Optional Category D | () | 0 |
| Administrative | (SF) | 123 | Optional Category E | () | 0 |
| School Buildings | (SF) | 108 | Optional Category F | () | 0 |
| Maintenance Shops | (SF) | 102 | Optional Category G | () | 0 |
| Bachelor Quarters | (SF) | 96 | Optional Category H | () | 0 |
| Family Quarters | (EA) | 78,750 | Optional Category I | () | 0 |
| Covered Storage | (SF) | 94 | Optional Category J | () | 0 |
| Dining Facilities | (SF) | 165 | Optional Category K | () | 0 |
| Recreation Facilities | (SF) | 120 | Optional Category L | () | 0 |
| Communications Facil | (SF) | 165 | Optional Category M | () | 0 |
| Shipyard Maintenance | (SF) | 129 | Optional Category N | () | 0 |
| RDT & E Facilities | (SF) | 160 | Optional Category O | () | 0 |
| POL Storage | (BL) | 12 | Optional Category P | () | 0 |
| Ammunition Storage | (SF) | 160 | Optional Category Q | () | 0 |
| Medical Facilities | (SF) | 168 | Optional Category R | () | 0 |
| Environmental | () | 0 | | | |

Department : NAVY
Option Package : NAWC ORELAND
Scenario File : C:\COBRA95\NAVY\DONE\NAWCO.CBR
Std Fctrs File : C:\COBRA95\NAVY\N95DBOF.SFF

EXPLANATORY NOTES (INPUT SCREEN NINE)

5 - One-time unique costs related to disposal and removal of mission equipment.

Document Separator

**NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION, OPEN
WATER TEST FACILITY, ORELAND, PENNSYLVANIA**

CHART F-8 & F-9

**DOD RECOMMENDS CLOSURE OF THE NAVAL AIR WARFARE
CENTER, AIRCRAFT DIVISION, OPEN WATER TEST FACILITY,
ORELAND, PENNSYLVANIA**

**NO MAJOR ISSUES WERE IDENTIFIED WITH RESPECT TO THIS
CLOSURE.**

ARE THERE ANY QUESTIONS?

BASE ANALYSIS
NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION, OPEN WATER TEST FACILITY, ORELAND, PA

DOD RECOMMENDATION: Close the Naval Air Warfare Center, Aircraft Division's Open Water Test Facility in Oreland, PA.

| CRITERIA | DOD RECOMMENDATION |
|--------------------------------|--------------------|
| MILITARY VALUE | 8 of 8 |
| FORCE STRUCTURE | N/A |
| ONE-TIME COSTS (\$ M) | 0.050 |
| ANNUAL SAVINGS (\$ M) | 0.015 |
| RETURN ON INVESTMENT | 1999 (3 years) |
| NET PRESENT VALUE (\$M) | 0.175 |
| BASE OPERATING BUDGET (\$ M) | 0.015 |
| PERSONNEL ELIMINATED (MIL/CIV) | 0/0 |
| PERSONNEL REALIGNED (MIL/CIV) | 0/0 |
| ECONOMIC IMPACT (BRAC 95/CUM) | None |
| ENVIRONMENTAL | |

SCENARIO SUMMARY
NAVAL AIR WARFARE CENTER, AIRCRAFT DIVISION, OPEN WATER TEST FACILITY, ORELAND, PA

| DoD RECOMMENDATION | |
|--|------------|
| Close the Naval Air Warfare Center, Aircraft Division's Open Water Test Facility in Oreland, PA. | |
| One Time Costs (\$M): 0.050 Annual Savings (\$M): 0.015 Return on Investment: 1999 (3 years) Net Present Value (\$M): 0.175 | |
| PRO | CON |
| Reduces excess capacity by eliminating redundant capability in Navy | |

Document Separator