DCN: 11935

NAVAL
POSTGRADUATE
SCHOOL

Itinerary for the visit of
BRAC Commission Visit
5, 8 August 2005

Members in traveling party

Admiral Harold W. Gehman, Jr., USN (Ret.), BRAC Commissioner
Honorable James V. Hansen, BRAC Commissioner
Honorable Phillip Coyle, BRAC Commissioner
Honorable James Bilbray, BRAC Commissioner
Congressman Sam Farr

Admiral Hank Mauz, USN (Ret.), President/NPSFI Trustee
Mr. Terry Tamminen, Secretary of the Cabinet, Office of Gov. Schwarzenegger
Mr. David Berteau, California Council on Base Support and Retention
Mr. Jim Molinari, State Director, Office of Senator Feinstein

Mr. Syd Carroll, BRAC Analyst Team Member

Mr. Dave Van Saun, BRAC Analyst Team Member
Mr. Wes Hood, BRAC Analyst Team Member
Mr. Ryan Dean, BRAC Analyst Team Member
Ms. Melissa Decker, Special Assistant to the Governor for Military Affairs
Mr. Michael Walker, Field Rep, Office of Senator Feinstein
Mr. Fred Meurer, City Manager, City of Monterey

Fred Cohn, Assistant City Manager, City of Monterey

Arrival

Date	Monday, 8 August 2005
Time	0725
Place	Herrmann Hall, Flag Pole
Greeter	RDML Patrick W. Dunne

	Friday, 5 August 2005	
0800-1500	Discussion of BRAC Visit Questions with Analyst Team	Location: PCR Attendees: Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, CAPT (Ret) George Conner, Col Dave Smarsh & COL (Ret) Pete Dausen
1100-1230	No Host Lunch	Location: West Dining Room
	Monday, 8 August 2005	
0715-0725	Depart Hotel Enroute NPS Herrmann Hall	
0725-0730	Arrive NPS Herrmann Hall	Greeter: RDML Dunne, LTJG Sawyer
0730-0745	FNMOC Brief	Location: PCR Briefer: CAPT David Titley

		Attendees: RDML Dunne, Provost Elster, Col Dave Smarsh, COL (Ret) Pete Dausen, CAPT David Titley, CAPT (Ret) Conner, Dean Ferrari, Dean Hughes, Dean Kays, VADM (Ret) Hughes, Dean Ord, Dr. Julie Filizetti & John Sanders
0745-0825	Command Brief/Facility Overview	Location: PCR Briefer: Dr. Julie Filizetti Attendees: RDML Dunne, Provost Elster, Col Dave Smarsh, COL (Ret) Pete Dausen, CAPT David Titley, CAPT (Ret) Conner, Dean Ferrari, Dean Hughes, Dean Kays, VADM (Ret) Hughes, Dean Ord & John Sanders
0825-0830	Enroute Root Hall	Walk Escort: RDML Dunne, Col Dave Smarsh, John Sanders & Protocol
0830-0845	Tactical Network Topology Brief	Location: Root Hall, RM 202 Greeter/Briefer: Dr. Dave Netzer Attendees: RDML Dunne, Col Dave Smarsh, John Sanders & Protocol
0845-0850	Enroute Watkins	Walk Escort: RDML Dunne, Col Dave Smarsh, John Sanders & Protocol
0850-0905	MOVES Institute Tour/ Combat Simulator	Location: Watkins Hall, RM 212B Greeter/Briefer: Professor Darken & Professor Don Brutzman Attendees: RDML Dunne, Col Dave Smarsh, John Sanders & Protocol
0905-0910	Enroute Glasgow Hall	Walk Escort: RDML Dunne, Col Dave Smarsh, John Sanders & Protocol
0910-0930	Classified Project Briefs/ SCIF Tour	Location: Glasgow Basement (SCIF) Greeter/Briefer: CAPT (Ret) Simeral Attendees: RDML Dunne, Col Dave Smarsh, John Sanders & Protocol
0930-0945	Depart for DLI	Location: In Front of Glasgow Hall Drivers: DLI

Points of Contact

RDML Dunne's Office
Comm: 831-656-2511
DSN: 756-2511
FAX: 831-656-2337

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Defense Language Institute Protocol
Comm: 831-242-5595/5302

Ms. Connie Trautman & Ms. Ingrid Speed

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Discussion of Privatization of NPS Graduate Education Programs

Assumptions:

1. The Programs offered at the NPS will be replicated at civilian institutions at the same number of quarter units as currently approved by Navy, USMC, Air Force and Army Curriculum sponsors.
2. The number of FTE students currently being served by NPS from the $70M mission appropriation is 2,100.
3. Civilian universities will charge their published out-of-state, per credit tuition levels.

University	$ Per Qtr Unit	Cost/Student/Year (64 Units)	Total Cost/Year	Annual Cost $ Compared to NPS	Twenty Year Additional Cost $
NPS	520[1]	33,333	70,000,000	----	----
Stanford	1068[2]	68,352	143,539,200[3]	+73,539,200	+1,470,784,000
MIT	949	60,736	127,545,600	+57,545,600	+1,150,912,000
Columbia	1100	70,400	147,840,000	+77,840,000	+1,556,800,000
George Mason	550	35,200	73,920,000	+3,920,000	+78,400,000
UC Irvine	676	43,297	90,925,333	+20,925,333	+418,506,666
Carnegie Mellon	916	58,624	123,110,400	+53,110,400	+1,062,208,000
U of Michigan	853	54,592	114,643,200	+44,643,200	+892,864,000
Harvard U.	900	57,600	120,960,000	+50,960,000	+1,019,200,000

Discussion

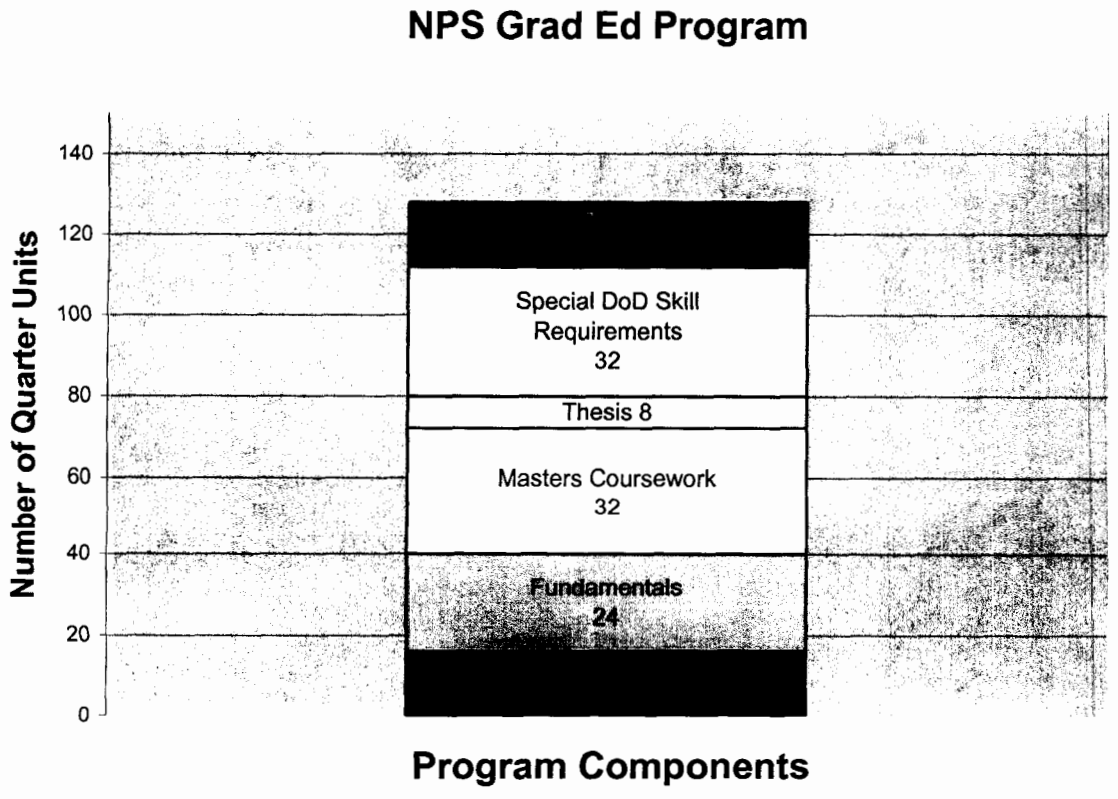
(1) NPS costs are lower because government salaries are significantly lower than at civilian universities, the number of support staff is smaller, and physical plant maintenance is regionalized.

[1] NPS Cost per Qtr Unit is found by dividing the total mission funds by the total number of units taught per year.
[2] Civilian tuition and fees are found from the respective institution's website and normalized to Qtr Units
[3] Total cost is computed using per unit cost, 2,100 students and 64 units/student/year

(2) Cost-benefit analysis requires that we compare like outcomes. Civilian MS programs generally require 36-45 units to complete the degree ; NPS graduate education programs provide prerequisites, subspecialty skills, JPME and a degree and require 120-128 units (see figure below). NPS programs also require a thesis.

a. Generally, civilian universities require a degree in a related field and/or a high GRE score for entry into a graduate program, particularly in technical fields. Because NPS responds to the needs of the Navy for educating high performers, NPS programs provide extensive transition and background courses to prepare students for the higher level courses.

b. DoD sponsors have assigned high value to the MS theses due to the contributions to student learning and the value of the research results produced by the students and faculty. Many civilian universities do not require a thesis. This component of the NPS Program is likely to be lost completely or will not realize the same value to the students and DoD under civilian privatization of the NPS programs.



Military Personnel Savings

Run ID	Scenario	Page	1-Time Costs ($M)	Payback (Years)	6 Yr Net ($M)	Annual ($M)	20-Yr NPV	MilPer 20yr NPV	% of Savings
1	Fort Wainwright, AK	Army-5	0.05	2	(0.19)	(0.05)	(0.70)	-	0%
2	Fort Gillem, GA	Army-6	56.8	1	(85.46)	(35.30)	(421.50)	(107.27)	25%
3	Fort McPherson, GA	Army-8	197.8	2	(111.39)	(82.09)	(895.20)	(439.69)	49%
4	Fort Bragg, NC	Army-10	334.8	Never	446.12	23.78	639.25	4,142.21	648%
5	Fort Monmouth, NJ	Army-11	822.3	6	395.61	(143.69)	(1,025.80)	(272.34)	27%
6	Fort Hood, TX	Army-15	435.8	Never	579.49	45.27	980.40	12,330.23	1258%
7	Red River Army Depot	Army-16	456.2	4	216.64	(76.48)	(539.00)	(12.56)	2%
8	Fort Monroe, VA	Army-19	72.4	1	(146.96)	(56.85)	(686.60)	(337.79)	49%
9	Manuever Training	Army-20	773.1	5	244.05	(123.34)	(948.10)	2,363.64	-249%
10	Operational Army (IGPBS)	Army-22	3946	Never	5,229.01	294.68	7,846.70	(1,085.03)	-14%
11	RC Transformation, AL	Army-25	109.2	6	31.09	(17.77)	(140.30)	(239.70)	171%
12	RC Transformation, AZ	Army-28	31.1	5	5.32	(5.93)	(51.70)	(75.83)	147%
13	RC Transformation, AR	Army-30	118.9	31	97.58	(5.79)	38.20	(63.96)	-167%
14	RC Transformation, CA	Army-33	78.7	10	41.34	(8.94)	(46.00)	(90.63)	197%
15	RC Transformation, CT	Amry-35	128.6	36	107.03	(5.77)	47.50	(47.72)	-100%
16	Rc Transformation, DE	Army-37	13.6	19	9.80	(0.89)	0.90	(9.20)	-1023%
17	RC Transformation, GA	Army-39	21.4	5	3.51	(5.03)	(44.80)	(68.77)	153%
18	RC Transformation, HI	Army-40	56.6	7	26.35	(9.15)	(62.40)	(129.82)	208%
19	RC Transformation, IL	Army-42	42.6	14	28.10	(3.49)	(6.50)	(37.24)	573%
20	RC Transformation, IN	Army-44	47.6	22	33.68	(2.74)	6.10	(41.71)	-684%
21	RC Transformation, IA	Army-46	68.9	3	(16.54)	(19.40)	(201.70)	(258.03)	128%
22	RC Transformation, KY	Army-48	25.3	6	6.89	(4.25)	(34.10)	(55.02)	161%
23	RC Transformation, LA	Army-50	30.7	2	(17.67)	(13.62)	(147.60)	(180.56)	122%
24	RC Transformation, MD (AFRC Frederick, MD)	Army-52	6.3	3	(1.37)	(1.72)	(17.80)	(22.91)	129%
25	RC Transformation, MA	Army-54	85.5	100	79.73	(1.69)	60.40	-	0%
26	RC Transformation, MI	Army-55	7.9	3	(1.44)	(2.11)	(21.60)	(29.22)	135%
27	RC Transformation, MN	Army-57	17.3	Never	17.77	0.01	17.10	-	0%
28	RC Transformation, MO	Army-58	28.6	3	0.90	(6.41)	(61.00)	(80.29)	132%
29	RC Transformation, MT	Army-60	26	23	19.75	(1.53)	4.30	(16.63)	-387%
30	RC Transformation, NE	Army-62	33.1	5	6.03	(6.21)	(53.70)	(82.54)	154%
31	RC Transformation, NH	Army-65	54.2	26	44.57	(3.12)	12.90	(42.18)	-327%
32	RC Transformation, NJ	Army-66	15.1	5	2.03	(2.99)	(26.60)	(39.53)	149%
33	RC Transformation, NM	Army-68	17.9	6	4.64	(3.03)	(24.60)	(41.27)	168%
34	RC Transformation, NY	Army-69	103.8	47	88.49	(4.02)	46.50	(29.22)	-63%
35	RC Transformation, NC	Army-72	9.2	2	(5.11)	(2.64)	(30.20)	(42.30)	140%
36	RC Transformation, ND	Army-73	7.9	Never	8.11	0.02	8.00	-	0%
37	RC Transformation, OH	Army-75	134.8	18	93.62	(9.25)	1.30	(130.45)	-10035%
38	RC Transformation, OK	Army-77	168.7	11	98.56	(16.53)	(63.80)	(193.78)	304%
39	RC Transformation, OR	Army-80	24.1	100	23.49	(0.29)	19.80	-	0%
40	RC Transformation, PA	Army-82	142.7	10	81.06	(14.19)	(58.40)	(168.89)	289%
41	RC Transformation, PR	Army-85	87	15	64.01	(7.31)	(8.60)	(112.12)	1304%
42	RC Transformation, RI	Army-87	32.4	6	9.44	(4.63)	(35.30)	(66.13)	187%
43	RC Transformation, TN	Army-89	36.9	18	28.17	(2.70)	1.10	(32.57)	-2961%
44	RC Transformation, TX	Army-91	375.6	12	220.58	(36.04)	(133.20)	(468.02)	351%
45	RC Transformation, VT	Army-95	61.4	100	57.17	(1.39)	41.70	-	0%
46	RC Transformation, WA	Amry-97	61.2	9	33.63	(8.19)	(46.10)	(104.17)	226%
47	RC Transformation, WV	Army-99	29.5	3	(4.17)	(7.62)	(77.00)	(106.08)	138%
48	RC Transformation, WI	Army-102	10.7	Immediate	(37.67)	(10.81)	(139.70)	(148.55)	106%

Military Personnel Savings

Run ID	Scenario	Page	1-Time Costs ($M)	Payback (Years)	6 Yr Net ($M)	Annual ($M)	20-Yr NPV	MilPer 20yr NPV	% of Savings
49	RC Transformation, WY	Army-103	72.4	21	53.80	(4.46)	9.00	(52.84)	-587%
50	Single Drill Sergeant	Army-105	1.8	1	(7.57)	(2.51)	(31.30)	(39.33)	126%
51	U.S. Army Garrison, MI	Army-106	9.5	Immediate	(91.39)	(18.05)	(260.90)	(8.16)	3%
52	USAR Command and Control New England	Army-107	96.1	13	61.19	(8.42)	(21.80)	(62.63)	287%
53	USAR Command and Control Northeast	Army-109	171.2	5	44.32	(35.90)	(302.10)	(299.44)	99%
54	USAR Command and Control Northwest	Army-112	80.4	9	43.37	(11.09)	(65.00)	(89.15)	137%
55	USAR Command and Control Southeast	Army-115	29.9	16	22.54	(2.40)	(1.50)	(57.49)	3832%
56	USAR Command and Control Southwest	Army-117	55.5	23	44.13	(3.38)	9.80	(92.67)	-946%
57	Marine Corps Logistics Base, Barstow, CA	DoN-6	26	1	(56.49)	(18.40)	(230.60)	(164.78)	71%
58	Naval Support Activity Corona, CA	DoN-7	80.2	15	65.47	(6.03)	(0.40)	(1.42)	354%
59	Naval Weapons Station Seal Beach Detachment,Concord, C	DoN-9	14	1	(43.24)	(16.39)	(199.70)	-	0%
60	Submarine Base New London, CT	DoN-10	679.6	3	345.44	(192.77)	(1,576.40)	(998.42)	63%
61	Officer Training Command, Pensacola, FL	DoN-12	3.6	4	(1.38)	(0.91)	(10.00)	(8.21)	82%
62	Naval Air Station Atlanta, GA	DoN-13	43	1	(289.85)	(66.05)	(910.90)	(769.14)	84%
63	Navy Supply Corps School Athens, GA	DoN-14	23.8	7	13.56	(3.54)	(21.80)	(27.65)	127%
64	Naval Support Activity New Orleans, LA	DoN-15	164.6	3	86.12	(36.50)	(276.40)	(210.25)	76%
65	Naval Air Station Brunswick, ME	DoN-18	147.2	4	112.62	(34.87)	(238.80)	(370.93)	155%
66	Marine Corps Support Activity Kansas City, MO	DoN-19	23.3	3	8.03	(5.83)	(49.80)	(20.30)	41%
67	Naval Station Pascagoula, MS	DoN-20	17.9	1	(220.02)	(47.43)	(665.70)	(577.55)	87%
68	Naval Air Station Joint Reserve Base Willow Grove, PA, and	DoN-21	126.3	2	(134.73)	(60.65)	(710.50)	(276.11)	39%
69	Naval Shipyard Portsmouth, Kittery, ME	DoN-23	448.4	4	(21.42)	(128.57)	(1,262.40)	(261.71)	21%
70	Naval Station Newport, RI	DoN-25	11.8	13	8.33	(1.02)	(2.10)	(4.46)	212%
71	Naval Station Ingleside, Texas and Naval Air Station Corpus	DoN-26	178.386	2	(99.98)	(75.63)	(822.23)	(750.76)	91%
72	Engineering Field Division/Activity	DoN-28	37.9	4	9.06	(9.33)	(81.80)	(8.49)	10%
73	Navy and Marine Corps Reserve Centers **(RollUp)	DoN-29	62.35	1	17.09	(9.75)	(76.80)	-	0%
74	Navy Recruiting Districts	DoN-34	2.4	1	(78.27)	(14.53)	(214.50)	-	0%
75	Navy Regions	DoN-35	3.2	1	(8.88)	(2.72)	(34.60)	-	0%
76	Navy Reserve Centers** (Roll up)	DoN-37	2.55	1	(87.02)	(15.93)	(236.60)	-	0%
77	Navy Reserve Readiness Comands	DoN-44	2.6	1	(30.94)	(6.47)	(91.70)	-	0%
78	Birmingham International Airport Air Guard Station, AL	Air Force-5	11	18	7.69	(0.82)	(0.50)	(0.88)	175%
79	Eielson Air Force Base, AK, Moody Air Force Base, GA, and	Air Force-6	141.4	1	(594.03)	(229.43)	(2,780.60)	(2,174.94)	78%
80	Kulis Air Guard Station, AK, and Elmendork Air Force Base,	Air Force-7	81.4	4	20.61	(17.29)	(146.70)	(156.80)	107%
81	Fort Smith Air Guard Station, AR, and Luke Air Force Base,	Air Force-8	17.6	16	12.44	(1.45)	(2.00)	24.43	-1221%
82	Beale Air Force Base, CA and Selfridge Air National Guard B	Air-Force-10	45.4	14	34.62	(3.88)	(6.40)	70.01	-1094%
83	March Air Force Base, CA	Air Force-11	10.8	5	1.91	(1.81)	(15.50)	(18.37)	118%
84	Onizuka Air Force Station, CA	Air Force-12	123.7	5	45.33	(25.90)	(211.00)	1.44	-1%
85	Bradley International Airport Air Guard Station, CT, Barnes A	Air Force-14	3.2	2	(6.12)	(2.02)	(25.20)	(21.98)	87%
86	New Castle Airport Air Guard Station, DE	Air Force-15	15.5	1	(29.06)	(9.62)	(120.10)	(32.41)	27%
87	Robins Air Force Base, GA	Air Force-16	6.7	1	(31.95)	(14.98)	(175.10)	(161.83)	92%
88	Boise Air Terminal Air Guard Station, ID	Air Force-17	2.5	8	1.60	(0.33)	(1.70)	(0.71)	42%
89	Mountain Home Air Force, ID, Nellis Air Force Base, NV, and	Air Force-18	74.2	1	(21.18)	(37.84)	(389.00)	(508.48)	131%
90	Capital Air Guard Station, IL, and Hulman Regional Airport A	Air Force-20	19.9	13	13.34	(1.99)	(6.30)	(3.09)	49%
91	New Orleans Air Reserve Station, LA	Air Force-22	50.2	5	32.50	(11.26)	(80.70)	5.73	-7%
92	Andrews Air Force Base, MD, Will Rogers Air Guard Station,	Air Force-23	21.7	2	(12.17)	(7.45)	(83.10)	(8.05)	10%
93	Martin State Air Guard Station, MD	Air Force-24	9.4	1	(13.69)	(8.69)	(97.10)	(3.01)	3%
94	Otis Air National Guard Base, MA, Lambert St. Louis Interna	Air Force-25	103	3	(12.25)	(33.56)	(336.10)	(24.29)	7%
95	W.K. Kellogg Airport Air Guard Station, MI	Air Force-27	8.3	1	(46.73)	(12.72)	(166.80)	(65.64)	39%
96	Duluth International Airport Air Guard Station	Air Force-28	2.1	5	(0.22)	(0.79)	(7.80)	-	0%

Military Personnel Savings

Run ID	Scenario	Page	1-Time Costs ($M)	Payback (Years)	6 Yr Net ($M)	Annual ($M)	20-Yr NPV	MilPer 20yr NPV	% of Savings
97	Key Field Air Guard Station, MS	Air Force-28	10.7	13	6.89	(0.93)	(2.50)	0.74	-30%
98	Great Falls International Airport Air Guard Station	Air Force-30	9.3	4	(0.73)	(1.82)	(18.10)	0.50	-3%
99	Reno-Tahoe International Airport Air Guard Station, NV	Air Force-31	22.9	9	12.23	(3.56)	(22.70)	(3.56)	16%
100	Cannon Air Force Base, NM	Air Force-32	90.1	1	(815.56)	(200.50)	(2,706.80)	(2,279.74)	84%
101	Niagra Falls Air Reserve Station, NY	Air Force-33	65.2	2	(5.31)	(20.08)	(199.40)	373.40	-187%
102	Schenectedy County Airport Air Guard Station	Air Force-34	3.5	8	3.32	(0.56)	(2.40)	(3.49)	145%
103	Pope Air Force Base, NC, Pittsburgh International Airport Air	Air Force-35	218.145	1	(652.52)	(196.98)	(2,515.35)	(2,136.38)	85%
104	Grand Forks Air Force Base, ND	Air Force-37	131.5	1	(322.49)	(173.35)	(1,982.00)	(1,649.11)	83%
105	Hector International Airport Air Guard Station, ND	Air Force-38	1.8	2	(3.32)	(1.02)	(12.90)	-	0%
106	Mansfield-Lahm Municipal Airport Air Guard Station, OH	Air Force-39	33.4	3	(3.07)	(8.66)	(86.20)	148.48	-172%
107	Springfield-Beckley Municipal Airport Air Guard Station, OH	Air Force-40	11.4	17	8.35	(0.91)	(0.70)	(5.06)	723%
108	Portland International Airport Air Guard Station, OR	Air Force-41	85.5	7	36.22	(13.99)	(100.20)	0.93	-1%
109	Ellsworth Air Force Base, SD and Dyess Air Force Base, TX	Air Force-43	299.1	1	(316.38)	(161.25)	(1,853.30)	(1,440.48)	78%
110	Nashville International Airport Air Guard Station,TN	Air Force-44	25.4	2	16.74	(13.70)	(120.00)	(4.29)	4%
111	Ellington Air Guard Station, TX	Air Force-45	1.6	5	0.10	(0.37)	(3.60)	-	0%
112	Lackland Air Force Base, TX	Air Force-46	8.1	2	(4.69)	(2.90)	(32.40)	(54.43)	168%
113	Hill Air Force Base, UT, Edwards Air Force Base, CA, Mount	Air Force-47	28.2	4	(7.23)	(8.15)	(85.90)	(15.19)	18%
114	Langley Air Force Base, VA	Air Force-49	1.8	3	(1.47)	(0.71)	(8.30)	(9.74)	117%
115	Richmond Air Guard Station, VA, Des Moines International A	Air Force-50	24.2	10	11.59	(2.55)	(13.20)	(12.25)	93%
116	Fairchild Air Force Base, WA	Air Force-51	6.4	7	1.65	(1.04)	(8.30)	8.12	-98%
117	General Mitchell Air Reserve Station, WI	Air Force-52	38.4	5	14.26	(6.54)	(50.20)	205.80	-410%
118	Air Force Logistics Support Centers	Air Force-53	9.3	1	(19.24)	(6.11)	(77.00)	(72.32)	94%
119	F-100 Engine Centralized Intermediate Repair Facilities	Air Force-55	9.2	9	3.80	(1.14)	(7.10)	(13.42)	189%
120	Aviation Logistics School	E&T-5	492.3	13	348.07	(42.86)	(77.40)	(683.71)	883%
121	Combat Service Support Center	E&T-6	754	6	352.42	(131.81)	(934.20)	(1,219.34)	131%
122	Joint Center for Consolidated Transportation Management T	E&T-7	1.5	1	(5.78)	(1.30)	(18.00)	(8.78)	49%
123	Joint Center of Excellence for Culinary Training	E&T-8	5	4	(2.57)	(1.40)	(16.10)	(13.48)	84%
124	Joint Center of Excellence for Religious Training and Educat	E&T-9	1	1	(3.96)	(0.85)	(11.90)	(9.94)	84%
125	Joint Strike Fighter Initial Joint Training Site	E&T-10	199.1	0	209.60	3.33	226.30	(1.92)	-1%
126	Net Fires Center	E&T-12	247	6	92.96	(42.62)	(319.10)	(667.07)	209%
127	Prime Power to Fort Leonard Wood, Mo	E&T-13	6.023	16	3.91	(0.48)	(0.80)	(4.26)	532%
128	Undergraduate Pilot and Navigator Training	E&T-14	71.7	4	1.62	(18.30)	(174.20)	(225.88)	130%
129	Co-locate Miscellaneous Air Force Leased Locations and Na	H&SA-3	90.5	1	(10.83)	(30.79)	(308.30)	(84.42)	27%
130	Co-locate Defense Military Department Adjudication Activitie	H&SA-5	67.1	13	47.51	(5.72)	(11.30)	(11.81)	104%
131	Co-locate Military Department Investigation Agencies with D	H&SA-8	174	7	87.99	(26.33)	(172.70)	(38.84)	22%
132	Co-locate Miscellaneous Army Leased Locations	H&SA-10	44.1	1	(59.49)	(27.75)	(322.00)	-	0%
133	Co-locate Miscellaneous OSD, Defense Agency, and Field A	H&SA-12	539	9	376.85	(63.28)	(257.60)	(9.98)	4%
134	Co-locate Missile and Space Defense Agencies	H&SA-15	178.2	1	(12.98)	(36.10)	(359.10)	(14.37)	4%
135	Co-locate Navy Education and Training Command and Navy	H&SA-17	33.3	10	23.64	(3.74)	(14.40)	(13.54)	94%
136	Consolidate Army Test and Evaluation Command Headquar	H&SA-18	7.1	1	(43.97)	(8.72)	(125.70)	(62.76)	50%
137	Consolidate Civilian Personnel Offices within each Military D	H&SA-19	97.5	4	46.37	(24.41)	(196.70)	(1.83)	1%
138	Consolidate Correctional Facilities into Joint Regional Corre	H&SA-22	178.8	16	149.39	(14.58)	(2.30)	(270.59)	11765%
139	Consolidate Defense Commisary Agency Eastern, Midweste	H&SA-26	47.2	14	35.39	(3.90)	(4.90)	(3.35)	68%
140	Consolidate Defense Information Systems Agency and Estal	H&SA-27	220	2	102.07	(59.37)	(491.20)	-	0%
141	Consolidate Media Organizations into a New Agency for Med	H&SA-30	42	4	2.90	(9.55)	(89.00)	(30.82)	35%
142	Consolidate Transportation Command Components	H&SA-31	101.8	1	(339.32)	(99.29)	(1,278.20)	(376.65)	29%
143	Consolidate/Co-locate Active and Reserve Personnel & Rec	H&SA-33	119.3	1	(463.03)	(152.77)	(1,913.40)	(1,065.31)	56%
144	Create Joint Mobilization Sites	H&SA-35	0.1	1	(30.85)	(0.79)	(37.90)	(4.63)	12%

DCN: 11935

Military Personnel Savings

Run ID	Scenario	Page	1-Time Costs ($M)	Payback (Years)	6 Yr Net ($M)	Annual ($M)	20-Yr NPV	MilPer 20yr NPV	% of Savings
145	Defense Finance and Accounting Service	H&SA-37	282.1	1	(158.12)	(120.50)	(1,313.80)	(9.84)	1%
146	Joint Basing	H&SA-41	50.6	1	(601.32)	(183.76)	(2,342.50)	(1,402.62)	60%
147	Relocate Air Force Real Property Agency (AFRPA)	H&SA-44	4.5	5	0.92	(0.91)	(7.90)	-	0%
148	Relocate Army Headquarters and Field Operating Agencies	H&SA-46	199.9	10	111.82	(23.93)	(122.90)	(29.31)	24%
149	Relocate Miscellaneous Department of Navy Leased Locatio	H&SA-49	61.9	1	12.79	(18.04)	(164.00)	(4.44)	3%
150	Naval Weapons Station Seal beach, CA	Ind-4	4.1	1	(2.26)	(1.62)	(17.70)	-	0%
151	Riverbank Army Ammunition Plant, CA	Ind-5	25.2	3	10.44	(6.54)	(53.30)	-	0%
152	Sierra Army Depot, CA	Ind-6	33.4	7	7.21	(7.48)	(66.70)	-	0%
153	Rock Island Arsenal, IL	Ind-7	27	9	16.20	(3.06)	(13.80)	-	0%
154	Newport Chemical Depot, IN	Ind-8	7.1	1	(95.62)	(35.74)	(436.20)	(218.46)	50%
155	Kansas Army Ammunition Plant, KS	Ind-9	25.2	2	(2.14)	(10.28)	(101.40)	-	0%
156	Lima Tank Plant, OH	ind-10	0.2	1	(5.85)	(1.73)	(22.30)	-	0%
157	Mississippi Army Ammunition Plant, MS	Ind-11	32.4	7	10.75	(5.09)	(38.60)	-	0%
158	Hawthorne Army Depot, NV	Ind-12	180.3	1	(59.22)	(73.42)	(777.70)	(66.41)	9%
159	Watervliet Arsenal, NY	Ind-13	63.7	18	46.81	(5.17)	(5.20)	-	0%
160	Umatilla Chemical Depot, OR	Ind-14	15.5	1	(89.06)	(60.98)	(681.10)	(116.25)	17%
161	Lackland Air Force Base, TX	Ind-15	10.2	3	0.07	(2.93)	(28.00)	-	0%
162	Lone Star Army Ammunition Plant	Ind-16	29	1	4.66	(17.31)	(164.20)	(2.94)	2%
163	Desert Chemical Depot, UT	Ind-17	4.4	1	(65.05)	(30.33)	(356.40)	(182.76)	51%
164	Ship Intermediate Maintenance Activity Norfolk, VA	Ind-18	10.6	1	(26.82)	(8.22)	(104.30)	(66.55)	64%
165	Fleet Readiness Centers **(Roll up)	Ind-19	298.1	1	(1,528.16)	(341.21)	(4,724.20)	(569.78)	12%
166	Naval Shipyard Detachments	Ind-26	12.5	4	0.95	(2.26)	(20.70)	-	0%
167	Defense intelligence Agency	Int-3	96.7	8	48.78	(10.09)	(52.80)	(2.93)	6%
168	National Geospatial Intelligence Agency	Int-4	1117.3	8	796.70		(535.10)	-	0%
169	Walter Reed National Military Medical Center, Bethesda, MD	Med-4	988.8	10	724.20	(99.57)	(301.20)	(369.44)	123%
170	Brooks City Base, TX	Med-6	325.3	2	45.93	(102.06)	(940.70)	(611.04)	65%
171	McChord Air Force Base, WA	Med-9	1.1	1	(55.12)	(11.64)	(164.40)	(45.66)	28%
172	San Antonio Regional Medical Center, TX	Med-10	1040.9	10	826.72	(129.04)	(476.20)	(693.09)	146%
173	Convert Inpatient Services to Clinics	Med-12	12.9	1	(250.88)	(60.17)	(818.10)	(761.58)	93%
174	Joint Centers of Excellence for Chemical, Biologist, and Med	Med-15	73.9	7	45.93	(9.19)	(46.00)	(17.34)	38%
175	Commodity Management Privatization	S&S- 5	6.4	1	(333.75)	(43.78)	(735.90)	-	0%
176	Depot level Reparable Procurement Management Consolida	S&S-7	127	1	(369.79)	(159.28)	(1,889.60)	(12.87)	1%
177	Supply, Storage, and Distribution Management Reconfigurat	S&S-13	192.7	1	(1,047.33)	(203.21)	(2,925.80)	(15.89)	1%
178	Co-locate Extramural Research Program Managers	Tech-5	153.5	2	(107.12)	(49.42)	(572.70)	0.12	0%
179	Consolidate Air and Space C4ISR Research, Development,	Tech-6	254.4	8	115.25	(36.16)	(238.00)	(265.50)	112%
180	Consolidate Ground Vehicle Development & Acquisition in a	Tech-7	3.8	2	1.90	(1.93)	(17.10)	(1.24)	7%
181	Consolidate Maritime C4ISR Research, Development & Acq	Tech-9	106.1	1	(88.56)	(38.74)	(455.10)	(7.93)	2%
182	Consolidate Navy Strategic Test and Evaluation	Tech-12	86.4	7	76.69	(13.40)	(61.40)	(36.61)	60%
183	Consolidate Sea Vehicle Development & Acquisition	Tech-13	1.5	7	0.14	(0.22)	(2.00)	(0.80)	40%
184	Create a Naval Integrated Weapons & Armaments Research	Tech-15	358.1	7	148.66	(59.69)	(433.40)	(65.59)	15%
185	Create an Air Integrated Weapons & Armaments Research,	Tech-18	2.7	2	(4.87)	(1.39)	(17.90)	(12.27)	69%
186	Create an Integrated Weapons & Armaments Specialty Site	Tech-19	116.3	13	81.24	(11.34)	(32.60)	(0.75)	2%
187	Defense Research Service Led Laboratories	Tech-22	164.6	4	45.03	(41.11)	(357.30)	(56.14)	16%
188	Establish Centers for Fixed Wing Air Platform Research, Dev	Tech-24	17.7	9	7.91	(2.66)	(17.90)	(2.01)	11%
189	Establish Centers for Rotary Wing Air Platform Development	Tech-26	49.4	26	40.22	(2.77)	11.80	(4.30)	-36%
190	Navy Sensors, Electronic Warfare, and Electornics Research	Tech-28	72.7	12	50.87	(6.73)	(16.90)	(1.74)	10%

CHARTER

RATIONALIZE THE EXISTING CAPACITIES OF THE NAVAL POSTGRADUATE SCHOOL (NPS) AND THE AIR FORCE INSTITUTE OF TECHNOLOGY (AFIT) TO MEET ADVANCED DEGREE PROGRAM REQUIREMENTS

The Navy and Air Force currently operate their own educational institutions, the Naval Postgraduate School (NPS) and The Air Force Institute of Technology (AFIT). Both institutions have unique capabilities and potential. They also appear to have some common areas of study. The Navy and Air Force hereby form an education alliance, which will review existing processes in order to:

1. Ensure officers continue to receive high quality, relevant and responsive graduate education, aligned to defense needs,
2. Eliminate unnecessary duplication, while sustaining excellence at NPS and AFIT, and
3. Ensure efficient operation of both institutions while maintaining each as "world class" higher education institutions underpinned by its unique Service heritage and character.

Tasking:

A joint project team comprised of senior Navy and Air Force personnel shall be formed to:

- Develop a project plan to meet the mission of the alliance
- Identify the curricula and programs that appear duplicative by name, content or objectives.
- For the common curricula and programs, conduct qualitative and quantitative reviews to:
  - Identify the highest quality curricula or program,
  - Assess whether consolidation is feasible within current capacities,
  - Identify the impact of consolidation on academic wholeness, including the impact on interdisciplinary curricula and programs, and
  - Assess ability to scale to changes in graduate education demand.

  Recommend processes and procedures for curriculum management, student loading, reimbursement, and admissions
- Establish a transition plan and timeline for all recommended actions

Responsibilities:

The Director Navy Staff (DNS) and the Air Force Deputy Chief of Staff, Personnel (AF/DP) shall undertake this review. Jointly prepared findings and recommendations shall be reported to the undersigned by 28 June 2002.

End State:

Two widely recognized, world-class institutions focused to meet the advanced degree program requirements of the Department of Defense, owned and operated by the Department of the Navy and Department of the Air Force. NPS and AFIT will continue to reflect the heritage and character of their respective Services, while meeting service unique needs, minimizing redundancy, maintaining quality, and realizing efficiencies and economies of scale.

SECRETARY OF THE AIR FORCE

SECRETARY OF THE NAVY

NPS/AFIT Oversight Group

Navy	Air Force
ADM Tracy, Chair	Lt Gen Brown
ADM Harms, Ch, Naval Ed/Tng	Lt Gen Hopper
Adm Ellison, NPS Superintendent	Lt Gen LaMontagne
Dr Zemen, Executive Secretary	Ms Corliss, Executive Secretary

Data Collection Group

Navy	Air Force
NPS Departments and Registrar	AFIT Departments and Registrar

Academic Assessment Group

Navy	Air Force
Academic experts from NPS	Col Andrew, AFIT (lead) with appropriate dept support

DCN: 11935

4 December 2002

MEMORANDUM OF AGREEMENT
FORMING AN EDUCATIONAL ALLIANCE
BETWEEN
THE DEPARTMENT OF THE NAVY
&
THE DEPARTMENT OF AIR FORCE

Introduction

On March 7, 2002 SECNAV and SECAF chartered a study to review graduate educational processes. As a result of that study, the Departments of Navy and Air Force hereby form an Alliance to ensure that the Naval Postgraduate School (NPS) and the Air Force Institute of Technology (AFIT) meet the advanced education requirements of the Armed Forces of the United States.

Goals:

This Alliance will ensure that NPS and AFIT are widely recognized, "world-class" institutions, focused to meet the advanced degree program requirements of the Department of Defense, owned and operated by the Department of the Navy and Department of the Air Force, respectively. NPS and AFIT will continue to reflect the heritage and character of their respective Services, meeting Joint and service-unique needs, minimizing redundancy, maintaining quality and realizing efficiencies and economies of scale.

The Alliance will leverage the complementarities of NPS and AFIT. For instance, NPS has strengths in space operations and AFIT has strengths in space science. The Alliance will leverage and strengthen such comparative advantages.

It will:

- ensure officers continue to receive high-quality, relevant and responsive graduate education aligned to defense needs
- prevent unnecessary duplication, while sustaining excellence at NPS and AFIT,
- ensure efficient operation of both institutions, while maintaining each as a "world-class" higher education

institution underpinned by its unique Service heritage and character

- in combination, provide a Joint educational environment in which officers from all of the Services will engage in education and research programs

Oversight of the Alliance.

The Alliance will be overseen by the NPS Board of Advisors (BOA) and the Air University's (AU) Board of Visitors (BoV). To implement the Joint Navy-Air Force Oversight of the Alliance, the BOA and BoV will interact with each other.

The NPS BOA will invite one or more members of the BoV to each of its meetings. The AU BoV will invite one or more members of the BOA to meetings at which AFIT or graduate education is to be discussed.

The Chairs of the BOA and BoV will hold a Joint meeting of the BOA and BoV whenever such a meeting will improve the Alliance.

Over time, and if appropriate, oversight of the Navy-Air Force Educational Alliance may transition to a single Board of Visitors, which will serve as the governing Board for both NPS and AFIT.

Initial Actions.

As a beginning, and to improve the quality of the education provided by the Alliance, the following actions are announced.

The Navy will:

- terminate Aeronautical Engineering curricula at NPS (curricula 610, 611 and 612); within the Alliance, only AFIT will offer an Aeronautical Engineering curriculum

The Air Force will:

- terminate the Meteorology curriculum at AFIT (curriculum GM); within the Alliance, only NPS will offer a Meteorology curriculum

- terminate Acquisition curricula at AFIT (curricula GAQ); within the Alliance, only NPS will offer an Acquisition curriculum

Both services will:

- establish Joint Oversight Boards for the Aeronautical Engineering, Meteorology, Acquisition, and Space curricula. The Chair of the Aeronautical Engineering Board will be a Navy Flag Officer. The Chair of the Boards for Meteorology and Acquisition will be an Air Force General Officer. The Chair of the Space Board will be a Flag/General Officer of the National Reconnaissance Office (NRO), Air Force, Army, Navy or U.S. Space Command. The Under Secretary of the Air Force/Director, NRO is the initial designee to Chair the Space Programs Joint Oversight Board. Each of these oversight bodies will make periodic reports to the BOA and the BoV. The Superintendent of NPS and the Commandant of AFIT will establish the Boards and ensure that the Boards have representative membership and hold periodic meetings.

- the Department of the Navy shall designate the Deputy Superintendent/Chief of Staff position at NPS to be filled by an Air Force Colonel, who will serve as the senior Air Force liaison officer at NPS. The Air Force shall designate the Vice Commandant/Director of Staff position at AFIT to be filled by a Navy Captain, who will serve as the senior Navy liaison officer at AFIT. Each service agrees to keep these billets filled by an O-6 Line Officer.

- the Department of the Navy and the Department of the Air Force should, after seats are filled at either NPS or AFIT in a particular field of study, give priority to sending their students to the other institution (NPS or AFIT), before sending those students to civilian universities. To implement this policy, NPS and AFIT will, in coordination with the staffs of the other services, to include the Marine Corps, Army and the Coast Guard, form a joint admissions and quota control process.

Follow-on Actions.

In order to further foster the Alliance, the Navy and the Air Force will:

- review current NPS/AFIT policies with the objective of establishing common policies, which represent the best practices at both institutions

- ensure the Assistant Secretaries for Financial Management program the resources needed to launch the alliance, annually review the resource issues of the alliance, and take all actions necessary to ensure the alliance has the resources required for success

- NPS/AFIT will develop a Memorandum of Understanding to identify additional areas that support education and research collaboration

SECRETARY OF THE AIR FORCE

SECRETARY OF THE NAVY

DCN: 11935

DCN: 11935

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Original ADD Recommendation (Motion):

Realign the Air Force Institute of Technology and Defense Language Institute with the Naval Postgraduate School to form a DoD University of Graduate Studies and Language.

Desired Recommendation (Motion):

Realign the Naval Postgraduate School and Air Force Institute of Technology by establishing a single Board of Governors who will: approve procedures and policies of the schools; determine curricula to minimize duplication between the schools; and, maximize the use of private institutions and non-residence programs to meet preparatory and non-DoD focused requirements.

NOTE:

- DLI will not be covered by the motion
- All three schools will remain as separate entities at their current locations

8/15

Syd — as appealing as the motion sounds, you will have to include the text in our report as an exhortation. Organization change of the type you propose is outside of BRAC.

David

DCN: 11935

Commission Recommendation

I move that the Commission find that when the Secretary of Defense failed to recommend the realignment or privatization of military postgraduate education, he substantially deviated from final selection criteria 1 and 4 and the Force Structure Plan; and, that the Commission add the recommendation "Realign the Naval Postgraduate School and Air Force Institute of Technology by establishing a single Board of Governors who will: approve procedures and policies of the schools; determine curricula to minimize duplication between the schools; and, maximize the use of private institutions and non-residence programs to meet preparatory and non-DoD focused requirements.

Aviation Logistics School

Issue: Potential for the commission to retain the Aviation Logistics School at Ft Eustis, VA and not consolidate it with the Aviation Center and School at Fort Rucker, AL.

- The move of the U. S. Army Aviation Logistics School (USAALS) to Fort Rucker requires significant up-front investment in military construction (MILCON).
- The payback period for the recommendation using the Commission's MILCON cost data exceeds 100 years vice the DoD data for a payback period after 13 years

Key Points:

- This recommendation consolidates all Army aviation training and doctrine in one location.
- Due to an error in determining personnel savings the recommendation resulted in producing an NPV costs vice NPV savings.

DoD Position: The consolidation of USAALS with the Army Aviation Center and School at Fort Rucker, AL, completes the consolidation of all Army aviation training and doctrine development at a single location. The consolidation enables Active, National Guard and Reserve aviation specialties (attack and lift pilots, medical evacuation, logisticians, and maintenance personnel) to train together, build cohesion and better simulate the environment seen during wartime. The consolidation directly supports the Army's aviation transformation to a modular design and the stabilization of Soldiers and their families by further integrating institutional training functions on the same installation, key objectives outlined in the Army Campaign Plan. This recommendation allows the Army to consolidate aviation doctrine, organizations, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) at one installation. This will enable a continuous cycle of innovation, experimentation, experience, and change to improve capabilities and provide dominant land power to the Joint force now and in the future.

The recommendation produces a $7.7 million a year savings after the implementation period. The savings are an additional benefit of a recommendation whose value to the military is not economic, but truly transformational.

Impact to DoD: The recommendation will enhance Army Aviation doctrinal development, training standardization, training proficiency and training management for all aviation specialties. Deletion of this recommendation by the commission will negate those gains.

DCN: 11935

Establish Joint Center of Excellence for Culinary Training

Issue: Potential for the commission to delete this recommendation, based on:

- Fort Lee, VA presented the Commission a memorandum (dated July 22, 2005) stating $18.5 million in military construction (MILCON) costs are required to support this recommendation, versus the certified $4.018 million COBRA estimate.
- Fort Lee's MILCON estimates do not yield a payback; therefore, the recommendation generates a NPV cost not a savings

Key Points:

- The DoD recommendation is based on certified data, deviation from this methodology is contrary to BRAC procedures and will result in inaccurate analysis. Locally produced DD1391s not reviewed by the Army leadership are outside of the BRAC process.
- Establishing Joint Centers of Excellence for training is a key DoD goal and supports the train as you fight concept.

DoD Position: DoD is required to use certified data in preparing financial analysis. The calculations used in the Cost of Base Realignment Actions (COBRA) analysis are based on standard BRAC techniques, and we stand by those estimates. Non-certified data provided by others has not been validated and is not a sufficient basis to question the certified cost estimates. Final MILCON requirements will be determined during the implementation phase of BRAC.

The Commission's concern about the financial viability of this recommendation is based on non-certified data and therefore misplaced.

Impact To DoD: DoD will lose an opportunity to establish a Joint Center of Excellence and sacrifice $16.1 million in NPV savings.

Why Monterey?

- Core competencies embedded in a human infrastructure without peer…
  - Have come from all over the world to teach and research
  - It took decades to assemble; not easily moved or replicated
- Collaboration amongst dozens of higher education and research assets along the Monterey Bay Crescent
  - Much of this provides direct support to the warfighter
- A supportive community attuned to DoD interests

DCN: 11935

Opportunities to do more good things for National Security & Homeland Defense

- Our status quo works and is continuously improving
  - We are agile, responsive to the warfighter and cost effective
- As much as our region has done, we have the opportunity to accomplish a lot more
  - DoD and the BRAC Commission can enable solutions and systems that will let the Nation take even better advantage of regional core competencies

DCN: 11935

A Regional Vision in Support of National Security…

- The Monterey region has become a world class center of excellence for research and study in national security issues, language and international policy, environmental sciences, and technology
- This bundled activity adds enormous military value to NPS, DLI, and the other local DoD missions
  - Example: MIIS teaches DLI faculty how to teach
- Local DoD missions also add value to the missions of the local civilian partners, and this is good for the country
  - Example: Center for Nonproliferation Studies at MIIS

Testimony Agenda

- Hon Leon Panetta
  - Vision to enhance region's capacity to support National Security
  - Military value of Monterey's DoD assets
- Hon Sam Farr, 17th Congressional District
  - Why Monterey?
- Mr. Fred Meurer, City of Monterey
  - NPS and DLI Overview
  - Discussion regarding BRAC scenarios being considered

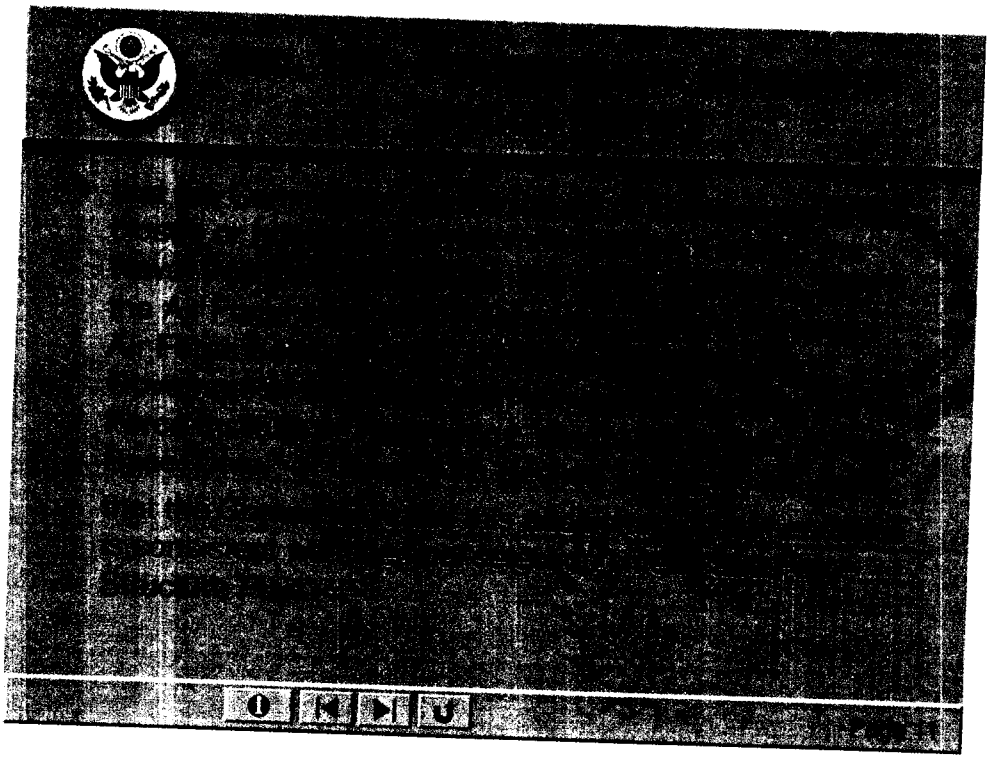
DCN: 11935

DRAFT

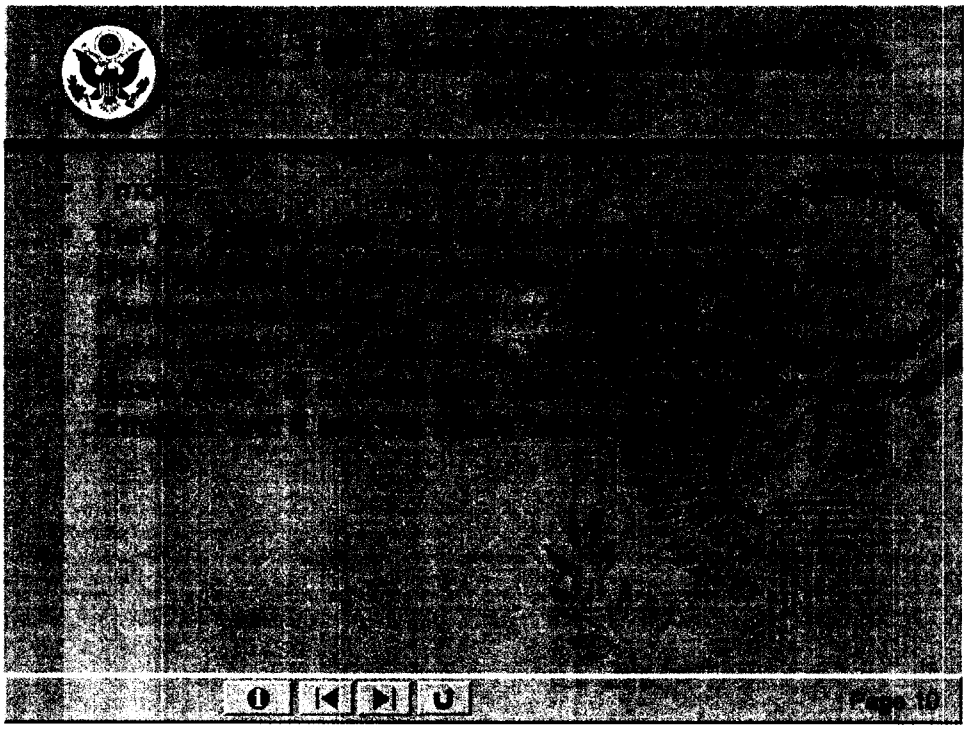
Naval Postgraduate School and Defense Language Institute – Adding Value to our Nation's Security

Defense Base Closure and Realignment Commission
Regional Hearing
August 8, 2005

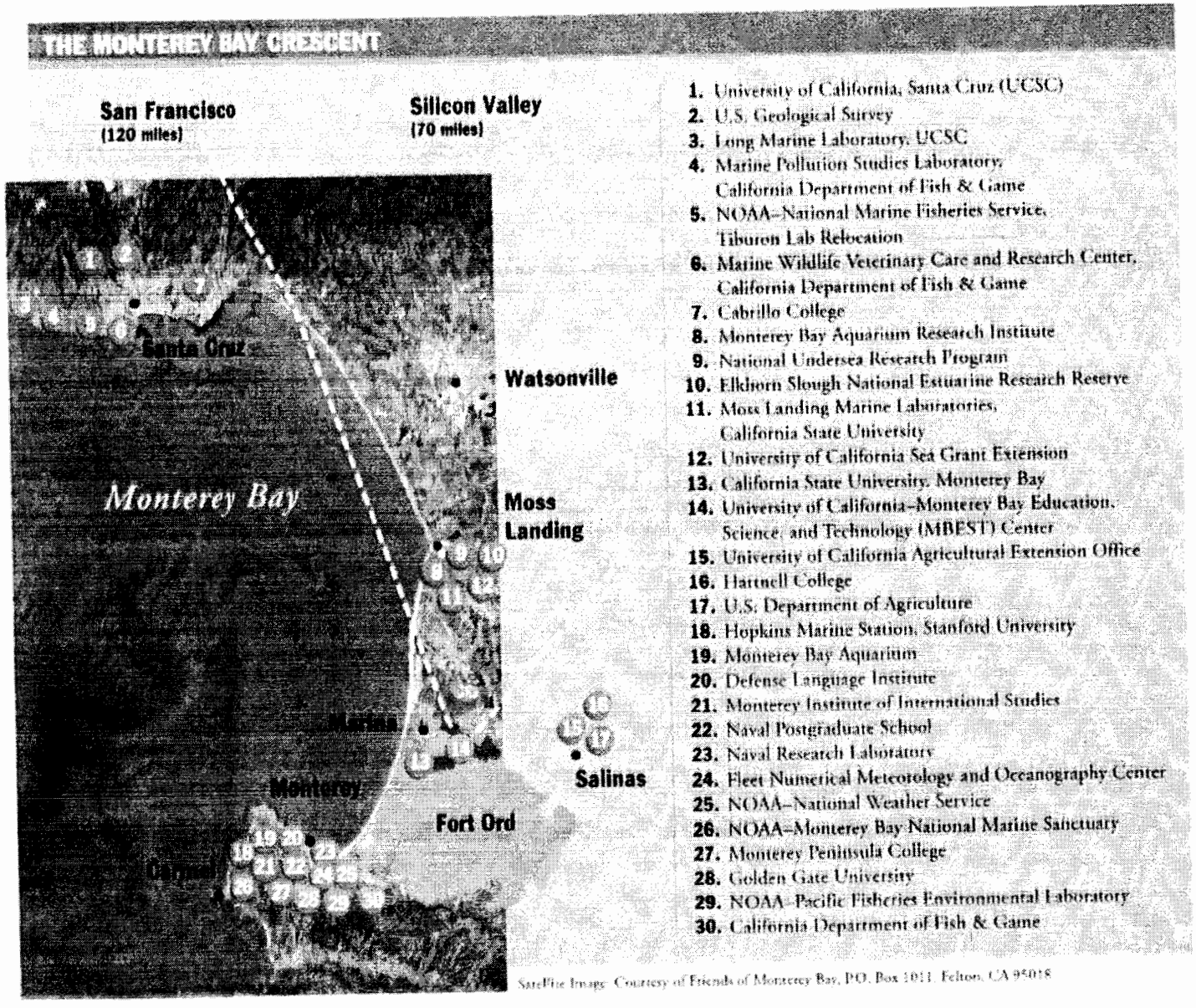
DCN: 11935



DCN: 11935



Monterey Bay Crescent…



Satellite Image: Courtesy of Friends of Monterey Bay, P.O. Box 1011, Felton, CA 95018

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[redacted]

Naval Postgraduate School Mission

- Graduate education programs targeted to officers from all U.S. military services, more than 30 allied nations, and DoD civilians
- An extraordinary research program tailored specifically to national security and DoD needs
- Respected project and research support to warfighters around the globe
- ***All programs focused on military and national security needs!***

[redacted]

DCN: 11935

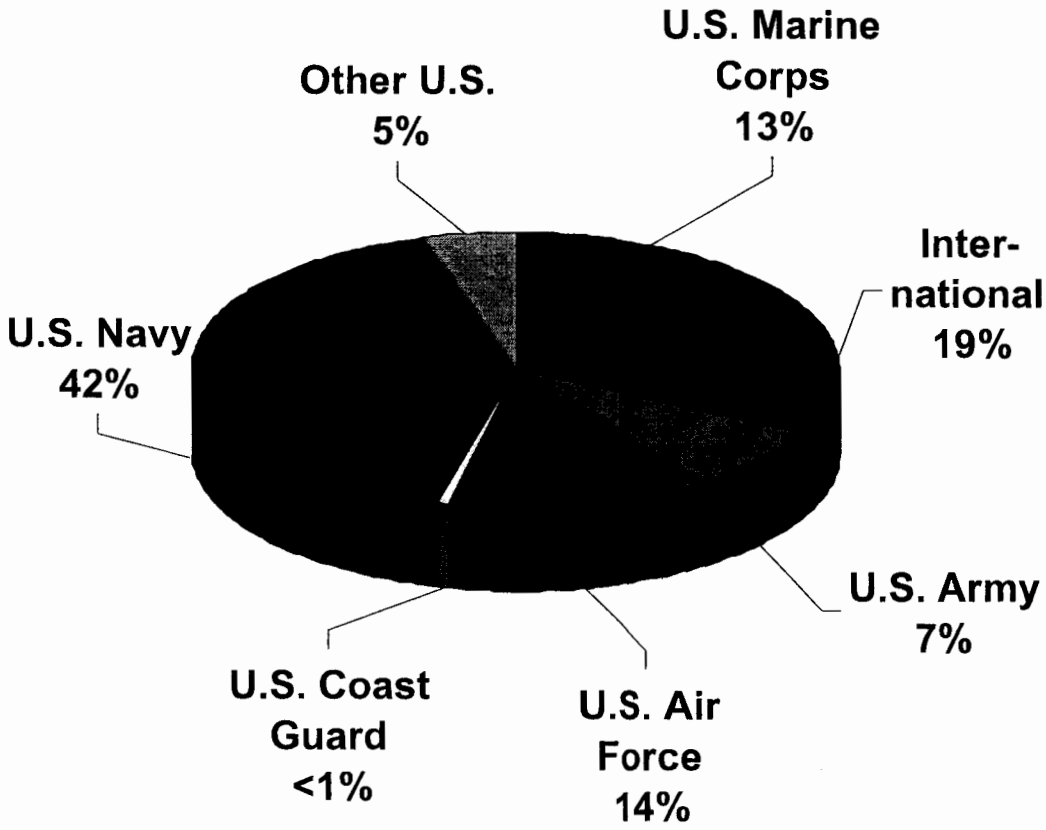
Naval Postgraduate School Overview

- Approximately 1,700 resident graduate students and 525 distance learning graduate students
  - Approximately 59% of student body are USN and USMC
- Approximately 49,000 Short Course students annually
- 41 Resident Masters and PhD programs
  - Samples: Defense Analysis, Information Assurance, Information Warfare, Undersea Warfare, Combat Systems, Homeland Security
- Education delivered to more than 50 countries
- Curriculum is not generally found in public institutions
  - The things that make NPS distinctive vice civilian institutions are things critical to the readiness of the force

NPS Overview (continued)…

- $76,239,000 direct Congressional Appropriation
- $109,102,541 Reimbursables Research/Education
- Student salaries estimated at $170,900,000
- 525 faculty, 99% have PhD
  - 10% are military personnel with strong academic credentials and operational expertise
  - No teaching assistants
- 466 staff
- 180 permanent party military
- Receives incoming students 4 times/year, programs run year-round

NPS Students



Resident Degree Program Enrollment (Fall 2004)

Total Resident - 1,556

Total Nonresident - 485

U.S. 81%

International 19%

Nondegree (Fall 04) – 3,103

DCN: 11935

Global Reach…

300 students from 60 allied nations…

…many go on to become significant

Military and state leaders!

NPS Schools and Institutes

- Schools
  - Engineering and Applied Sciences
  - Operational and Informational Sciences
  - Business and Public Policy
  - International Graduate Studies
- Cross-Disciplinary Institutes
  - Cebrowski Institute for Information Innovation and Superiority
  - Modeling, Virtual Environments, and Simulation (MOVES)
  - Wayne E. Meyer Institute of Systems Engineering

Extraordinary support to warfighters...

- Regional Security Education Program deploys faculty to conduct seminars on Carrier Battle Groups sailing to operating areas (USPACOM)
- Leadership Development for Sustained Peace (USCENTCOM)
- Mobile Education Team programs to over 50 countries
- Protection schemes for lightly armored vehicles (OSD)
- Cutting edge data networks to support tsunami relief (USPACOM)
- Tactical Network Topology (USSOCOM)
- Helicopter Brownout (USCENTCOM)

Research focused on National Security

- Computer security and information assurance
- Classified research in Maritime Domain Awareness, various GWOT topics
  - Heavy use of on-campus SCIF
- Remotely Piloted Aircraft, Autonomous Underwater Vehicles, and Network research
  - Utilizes Fort Hunter Liggett, Camp Roberts, Ord Military Community, Marina Airport, Monterey Bay
- Virtual Training Technologies
- Strategies to counter Islamic extremism

Special Initiatives based at NPS

- United States' only Partnership for Peace Education Center
- Masters Degree in Homeland Security
- Numerous Global War on Terrorism initiatives
- Strategic role in "Defense Language Transformation Roadmap"
- Designated "Information Operations Center of Excellence" by SecDef
- Center for Civil-Military Relations
- Defense Resources Management Institute
- Center for Stabilization and Reconstruction Studies
- Joint Intelligence Education and Training Portal with NSA

[redacted]

Defense Language Institute Mission

Produce operationally proficient military linguists…

- Foreign Language Education and Training
  - Basic, Advanced, and Specialized courses at Presidio in 26 languages
  - Contracted courses through DLI offices in Washington, D.C.
- Foreign Language Sustainment and Support
  - Refresher/enhancement training via Distance Education
  - Assistance to Command Language Programs for units and linguists
  - Mobile Training Teams, VTC links, electronic and written materials

DLI Mission (continued)…

- Foreign Language Assessment and Testing
  - Develop/control Defense Language Proficiency Tests for all DoD linguists
  - Defense Language Aptitude Battery for prospective language students
  - DoD's advisor on foreign language programs
- Foreign Language Research and Evaluation
  - Improve teaching techniques for resident courses and distance education
  - Keep training materials current with constantly changing languages
  - Technical control of all DoD language training, except service academies
- IET Soldierization

Defense Language Institute Overview

- Housed at the Presidio of Monterey
- 3,660 resident students from all the services
  - 7 hours of class, 3 to 4 hours of homework each day
- Distance learning sustainment for every active duty linguist
- 1,200 faculty, growing to 1,600 by FY 08
- 400 Staff
- $160 million annual budget growing to $362 million over 5 year defense plan

DLI Faculty

- 1,150 civilian faculty from over 40 countries around the world
  - 800 teaching resident classes in teams of 6
  - 300 developing curricula and testing, training faculty, Mobile Training Teams, Distance Education, Command Language Program assistance, administration
  - 98% are native speakers of languages taught
  - 580 hold advanced degrees
  - 50 working on MAs at Monterey Institute of International Studies
- Faculty Pay System instituted in 1997 by authority of Congress
  - Replaced the older General Service grades
  - Highly flexible pay bands for academic rank/position
  - Pay fluctuates, based on performance and evaluations
- 100 Military Language Instructors also teach and mentor service members

[redacted]

Languages Taught at DLI

Language	Faculty	Course Duration
Category IV		
Arabic	220	63 weeks
Korean	197	63 weeks
Chinese	97	63 weeks
Japanese	8	63 weeks
Category III		
Russian	52	47 weeks
Persian Farsi	58	47 weeks
Serbian/Croatian	26	47 weeks
Pashtu, Tagalog, Dari, etc	54	47 weeks
Category II		
German	6	34 weeks
Category I		
Spanish, French, Italian, Portuguese	50	26 weeks

[redacted]

DLI vs. U.S. Universities (2004)

Language	Total Civilian BA Degrees	DLI
Arabic	16	521
Farsi	0	157
Korean	0	369
Chinese	254	169
Russian	386	274

- DLI graduates complete studies in 12-18 months vice 4 years
- DLI graduates regularly achieve higher proficiency than university grads
- DLI prepares linguists in practical language skills demanded in strategic and tactical environments

Monterey is the Language Capital of the World!

MONTEREY
THE LANGUAGE CAPITAL OF THE WORLD

- Mixture of ethnic immigrant communities unmatched in US, outside of NYC
- Monterey, Santa Cruz, San Francisco, San Jose, Fremont within 2 hour drive
  - Arabic, Korean, Chinese, Japanese, Persian Farsi, Afghan (Dari, Pashtu), Turkish, Uzbek, other Central Asian, Russian, Serbian/Croatian, Hindi, Thai, Tagalog, other Pacific Rim, Spanish
- Critical sources for recruiting faculty, and keeping them current in language and culture
  - Creates substantial capacity for surge

NPS
PRAESTANTIA PER SCIENTIAM

DCN: 11935

Presidio of Monterey Overview

- 392 acres at POM with 771 acres at Ord Military Community
- $40 million annual budget
- 2,168 unit RCI project (joint with NPS) underway
- Public Works Services provided by City of Monterey
  - AAA audit documents 49% savings in BASOPS and fire protection

AAA Comments...

...Army has achieved significant savings...by contracting with the local Municipal Agency for some BASOPS services...

...In addition to reduced costs...benefits include the quality and timeliness of services provided...

Other DoD assets add to the mix!

- Fleet Numerical Oceanography and Meteorology Center
  - Weather prediction for forces around the globe
- Defense Manpower Data Center
  - Database systems, identity authentication, research
- Naval Research Laboratory
  - Weather prediction research
- Defense Personnel Security Research Center

Quality of Life Considerations…

- 2,168 unit RCI project underway
  - Land and water exists to develop additional units
- Earlier medical care challenges solved!
- Supportive community, MWR opportunities, access to a variety of educational and professional opportunities for family members

Monterey Community supports DoD…

- Monterey's fiber optic Institutional Network provides more broadband/Internet capacity to NPS for $88,000/year than could be secured via the phone company for $1.5 million/year
  - A subset of this network now interconnects all DoD organizations in the region for further mission opportunities and savings
- Monterey's base operations support initiatives are a Win/Win

Privatization does not make cents!

- ***Navy purports in its COBRA to save more money than it is spending on NPS!***
- Navy's COBRA analysis regarding closure/privatization is seriously flawed
  - Ignores tuition for non-DoN students - ***$26,000,000 additional cost!***
  - Ignores short courses and extra JPME costs - ***$87,104,220 additional cost!***
  - Ignores the fact (and student salary impacts) that advanced degrees take longer at civilian institutions - ***$40,344,000 additional cost!***
- In reality, privatization would ***cost an additional $142.42 million/year*** as opposed to the $89.5 million/year savings contemplated by Navy COBRA

Privatization does not make sense!

- NPS and DLI missions are described by DoD as core competencies that should not be outsourced
  - Civilian educational leaders concur that NPS curriculum and research program can not be replicated at civilian universities.
- Privatization undermines military value
  - Navy's Privatization scenario completely ignores the NPS reimbursable research program.
  - Navy's privatization scenario completely ignores the project and research support to warfighters around the globe.
- Research concludes that 75% of those students completing NPS would not have been accepted at top-level civilian universities
  - NPS program re-acclimates mid-career officers to the classroom
  - NPS program gives liberal arts undergraduate the foundation necessary to pursue an advanced degree in engineering, science, operations research, etc.
- Interaction with international students is lost!

Relocation to Ohio is a bad idea!

- The key to military value at NPS and DLI is the human infrastructure
  - It took decades to assemble
  - It will not move and would take 12 to 15 years to replicate
  - What happens to our national security during the transition period and beyond?
- The value added associated with the Monterey-area research/education assets would be lost
- ***The cost to replicate the Monterey academic plant at Wright-Patterson is estimated at $1.38 billion!***

[redacted]

Opportunities in Monterey for BRAC 2005 to consider…

- Installation Management can be better integrated and coordinated
  - 2 small installations under different ownership (and surrounded by City) beg a different way to do things
    - Installation management consolidation could create 10% to 20% ad ditional classroom capacity at POM to accommodate expected mission growth.
  - BRAC 1993 directed some change, not all was implemented
- Opportunities to better integrate the missions in Monterey should be carefully considered
  - A National Security Research University or University for National Defense Studies could further leverage the region's potential to support defense interests
  - Redundant university overhead could be reduced and economies of scale captured
  - Uniqueness, agility, core focus of each partner needs to be maintained
  - **Responsiveness to warfighter needs must remain paramount!**

Regarding AFIT to Monterey…

- Monterey has a posture not to recruit another community's mission
- Recent AFIT/NPS MOU coordinates curriculum and support to combatant commanders
- AFIT could likely be absorbed in Monterey with modest MILCON, if the student population is around 700
  - Approximately 30 acres of developable land exist at NPS, more at OMC
- It may be best to examine the reporting structures for these organizations, but to keep them in place
- AFIT would suffer mission disruption if moved

Existing NPS/AFIT Relationship

Per SecNav and SecAF decision, 12/4/2002…

- Duplication Eliminated
  - Moved Meteorology from AFIT to NPS
  - Moved Acquisition from AFIT to NPS
  - Moved Aerospace Engineering from NPS to AFIT
- Collaborations Pursued
  - USAF Col is NPS Deputy and USN CAPT is AFIT Deputy
  - Created Joint Oversight Boards for Meteorology, Space, Acquisition, and Aeronautical Engineering
  - Numerous other joint projects and working groups underway

Summary...

- NPS and DLI receive much of their mission value by their relationships in Monterey
- Privatization of either NPS or DLI undermines military value and is cost prohibitive
- Relocation of NPS and/or DLI to Ohio is cost prohibitive and dangerously disrupts mission
- Opportunities exist for efficient and effective installation and mission integration in Monterey

Recommendations…

- Do not contract out NPS, AFIT, or DLI due to the overriding military value and true cost to replicate mission
- Do not relocate NPS, AFIT, or DLI due to cost and mission disruption
- Do consider realigning Monterey installations to minimize duplicate installation overhead and to capitalize on the unique relationship with Monterey that further eliminates duplicate overhead
- Do consider the creation of a National Security Research University or University for National Defense Studies to further joint/integrated national security education and eliminate duplicate university overhead

DCN: 11935

Original ADD Recommendation (Motion):

Realign the Air Force Institute of Technology and Defense Language Institute with the Naval Postgraduate School to form a DoD University of Graduate Studies and Language.

Desired Recommendation (Motion):

Realign the Naval Postgraduate School and Air Force Institute of Technology by establishing a single Board of Governors who will: approve procedures and policies of the schools; determine curricula to minimize duplication between the schools; and, maximize the use of private institutions and non-residence programs to meet preparatory and non-DoD focused requirements.

NOTE:

- DLI will not be covered by the motion
- All three schools will remain as separate entities at their current locations

8/15

Syd — as appealing as the motion sounds, you will have to include the text in our report as an exhortation. Organization change of the type you propose is outside of BRAC.

Reid

DCN: 11935

Commission Recommendation

I move that the Commission find that when the Secretary of Defense failed to recommend the realignment or privatization of military postgraduate education, he substantially deviated from final selection criteria 1 and 4 and the Force Structure Plan; and, that the Commission add the recommendation "Realign the Naval Postgraduate School and Air Force Institute of Technology by establishing a single Board of Governors who will: approve procedures and policies of the schools; determine curricula to minimize duplication between the schools; and, ~~maximize~~ consider the use of private institutions and non-residence programs to meet preparatory and non-DoD focused requirements.

NPS / AFIT Rationalization

25 July 2002

DCN: 11935

NPS-AFIT Project Charter

- Identify level of program quality
- Assess feasibility of consolidation
- Identify impact of consolidation
- Assess ability to expand

"Two widely recognized, world-class institutions focused to meet the advanced degree program requirements of the Department of Defense, owned and operated by the Department of the Navy and Department of the Air Force. NPS and AFIT will continue to reflect the heritage and character of their respective Services, while meeting service unique needs, minimizing redundancy, maintaining quality, and realizing efficiencies and economics of scale."

- SECNAV/SECAF Charter
7 March 02

DCN: 11935

Campus Comparison

	AFIT	NPS
■ Total Capacity (No additional faculty)	600	1500
(Additional faculty)	2000	2000
■ Number of students	508	1315
■ Faculty (FTEs)		
• Civilian	57 (100% mission funded)	340 (45% reimbursable)
• Military	52	35
• Student:Faculty ratio*	4.6	6.3
■ Academic programs		
• Masters	23	41
• PhD	11	10
■ Other Service Tuition	None	by Title X

* Represents the Student:Faculty ratio funded by the respective Service

Student Composition

	AFIT	NPS
USAF	420	35
USN	0	651
USA	8	111
USMC	2	217
USCG	1	12
International	28	258
Other/Civilian	49	31
TOTAL	508	1315

Academic Differences

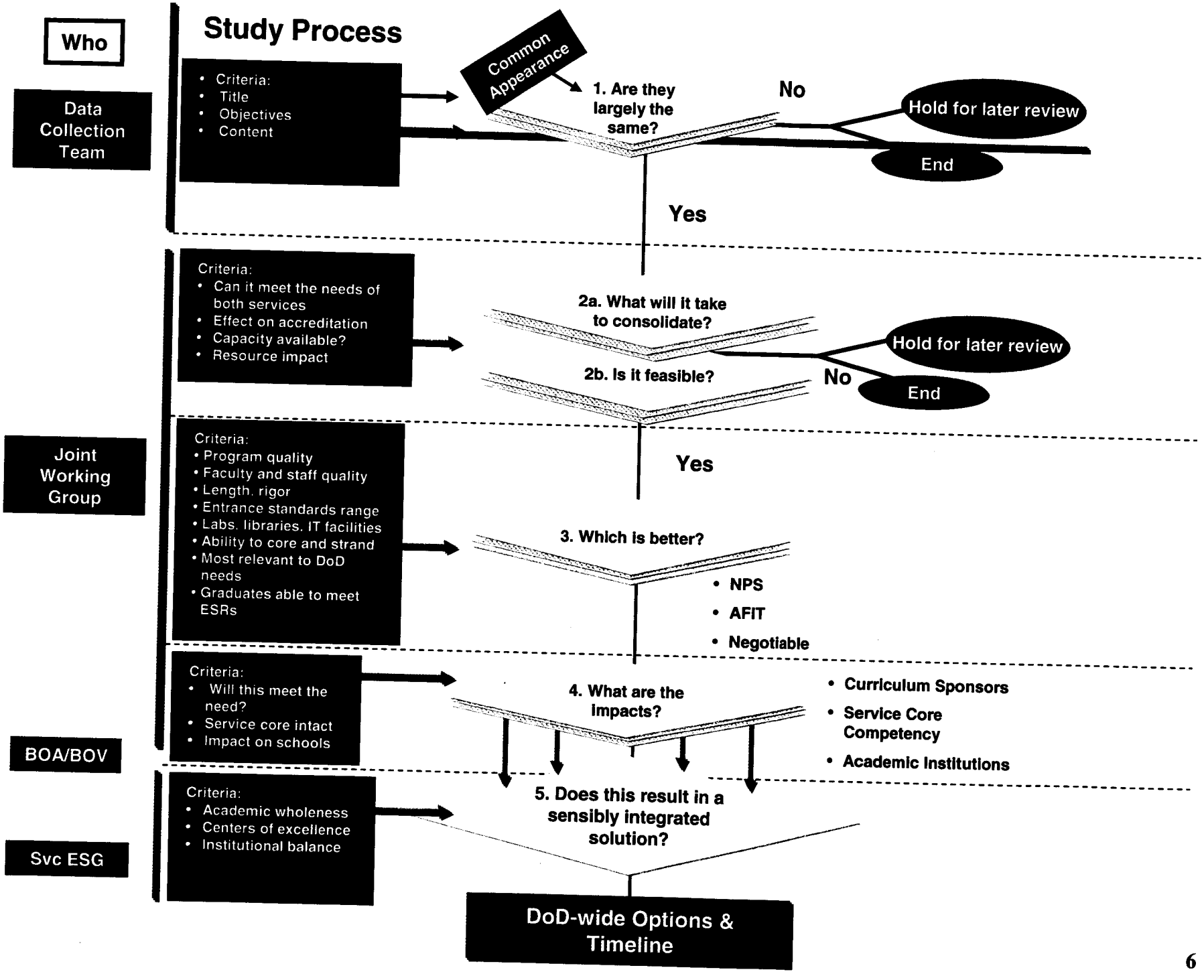
NPS

- Science & Engineering (S&E) academic programs
  - Accepts students without S&E undergraduate degrees
  - Entrance based on Academic Profile Code
  - Subspecialty development
    - Operational application
- Faculty 90% civilian

AFIT

- Traditional graduate S&E programs
  - Students already have the undergraduate background in S&E
  - Undergraduate GPA + Graduate Record Exam
  - Science and Engineering
    - Research & Operational oriented
- Faculty 50% civilian, 50% military (all PhDs)

DCN: 11935


Who
Study Process
Data Collection Team
Criteria:
• Title
• Objectives
• Content
Common Appearance
1. Are they largely the same?
No
Hold for later review
End
Yes
Criteria:
• Can it meet the needs of both services
• Effect on accreditation
• Capacity available?
• Resource impact
2a. What will it take to consolidate?
2b. Is it feasible?
Hold for later review
No
End
Yes
Joint Working Group
Criteria:
• Program quality
• Faculty and staff quality
• Length, rigor
• Entrance standards range
• Labs, libraries, IT facilities
• Ability to core and strand
• Most relevant to DoD needs
• Graduates able to meet ESRs
3. Which is better?
• NPS
• AFIT
• Negotiable
BOA/BOV
Criteria:
• Will this meet the need?
• Service core intact
• Impact on schools
4. What are the impacts?
• Curriculum Sponsors
• Service Core Competency
• Academic Institutions
Svc ESG
Criteria:
• Academic wholeness
• Centers of excellence
• Institutional balance
5. Does this result in a sensibly integrated solution?
DoD-wide Options & Timeline

DCN: 11935

DCN: 11935

Findings

Comparison Criteria	Meteorology	Logistics Mgmt.	Aeronautical Eng	Aerospace/ Avionics	Space Operations	Electronic Systems Eng.	Info Systems Technology	Acquisition & Contracting Mgmt.	Operations Research	Systems Engineering
*Faculty Quality	NPS	AFIT	○	○	○	○	○	NPS	○	○
Research Capability	NPS	○	○	○	○	○	○	NPS	○	○
Available Capacity	NPS	○	○	○	○	○	○	NPS	○	○
Customer Needs	■	■	○	○	■	○	○	NPS	○	○
Ability to Enroll	NPS	NPS	NPS	NPS	NPS	NPS	NPS	NPS	NPS	NPS
*Quality of Facilities	NPS	○	○	○	○	○	○	○	○	○
Types of Degrees	○	■	○	○	○	○	○	■	○	○
Program Length	○	○	AFIT	AFIT	AFIT	AFIT	AFIT	○	AFIT	○
*Thesis / Project Quality	○	○	○	○	○	○	○	○	○	○
Specialized Accreditation	○	○	○	○	○	○	○	NPS	○	AFIT
Dependent Upon Other Programs	○	○	○	○	○	○	○	○	○	○

AFIT	NPS
Astronautical Engineering	Aerospace / Avionics
Aerospace Information and Operations	Space Systems / Operations
Space Operations	Space Systems Engineering
Electrical Engineering	Electronic Systems Engineering
Information Resources/Information Systems Management	Information Systems Technology
Acquisition Management	Acquisition and Contracting Management

○ = similar/same capabilities

■ = different

* = industry standards

JWG Recommendations

- Move AFIT Meteorology program to NPS, with conditions
- Move AFIT Acquisition program to NPS, with conditions
- All services send students to both institutions
- Expand collaboration – research, faculty, specialized courses
- Provide oversight ... NPS Board of Advisors and AFIT Board of Visitors increase interaction

DCN: 11935

Meteorology

Move students in AFIT Meteorology and USAF basic meteorology program to NPS

- Conditions
  - NPS develop an MOU with AF/XOW to insure that USAF meteorology education and research needs are met
  - NPS include space environment course(s) for meteorology students taught by AF instructor
  - AF military meteorology faculty members join the NPS faculty
  - Applied Physics (Space Weather) program remains at AFIT
  - AF/XOW retains option to send students to civilian institutions as needs dictate

Acquisition and Contract Management

Move AFIT program and faculty to NPS Graduate School of Business & Public Policy

- Conditions
  - Maintain full integrity (including Internship and research programs) of the USAF-unique Strategic Purchasing curriculum
  - Add USAF-unique acquisition courses to the MBA curriculum
  - Move at least 1 AFIT faculty and retain professorial rank

DCN: 11935

JWG Conclusions

- Program quality equal in all but 2 programs
- Curriculum focus differs – driven by
  - Use of graduates
  - Unique strength of faculty
  - Service requirements
- NPS accommodates a wider range of student qualifications
- Unused capacity exists at NPS
- Many collaboration opportunities exist – both directions currently under-emphasized

Navy Endorses JWG Recommendations

- Willing to consolidate Meteorology and Acquisition at NPS
- Pursue collaboration opportunities
  - Consolidate Operations Research thesis competition
  - Directed Energy Weapons lectures by AFIT to NPS
  - Develop common Distance Learning coursework
  - Aeronautical Engineering research projects and exchange of faculty
- Make unused NPS capacity available for Air Force
  - Work tuition issue
- Combine Board of Advisors (BOA) and Board of Visitors (BOV) meeting – once/year
  - Report to Secretaries on collaboration efforts annually
- Examine sending some Navy Officers to AFIT
  - Aeronautical Engineering
  - Space Engineering and Space Operations
  - Operations Research
  - Applied Mathematics

Backup Slides

Better Collaboration / Partnerships

- Courses and seminars shared via DL
- Joint research ventures
- Appointment of faculty from other institution to MS/PhD committees
- Faculty exchanges and visits
- Provide faculty incentives to collaborate
- Ensure availability of suitable DL facilities
- Offer comparable programs (18 mo and 24 mo)
- Establish an admissions MOU
- Air Force provide JPME (ph1)

DCN: 11935

Programs Evaluated

AFIT	NPS
Meteorology	Meteorology/METOC
Logistics Management	Logistics Management
Aeronautical Engineering	Aeronautical Engineering;
Astronautical Engineering	Aerospace/Avionics
Aerospace Information & Operations	Space Systems Operations
Space Operations	Space Systems Engineering
Electrical Engineering	Electronic Systems Engineering
Acquisition Management	Acquisition & Contracting Management
Information Resource Management	Information Systems Technology
Information Systems Management	Operations Research/Analysis
Operations Research	Systems Engineering
Systems Engineering	

SECAF removed Computer Science from consideration
SECAF desires Operations Research to remain at both schools
Applied Physics not considered, NPS discontinuing curriculum

Meteorology

AFIT

- Students/year : 14 MS
- Faculty: 4 military
- Degrees:
  - MS in Meteorology
  - MS in Applied Physics (Space Weather)
- Length
  - 18 months (with thesis) for both programs
- Focus Areas: Terrestrial and Space Meteorology

NPS

- Students/year : Meteorology: 1 MS, 1 PhD; METOC: 18 MS
- Faculty: 1 military, 9 tenure civilian, 9 research civilian
- Degrees
  - MS/PhD in Meteorology
  - MS/PhD in Meteorology and Physical Oceanography
- Length
  - 18 months (with thesis) for Meteorology MS
  - 27 months (with thesis) for METOC MS
- Focus Areas: Meteorology, Physical Oceanography

Move AFIT Meteorology to NPS

- PROs
  - Larger faculty with broader range of expertise
  - Links Navy/AF meteorology communities for greater synergy
  - Proximity of NPS to Fleet Numerical Meteorology and Oceanography Center, National Weather Service, and Naval Research Laboratory West
  - Monterey has 3rd largest concentration of meteorologists in US (after DC and Boulder, CO)
- CONs
  - Less direct AF/XOW involvement
  - Requires NPS program modifications to meet USAF needs

DCN: 11025

Acquisition and Contract Management

AFIT

- Students/year : 13 MS (excluding Cost Analysis)
- Faculty: 2 military
- Degree
  - MS in Acquisition Management (GAQ)
- Length
  - 18 months (with thesis) plus 4 weeks initial preparation courses
- Focus Areas: Systems Management, Strategic Purchasing

NPS

- Students/year: 42 MBA
- Faculty: 11 civilian, 4 military
- Degrees
  - MS in Management ends Dec '02
  - MBA (Defense-focused)
- Length
  - 18 months (with project) Acquisition and Contract Management
  - 21 months (with project) Systems Acquisition Management
- Focus Areas: Acquisition and Contract Management, Systems Acquisition Management

Move AFIT Acquisition and Contract Management to NPS

- PROs
  - Joins acquisition communities
  - Eliminates program duplication
  - DAU course equivalencies and JPME available
- CONs
  - AFMC students inability to attend AFIT part-time
  - Loss of link to AFMC contracting and acquisition communities and USAF systems engineering institute

Logistics Management

AFIT

- Students/year
  - 21 in Logistics Management
  - 15 in Mobility Management
- Faculty: 1 civilian, 3 military
- Degrees
  - MS in Logistics Management
  - MA in Mobility Management
- Length
  - 18 months (with thesis)
- Focus Areas: Acquisition Logistics, Logistics Management, Supply Management, Transportation, Mobility Management

NPS

- Students/year: 39
- Faculty: 5 civilian
- Degree
  - MBA in Logistics Management
- Length
  - 18 months (with thesis)
- Focus Areas: Acquisition Logistics, Transportation, Inventory Management

DCN: 11035

Aeronautical Engineering

AFIT

- Students/year: 9 MS, 3 PhD
- Faculty: 3.5 civilian FTEs and 3.5 military FTEs
- Degrees
  - MS in Aeronautical Engineering
  - PhD in Aeronautical Engineering
- Length
  - MS : 18 months
  - TPS 15 months
- Focus Areas: Computational Fluid Dynamics, Air Breathing Propulsion, Heat Transfer, Aircraft Stability and Control, Control and Optimization Theory, Structural Analysis, Vibration Damping and Control, Structural Materials, Air Weapons, Systems Analysis and Design, Aerospace Robotics

NPS

- Students/year: 20 MS, 1 PhD
- Faculty: 8.5 FTE
- Degrees
  - MS in Aeronautical Engineering
  - Engineer's Degree (Masters plus)
  - PhD in Aeronautical Engineering
- Length
  - Direct accession/12 months
  - MS : 18-24 months
  - TPS 15 months w/o thesis
- Focus Areas: Aerospace Vehicle Design, Aerodynamics, Aeroelasticity, V/STOL Aircraft Technology, Structures and Mechanics, Propulsion and Gas Dynamics, Rotary Wing Aircraft Technology

DCN: 11935

Aeronautical Engineering (Avionics)

AFIT

- Students/year: 9 MS, 1 PhD
- Faculty: 2 civilian, 1 military
- Degrees
  - MS in Electrical Engineering
  - PhD in Electrical Engineering
- Length
  - MS : 18 months
  - TPS 15 months
- Focus Areas: Advanced Control Systems, Stochastic Estimation Control, Flight Control Systems, Navigation Systems

Astronautical Engineering

AFIT

- Students/year: 3 MS, 1 PhD
- Faculty: 1 civilian, 1 military
- Degrees
  - MS in Astronautical Engineering
  - PhD in Astronautical Engineering
- Length
  - 18 month MS
- Focus Areas: Guidance and Controls, Aerospace Navigation, Rocket Propulsion, Space Facilities, Structures, General

NPS

- Students/year: 9 MS, 1 PhD
- Faculty: 6 civilian
- Degrees
  - MS/PhD in Astronautical Engineering
  - Engineer's Degree
- Length
  - 18-27 month MS
- Focus Areas: Spacecraft Engineering and Design, Spacecraft Attitude Control, Guidance & Optimal Control, Rocket Propulsion

DCN: 11935

Space Operations

AFIT

- Students/year: 5 MS
- Faculty: 1 military, 3 civilian
- Degrees:
  - MS in Space Operations
  - MS in Aerospace and Information Operations
- Length : 18 months
- Focus Area: Underlying Principles of Space Science and Engineering

NPS

- Students/year: 12 MS
- Faculty: 1 military, 4 civilian
- Degree:
  - MS in Space Operations
- Length : 24 months
- Focus Areas: Operation, Tasking, and Employment of Space Systems

DCN: 11035

Electrical Engineering

AFIT

- Students/year: 24 MS, 3 PhD
- Faculty: 6 civilian, 8 military
- Degrees:
  - MS/PhD in Electrical Engineering
- Length
  - 18 months for MS
- Focus Areas: Electro-Optics, Micro-electronics/MEMS Photonics, Guidance Navigation Control, Signal/Image Processing, Electro-Magnetic Stealth Technology, C4 Radar Networks, High Performance Computing, Software Engineering

NPS

- Students/year: 50 MS, 2 PhD
- Faculty: 21 civilian, 1 military
- Degrees:
  - MS/Engineer's Degree/PhD in Electrical Engineering
- Length
  - 12-24 months for MS
- Focus Areas: Communication Systems, Computer Systems, Electromagnetic Systems, Guidance, Navigation, Control Systems, Power Systems, Joint Service Electronic Warfare, Signal Processing Systems,Signals Intelligence

Information Resource Management

AFIT

- Students/year: 14 MS
- Faculty: 1 civilian, 1 military
- Degrees:
  - MS in Information Resources Management (IRM)
  - MS in Information Systems Management (ISM)
- Length : 18 months
- Focus Areas:
  - IRM: Information Operations, Chief Information Officer
  - ISM: Computer Networks, Database Systems

NPS

- Students/year: 60 MS
- Faculty: 13 civilian, 1 military
- Degree:
  - MS in Information Technology Management (ITM)
- Length
  - 24 months MS, 18 months MS (USCG)
- Focus Areas: Advanced Architectures for Command and Control, Information Operations, Network Operations, Collaborative Technologies, Transformation

DCN: 11035

Systems Engineering

AFIT

- Students/year: 13 MS
- Faculty: 8 civilian, 8 military
- Degree:
  - MS in Systems Engineering
- Length: 18 months

NPS

- Students/year: MSSE: 3 resident, 30 Distance Learning; MSSA: 12
- Faculty: 5 civilian
- Degree:
  - MS in Systems Engineering
  - MS in Systems Analysis (non-engineering)
- Length: 18 months resident, 24 months part-time DL

DCN: 11935

Operations Research/Analysis

AFIT

- Students/year: 23 MS, 2 PhD
- Faculty: 5 civilian, 6 military
- Degrees:
  - MS/PhD in Operations Research
- Length
  - 18 months MS
- Focus Areas: Deterministic OR, Probabilistic OR, Simulation, Applied Statistics, Information Operations/Warfare, Operational Modeling

NPS

- Students/year: 63 MS, 1 PhD
- Faculty: 31 civilian, 9 military
- Degrees:
  - MS/PhD in Operations Research
- Length
  - 12-24 months MS
- Focus Areas: Human Factors, Logistics, Simulation and Modeling, Land Combat

DCN: 11935

AF Students to NPS

- **Similar Curricula:**
  - Meteorology — 15 Students
  - Acquisition — 25 Students
  - Operations Research — 35 Students
  - Computer Science — 20 Students
- **Minor modifications required:**
  - Space Systems Operations — 15 Students
  - Mechanical Engineering — 40 Students
  - Aeronautical Engineering — 15 Students
  - Aeronautical/Avionics — 15 Students
  - NPS/TPS — 20 Students
- **Significant modifications required:**
  - Information Systems Technology — 20 Students
  - Systems Engineering / Integration — 12 Students
  - Combat Systems Science / Technology — 12 Students
  - Operations Logistics — 10 Students
  - Space Systems Engineering — 12 Students
  - Electronic Systems Engineering — 12 Students
- **Curriculum not available at AFIT:**
  - SOLIC — 10 Students
  - Information Systems and Operations — 18 Students
  - Software Engineering — 10 Students
  - Modeling, Virtual Environments and Simulation — 30 Students

Assumes $6K tuition and 1 instructor for each 20 students if inputs are spread among all curricula and not focused on a few. Once empty seats are filled (~200) the incremental costs will rise as NPS adds new faculty to handle additional teaching sections.

Joint Executive Steering Group

Membership

- Air Force
  - LtGen Richard "Tex" Brown, AF/DP (Co-Chair)
  - LtGen Hopper, Vice Commander, Air and Education Training Command
  - Ms. Beth Corliss, Director, Personnel Force Development
  - Senior Functional Representative
- Navy
  - VADM Pat Tracey, Director of Navy Staff (Co-Chair)
  - VADM Al Harms (Chief, Naval Education and Training)
  - Dr. Allen Zeman (Director of Naval Training and Education)
  - Curriculum Sponsor Representative

DCN: 11025

USN/USAF ESG

Membership

- AF ESG
  - LtGen Richard "Tex" Brown, AF/DP (Chair)
  - LtGen Donald Lamontagne, Commander, Air University
  - Mr. Jim Barone, AFMC/DP
  - Ms. Beth Corliss, Director, Personnel Force Development
  - Col Michael Heil, AFIT Commandant
  - VADM Tracey & RADM Ellison (guests)
- Navy ESG
  - VADM Pat Tracey, Director of Navy Staff (Chair)
  - VADM Al Harms (Chief, Naval Education and Training)
  - RADM Dave Ellison (NPS Superintendent)
  - RADM Joe Henry (N13; ACNP - Mil Personnel Policy
  - Dr. Allen Zeman (Director of Navy Training and Education)
  - LtGen Brown and Col Heil (guests)

Joint Working Group Members

- Dr. Robert Kribel
  - Air Force, Co-Chair
- Dr. Phil DePoy
  - Navy, Co-Chair
- Air Force
  - Dr. Paul Wolf, AFIT
  - Col(s) Samuel Walker, AF/DPDE
  - Mr. Ron Riggi, AF/DPDEE
- Navy
  - Mr. George Conner, NPS
  - CDR Jack Roesner, N794
  - CDR Leah Roust, N794H

DCN: 11935

Navy Data Collection Teams

- Meteorology: CDR Don Conlee (CO, Naval Tech Training Unit), Keesler AFB
- Logistics Management: LCDR Douglas Porter (Training Program Manager, CNET) Pensacola, FL.
- Space Systems (Ops): LCDR Don O'Neill (NAVSPACOM)
- Space Systems Engineering/Astronautical Engineering : LCDR Scott Margulis (NRO/SSFA)
- Aeronautical Engineering: CDR Randy Mahr (NAVAIR, Detachment WPAFB)
- Information Technology Management: LCDR David Wirth (CNO N614)
- Systems Engineering: Mr. Mike Somonsen (CNO N76)
- Operations Research: LCDR Dan Boyles (CNO N81)
- Electrical Engineering: CDR Irma Sityar (MCSC / SEI)
- Acquisition & Contracting Management: Ms Joyce Runyan & LCDR Walt Blaney (ASN RDA)

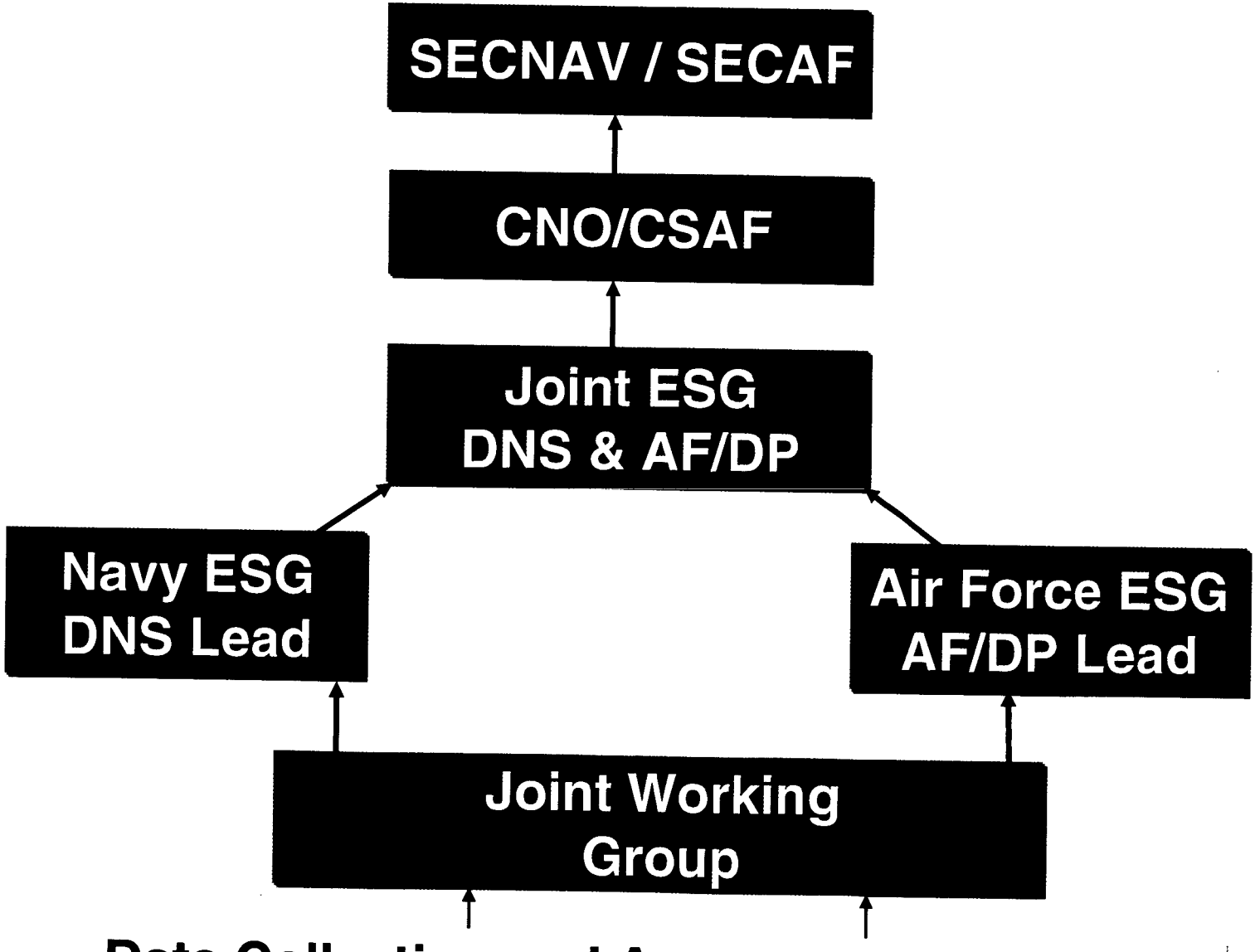
DCN: 11935

Air Force Data Collection Teams

- Meteorology: LtC Vicki Michetti & LtC Jay Fitzgerald (AF/XOWR)
- Logistics Management: Maj Deanna Cooper (AF/ILPS)
- Space Operations : Maj Myron Fortson (AF/XOS)
- Aerospace Information and Operations: Maj Steve Finney (NRO)
- Aeronautical Engineering: Maj John Anttonen (AFRL/MNAV, Eglin AFB)
- Astronautical Engineering: Col Mike DeLorenzo (AFRL/CV)
- Information Resource Management: LtC Sheron Bellizan (AF/ILCX)
- Information Systems Management: Maj John Lussi (AFRL/SNZT)
- Systems Engineering: Ms Karen Bausman (AFMC/ENPD)
- Operations Research: LtC Roger Foley (AFSAA/SAAI)
- Electrical Engineering: LtC Mark Crews (AFRL/DEBA)
- Acquisition Management: Maj Stephanie Teague (SAF/AQX) & Maj Francis Geiser (WR-ALC/LAM)

CN: 11935

Project Oversight



1/3 - 1/2 Prep or standard

DCN: 1935

NAVAL POSTGRADUATE CURRICULA

8/4/2005

CUR #	CURRICULA NAME	UNIQUE/1	STUDENTS ON BOARD/2	TOTAL CLASSES/3,6	UNIQUE CLASSES/3,4,6	DOD SUBJECT MATTER/6	PREPARATORY CLASSES/5,6	OTHER CLASSES/7	JPME /8
	THE GRADUATE SCHOOL OF OPERATIONS & INFORMATION SCIENCES								
360	Operations Analysis	YES/DOD	131	35	6	8	7	10	4
361	Operational Logistics	Yes/DOD	21	35	8	8	4	7	4
362	Human Systems Integration	YES/DOD	14	30	9	26	4	5	4
370	Information Systems & Technology	Yes	116	37	15	11	1	10	4
595	Information Warfare	Yes	26	36	15	6	2	12	4
365	Joint C4I Systems	Yes	36	33	18	5	1	9	4
368	Computer Science	Yes/DoD	49	25	6	3	18	-	4
369	Software Engineering	Yes/DoD	1	34	9	11	4	10	4
369	Software Engineering DL	Yes/DoD	57	34	9	11	4	10	4
399	Modeling, Virtual Environments & Simulation	Yes	41	30	7	6	10	3	4
356	Information Systems & Operations	Yes	10	26	17	4	1	4	4
596	Electronic Warfare Systems (International)	Yes	29	32	8	8	9	7	0
699	Special Operations and Irregular Warfare	Yes	105	25	19	1	1		4
698	Joint Information Operations	Yes	10	25	19	1	1		4
***	Army Operational Carreer Field	Yes	11	21	19	1	1		-
366	Space Systems Operations	YES	28	30	17	16	7	12	4
CUR #	CURRICULA NAME	UNIQUE/1	STUDENTS ON BOARD/2	TOTAL CLASSES/3,6	UNIQUE CLASSES/3,4,6	DOD SUBJECT MATTER/6	PREPARATORY CLASSES/5,6	OTHER CLASSES/7	JPME /8
	THE GRADUATE SCHOOL OF ENGINEERING & APPLIED SCIENCES								
372	Meteorology	YES	44	24	10	0	6	1	0
373	METOC	YES	36	36	18	14	7	0	1
374	Operational Oceanography	YES	3	33	14	8	7	0	4
440	Oceanography	YES	8	28	14	8	7	0	0
570	Naval/Mechanical Engineering	YES	82	64	21	24	6	21	4
590	Electronics Systems Engineering	YES/DOD	113	28	14	19	14	21	4
533	Combat Systems Science & Technology	YES	81	41	19	7	11	4	
525	Undersea Warfare	YES	32	29	13	4	6	4	4
526	Undersea Warfare (In't)	yes	0	29	13	4	6	4	4
591	Space Systems Engineering	YES	41	40	8	12	12	10	4
380	Applied Mathematics	YES/DOD	9	28	2	1	7	16	1
CUR #	CURRICULA NAME	UNIQUE/1	STUDENTS ON BOARD/2	TOTAL CLASSES/3,6	UNIQUE CLASSES/3,4,6	DOD SUBJECT MATTER/6	PREPARATORY CLASSES/5,6	OTHER CLASSES/7	JPME /8
	THE GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY								
847	Manpower Systems Analysis	YES/DoD	73	33	9	8	1	11	4
814	Transportation Management	YES/DOD	2	27	6	9	1	7	4
819	Supply Chain Management	YES/DOD	19	27	6	9	1	7	4
827	Log & Trans Support Management	YES/DOD	37	27	6	9	1	7	4
837	Financial Management	YES/DOD	98	29	7	9	1	8	4
817	Defense Systems Analysis	YES/DOD	15	28	6	9	1	8	4
815	Acquisition & Contract Management	Yes/DoD	59	25	7	10	1	6	1
816	Systems Acquisition Management	YES/DOD	38	28	9	11	1	6	1
870	Information System Management	Yes/DoD	9	26	5	9	1	7	4
805	Executive Master of Business Admin. (DL)	YES/DoD	187	17	6	4	0	7	0
856	Leadership Education and Development (DL)	YES/DOD	15	22	5	12	1	4	0

DCN: 1[illegible]935

835	[illegible]gement (DL)	YES/DoL	17	15	11	2	0	[illegible]	0
836	Program Management (DL)	YES/DoD	46	15	10	2	0	3	0
CUR #	CURRICULA NAME	UNIQUE/1	STUDENTS ON BOARD/2	TOTAL CLASSES/3,6	UNIQUE CLASSES/3,4,6	DOD SUBJECT MATTER/6	PREPARATORY CLASSES/5,6	OTHER CLASSES/7	JPME /8
	THE SCHOOL OF INTERNATIONAL GRADUATE STUDIES								
681	Middle East, Africa, South Asia	YES	53	21	5	3	0	9	4
682	Far East, Southeast Asia Pacific	YES	43	21	7	1	0	9	4
683	Western Hemisphere	YES	13	21	7	0	0	10	4
684	Russia, Europe, Central Asia	YES	43	21	4	4	0	9	4
689a	Civil-Military Relations	YES	30	17	6	0	0	11	0
689b	International Security: Post-Conflict Security Building	YES	6	17	9	0	0	8	0
689c	Defense Decision Making and Planning	YES	30	21	5	5	0	7	4
690	Homeland Defense	YES/DOD	20	17	5	6	0	2	4
251	Homeland Security Leadership Development (DL)								
CUR #	CURRICULA NAME	UNIQUE/1	STUDENTS ON BOARD/2	TOTAL CLASSES/3,6	UNIQUE CLASSES/3,4,6	DOD SUBJECT MATTER/6	PREPARATORY CLASSES/5,6	OTHER CLASSES/7	JPME /8
	SYSTEMS ENGINEERING ACADEMIC COMMITTEE								
308	Systems Engineering & Analysis	Yes	52	27	12	3	5	3	4
311	Systems Engineering (DL)	Yes/DoD	150	13	2	2	1	8	0
721	Systems Eng Management (SEM) Product Development (DL)	Yes/DoD	33	14	0	4	0	10	0

1. YES - UNIQUE: NO OTHER SCHOOL TEACHES, YES/DOD: UNIQUE DOD MATERIAL IS TAUGHT.
2. ON-BOARD 8/2005
3. A "CLASS" MEETS FOR 12 WEEKS, E.G. PH2114, MA2121, OR4605
4. UNIQUE CLASS THAT IS NOT TYPICALLY TAUGHT AT A CIVILIAN INSTITUTION.
5. CLASS NEEDED TO BEGIN MASTER'S-LEVEL EDUCATION
6. NUMBERS OF CLASSES ARE FOR A TYPICAL STUDENT, MANY OTHER UNIQUE AND DOD SUBJECT MATTER CLASSES ARE OFFERED.
7. CLASSES THAT ARE GRADUATE-LEVEL, STANDARD IN CONTENT, BUT USE MILITARY EXAMPLES.
8. JOINT PROFESSIONAL EDUCATION PHASE ONE CLASSES ARE INCLUDED

DCN: 11935

AFIT QUESTIONS

1. Please provide the following data regarding AFIT students.
   a. The number of master's and doctorate degrees awarded, by type, for school years 2000-2004. *Please reference attached document entitled "DEGREES AWARDED BY ACADEMIC YEAR-WITH MS SPREAD-2."*

   b. The number of students enrolled in masters and doctorate programs, by type, for school years 2000-2005 in AFIT's Graduate School of Engineering and Management. *Please reference attached document entitled "ENROLLMENT BY ACADEMIC YEAR-2."*

   c. The number of students enrolled in masters and doctorate programs, by type, for school years 2000-2005 through AFIT's Office of Civilian Institution Programs. *Please reference attached document entitled "CI STUDENT GAINS WITH NPS ADDED."*

   d. The number of military, civilian, and contractor faculty, by Graduate School of Engineering and Management program, for school years 2000-2005. *Please reference attached document entitled "FACULTY MIL & CIV & CONTRACTOR."*

   e. The number of non-US students, by country, enrolled in and graduated from the Graduate School of Engineering and Management programs for school years 2000-2005. *Please reference attached documents entitled "DEGREES AWARDED BY ACADEMIC YR WITH COUNTRY-2" and "ENROLLMENT BY ACADEMIC YEAR WITH COUNTRY-2."*

2. We recognize that the Graduate School of Engineering and Management provides defense focused courses to improve their relevancy for service and DoD personnel. This aside, what specific master's program courses does the Graduate School of Engineering and Management teach that are not available through the private university system.

   The correct and simplest answer is that none of the programs currently offered at AFIT are currently available through the civilian university system. However, that does not mean that the programs are composed or built upon DoD- unique courses. Clearly there is no such thing as AF or DoD-unique physics, engineering, or management principles. Nor does it mean that no civilian university would be willing to provide the DoD any of the programs currently offered by AFIT. What characterizes AFIT's programs and is included in their cost is: 1) an absolute focus on the needs of the DoD both in the examples used in the classroom and the research accomplished by students and faculty, 2) research that is relevant to current DoD problems, and 3) a responsiveness demonstrated by a willingness to make subtle or substantial changes to curriculum or to

redirect research in virtually real time. While civilian universities might be willing to offer at least some, if not all, of our programs, the cost of trying to provide the focus, relevance, and responsiveness that AFIT currently provides will be much more expensive than tuition. Additionally, even with the best of motives and intentions from civilian universities, significant risks exist when considering the long-term continuance of DoD-focused programs and research on civilian university campuses.

In 1997, AFIT was tasked to survey quality civilian universities to determine the cost of providing the DoD-focused programs provided by AFIT. A team, consisting of experts from each curriculum area and led by the Associate Dean (an AF Colonel), visited sixteen civilian universities to provide details on our curricula and to determine their interest in providing the then current AFIT programs, including defense-focused student research. Ten of the universities (Carnegie Mellon, Florida, Georgia Tech, MIT, University of New Mexico, Purdue, Stanford, Syracuse, UT Austin, and Texas A&M) provided white papers detailing their interest and the associated cost. The average total cost (institutional support, research support and advising, and tuition) was $57.4K per student year (in FY05 dollars).

Several issues arise, which are not easily quantified, when considering the current and future availability of DoD-focused programs at civilian universities. In the above, the universities were not asked to support either limited access or classified course work or research. Typically such work is not welcome on college campuses, and numerous examples exist where such work has been banned on college campuses. Even if the universities were interested in pursuing classified or limited access work, doing so would be difficult in an environment where 45% of engineering MS graduates and 60% of PhD graduates are foreign nationals. Additionally, nearly 40% of engineering faculty is foreign born. Finally the long-term availability of military programs on civilian campuses is questionable. Military recruiters are not welcome on some campuses today, and past examples of campus unrest due to the presence of military students, programs, or research are numerous.

3. During its BRAC assessment process, the DoD Education and Training Joint Cross Service Group considered several scenarios pertaining to postgraduate education. These scenarios included (1) privatizing all postgraduate education, and (2) consolidating all postgraduate education at the Naval Postgraduate School. A third scenario, which the DoD did not consider, would be to consolidate all postgraduate education at AFIT. What is AFIT's position, and why, on each of the scenarios with regard to:

    a. Its affect on instructional quality.
    b. Its impact on the military's officer corp.
    c. Its impact on DoD's education system.
    d. Program costs.

e. The value added to DoD's overall mission.

Please reference attached documents entitled "Scenario 1 input," "Scenario 2 input," and "Scenario 3 input."

4. Are there specific courses or research programs that should not be considered for privatization or consolidation? If so, please explain what they are and why.

It is our opinion that privatization is not cost effective for any of our programs. In addition, however, we believe that many of our programs simply cannot be duplicated in the private sector. The most obvious example is our nuclear engineering program which classically focuses on nuclear weapons effects. It has produced the core of this country's weapons effects experts in both DoD and DoE as no civilian university program existed. Today, that program is focused on non- and counter-proliferation as well as nuclear detection. This work requires classified access and requires the same background as required to understand effects – not an area of interest in civilian universities. While this program is a nuclear engineering program, it requires faculty in mathematics, physics, and nuclear engineering. Another example comes from directed energy weapons. Research in this area is not limited to inputs from physicist. The technical challenges with weaponizing high-energy lasers require a wide variety of skills including aeronautical engineering to address flow problems in chemical lasers, aeronautical and electrical engineers to address beam control issues, optical engineers and meteorologists to address beam forming and propagation, in addition to physicists. Additionally, to assess the effectiveness of such weapons requires the modeling skills of operations research analysts. These examples are two from many that could be given. What is true is that research does not cleanly break along the lines of traditional disciplines. The really relevant and challenging problems require skill sets from across all of the technical disciplines. It is for that very reason that AFIT has developed research centers – multi-disciplinary teams of faculty address areas of primary interest to the DoD. In summary, removing or consolidating any of the technical programs would greatly hamper AFIT's ability to conduct relevant research and educate its students to the maximum benefit of the DoD.

5. Explain your BOS structure and procedures. Include details on cost, manning, and how you might expand your program to cover other organizations and/or locations in the same local area.

Please reference attached document entitled "AFIT BRAC Information – Question 5."

DEGREES AWARDED BY ACADEMIC YEAR BY TYPE - ACADEMIC YEAR 2000-2004

AFIT Degree Awarded	AY00-01 MS	AY00-01 Ph.D.	AY00-01 Total	AY01-02 MS	AY01-02 Ph.D.	AY01-02 Total	AY02-03 MS	AY02-03 Ph.D.	AY02-03 Total	AY03-04 MS	AY03-04 Ph.D.	AY03-04 Total	AY04-05 MS	AY04-05 Ph.D.	AY04-05 Total
DOCTOR OF PHILOSOPHY		6	6		21	21		12	12		10	10		15	15
MASTER OF AIR MOBILITY	15		15	15		15	15		15	16		16	16		16
MASTER OF APPLIED COMPUTING													1		1
MASTER OF ARTS										1		1			
MASTER OF LOGISTICS MANAGEMENT	25		25	17		17	18		18	33		33	13		13
MASTER OF OPERATIONAL SCIENCES										7		7	22		22
MASTER OF SPACE SYSTEMS										12		12	6		6
MASTER OF SYSTEMS MANAGEMENT										10		10			
MS (APPLIED MATHEMATICS)													3		3
MS (APPLIED PHYSICS)													7		7
MS (COMPUTER SCIENCE)													16		16
MS (COST ANALYSIS)													8		8
MS (NUCLEAR SCIENCE)													6		6
MS (OPERATIONS RESEARCH)										3		3	17		17
MS (STRATEGIC PURCHASING)													8		8
MS IN AERONAUTICAL ENGINEERING	10		10	12		12	18		18	33		33	46		46
MS IN ASTRONAUTICAL ENGINEERING	9		9	8		8	5		5	15		15	18		18
MS IN COMPUTER ENGINEERING	8		8	11		11	9		9	4		4	7		7
MS IN ELECTRICAL ENGINEERING	20		20	31		31	23		23	31		31	36		36
MS IN ENGINEERING MANAGEMENT	23		23	19		19	23		23	23		23	17		17
MS IN ENVIRONMENTAL SCIENCE													5		5
MS IN INFORMATION RESOURCE MANAGEMEN													19		19
MS IN LOGISTICS MANAGEMENT													21		21
MS IN MANAGEMENT	22		22	20		20	14		14	22		22	38		38
MS IN NUCLEAR ENGINEERING	6		6	7		7	9		9	9		9	10		10
MS IN SYSTEMS ENGINEERING	19		19	12		12	26		26	43		43	51		51
MS IN SYSTEMS MANAGEMENT													3		3
MS(APPLIED MATHEMATICS)	1		1	3		3	1		1	2		2	1		1
MS(APPLIED PHYSICS)	17		17	14		14	11		11	16		16	7		7
MS(COMPUTER SCIENCE)	13		13	10		10	14		14	21		21	2		2
MS(COST ANALYSIS)							12		12	16		16			
MS(OPERATIONS RESEARCH)	19		19	17		17	26		26	11		11			
Grand Total	207	6	213	196	21	217	224	12	236	328	10	338	404	15	419

DCN: 11935

ENROLLMENT

DCN: 11935

Manning	AY0001 MS	AY0001 Ph.D.	AY0001 Total	AY0102 MS	AY0102 Ph.D.	AY0102 Total	AY0203 CERT	AY0203 MS	AY0203 Ph.D.	AY0203 Total	AY0304 CERT	AY0304 MS	AY0304 Ph.D.	AY0304 Total	AY0405 CERT	AY0405 MS	AY0405 Ph.D.	AY0405 Total
(Blank)	2	1	3								5			5	5	4	1	10
A.F. ENLISTED, REGULAR								8		8	1	19		20	4	20		24
A.F. OFFICER, REGULAR	336	37	373	339	54	393	6	415	53	474	9	520	67	596	34	644	83	761
A.F. OFFICER, RESERVE ADT	1		1															
A.F. OFFICER, RESERVE EAD		2	2	1	2	3					1			1	1	1		2
ARMY OFFICER	10	3	13	15	2	17		13	4	17		14	6	20		17	5	22
COAST GUARD OFFICER	1		1	3		3		3		3		1		1				
DEPT. OF A.F. CIVILIANS	23	5	28	22	7	29	21	21	8	50	9	13	7	29	14	17	6	37
INTERNATIONAL OFFICER	60	2	62	57	1	58		21	2	23		13	2	15		19	2	21
MARINE CORPS OFFICER	4		4	4		4		1		1		4		4		7		7
MARINE ENLISTED								6		6		6		6		3		3
NAVY OFFICER												21		21		26		26
NON-DOD CIVILIANS	6	6	12	9	7	16	7	16	14	37	5	18	10	33	8	22	11	41
OTHER DOD CIVILIANS	1		1	1	1	2	3	2		5	5	1		6	2	2		4
Grand Total	444	56	500	451	74	525	37	506	81	624	35	630	92	757	68	782	108	958

ENROLLMENT DCN: 11935

YEAR	QUOTA PROGRAM	DEGREE MASTERS	PHD	Grand Total	NPS MASTER'S	NPS DOCTORATE	TOTAL NPS	NON-NPS TOTAL
ACADEMIC YEAR 2000	FACULTY DEVELOPMENT	31	55	86				
	FOREIGN AREA SPECIALISTS PGM	2		2				
	GRADUATE SCHOOL PROGRAM	29		29				
	LEGAL MASTERS	21		21				
	PSYCHOLOGY/COUNSELING	6		6				
	REGULAR GRADUATE PROGRAM	45	12	57				
	SCHOLARSHIPS, FELLOWSHIPS	30	3	33				
ACADEMIC YEAR 2000 Total		164	70	234	17	1	18	216
ACADEMIC YEAR 2001	BASIC METEOROLOGY	1		1				
	FACULTY DEVELOPMENT	31	38	69				
	GRADUATE SCHOOL PROGRAM	24		24				
	LEGAL MASTERS	24		24				
	REGULAR GRADUATE PROGRAM	46	8	54				
	SCHOLARSHIPS, FELLOWSHIPS	28		28				
ACADEMIC YEAR 2001 Total		154	46	200	16	1	17	183
ACADEMIC YEAR 2002	FACULTY DEVELOPMENT	22	37	59				
	GRADUATE SCHOOL PROGRAM	8		8				
	INFO ASSURANCE SCHOLAR PROGRAM	3	3	6				
	LEGAL MASTERS	26		26				
	OLMSTEAD SCHOLARSHIPS	4		4				
	REGULAR GRADUATE PROGRAM	52	4	56				
	SCHOLARSHIPS, FELLOWSHIPS	21	4	25				
ACADEMIC YEAR 2002 Total		136	48	184	33	3	36	148
ACADEMIC YEAR 2003	BASIC METEOROLOGY	1		1				
	CHAPLAIN	2		2				
	FACULTY DEVELOPMENT	17	49	66				
	GRADUATE SCHOOL PROGRAM	8		8				
	INTERMEDIATE DEV EDUC AT NPS	44		44				
	LEGAL MASTERS	27		27				
	OLMSTEAD SCHOLARSHIPS	1		1				
	PSYCHOLOGY/COUNSELING	16		16				
	REGULAR GRADUATE PROGRAM	55	5	60				
	SCHOLARSHIPS, FELLOWSHIPS	32	5	37				
ACADEMIC YEAR 2003 Total		203	59	262	79	2	81	181
ACADEMIC YEAR 2004	BASIC METEOROLOGY	1		1				
	CHAPLAIN	2		2				
	FACULTY DEVELOPMENT	24	55	79				
	GRADUATE SCHOOL PROGRAM	2		2				
	INFO ASSURANCE SCHOLAR PROGRAM	4		4				
	INTERMEDIATE DEV EDUC AT NPS	54	1	55				
	LEGAL MASTERS	22		22				
	OLMSTEAD SCHOLARSHIPS	7		7				
	PSYCHOLOGY/COUNSELING	20		20				
	REGULAR GRADUATE PROGRAM	111	9	120				
	SCHOLARSHIPS, FELLOWSHIPS	28	2	30				
ACADEMIC YEAR 2004 Total		275	67	342	142	4	146	196

ACADEMIC YEAR 2005 DCN: 11935	CHAPLAIN	1		1				
	FACULTY DEVELOPMENT	34	57	91				
	GRADUATE SCHOOL PROGRAM	11		11				
	INFO ASSURANCE SCHOLAR PROGRAM	2		2				
	INTERMEDIATE DEV EDUC AT NPS	72		72				
	LEGAL MASTERS	22		22				
	OLMSTEAD SCHOLARSHIPS	2		2				
	PSYCHOLOGY/COUNSELING	16		16				
	REGULAR GRADUATE PROGRAM	116	13	129				
	SCHOLARSHIPS, FELLOWSHIPS	33	3	36				
ACADEMIC YEAR 2005 Total		309	73	382	166	5	171	211
Grand Total		1241	363	1604				

DCN: 11935

TEACHING FACULTY FROM 2000 - 2005			
YEAR	MILITARY	CIVILIAN	CONTRACTOR
2000-01	54	39	5
2001-02	50	40	4
2002-03	49	44	6
2003-04	49	69	4
2004-05	62	75	6

DCN: 11935

7/28/2005

ENROLLMENT OF NON-US STUDENTS BY COUNTRY BY ACADEMIC YEAR

		ACADEMIC YEAR														
		AY0001			AY0102			AY0203			AY0304			AY0405		
		MS	Ph.D.	Total	MS	Ph.D.	Total	MS	Ph.D.	Total	MS	Ph.D.	Total	MS	Ph.D.	Total
Manning Description	**Country**	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −	+ −
INTERNATIONAL OFFICER	Argentina	1		1	1		1	1		1	1		1			
	Australia	6		6	6		6	6		6	4		4	2		2
	Bahrain										1		1	1		1
	Brazil	3		3	2		2									
	Canada	1		1												
	Chile	1		1	1		1									
	Greece										1		1	4		4
	Jordan													1		1
	Mexico										1		1	1		1
	Moracco													1		1
	Saudi Arabia													1		1
	South Korea	6	1	7	9	1	10	5	2	7	4	2	6	6	2	8
	Sri Lanka													1		1
	Taiwan	1	1	2	1		1				1		1	1		1
	Turkey	41		41	37		37	9		9						
	Total	60	2	62	57	1	58	21	2	23	13	2	15	19	2	21
NON-DOD CIVILIANS	China	1		1												
	Nigeria								1	1		1	1		1	1
	Taiwan							1		1	1		1			
	Total	1		1				1	1	2	1	1	2		1	1
Grand Total		61	2	63	57	1	58	22	3	25	14	3	17	19	3	22

DCN: 11935

DEGREES AWARDED TO NON-US STUDENTS BY ACADEMIC YR BY COUNTRY 7/28/2005

		ACADEMIC YEAR											
		AY00-01			AY01-02		AY02-03		AY03-04		AY04-05		
		MS	Ph.D.	Total	MS	Total	MS	Total	MS	Total	MS	Ph.D.	Total
Manning	Country												
INTERNATIONAL OFFICER	Argentina				1	1			1	1			
	Australia	3		3	3	3	3	3	3	3	1		1
	Bahrain										1		1
	Brazil	1		1	2	2							
	Chile				1	1							
	Greece										1		1
	Mexico										1		1
	South Korea				6	6	3	3	2	2	2	2	4
	Taiwan		1	1	1	1					1		1
	Turkey	13		13	28	28	9	9					
	Total	17	1	18	42	42	15	15	6	6	7	2	9
NON-DOD CIVILIANS	China	1		1									
	Taiwan								1	1			
	Total	1		1					1	1			
Grand Total		18	1	19	42	42	15	15	7	7	7	2	9

Scenario 1 – Privatize All Postgraduate Education

a. Effect on instructional quality

The DoD can expect that *peer* civilian institutions to AFIT and NPS would also have top-flight faculty with terminal degrees in their academic disciplines. What will be lacking at civilian schools, however, is instruction tailored to the unique needs of the DoD, specifically focused and responsive curriculum and research which are central to the instruction provided at AFIT.

About one-half of the AFIT graduate school faculty members are Air Force officers who bring hands-on experience to the institute; the school also has an Army officer on staff. The military faculty come from a variety of operational and support career fields. As such, they bring first-hand knowledge of a spectrum of real-world challenges and problems to discuss in the classroom and to tackle in research programs. The grad school faculty is augmented by adjunct professors, many from the Air Force Research Lab, who bring very relevant expertise to the AFIT educational experience. Some faculty members deploy during their AFIT tour, and hence, are exposed to real-time issues of priority importance to the warfighting community (5 military and 1 civilian deployed to Iraq, Qatar, Afghanistan, and Saudi Arabia in last two years). In some instances (e.g. nuclear weapons effects) faculty expertise is gained through unique specific experiences within DoD (or DOE).

Research is an integral component to graduate education programs. The DoD would lose the ability to focus research on many critical military related activities and technologies if students were sent exclusively to CI programs. Examples include: M.S. and Ph.D. programs in nuclear engineering with research focus in nuclear weapons, as well as effects that serve both Army and Air Force students. Additionally, capabilities would be lost in areas dealing with nuclear fallout dose estimates, forensic analysis for dirty bombs, and cyber exploitation (network attack and software attack). There are no real analogs at civilian universities due to security implications. Many AFIT research programs (about 50%) are closely tied to collocated organizations at Wright-Patterson AFB including AFRL, NASIC, ASC, and HQ AFMC. This close proximity generates a valuable synergy that amplifies the return on investment of key research efforts.

b. Impact on the military's officer corps

Outsourcing all DoD graduate education to civilian programs will have an adverse affect on the officer corps from two perspectives. It will pull a large number of officers out of a military academic environment and will put them and their families in totally civilian communities away from military base support infrastructure.

Many students are drawn to AFIT because they want to study at a school where military application is central to the whole educational approach. They want to help solve DoD's real-world problems in an environment that fosters the same. Military students value the

opportunity to interact directly with their operator counterparts in the field and feel like they make a difference in helping accomplish the greater AF/DoD mission.

Military students enjoy a sense of camaraderie within AFIT's joint academic environment. Special events and activities, including the Wright Brothers Lecture Series, provide a warrior focus and serve to enrich military professional development. The AFIT Student Association engenders unit cohesion by sponsoring numerous social activities throughout the academic year.

The blend of students from operational, mission support, and technical career fields provides an opportunity for "cross-talk" that helps foster a better understanding of how each field contributes to the overall mission. The recent addition of mid-career officers into AFIT's IDE programs brought a greater diversity of backgrounds to the institute. These top officers have directly contributed to the professional development of younger officers, including new accessions, through formal and informal mentoring programs.

US students also enjoy collegial interaction with international military students who attend AFIT. This important cultural exchange between military comrades-in-arms would not be possible elsewhere because international military students cannot go to civilian schools using State Department provided security assistance training funds. This interaction and understanding is ever more important in the dynamic and evolving global security environment.

It is difficult to provide proper military support and management of students at civilian institutions; the challenge will be exacerbated by more than doubling the numbers currently in CI programs. AFROTC detachments are limited to 25 AFIT students per detachment due to manning constraints. Four detachments already have more AFIT students in their geographical area than they can support. The AF currently has nearly 200 AFIT/CI students at schools without an AFROTC detachment. That number would likely grow. Student management in these cases falls back to staff located at AFIT, often at great distances from the student's location.

The bases supporting students at CI schools can be several hundred miles away (e.g. Penn State University is 233 miles from Dover AFB in Delaware). Mission Support Squadrons at supporting bases do not get manning to support AFIT/CI students, and base units cannot readily accommodate school class schedules. This is especially a problem for students in special programs with unique education requirements.

Civilian schools do not have *.mil* internet access available for military students. This impacts access to military information and automated services and significantly inhibits ability to conduct DoD-related research.

Health care and family support issues are a major concern for geographically-separated military members. AFIT resident students would lose access to the WPAFB medical center – a major regional Military Treatment Facility. Tricare access is an issue at many

locations, including low cost as well as high cost areas. Tricare availability is generally driven by the market need which is relatively low in predominantly civilian locales.

Military members and families would lose other support services if in school away from military bases like WPAFB as no base support is readily available near many school locations. Military members would not have access to the BX & commissary, more affordable child care, family support centers, among many others.

And finally, we'd like to note WPAFB has an excess of military housing available. Also, local off-base housing is among the most affordable in the nation given the relatively flat appreciation in Dayton housing prices over the last few years. This not only affects the affordability of living here, but the quality of life locally as families can divert funds used for housing in high cost areas—such as where many tier one universities are located—to other family activities.

c. Impact on DoD's education system.

We are unclear about the meaning of a "DoD education system" and can only comment about it from an Air Force perspective.

At the strategic level, closing AFIT would effectively eliminate the AF's primary champion and corporate expertise regarding graduate education. It is unclear which AF organization (if any) would pick up the necessary responsibility to provide overarching vision and guidance for Air Force graduate education. Historically, regular customer interaction and feedback has been the primary mechanism to drive changes to AFIT's focus, curriculum, and research. Only in very rare instances has AFIT received top-down direction in these areas (e.g. Sec Roche's push for systems engineering). AFIT has unilaterally shouldered the responsibility to guide <u>all</u> Air Force graduate education programs, not just those at the residence school. The AF will undoubtedly continue to send officers for graduate degrees. If this is solely done via civilian institutes, who will carry the torch and represent the numerous AF and DoD stakeholders to assure that their interests and needs are met as graduate education requirements evolve and change over time?

At the tactical level, a key issue is the time-phasing of selection of officers to civilian schools vs. AFIT. The Air Force routinely selects officers for graduate education opportunities 6-9 months out from the school start date (often less). This is not compatible with the application timeliness at many universities where a student's application must be submitted the December before a September start. The AF assignment system would have to adjust significantly to lead turn the process to select officers for graduate school about one year in advance of the school class start date. This is often not practical due to operational constraints and considerations. The problem is significantly exacerbated if an officer is denied acceptance late in the game when admission results are announced (typically March before a fall start). The officer and the AF would need to scramble to find him/her a different educational program or military assignment. The time-phasing challenge is particularly acute for mid-career officers

being considered for IDE schooling opportunities. These officers do not know if they have been vectored toward graduate education or DoD PME programs until the results of the Developmental Education Designation Board are released in mid-October.

AFIT has the flexibility to be very responsive to the AF assignment process. Future prospective students are encouraged to apply for AFIT programs well in advance of desired attendance. Many officers act on this option because the application process is simple and straightforward; it is a known and common process (as many AF officers routinely apply), and it *does not cost anything* to apply. Once accepted for AFIT, the AF has the latitude to send the officer at anytime because AFIT is not constrained by seat count in a particular class or program. AFIT frequently has received applications, reviewed them, and accepted officers into graduate programs just weeks before the class start date. This responsiveness is not available at other top graduate schools. QED.

d. Program costs

In 1997 AFIT's total cost per student was $39,184 per calendar year, a figure which does not account for building depreciation or utilities. Today's graduate education total cost per student at AFIT has actually decreased to $37,717, which equates to a total cost of $41.3 million for 1095 students.

To accomplish AFIT graduate education and research at civilian institutions, the cost will be approximately $57,434 per student per calendar year. This estimate includes institutional support, research, and tuition but does not include any other costs such as increased housing allowances. In the late 1990s, AFIT engaged with 16 Tier 1 graduate schools to assess the feasibility and costs to host DoD technical programs at these top schools. Ten provided white papers: Stanford, MIT, Purdue, Georgia Tech, Carnegie Mellon, University of New Mexico, Syracuse, Texas A&M, University of Texas at Austin, and University of Florida. At that time, these 10 institutions reported an average cost of $38,000 per calendar year needed to provide facilities and staff required to replicate the defense-focused research programs available at AFIT; this figure does not include tuition costs. The $38,000 cost was inflated to '05 figures to obtain a cost of approximately $45,844 per student per calendar year. As the average tuition cost for all Civilian Institution (CI) degree programs in FY05 is $11,590, the total cost to achieve equivalent civilian training in a CI in '05 dollars is an estimated $57,434 per student per calendar year. Based on a total enrollment of 1095 students, this will require $62.9 million, an increase of $21.6 million '05 dollars to privatize AFIT graduate education programs.

Additional costs to be factored into that bill include potentially increased BAH costs to relocate students to high cost metropolitan areas near civilian institutions. At the "0-3 With Dependent" rate, an Air Force Capt/Navy LT with dependents receives $1,101 per month in BAH in Dayton, OH while their counterpart in Monterey, CA receives $2,291 per month. In reviewing the BAH rates for the locations of the 10 civilian institutions listed previously, only 2 (Purdue--$1,016 and Syracuse--$1,028) were cheaper than Dayton while Monterey exceeded all but 2 (Stanford--$2,738 and MIT--$2,359). The average BAH rate for those 10 locations equates to $1,483 per month.

e. The value added to DoD's overall mission

Unquestionably, some civilian universities could incorporate defense-focused instruction and research into their academic programs. Education provided at civilian schools, however, is primarily a business proposition. That is, these institutions would perform a cost-benefit analysis to determine the economic payback of hosting unique DoD-related programs. Considering that less that the DoD drives less that ½ of 1% of the science & engineering graduate education requirements, top schools aren't inherently predisposed to support this relatively small market share. This is even more likely for non-technical programs, such as management, due to the greater number of civilian business schools. Categorically, the response from the 10 institutions who responded via the 1997 White Papers is that they could support DoD needs on a "pay for service" arrangement. They will gladly contract with government to establish the programs and provide the necessary resources. These will necessarily be long-term arrangements due the very unique requirements of faculty expertise, laboratory facilities, etc. This provides relative inflexibility if DoD needs change; i.e., the DoD will have to pay for the programs regardless of the student throughput. Copies of the responses from the surveyed schools are available upon request. An additional consideration is that student acceptance into civilian-hosted programs is not necessarily guaranteed, especially at top, high-demand graduate schools like Stanford and MIT. As a result, the DoD may have to compromise for officers who do not have truly outstanding academic credentials.

Unlike CI schools, AFIT has the flexibility to adjust internal resources to be highly responsive to changing DoD priorities. Recent examples include: a military meteorology program built at the request of AF/XOW within 1 year; Measurement and Signature Intelligence program (MASINT) stood up to support scientific, technical, and operational exploitation of intelligence data required by NASIC, NGA, and other DoD intelligence organizations; 14 master's degree programs tailored to the needs of field grade officers for Intermediate Development Education (IDE) that was completed within 6 months of request by AF; and stood up information assurance (IA) program to meet specific needs of NSA within one year in response to DoD Info Ops Roadmap. AFIT is currently crafting a one-of-a-kind graduate program on Chemical, Biological, Nuclear, and Radiological Explosives (CBRNE) that is tailored to meet needs of AF/XOS, Army, Defense Threat Reduction Agency, and AFTAC.

DCN: 11935

NAVAL
POSTGRADUATE
SCHOOL

Itinerary for the visit of
BRAC Commission Visit
5, 8 August 2005

Members in traveling party

Admiral Harold W. Gehman, Jr., USN (Ret.), BRAC Commissioner
Honorable James V. Hansen, BRAC Commissioner
Congressman Sam Farr
Admiral Hank Mauz, USN (Ret.)
Mr. Terry Tamminen, Secretary of the Cabinet, Office of Gov. Schwarzenegger
Mr. David Berteau, California Council on Base Support and Retention
Mr. Jim Molinari, State Director, Office of Senator Feinstein
Fred Cohn, Assistant City Manager, City of Monterey
Mr. Syd Carroll, BRAC Analyst Team Member
Mr. Dave Van Saun, BRAC Analyst Team Member
Mr. Wes Hood, BRAC Analyst Team Member
Mr. Ryan Dean, BRAC Analyst Team Member
Ms. Melissa Decker, Special Assistant to the Governor for Military Affairs
Mr. Michael Walker, Field Rep, Office of Senator Feinstein
Mr. Fred Meurer, City Manager, City of Monterey

Arrival

Date	Monday, 8 August 2005
Time	0725
Place	Herrmann Hall, Flag Pole
Greeter	RDML Patrick W. Dunne
Ground transportation	7 Pax Van, Government Sedan
Driver(s)	QM1 Benny Romero CSSN Josh Sullivan

	Friday, 5 August 2005	
0800-1500	Discussion of BRAC Visit Questions with Analyst Team	Location: PCR Attendees: Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, CAPT (Ret) George Conner, Col Dave Smarsh & COL (Ret) Pete Dausen
1100-1230	Lunch	Location: Facility Dining Room
	Monday, 8 August 2005	
0715-0725	Depart Hotel Enroute NPS Herrmann Hall	Driver(s): Sedan: QM1 Benny Romero 7 Pax Van: CSSN Josh Sullivan
0725-0730	Arrive NPS Herrmann Hall	Greeter: RDML Dunne, LTJG Sawyer
0730-0745	FNMOC Brief	Location: PCR

		Briefer: CAPT David Titley Attendees: RDML Dunne, Provost Elster, Col Dave Smarsh & COL (Ret) Pete Dausen
00745-0825	Command Brief/Facility Overview	Location: PCR Briefer: Col (Ret) Gary Roser Attendees: RDML Dunne, Provost Elster, Col Dave Smarsh, COL (Ret) Pete Dausen, CAPT David Titley CAPT (Ret) Conner, Dean Ferrari, Dean Hughes, Dean Kays, VADM (Ret) Hughes, Dean Ord, Megan Reilly & Julie Filizetti
0825-0830	Enroute Root Hall	Walk Escort: RDML Dunne, Provost Elster, Col Dave Smarsh, COL (Ret) Pete Dausen & Protocol
0830-0845	Tactical Network Topology Brief	Location: Root Hall, RM 202 Greeter/Briefer: Dr. Dave Netzer Attendees: RDML Dunne, Provost Elster, Col Dave Smarsh & COL (Ret) Pete Dausen
0845-0850	Enroute Watkins	Walk Escort: RDML Dunne, Provost Elster, Col Dave Smarsh, COL (Ret) Pete Dausen & Protocol
0850-0905	MOVES Institute Tour/ Combat Simulator	Location: Watkins Hall, RM 212B Greeter/Briefer: Professor Darken Attendees: RDML Dunne, Provost Elster, Col Dave Smarsh & COL (Ret) Pete Dausen
0905-0910	Enroute Glasgow Hall	Walk Escort: RDML Dunne, Provost Elster, Col Dave Smarsh, COL (Ret) Pete Dausen & Protocol
0910-0930	Classified Project Briefs/ SCIF Tour	Location: Glasgow Basement (SCIF) Greeter/Briefer: CAPT (Ret) Simeral Attendees: RDML Dunne, Provost Elster, Col Dave Smarsh & COL (Ret) Pete Dausen
0930-0945	Depart for DLI (Glasgow)	Drivers: DLI driver

Points of Contact

RDML Dunne's Office Colonel Dave Smarsh, Chief of Staff

Points of Contact

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Source: Dept of Navy Minutes DOD BRAC Website
DCN: 11935
2005 - Report of Deliberations
Zip file (3)
Adobe File N-RP-0499 1Feb05

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Fenceline Closure: Naval Postgraduate School

- **DON-0070 Close Naval Postgraduate School Monterey, CA**
  - **Scenario data call complete. Removes all personnel and functions from Monterey. Briefed to DAG on 4 Jan 05**
- **E&T-0003 Privatizes all DOD graduate education**
  - **Approved by E&T JCSG on 12 Jan 05**
  - **Modification required to extract and distribute service unique programs**
  - **Scheduled for ISG on 11 Feb 05**
- **TECH-0020 moves NRL-Det Monterey to Stennis**
  - **Tech JCSG decision anticipated by 4 Feb 05**
- **Required actions to proceed with DON-0070**
  - **FNMOC and NRL suggest enclave; only if TECH-0020 disapproved**
    - **Need to determine extent of FNMOC and NRL-Det common use of IT infrastructure**
  - **DON request E&T-0003 be modified to extract service programs with receiving site Newport**

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Fenceline Closure: Navy Supply Corps School

- DON-0126 Close Navy Supply Corps School Athens, GA
- E&T-0004 Relocates/Consolidates Supply and Logistics Training to Fort Lee
  - Scenario deactivated by E&T JCSG
  - E&T JCSG has no plans to revisit relocation of Navy Supply Corps School
- Pending Actions
  - DAG Decision to suggest a scenario to relocate Navy Supply Corps School to Naval Station Newport
  - DON request JCSG to evaluate scenario on this activity that is consistent with their methodology and takes advantage of available capacity within Navy
    - DON will perform all work, if necessary

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NAVSTA Newport Active Scenarios

• Out of Newport

- ***E&T-0014:** Consolidate service Chaplain SST/PDE Functions at Ft. Jackson, SC
- **E&T-0024:** Realign Intermediate and Senior Service College functions to appropriate Service Academy (Naval War College to US Naval Academy)
- **E&T-0026, 0027, 0028, 0032, 0033, 0034, 0035, 0036:** Realign and/or consolidate DON/DOD Senior Level Colleges at Fort McNair (DC), MCB Quantico, Fort Eustis (VA)
- **TECH-008A:** Consolidate Sensors, Electronic Warfare and Electronics RDAT&E, surface and above, functions at NUWC Newport with NSWC Dahlgren
- **TECH-008B:** Consolidate Maritime Information Systems RDAT&E functions at NUWC Newport with SPAWARSYSCEN San Diego
- ***DON-0156:** Relocate REDCOM Northeast Newport To COMNAVREG Mid-Atlantic, Norfolk, VA

• Into Newport

- **TECH-00028:** Relocate all RDAT&E for underwater weapons and underwater weapons systems integration, platform integration, including mines, mine countermeasures and unmanned underwater vehicles from Panama City to Newport.
- ***DON-0085:** Realign OTC Pensacola, FL to NAVSTA Newport, RI
- ***USA-0158:** Build Armed Forces Reserve Center Newport, RI

* **Candidate recommendations**

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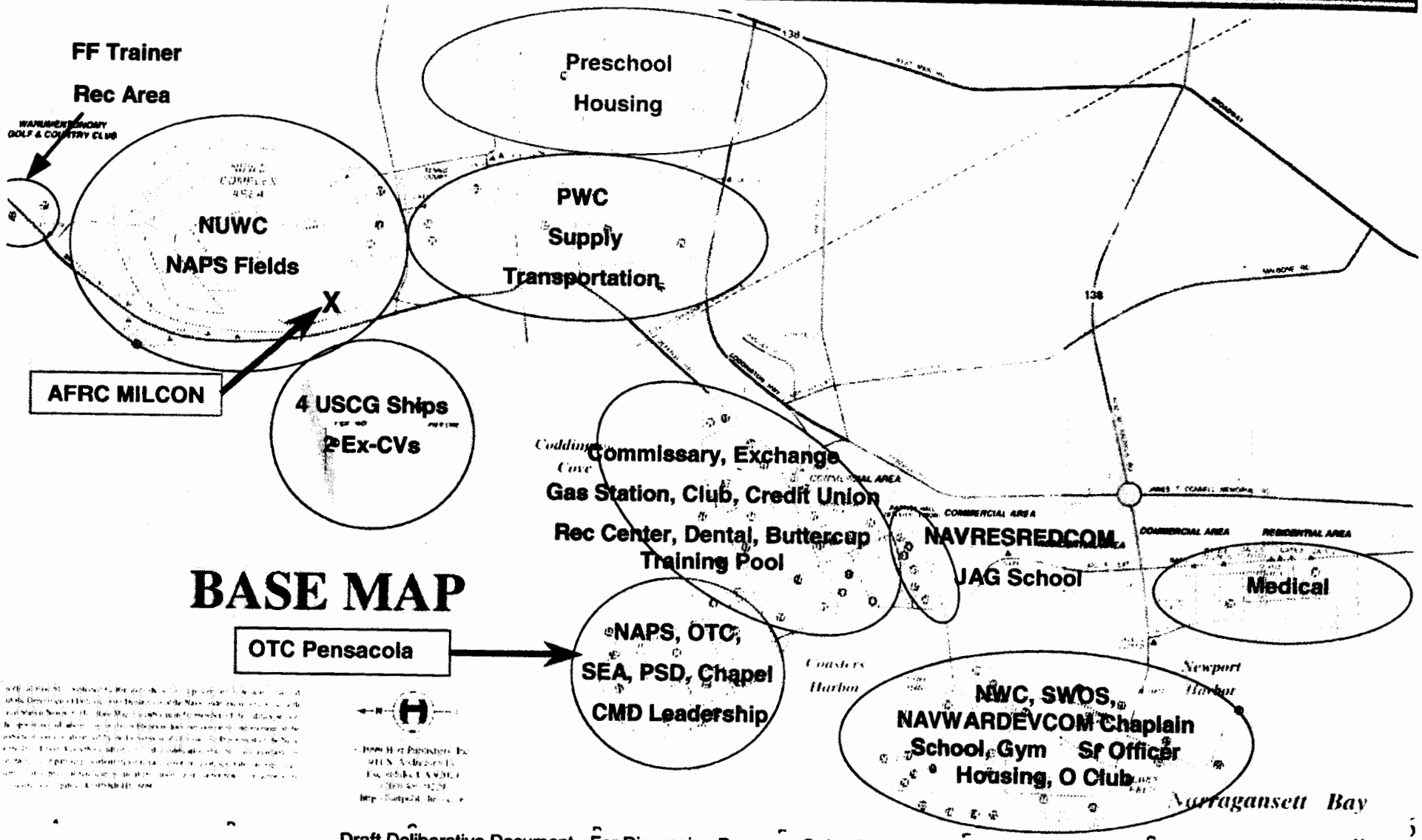
NAVSTA Newport Candidate Recommendations



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Proposed Newport Options

- Move DON-specific graduate education from Monterey, CA to Newport, RI
- Move Navy Supply Corps School from Athens, GA to Newport, RI
- Move Naval Submarine School from New London, CT to Newport, RI
- Move Navy Warfare Development Command from Newport, RI to Norfolk, VA

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Related Scenarios

- **PG School**
  - ***E&T-0003:** Privatize all DOD graduate education
  - **DON-0070:** Close Naval Postgraduate School Monterey, CA
- **Navy Supply Corps School**
  - **E&T-0004:** Realign Navy Supply Corps School Athens, GA; Relocate and consolidate Supply and Logistics training to Fort Lee
  - **DON-0126:** Close Navy Supply Corps School Athens, GA
- **Naval Submarine School**
  - ***DON-0033:** Close Naval Submarine Base New London, GA; Relocate SSNs to NAVSTA Norfolk, VA and SUBASE Kings Bay, GA (Naval Submarine School moves to SUBASE Kings Bay with a piece to Norfolk)
- **Navy Warfare Development Command**
  - **None**

* **Candidate recommendations**

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DON-0070 Close PG School Unique Military Degree Programs

Curriculum Title	Average on Board (Navy)	Average on Board (All US)	Classroom Square Feet Required
Combat Systems	35	40	3,116
Joint C4I Systems	19	24	1,616
Information Warfare	14	19	808
Operational Logistics	11	14	577
Information Systems Operations	12	13	1,125
Undersea Warfare	5	6	1,154
Special Operations	12	43	866
Information Systems Technology	54	93	6,462
Total	162	252	15,723

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PG School Issues

- Relocate the eight degree programs and dedicated faculty from Naval Postgraduate School Monterey, CA to NAVSTA Newport, RI
  - Chaplain School and NWC senior course under consideration for move out, opening classrooms.
  - Leverage intellectual and research synergy with NUWC (150 technical PhDs).
- Dedicated faculty and administrative requirements not known.
- Dedicated laboratory requirements not known.
- Dedicated classroom space is approximated, detailed data required.

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Other Issues

- **Supply Corps School**
  - Large tenant, Center for Service Support (40 Mil, 47 Civ), will not necessarily follow Supply Corps School
  - Supply Corps School will move museum material and require museum space at NAVSTA Newport
- **Submarine School**
  - Majority of Submarine School can move to Newport
  - Kings Bay and Norfolk require additional trainers and fleet and team training courses
- **Navy Warfare Development Command (moving to Norfolk)**
  - 50 Military, 57 Civilian

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Capacity Requirements

Activity	Student Average on Board	Classroom NSF Required*
PG DON-Unique Military Degree Programs	162	15,723
Navy Supply Corps School	356	16,020
Naval Submarine School	1,848	83,160
OTC Pensacola (DON-0085)	524	15,111
Total	2,890	130,014

Notes:

- Administrative space is not included in the above
- Relocating Chaplain School frees up 32,735 GSF Training Space
- Relocating NAVRESREDCOM frees up 19,985 GSF Admin Space
- Relocating COMNAVWARDEVCOM would free up unspecified space in NAVWARCOL's Conolly Hall
- Callaghan Hall is vacant with 47,291 GSF Training Space

* Classroom capacity requirement is based on P-80 criteria as applied by JSCG and DON

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DCN: 11935

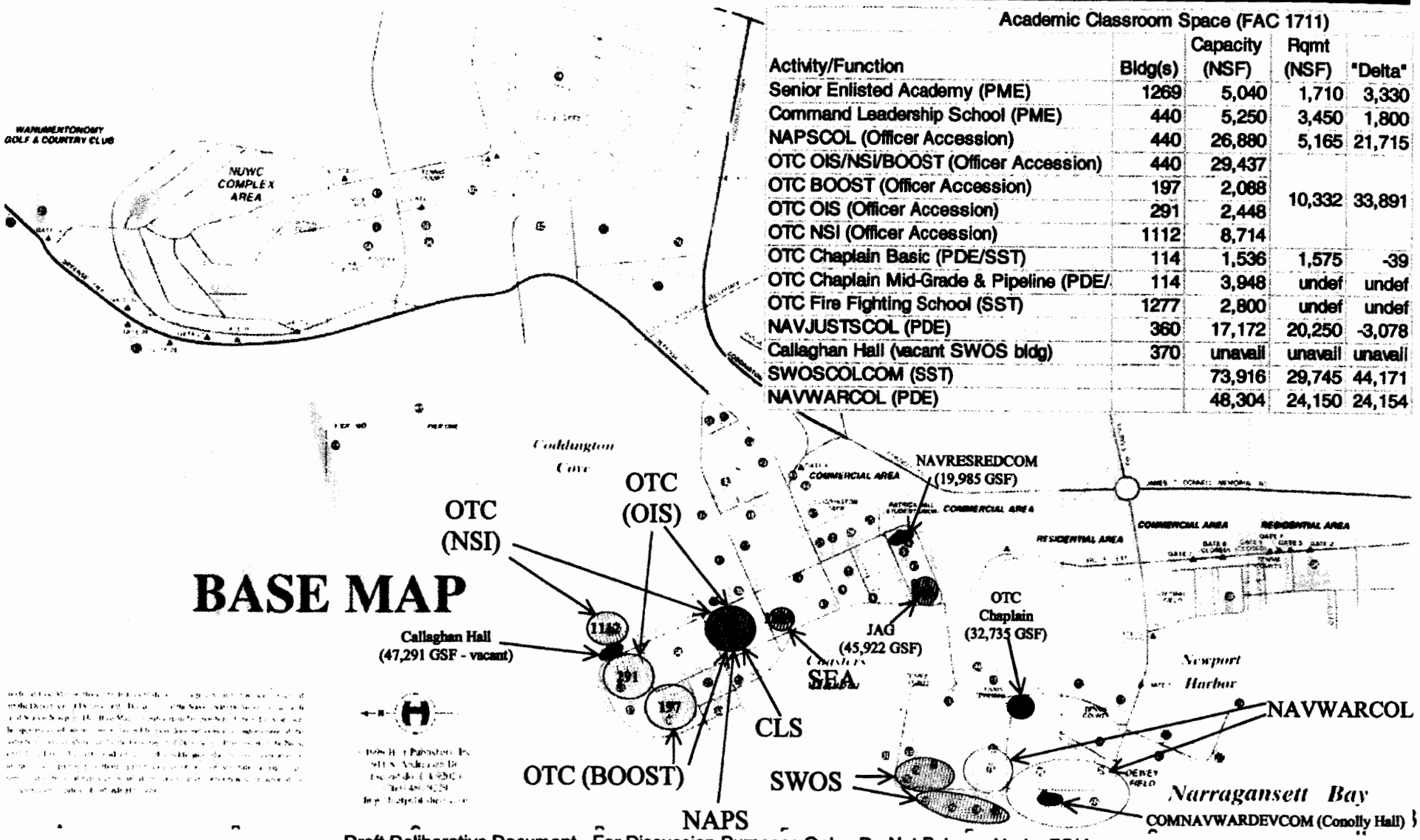
Department of the Navy

Infrastructure Analysis Team

NAVSTA Newport Facilities

Academic Classroom Space (FAC 1711)

Activity/Function	Bldg(s)	Capacity (NSF)	Rqmt (NSF)	"Delta"
Senior Enlisted Academy (PME)	1269	5,040	1,710	3,330
Command Leadership School (PME)	440	5,250	3,450	1,800
NAPSCOL (Officer Accession)	440	26,880	5,165	21,715
OTC OIS/NSI/BOOST (Officer Accession)	440	29,437		
OTC BOOST (Officer Accession)	197	2,088	10,332	33,891
OTC OIS (Officer Accession)	291	2,448		
OTC NSI (Officer Accession)	1112	8,714		
OTC Chaplain Basic (PDE/SST)	114	1,536	1,575	-39
OTC Chaplain Mid-Grade & Pipeline (PDE/	114	3,948	undef	undef
OTC Fire Fighting School (SST)	1277	2,800	undef	undef
NAVJUSTSCOL (PDE)	360	17,172	20,250	-3,078
Callaghan Hall (vacant SWOS bldg)	370	unavail	unavail	unavail
SWOSCOLCOM (SST)		73,916	29,745	44,171
NAVWARCOL (PDE)		48,304	24,150	24,154



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Scenario Actions

- Realign Naval Postgraduate School Monterey, CA to relocate eight military unique graduate degree programs to Naval Station, Newport under the academic command and control of the Naval War College.
- Close Navy Supply Corps School, Athens GA and relocate to Naval Station Newport, RI.
- Realign Naval Station Groton, CT to relocate the Submarine School to Naval Station Newport, RI.
- Realign Naval Station Newport, RI to relocate Naval Warfare Development Command to Naval Station Norfolk, VA.
- Consolidate real estate assets to maximum extent possible.

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831 654-2511 Adm Duane

COL SMARSH COS

(8-B)

(10)

NPS at a Glance

The School

The Naval Postgraduate School is an academic institution whose emphasis is on study a programs relevant to the Navy's interests, as well as to the interests of other arms of the Defense. The programs are designed to accommodate the unique requirements of the n

The Campus

Located in Monterey, California, on the Pacific Ocean 120 miles south of San Francisco, Postgraduate School campus covers 627 acres of land. The site, which has been home 1947, houses state-of-the-art laboratories, numerous academic buildings, a great library housing and impressive recreational facilities.

The Students

Nearly 1,500 students attend the Naval Postgraduate School. The student body consists the five U.S. uniformed services, officers from approximately 30 other countries and a sr civilian employees. Selection of officers for fully funded graduate education is based upc professional performance as an officer, promotion potential and a strong academic back

The Faculty

The faculty, the majority of whom are civilians, are drawn from a broad diversity of educa and represent a prestigious collection of scholars. Faculty/student interaction is high. Ev taught directly by a faculty member--over 99% of whom have a Ph.D.

The Degrees

The Naval Postgraduate School offers classes leading to advanced degrees in a variety

MASTER OF ARTS DEGREE:
National Security Affairs

MASTER OF BUSINESS ADMINISTRATION DEGREE:
Defense-Focused (MBA), Executive (EMBA), Joint (JMBA)

MASTER OF SCIENCE DEGREE:
Aeronautical Engineering, Applied Mathematics, Applied Physics, Applied Science, Astr Engineering, Computer Science, Contract Management, Defense Analysis, Electrical En Engineering Acoustics, Engineering Science, Information Technology Management, Inte Resource Planning and Management, Leadership and Human Resource Development, I Materials Science and Engineering, Mechanical Engineering, Meteorology, Meteorology Oceanography, Modeling, Operations Research, Physical Oceanography, Physics, Prog Management, Software Engineering, Systems Engineering, Systems Engineering Mana Technology, Virtual Environments and Simulation.

ENGINEER DEGREE:
Aeronautical and Astronautical Engineer, Electrical Engineer, Mechanical Engineer.

DOCTOR OF PHILOSOPHY:
Aeronautical and Astronautical Engineer, Applied Mathematics, Applied Physics, Compu Electrical Engineering, Engineering Acoustics, Mechanical Engineering, Meteorology, O Research, Physical Oceanography, Physics, Systems Management, Software Engineeri

DOCTOR OF ENGINEERING:
Aeronautical and Astronautical Engineer, Engineering Acoustics, Mechanical Engineerin

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All information contained herein has been approved for release by the Public Affairs Offic
GILS #POD-TBD-001923 | Contact NPS Webmaster

Facts & Figures

The Naval Postgraduate School's impact upon the Central California coast by the numb

2,807 -Total number of Faculty, Students and Staff members (military and Civilian)

$161.3M -Total annual salaries (Faculty, Students and Staff)

$112.9M -Total annual spendable income

$34.5M -Total value of goods and services purchased annually in the community

$11M -Contracts for local construction and support services

$6M -Estimated local credit card purchases

$5-6M -Local contracts and purchases for grants/research projects

$3.18M -Value to hotels & restaurants from short courses & conferences

$1.6M -Amount of goods and services purchased for recreation programs

$14.88M -Value of 1,030 rental leases in the community

NPS Celebrates 50 Years in Monterey - Slideshow

This is an official U.S. Navy website.
All information contained herein has been approved for release by the Public Affairs Offic
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Carroll, Ray, CIV, WSO-BRAC

From: Howlett, Robert, CIV, WSO-E&T JCSG

Sent: Monday, July 25, 2005 12:53 PM

To: Carroll, Ray, CIV, WSO-BRAC

Cc: Briggs James Col AF/DPLT; Hilscher, Gregory, CDR, WSO-E&T JCSG; Lineer, Thomas, CTR, WSO-E&T JCSG; Osman, Cathy H., CAPT, JCS J7; Walker, Samuel, COL, WSO-E&T JCSG; Horn, Mark, CTR, WSO-E&T JCSG

Subject: Army FAO PCSs between NPS & DLI

Good afternoon Syd,

Attached message responds to one of the items mentioned during our AFIT/NPS/DLI meeting last week. An argument that the Army brought up (some time ago) was that relocating NPS or DLI might cause undue hardships on Army Foreign Area Officers (FAOs) by forcing them to make an "extra" PCS move, i.e., in/out of Monterey to another place instead of just staying in Monterey area for their graduate education and language training. The numbers (see below) indicate that NPS or DLI relocation would have minimal impact and that FAO PCSs shouldn't influence the Commission's decision.

V/r,

Bob
E&T JCSG CT

-----Original Message-----
From: Hilscher, Gregory, CDR, WSO-E&T JCSG
Sent: Monday, July 25, 2005 9:08 AM
To: Howlett, Robert, CIV, WSO-E&T JCSG
Cc: Horn, Mark, CTR, WSO-E&T JCSG; Briggs James Col AF/DPLT; Walker, Samuel, COL, WSO-E&T JCSG; Osman, Cathy H., CAPT, JCS J7; Lineer, Thomas, CTR, WSO-E&T JCSG
Subject: FW: E&T Tasker for DLI information (UNCLASSIFIED)
Importance: High

Bob,

Here's the Army response to one of Mr Carroll's questions from our 21 July meeting:

Question:
How many Foreign Area Officers (yearly) PCS from NPS to DLI or from DLI to NPS (and stay in the Monterey, CA area)?

Answer:
FY02- 5
FY03- 9
FY04- 5
FY05- 1

The number of personnel affected is small, resulting in minimal impact and should not be a factor in the scenarios discussed.

vr, Greg

Carroll, Ray, CIV, WSO-BRAC

From: Howlett, Robert, CIV, WSO-E&T JCSG
Sent: Thursday, July 21, 2005 1:25 PM
To: Carroll, Ray, CIV, WSO-BRAC
Cc: Walker, Samuel, COL, WSO-E&T JCSG; Osman, Cathy H., CAPT, JCS J7
Subject: FW: Question on Medical Care at the NPS

Syd,

Attached e-mail traffic between Col Walker and NPS's George Conner addresses the concern mentioned during your testimony about medical services in Monterey. This NPS response reinforces our discussion this morning on the availability of TRICARE providers for NPS and DLI families/students. Further details regarding specific coverages, various co-payments, et cetera, would be best answered by the regional TRICARE office.

V/r,

Bob

-----Original Message-----
From: Conner, George USA [mailto:GConner@nps.edu]
Sent: Wednesday, July 20, 2005 11:58 AM
To: Walker, Samuel, COL, WSO-E&T JCSG
Cc: Summerlin, Gene A CAPT (BRAC); Moore, Greg J. LtCol BRAC; Osman, Cathy H., CAPT, JCS J7; Jenkins, Karen, CTR, WSO-E&T JCSG; Alegre, Kenneth, CTR, WSO-E&T JCSG
Subject: RE: Question on Medical Care at the NPS

If more info is needed let me know. This is a non issue.

TRICARE contract administer in this region turned over from the outgoing contractor HealthNet Federal Services, to the incoming contractor, TriWest HealthCare Alliance, on 1 July 04. In January 04, TriWest began negotiating with doctors in Monterey County by offering to pay only 80% of CMAC. OB/GYN doctors on the Monterey Peninsula were very unhappy with their current rate of reimbursement and were expecting a higher rate under the new contractor. They immediately rejected the offer and began refusing new patients. This was quickly communicated to TriWest, who immediately countered with 100% CMAC. As a result, the majority of the OB/GYN providers on the Monterey Peninsula have re-contracted with TriWest and provide sufficient coverage for our military population. Even during this period, sufficient OB/GYN coverage was provided by the providers in the Salinas area.

From: Walker, Samuel, COL, WSO-E&T JCSG [mailto:Samuel.Walker@wso.whs.mil]
Sent: Wednesday, July 20, 2005 6:57 AM
To: Conner, George USA; Walker, Samuel, COL, WSO-E&T JCSG
Cc: Summerlin, Gene A CAPT (BRAC); Moore, Greg J. LtCol BRAC; Osman, Cathy H., CAPT, JCS J7; Jenkins, Karen, CTR, WSO-E&T JCSG; Alegre, Kenneth, CTR, WSO-E&T JCSG
Subject: Question on Medical Care at the NPS

George,

I guess you saw the outcome of yesterday's BRAC Commission hearing.....The E&T JCSG will start the process all over again, but I need to ask a basic question. During some of the data

gathering, etc. the issue of "lack of TRICARE providers" for the NPS/DLI students came up as a big issue, along with the lack of child care. The child care issue is easily resolved with additional MILCON during the COBRA runs.

In my previous position at the Air Staff, I had not heard of the TRICARE problem from the AF students.....so do the NPS and DLI families/students have serious problems getting medical care in Monterey? If so, how do you handle the issue? The BRAC Commission was informed yesterday of the problem, and it will need to be addressed during any possible consolidation at the NPS. Any assistance is appreciated, and the sooner the better. Thanks

SAM

COL SAMUEL J. WALKER, USAF
E&T JCSG (PDE Subgroup)
samuel.walker@wso.whs.mil
703-696-6435, ext. 261

DCN: 11935

TALKING PAPER

ON

INTERNATIONAL OFFICERS ATTENDING NPS AND AFIT (E&T-0003R)

- International Officers attend several advanced academic degree (AAD) programs at both institutions, with a significantly greater percentage attending at the Naval Postgraduate School.
  - **AFIT** (AY05) = **18 students** from eight different countries (See enclosed spreadsheet for current and prior year enrollments)
    - International students are focused in eight specific academic specialties
    - Prior Years: FY04 = 12 students; FY03 = 7 students; FY02 = 7 students; FY01 = 16 students
  - **NPS** (AY05) = **303 students** (Average Load Per Quarter) from 71 countries (See enclosed spreadsheet for current and prior year enrollments)
    - International students attend AAD programs across all four NPS Graduate Schools, with several of the AAD programs having limitations on international officers due to classified courses/materials, etc.
      - School of International Graduate Studies (17%)
      - Graduate School of Business and Public Policy (18%);
      - Graduate School of Operational and Information Sciences (41%);
      - Graduate School of Engineering and Applied Science (24%)
    - Prior Year: AY04 = 286 students; AY03 = 335 students (Average Load Per Quarter)
- Both graduate institutions receive primary funding for the International Officers through the U.S. State Department's International Military Education and Training (IMET) program. International Officer attendance has grown into a "money maker" proposition for both institutions.
  - Per State Department, "IMET funding assists countries by providing training programs that focus on professionalizing their military, developing future leaders, inculcating a better capability in resource management, and instilling a greater respect for human rights among service members."
    - **AFIT estimates approx. $783-800K for FY05**
    - **NPS received $7.2M in IMET funds in FY04; NPS estimates $7.1M in IMET funds for FY05 (currently at $6.9M through this quarter of the FY)**
- International Officers also attend "other" military training programs across the Services and DoD through the IMET & Expanded IMET programs. These "training" courses are

funded by the U.S. State Department and generally focus on defense management, civil-military relations, counternarcotics, military justice and human rights.

- Lastly, International Officers attend each of the three levels of JPME/PME programs conducted by the DoD. At the intermediate and senior levels, international officers could pursue the Master's of Military Art and Sciences (or a slight AAD derivative) advanced academic degree.

- **POTENTIAL ISSUE: If the graduate programs at the NPS and AFIT are "privatized", international officers would not attend a DoD-sponsored graduate-level degree-granting institution (except for PME) paid by the U.S. State Department. The PDE Subgroup is unaware of policy that would prohibit international officers from attending civilian universities across the country, but IMET/FMS funding (under it's current structure) could not be used.**

Col Walker/PDE Subgroup/703-696-6435, ext. 261/17 March 2005

DCN: 11935

Number of International Students Onboard NPS Quarterly By Country Across Academic Year Ranked From Highest Load to Lowest

Country	AY-04				AY-05		Average Load Per Quarter	MIN	MAX
	1	2	3	4	1	2			
Turkey	65	65	55	54	52	53	57.3	52	65
Greece	61	58	47	47	43	43	49.8	43	61
Singapore	46	44	37	33	37	38	39.2	33	46
Taiwan	13	13	14	15	18	15	14.7	13	18
Germany	11	15	12	13	11	13	12.5	11	15
Poland	9	10	10	9	9	13	10.0	9	13
Mexico	8	8	7	8	9	8	8.0	7	9
Pakistan	5	8	8	9	9	6	7.5	5	9
Philippines	11	7	7	7	9	4	7.5	4	11
Romania	6	8	7	6	6	6	6.5	6	8
Indonesia	5	4	4	5	5	8	5.2	4	8
Tunisia	6	8	5	5	4	3	5.2	3	8
Ukraine	4	7	5	4	4	5	4.8	4	7
Bahrain	5	4	5	5	3	3	4.2	3	5
Thailand	5	5	5	3	4	3	4.2	3	5
Chile	6	6	6	2	2	2	4.0	2	6
Canada	5	4	4	2	4	4	3.8	2	5
Australia	5	4	3	2	3	4	3.5	2	5
Norway	4	3	2	4	4	3	3.3	2	4
Malaysia	9	4	3	1	1	1	3.2	1	9
Portugal	3	3	3	3	3	3	3.0	3	3
Brazil	4	3	3	3	2	2	2.8	2	4
India	2	3	3	3	3	3	2.8	2	3
Korea	3	2	2	2	2	4	2.5	2	4
Czech Republic	1	3	2	2	2	4	2.3	1	4
Hungary	1	3	3	2	2	3	2.3	1	3
Albania	4	4	3	1	1	0	2.2	0	4
Bulgaria	4	4	2	1	1	1	2.2	1	4
Jordan	1	2	2	2	3	3	2.2	1	3
Venezuela	4	4	4	0	1	0	2.2	0	4
Japan	1	2	2	2	2	3	2.0	1	3
Georgia	2	3	3	1	1	1	1.8	1	3
Morocco	1	2	2	2	2	2	1.8	1	2
Botswana	1	2	1	2	2	2	1.7	1	2
South Africa	2	2	2	2	2	0	1.7	0	2
Lithuania	1	2	2	1	1	2	1.5	1	2
Moldova	1	2	2	1	1	2	1.5	1	2
Saudi Arabia	1	1	1	2	2	2	1.5	1	2
Sweden	1	1	1	2	2	2	1.5	1	2
France	1	1	1	1	2	2	1.3	1	2

DCN: 11935

Number of International Students Onboard NPS Quarterly By Country Across Academic Year Ranked From Highest Load to Lowest

Country	AY-04				AY-05		Average Load Per Quarter	MIN	MAX
	1	2	3	4	1	2			
Jamaica	1	2	2	1	1	1	1.3	1	2
Peru	1	1	1	2	2	1	1.3	1	2
Spain	2	2	1	1	1	1	1.3	1	2
Israel	1	2	1	1	1	1	1.2	1	2
Latvia	2	1	1	1	1	1	1.2	1	2
Mongolia	1	2	1	1	1	1	1.2	1	2
Argentina	1	1	1	1	1	1	1.0	1	1
El Salvador	0	1	1	1	1	2	1.0	0	2
Rwanda	1	1	1	1	1	1	1.0	1	1
Cameroon	0	1	1	1	1	1	0.8	0	1
Dominican Republic	0	1	1	1	1	1	0.8	0	1
Ecuador	0	1	1	1	1	1	0.8	0	1
Kazakhstan	1	1	1	1	1	0	0.8	0	1
Papua-New Guinea	0	1	1	1	1	1	0.8	0	1
Uzbekistan	0	0	1	0	1	2	0.7	0	2
Paraguay	0	0	0	1	1	1	0.5	0	1
Slovakia	1	1	1	0	0	0	0.5	0	1
Switzerland	1	1	1	0	0	0	0.5	0	1
United Kingdom	0	0	0	1	1	1	0.5	0	1
Armenia	0	0	0	0	1	1	0.3	0	1
Trinidad and Tobago	0	0	0	0	1	1	0.3	0	1
Uruguay	0	0	0	0	1	1	0.3	0	1
Bosnia	0	0	0	0	0	1	0.2	0	1
Colombia	1	0	0	0	0	0	0.2	0	1
Estonia	0	0	0	0	0	1	0.2	0	1
Ethiopia	1	0	0	0	0	0	0.2	0	1
Guyana	0	0	0	0	0	1	0.2	0	1
Italy	0	0	1	0	0	0	0.2	0	1
Lebanon	0	0	0	0	0	1	0.2	0	1
Senegal	0	0	0	0	0	1	0.2	0	1
Tanzania	0	0	0	0	0	1	0.2	0	1
Total	343	354	309	286	295	303	315.0	286	354

DCN: 11935

11:42 AM; 3/14/2005

The Frequency and Percentage of International Officers In-Residence Across Ten Academic Quarters Partitoned by Graduate School at the Naval Postgraduate School

	Number of International Officers in Each NPS School										Average
	AY03				AY04				AY05		Number
Graduate School	1	2	3	4	1	2	3	4	1	2	AOB
School of International Graduate Studies	52	67	55	50	66	63	54	45	52	50	55.4
Graduate School of Business and Public Policy	40	62	56	59	88	82	57	40	39	50	57.3
Graduate School of Operational and Information Sciences	122	135	118	135	137	146	122	133	125	121	129.4
Graduate School of Engineering and Applied Science	72	81	87	91	58	63	76	68	79	82	75.7
Total	286	345	316	335	349	354	309	286	295	303	317.8

	Percent of International Officers in Each NPS School										Average
	AY03				AY04				AY05		Percent
Graduate School	1	2	3	4	1	2	3	4	1	2	AOB
School of International Graduate Studies	18.2	19.4	17.4	14.9	18.9	17.8	17.5	15.7	17.6	16.5	17.4
Graduate School of Business and Public Policy	14.0	18.0	17.7	17.6	25.2	23.2	18.4	14.0	13.2	16.5	18.0
Graduate School of Operational and Information Sciences	42.7	39.1	37.3	40.3	39.3	41.2	39.5	46.5	42.4	39.9	40.6
Graduate School of Engineering and Applied Science	25.2	23.5	27.5	27.2	16.6	17.8	24.6	23.8	26.8	27.1	23.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7

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DCN: 11935

Carroll, Ray, CIV, WSO-BRAC

From: Fred Meurer [MEURER@ci.monterey.ca.us]
Sent: Tuesday, July 26, 2005 3:51 PM
To: ray.carroll@wso.whs.mil
Cc: Fred Cohn; rochelle.dornatt@mail.house.gov
Subject: Fwd: Monterey network

Attachments: Monterey network

Monterey network

Syd,
I'm forwarding to you an email that I received from TriWest, the new Tri-Care contractor for our region. During the transistion to this contractor, there was a short period of time when we had an insufficient number of OB-GYN and pediatric physicians participating in the network.

We instituted a major recruiting effort through the City, the medical associations, and our regional hospitals. The Monterey Hospital established $155K forgivable loans to new practioners in our area. A condition of the loan was participation in the Tri-Care program.

I will be receiving the "certified" letter from TriWest that will be provided to you during the site visit in Monterey. I hope this information is sufficient for your current needs.

Fred

Carroll, Ray, CIV, WSO-BRAC

From: Maguire, Frank [MMaguire@TriWest.com]
Sent: Tuesday, July 26, 2005 1:04 PM
To: meurer@ci.monterey.ca.us
Subject: Monterey network
Attachments: monterey directory 072605.pdf; Monterey NAR 7-20-05.pdf

Mr Meurer,
As usual we appreciate the incredible support TriWest receives from both the City of Monterey and also your provider community as we assure ready access to high quality medical care for the extended military family (active duty, active duty family members, retirees, retiree family members, etc.) through the TRICARE program in Monterey. I have attached two documents for you. The first attachment is a certified listing of all providers currently contracted in the extended Monterey Prime Service Area (PSA) pulled directly from our network contracting database. Please note that pages 25-36 list those providers located within Monterey but the larger list includes all the providers in your surrounding communities who have also contracted with TRICARE. The second attachment is a tool we use with the government to measure network adequacy. Please note that we currently have no network shortfalls in Monterey.

Mac

<<monterey directory 072605.pdf>> <<Monterey NAR 7-20-05.pdf>>

Frank E. Maguire, MD
Senior Vice President
Provider and Healthcare Services
TriWest Healthcare Alliance
602-564-2048 or 2424

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DCN: 11935

Carroll, Ray, CIV, WSO-BRAC

From: Fred Meurer [MEURER@ci.monterey.ca.us]
Sent: Tuesday, July 26, 2005 12:15 PM
To: ray.carroll@wso.whs.mil
Cc: Fred Cohn
Subject: BRAC Costing Data

Attachments: Cost Estimating Methodology.pdf

Cost Estimating Methodology.pd...

Syd,

Attached is the square footage by use category by installation and our estimate of the cost of replicating in Dayton, Ohio using Means estimating guide. I am hand-carrying additional data regarding buildable acreage at NPS. A Point paper and supporting documents addressing unique aspects of the NPS student body, curriculum and costs. I will also bring the DLI Command Briefs for the installation and mission. The final document is a copy of the Army Audit Agency audit of the City's doing base ops for the Army installation.

Fred Meurer

DCN: 11935

Cost Estimating Methodology
DLI/NPS Mission Facilities Built
In Dayton, Ohio

The estimated cost to construct facilities in Dayton Ohio needed to continue the mission of the Defense Language Institute and Naval Post Graduate School is $1,098,946,900 as a low and $1,824,417,800 as a high with the median probable cost being $1,385,273,700.

Total square footages of existing facilities at the Defense Language Institute, Naval Post Graduate School, Fort Ord Family Housing, and the Navy's La Mesa Housing Area were determined from available information.

The construction estimate for this includes planning, design, site development, infrastructure improvements, building construction costs, construction support, and contingencies. Not included in the estimate is any funding required for land acquisition and non-mission essential facilities. These were assumed to already be available.

Unit prices were drawn from RS Means Construction Data for the Dayton, Ohio area. An appropriate unit price was selected for each type of building to be constructed based on building function.

Costs were escalated to the midpoint of construction based on the ENR Building Cost Index. An inflation factor of 7.5% per year was used based on the average rate of the ENR Building Cost Index for Cincinnati, Ohio over the past 36 months. The midpoint of construction was set at October 2008 to comply with the mandatory six-year relocation time frame.

Attachments:
Category of Use Summary Estimate Sheets
Building Inventory by Square Footage

I CERTIFY THAT this information is true and correct.

Dated: 25 July 05

Fred Meurer, City Manager

ADELINE OBESO FLORES
Commission # 1414334
Notary Public - California
Monterey County
My Comm. Expires Apr 28, 2007

Adeline Obeso Flores, Notary

DCN: 11935

Construction Cost Estimate
7/25/2005

BUILDING CONSTRUCTION COSTS				
PRESIDIO OF MONTEREY		**LOW**	**MEDIAN**	**HIGH**
General Instruction Building	**601,305**	$ 99,816,700	$ 116,653,200	$ 144,313,200
Administration General Purpose	**139,845**	$ 10,348,600	$ 13,425,200	$ 17,340,800
Enlisted Barracks	**690,953**	$ 52,512,500	$ 77,386,800	$ 93,969,700
Billeting	**48,345**	$ 2,949,100	$ 4,109,400	$ 5,366,300
Dinning Facilities	**18,165**	$ 1,980,000	$ 2,488,700	$ 3,178,900
Morale & Welfare & Medical Support Buildings	**140,664**	$ 11,667,900	$ 15,386,000	$ 19,487,900
Technical & Educational Support Buildings	**128,050**	$ 12,933,100	$ 16,902,600	$ 22,536,800
Maintenance & General Support Buildings	**22,586**	$ 858,300	$ 1,151,900	$ 1,626,200
Housing	**2,624,000**	$ 212,544,000	$ 275,520,000	$ 388,352,000
Grand Total GSF	**4,467,247**			
Construction Cost (January 2005)		$ 405,610,200	$ 523,023,800	$ 696,171,800
15.00% Site Improvement		$ 60,841,600	$ 78,453,600	$ 104,425,800
15.00% Street and Utility Improvement		$ 60,841,600	$ 78,453,600	$ 104,425,800
7.50% Adjusted Costs (October 2008) @ +7.5/year		**$ 527,293,400**	**$ 679,931,000**	**$ 905,023,400**
6.00% Site Planning (Planning + Surveying)		$ 31,637,700	$ 40,795,900	$ 54,301,500
6.00% Design (Engineering and Architecture)		$ 31,637,700	$ 40,795,900	$ 54,301,500
5.00% Construction Support + Management		$ 26,364,700	$ 33,996,600	$ 45,251,200
10.00% Construction Contigency		$ 52,729,400	$ 67,993,100	$ 90,502,400
***CONSTRUCTION COST (ARMY)**		**$ 669,662,900**	**$ 863,512,500**	**$ 1,149,380,000**
NAVAL POSTGRADUATE SCHOOL				
Housing	**833,439**	$ 68,803,200	$ 89,419,000	$ 125,665,700
Support Buildings	**225,193**	$ 22,744,500	$ 29,725,500	$ 39,634,000
Teaching and Research	**1,014,859**	$ 168,466,600	$ 196,882,700	$ 243,566,200
Grand Total GSF	**2,073,491**			
Construction Cost (January 2005)		$ 260,014,300	$ 316,027,200	$ 408,865,900
15.00% Site Improvement		$ 39,002,200	$ 47,404,100	$ 61,329,900
15.00% Street and Utility Improvement		$ 39,002,200	$ 47,404,100	$ 61,329,900
7.50% Adjusted Costs (October 2008) @ +7.5/year		**$ 338,018,700**	**$ 410,835,400**	**$ 531,525,700**
6.00% Site Planning (Planning + Surveying)		$ 20,281,200	$ 24,650,200	$ 31,891,600
6.00% Design (Engineering and Architecture)		$ 20,281,200	$ 24,650,200	$ 31,891,600
5.00% Construction Support + Management		$ 16,901,000	$ 20,541,800	$ 26,576,300
10.00% Construction Contigency		$ 33,801,900	$ 41,083,600	$ 53,152,600
***CONSTRUCTION COST (NAVY)**		**$ 429,284,000**	**$ 521,761,200**	**$ 675,037,800**
***TOTAL CONSTRUCTION COST**		**$ 1,098,946,900**	**$ 1,385,273,700**	**$ 1,824,417,800**

*Notes:
Includes design, site development, and construction costs only. Costs for land acquisition is not included.
Unit prices were derived from the RSMeans Construction database for Dayton, Ohio.
Adjusted Cost: Annual increase of 7.5% based on the ENR Cost Index (Cincinatti) over the last 36-month period.

DCN: 11935

Construction Cost Estimate
7/25/2005

Presidio of Monterey

			BUILDING CONSTRUCTION COSTS		
GENERAL INSTRUCTION BLDG.			LOW	MEDIAN	HIGH
204	Gen Instr Bldg	4,780			
205	Gen Instr Bldg	4,780			
206	Gen Instr Bldg	4,780			
207	Gen Instr Bldg	4,780			
209	Gen Instr Bldg	9,499			
210	Gen Instr Bldg	6,825			
211	Gen Instr Bldg	9,434			
212	Gen Instr Bldg/AAFES, Snack Bar	11,704			
213	Gen Instr Bldg	9,472			
214	Gen Instr Bldg	6,161			
215	Gen Instr Bldg	9,020			
216	Gen Instr Bldg	8,326			
218	Gen Instr Bldg	6,131			
221	Gen Instr Bldg	8,754			
267	Gen Instr Bldg/Smart Class/Eng Maint.	12,406			
326	Gen Instr Bldg	18,403			
450	Gen Instr Bldg	10,235			
451	Gen Instr Bldg	7,600			
452	Gen Instr Bldg	7,424			
453	Gen Instr Bldg	10,334			
610	Gen Instr Bldg	74,658			
611	Gen Instr Bldg	30,600			
619	Gen Instr Bldg	22,918			
620	Gen Instr Bldg	39,737			
621	Gen Instr Bldg	31,990			
623	Gen Instr Bldg	20,412			
624	Gen Instr Bldg	36,897			
631	Gen Instr Bldg	5,682			
632	Gen Instr Bldg	5,533			
634	Gen Instr Bldg	7,185			
635	Gen Instr Bldg	5,682			
636	Gen Instr Bldg	5,682			
637	Gen Instr Bldg	5,683			
848	Gen Instr Bldg	77,977			
LA 1	Larkins School	25944			
MV 2	Monte Vista School	33877			
TOTAL GSF		**601,305**	$ 99,816,700	$ 116,653,200	$ 144,313,200
ADMIN GENERAL PURPOSE					
220	Admin General Purpose	3,714			
228	Admin General Purpose/Outdoor Recreation Ctr	20,501			
254	Admin General Purpose	911			
257	Admin General Purpose	2,262			
272	Admin General Purpose/Gen Instr Bldg	5,658			
274	Admin General Purpose	6,650			
275	Admin General Purpose/Court Room/Law Library	8,943			
276	Admin General Purpose/Substance Abuse Ctr	9,726			
278	Admin General Purpose	571			
339	Admin General Purpose	5,654			
340	Admin General Purpose	5,654			
341	Admin General Purpose	2,485			
614	Admin Gen Purpose/HQ Bldg/Info Sys Process Ctr	27,941			
616	Admin General Purpose/Bn HQ Bldg	20,492			
633	Admin General Purpose	3,287			
830	Admin General Purpose/Co HQ Bldg	7,698			
834	Admin General Purpose/Co HQ Bldg	7,698			
TOTAL GSF		**139,845**	$ 10,348,600	$ 13,425,200	$ 17,340,800
ENLISTED BARRACKS					
622	Enl Brk W/O Din	75,891			
627	Enl Brk W/O Din	75,486			
629	Enl Brk W/O Din	83,698			
630	Enl Brk W/O Din	82,593			
645	Enl Brk W/O Din	23,746			
646	Enl Brk W/O Din	23,746			
647	Enl Brk W/O Din	23,533			
648	Enl Brk W/O Din	23,676			
649	Enl Brk W/O Din	23,533			
650	Enl Brk W/O Din	23,676			
651	Enl Brk W/O Din	23,533			
652	Enl Brk W/O Din	23,533			
829	Enl Brk W/O Dinn	23,746			
831	Enl Brk W/O Din	23,032			
832	Enl Brk W/O Din	23,032			
833	Enl Brk W/O Din	23,032			
835	Enl Brk W/O Din	23,032			
836	Enl Brk W/O Din	22,271			
840	Enl Brk W/O Din/Storage, Gen Purpose	23,132			
841	Enl Brk W/O Din	23,032			
TOTAL GSF		**690,953**	$ 52,512,500	$ 77,386,800	$ 93,969,700

DCN: 11935

Construction Cost Estimate
7/25/2005

BILLETING					
315	Billeting Break Rm	200			
354 A	Billeting	1,230			
354 B	Billeting	1,230			
356 A	Billeting	1,011			
356 B	Billeting	1,011			
358 A	Biletting	1,126			
358 B	Billeting	1,126			
359	Billeting	1,563			
364	Billeting	1,312			
366	Billeting 3 - story structure	22,024			
367	Billeting 2 - story structure	16,512			
TOTAL GSF		**48,345**	$ 2,949,100	$ 4,109,400	$ 5,366,300
Dinning Facilities					
627	Attached to 627 Enl Brk	4,800			
627A	Kiosk	1800			
838	Enl Pers Din	11,565			
TOTAL GSF		**18,165**	$ 1,980,000	$ 2,488,700	$ 3,178,900
Morale & Welfare & Medical Support Buildings					
208	Theater W/O Dress Rm	4,460	$ 343,500	$ 441,600	$ 655,700
324	Religious Ed Fac	8,340	$ 600,500	$ 784,000	$ 992,500
325	Chapel	3,341	$ 280,700	$ 354,200	$ 461,100
422	Health Clinic/Dental Clinic	25,848	$ 2,429,800	$ 3,101,800	$ 3,954,800
422	Medical Trailer	1,800	$ 169,200	$ 216,000	$ 275,400
454	Rehabilitation Clinic	3,041	$ 285,900	$ 365,000	$ 465,300
518	Aduitorium, Gen Purpose/Admin Gen Purpose/Storag	12,644	$ 1,062,100	$ 1,454,100	$ 2,048,400
842	Physical Fitness Ctr	72,759	$ 5,602,500	$ 7,421,500	$ 9,167,700
843	Recreation Ctr	8,431	$ 893,700	$ 1,247,800	$ 1,467,000
Total GSF		**140,664**	$ 11,667,900	$ 15,386,000	$ 19,487,900
Technical & Educational Support Buildings					
233	Print Plant	9,348			
235	Supply General Whse	34,008			
261	Classroom Support Shop	3,730			
263	Info Sys Process Ctr	9,012			
273	Army Continuing Ed Ctr/Electronic Maint	9,258			
277	DOIM Main Office	9,062			
343	Telephone Exchange Bldg	2,279			
344	DOIM	6578			
418	Tele Video Ctr	8,143			
420	Tele Video Center	5,500			
617	Technical Library	14,577			
618	Photo Lab/ADP Instr Bldg/Gen Instr Bldg	16,555			
Total GSF		**128,050**	$ 12,933,100	$ 16,902,600	$ 22,536,800
Maintenance & General Support Buildings					
105	Storage, Eng Lab	4,906			
219	POM Police Station	6,131			
268	Engr Hsg Maint Shop	4,745			
269	Electrical Shop	3,308			
271	Engr Hsg Maint Key Shop	1,113			
315	Storage General Purpose	225			
609	Guard House at Franklin Gate	58			
	Guard Trailer Private Bolio	300			
	Guard Trailer Taylor St	300			
701	Multi Purpose Athletic Field				
702	Recreation Shelter	1500			
Total GSF		**22,586**	$ 858,300	$ 1,151,900	$ 1,626,200
Housing					
	Base Housing (Fort Ord)	2560000	$ 207,360,000	$ 268,800,000	$ 378,880,000
	Base Housing (DLI)	64000	$ 5,184,000	$ 6,720,000	$ 9,472,000
Total GSF		**2,624,000**	$ 212,544,000	$ 275,520,000	$ 388,352,000
Grand Total GSF		**4,467,247**			
			LOW	**MEDIAN**	**HIGH**
Construction Cost (January 2005)			$ 405,610,200	$ 523,023,800	$ 696,171,800
15.00%	Site Improvement		$ 60,841,600	$ 78,453,600	$ 104,425,800
15.00%	Street and Utility Improvement		$ 60,841,600	$ 78,453,600	$ 104,425,800
7.50%	**Adjusted Costs (October 2008) @ +7.5/year**		**$ 527,293,400**	**$ 679,931,000**	**$ 905,023,400**
6.00%	Site Planning (Planning + Surveying)		$ 31,637,700	$ 40,795,900	$ 54,301,500
6.00%	Design (Engineering and Architecture)		$ 31,637,700	$ 40,795,900	$ 54,301,500
5.00%	Construction Support + Management		$ 26,364,700	$ 33,996,600	$ 45,251,200
10.00%	Construction Contigency		$ 52,729,400	$ 67,993,100	$ 90,502,400
***CONSTRUCTION COST (ARMY)**			**$ 669,662,900**	**$ 863,512,500**	**$ 1,149,380,000**

DCN: 11935

Construction Cost Estimate
7/25/2005

NAVAL POSTGRADUATE SCHOOL					
Housing					
	Base Housing (NPS)	33439	$ 2,708,600	$ 3,511,100	$ 4,949,000
	Base Housing (La Mesa)	800000	$ 64,800,000	$ 84,000,000	$ 118,400,000
	Barracks (NPS)	17034	$ 1,294,600	$ 1,907,900	$ 2,316,700
Total GSF		**833,439**	$ 68,803,200	$ 89,419,000	$ 125,665,700
Support (NPS)					
171-77		1,764			
219-10		13,200			
219-30		1,600			
441-10		16,302			
540-10		2,852			
610-10		23,382			
721-11		17,034			
724-12		52,035			
730-83		10,530			
740-09		206			
740-43		21,620			
740-60		31,211			
740-89		5,529			
Common Spaces		27,928			
Total GSF		**225,193**	$ 22,744,500	$ 29,725,500	$ 39,634,000
Teaching and Research (NPS)					
171-10		345,758			
171-20		152,214			
171-25		12,292			
171-77		7,072			
310-23		35,594			
310-37		10,080			
610-10		37,655			
610-20		12,009			
610-77		101			
Common Spaces		402084			
Total GSF		**1,014,859**	$ 168,466,600	$ 196,882,700	$ 243,566,200
Grand Total GSF		**2,073,491**			
Construction Cost (January 2005)			$ 260,014,300	$ 316,027,200	$ 408,865,900
15.00%	Site Improvement		$ 39,002,200	$ 47,404,100	$ 61,329,900
15.00%	Street and Utility Improvement		$ 39,002,200	$ 47,404,100	$ 61,329,900
7.50%	**Adjusted Costs (October 2008) @ +7.5/year**		**$ 338,018,700**	**$ 410,835,400**	**$ 531,525,700**
6.00%	Site Planning (Planning + Surveying)		$ 20,281,200	$ 24,650,200	$ 31,891,600
6.00%	Design (Engineering and Architecture)		$ 20,281,200	$ 24,650,200	$ 31,891,600
5.00%	Construction Support + Management		$ 16,901,000	$ 20,541,800	$ 26,576,300
10.00%	Construction Contigency		$ 33,801,900	$ 41,083,600	$ 53,152,600
***CONSTRUCTION COST (NAVY)**			**$ 429,284,000**	**$ 521,761,200**	**$ 675,037,800**
***TOTAL CONSTRUCTION COST**			**$ 1,098,946,900**	**$ 1,385,273,700**	**$ 1,824,417,800**

*Notes:
Includes design, site development, and construction costs only. Costs for land acquisition is not included.
Unit prices were derived from the RSMeans Construction database for Dayton, Ohio.
Adjusted Cost: Annual increase of 7.5% based on the ENR Cost Index (Cincinatti) over the last 36-month period.

DCN: 11935

COBRA REALIGNMENT SUMMARY REPORT (COBRA v6.10) - Page 1/2
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Starting Year : 2006
Final Year : 2008
Payback Year : 2009 (1 Year)

NPV in 2025($K): -556,571
1-Time Cost($K): 95,695

Net Costs in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	1,930	21,449	0	0	0	0	23,380	0
Person	0	0	-9,375	-21,006	-21,006	-21,006	-72,393	-21,006
Overhd	-1,642	-2,558	-22,974	-26,511	-26,511	-26,511	-106,707	-27,708
Moving	1,000	1,000	51,097	0	0	0	53,097	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	801	801	801	801	3,205	801
TOTAL	1,288	19,891	19,550	-46,716	-46,716	-46,716	-99,418	-47,913

	2006	2007	2008	2009	2010	2011	Total
POSITIONS ELIMINATED							
Off	0	0	0	0	0	0	0
Enl	0	0	0	0	0	0	0
Civ	0	0	161	0	0	0	161
TOT	0	0	161	0	0	0	161
POSITIONS REALIGNED							
Off	0	0	137	0	0	0	137
Enl	0	0	164	0	0	0	164
Stu	0	0	1,931	0	0	0	1,931
Civ	0	0	914	0	0	0	914
TOT	0	0	3,146	0	0	0	3,146

Summary:

This scenario closes Naval Post-Graduate School at Monteray, CA, and consolidates it with the Post-Graduate education at AFIT, Wright-Patterson AFB, OH.

DCN: 11935

COBRA REALIGNMENT SUMMARY REPORT (COBRA v6.10) - Page 2/2
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Costs in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	1,930	21,449	0	0	0	0	23,380	0
Person	0	0	7,681	2,044	2,044	2,044	13,814	2,044
Overhd	5,262	4,346	20,645	17,108	17,108	17,108	81,577	17,108
Moving	1,000	1,000	51,933	0	0	0	53,933	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	801	801	801	801	3,205	801
TOTAL	8,192	26,795	81,061	19,954	19,954	19,954	175,909	19,954

Savings in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	17,055	23,051	23,051	23,051	86,207	23,051
Overhd	6,904	6,904	43,619	43,619	43,619	43,619	188,284	44,816
Moving	0	0	836	0	0	0	836	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	6,904	6,904	61,510	66,670	66,670	66,670	275,327	67,867

DCN: 11935

TOTAL COBRA ONE-TIME COST REPORT (COBRA v6.10) - Page 1/3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

(All values in 2005 Constant Dollars)

Category	Cost	Sub-Total
Construction		
Military Construction	23,380,061	
Total - Construction		23,380,061
Personnel		
Civilian RIF	4,178,660	
Civilian Early Retirement	1,168,227	
Eliminated Military PCS	0	
Unemployment	289,315	
Total - Personnel		5,636,202
Overhead		
Program Management Cost	12,167,585	
Support Contract Termination	0	
Mothball / Shutdown	577,800	
Total - Overhead		12,745,385
Moving		
Civilian Moving	45,613,835	
Civilian PPP	1,135,872	
Military Moving	2,829,979	
Freight	1,758,966	
Information Technologies	2,594,800	
One-Time Moving Costs	0	
Total - Moving		53,933,453
Other		
HAP / RSE	0	
Environmental Mitigation Costs	0	
Mission Contract Startup and Termination	0	
One-Time Unique Costs	0	
Total - Other		0
Total One-Time Costs		95,695,102
One-Time Savings		
Military Construction Cost Avoidances	0	
Military Moving	835,917	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	
Total One-Time Savings		835,917
Total Net One-Time Costs		94,859,185

DCN: 11935

COBRA ONE-TIME COST REPORT (COBRA v6.10) - Page 2/3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: NAVPGSCOL MONTEREY, CA (N62271)
(All values in 2005 Constant Dollars)

Category	Cost	Sub-Total
Construction		
Military Construction	0	
Total - Construction		0
Personnel		
Civilian RIF	4,178,660	
Civilian Early Retirement	1,168,227	
Eliminated Military PCS	0	
Unemployment	289,315	
Total - Personnel		5,636,202
Overhead		
Program Management Cost	12,167,585	
Support Contract Termination	0	
Mothball / Shutdown	577,800	
Total - Overhead		12,745,385
Moving		
Civilian Moving	45,613,835	
Civilian PPP	1,135,872	
Military Moving	2,829,979	
Freight	1,758,966	
Information Technologies	594,800	
One-Time Moving Costs	0	
Total - Moving		51,933,453
Other		
HAP / RSE	0	
Environmental Mitigation Costs	0	
Mission Contract Startup and Termination	0	
One-Time Unique Costs	0	
Total - Other		0
Total One-Time Costs		70,315,040
One-Time Savings		
Military Construction Cost Avoidances	0	
Military Moving	835,917	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	
Total One-Time Savings		835,917
Total Net One-Time Costs		69,479,123

DCN: 11935

COBRA ONE-TIME COST REPORT (COBRA v6.10) - Page 3/3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: Wright-Patterson AFB, OH (ZHTV)
(All values in 2005 Constant Dollars)

Category	Cost	Sub-Total
Construction		
Military Construction	23,380,061	
Total - Construction		23,380,061
Personnel		
Civilian RIF	0	
Civilian Early Retirement	0	
Eliminated Military PCS	0	
Unemployment	0	
Total - Personnel		0
Overhead		
Program Management Cost	0	
Support Contract Termination	0	
Mothball / Shutdown	0	
Total - Overhead		0
Moving		
Civilian Moving	0	
Civilian PPP	0	
Military Moving	0	
Freight	0	
Information Technologies	2,000,000	
One-Time Moving Costs	0	
Total - Moving		2,000,000
Other		
HAP / RSE	0	
Environmental Mitigation Costs	0	
Mission Contract Startup and Termination	0	
One-Time Unique Costs	0	
Total - Other		0
Total One-Time Costs		25,380,061
One-Time Savings		
Military Construction Cost Avoidances	0	
Military Moving	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		25,380,061

DCN: 11935

TOTAL COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 1/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

ONE-TIME COSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	1,930	21,449	0	0	0	0	23,380
O&M							
CIV SALARY							
Civ RIF	0	0	4,179	0	0	0	4,179
Civ Retire	0	0	1,168	0	0	0	1,168
CIV MOVING							
Per Diem	0	0	2,947	0	0	0	2,947
POV Miles	0	0	370	0	0	0	370
Home Purch	0	0	22,068	0	0	0	22,068
HHG	0	0	8,498	0	0	0	8,498
Misc	0	0	742	0	0	0	742
House Hunt	0	0	2,869	0	0	0	2,869
PPP	0	0	1,136	0	0	0	1,136
RITA	0	0	8,119	0	0	0	8,119
FREIGHT							
Packing	0	0	185	0	0	0	185
Freight	0	0	1,573	0	0	0	1,573
Vehicles	0	0	0	0	0	0	0
Unemployment	0	0	289	0	0	0	289
OTHER							
Info Tech	1,000	1,000	595	0	0	0	2,595
Prog Manage	5,262	3,946	2,960	0	0	0	12,167
Supt Contrac	0	0	0	0	0	0	0
Mothball	0	0	578	0	0	0	578
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	229	0	0	0	229
POV Miles	0	0	150	0	0	0	150
HHG	0	0	2,149	0	0	0	2,149
Misc	0	0	301	0	0	0	301
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
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	8,192	26,396	61,107	0	0	0	95,695

DCN: 11935

TOTAL COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 2/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

RECURRINGCOSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
O&M								
Sustainment	0	222	222	222	222	222	1,111	222
Recap	0	177	177	177	177	177	886	177
BOS	0	0	16,709	16,709	16,709	16,709	66,834	16,709
Civ Salary	0	0	0	0	0	0	0	0
TRICARE	0	0	801	801	801	801	3,205	801
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	2,044	2,044	2,044	2,044	8,178	2,044
OTHER								
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	399	19,954	19,954	19,954	19,954	80,214	19,954
TOTAL COST	8,192	26,795	81,061	19,954	19,954	19,954	175,909	19,954

ONE-TIME SAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	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	836	0	0	0	836
OTHER							
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	836	0	0	0	836

RECURRINGSAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	6,785	6,785	6,785	6,785	27,141	7,983
Recap	6,904	6,904	6,904	6,904	6,904	6,904	41,424	6,904
BOS	0	0	29,930	29,930	29,930	29,930	119,720	29,930
Civ Salary	0	0	12,687	18,682	18,682	18,682	68,732	18,682
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	4,369	4,369	4,369	4,369	17,475	4,369
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	6,904	6,904	60,674	66,670	66,670	66,670	274,492	67,867
TOTAL SAVINGS	6,904	6,904	61,510	66,670	66,670	66,670	275,327	67,867

DCN: 11935

TOTAL COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 3/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

ONE-TIME NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	1,930	21,449	0	0	0	0	23,380
O&M							
Civ Retir/RIF	0	0	5,347	0	0	0	5,347
Civ Moving	0	0	48,509	0	0	0	48,509
Info Tech	1,000	1,000	595	0	0	0	2,595
Other	5,262	3,946	3,827	0	0	0	13,035
MIL PERSONNEL							
Mil Moving	0	0	1,994	0	0	0	1,994
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	8,192	26,396	60,271	0	0	0	94,859

RECURRING NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	222	-6,563	-6,563	-6,563	-6,563	-26,030	-7,760
Recap	-6,904	-6,727	-6,727	-6,727	-6,727	-6,727	-40,537	-6,727
BOS	0	0	-13,221	-13,221	-13,221	-13,221	-52,885	-13,221
Civ Salary	0	0	-12,687	-18,682	-18,682	-18,682	-68,732	-18,682
TRICARE	0	0	801	801	801	801	3,205	801
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	-2,324	-2,324	-2,324	-2,324	-9,297	-2,324
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	-6,904	-6,504	-40,721	-46,716	-46,716	-46,716	-194,277	-47,913
TOTAL NET COST	1,288	19,891	19,550	-46,716	-46,716	-46,716	-99,418	-47,913

DCN: 11935

COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 4/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: NAVPGSCOL MONTEREY, CA (N62271)

ONE-TIME COSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	4,179	0	0	0	4,179
Civ Retire	0	0	1,168	0	0	0	1,168
CIV MOVING							
Per Diem	0	0	2,947	0	0	0	2,947
POV Miles	0	0	370	0	0	0	370
Home Purch	0	0	22,068	0	0	0	22,068
HHG	0	0	8,498	0	0	0	8,498
Misc	0	0	742	0	0	0	742
House Hunt	0	0	2,869	0	0	0	2,869
PPP	0	0	1,136	0	0	0	1,136
RITA	0	0	8,119	0	0	0	8,119
FREIGHT							
Packing	0	0	185	0	0	0	185
Freight	0	0	1,573	0	0	0	1,573
Vehicles	0	0	0	0	0	0	0
Unemployment	0	0	289	0	0	0	289
OTHER							
Info Tech	0	0	595	0	0	0	595
Prog Manage	5,262	3,946	2,960	0	0	0	12,167
Supt Contrac	0	0	0	0	0	0	0
Mothball	0	0	578	0	0	0	578
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	229	0	0	0	229
POV Miles	0	0	150	0	0	0	150
HHG	0	0	2,149	0	0	0	2,149
Misc	0	0	301	0	0	0	301
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
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	5,262	3,946	61,107	0	0	0	70,315

DCN: 11935

COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 5/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: NAVPGSCOL MONTEREY, CA (N62271)

RECURRINGCOSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
TRICARE	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 Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	5,262	3,946	61,107	0	0	0	70,315	0

ONE-TIME SAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	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	836	0	0	0	836
OTHER							
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	836	0	0	0	836

RECURRINGSAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	6,785	6,785	6,785	6,785	27,141	7,983
Recap	6,904	6,904	6,904	6,904	6,904	6,904	41,424	6,904
BOS	0	0	29,930	29,930	29,930	29,930	119,720	29,930
Civ Salary	0	0	5,995	11,990	11,990	11,990	41,967	11,990
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	4,369	4,369	4,369	4,369	17,475	4,369
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	6,904	6,904	53,983	59,978	59,978	59,978	247,726	61,176
TOTAL SAVINGS	6,904	6,904	54,819	59,978	59,978	59,978	248,562	61,176

DCN: 11935

COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 6/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: NAVPGSCOL MONTEREY, CA (N62271)

ONE-TIME NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	5,347	0	0	0	5,347
Civ Moving	0	0	48,509	0	0	0	48,509
Info Tech	0	0	595	0	0	0	595
Other	5,262	3,946	3,827	0	0	0	13,035
MIL PERSONNEL							
Mil Moving	0	0	1,994	0	0	0	1,994
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	5,262	3,946	60,271	0	0	0	69,479

RECURRING NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	-6,785	-6,785	-6,785	-6,785	-27,141	-7,983
Recap	-6,904	-6,904	-6,904	-6,904	-6,904	-6,904	-41,424	-6,904
BOS	0	0	-29,930	-29,930	-29,930	-29,930	-119,720	-29,930
Civ Salary	0	0	-5,995	-11,990	-11,990	-11,990	-41,967	-11,990
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	-4,369	-4,369	-4,369	-4,369	-17,475	-4,369
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	-6,904	-6,904	-53,983	-59,978	-59,978	-59,978	-247,726	-61,176
TOTAL NET COST	-1,642	-2,958	6,288	-59,978	-59,978	-59,978	-178,247	-61,176

DCN: 11935

COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 7/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: Wright-Patterson AFB, OH (ZHTV)

ONE-TIME COSTS	2006	2007	2008	2009	2010	2011	Total
-----($K)-----	----	----	----	----	----	----	-----
CONSTRUCTION							
MILCON	1,930	21,449	0	0	0	0	23,380
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
PPP	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
Unemployment	0	0	0	0	0	0	0
OTHER							
Info Tech	1,000	1,000	0	0	0	0	2,000
Prog Manage	0	0	0	0	0	0	0
Supt Contrac	0	0	0	0	0	0	0
Mothball	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
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	2,930	22,449	0	0	0	0	25,380

DCN: 11935

COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 8/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: Wright-Patterson AFB, OH (ZHTV)

RECURRINGCOSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
O&M								
Sustainment	0	222	222	222	222	222	1,111	222
Recap	0	177	177	177	177	177	886	177
BOS	0	0	16,709	16,709	16,709	16,709	66,834	16,709
Civ Salary	0	0	0	0	0	0	0	0
TRICARE	0	0	801	801	801	801	3,205	801
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	2,044	2,044	2,044	2,044	8,178	2,044
OTHER								
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	399	19,954	19,954	19,954	19,954	80,214	19,954
TOTAL COSTS	2,930	22,849	19,954	19,954	19,954	19,954	105,594	19,954

ONE-TIME SAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	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							
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 -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	6,691	6,691	6,691	6,691	26,766	6,691
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 Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	6,691	6,691	6,691	6,691	26,766	6,691
TOTAL SAVINGS	0	0	6,691	6,691	6,691	6,691	26,766	6,691

DCN: 11935

COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 9/9
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: Wright-Patterson AFB, OH (ZHTV)

ONE-TIME NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	1,930	21,449	0	0	0	0	23,380
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	0	0	0	0	0	0	0
Info Tech	1,000	1,000	0	0	0	0	2,000
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
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	2,930	22,449	0	0	0	0	25,380

RECURRING NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	222	222	222	222	222	1,111	222
Recap	0	177	177	177	177	177	886	177
BOS	0	0	16,709	16,709	16,709	16,709	66,834	16,709
Civ Salary	0	0	-6,691	-6,691	-6,691	-6,691	-26,766	-6,691
TRICARE	0	0	801	801	801	801	3,205	801
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	2,044	2,044	2,044	2,044	8,178	2,044
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	399	13,262	13,262	13,262	13,262	53,449	13,262
TOTAL NET COST	2,930	22,849	13,262	13,262	13,262	13,262	78,829	13,262

DCN: 11935

COBRA PERSONNEL/SF/SUSTAINMENT/RECAP/BOS DELTAS REPORT (COBRA v6.10)
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Personnel

Base	Start*	Finish*	Change	%Change
NAVPGSCOL MONTEREY	3,307	0	-3,307	-100%
Wright-Patterson AFB	15,885	19,031	3,146	20%
TOTAL	19,192	19,031	-161	-1%

Square Footage

Base	Start	Finish	Change	%Change	Chg/Per
NAVPGSCOL MONTEREY	3,210,717	717	-3,210,000	-100%	971
Wright-Patterson AFB	13,341,000	13,468,115	127,115	1%	40
TOTAL	16,551,717	13,468,832	-3,082,885	-19%	19,148

Base Operations Support (2005$)

Base	Start*	Finish*	Change	%Change	Chg/Per
NAVPGSCOL MONTEREY	29,929,951	0	-29,929,951	-100%	9,050
Wright-Patterson AFB	100,469,454	117,178,071	16,708,617	17%	5,311
TOTAL	130,399,405	117,178,071	-13,221,334	-10%	82,120

Sustainment (2005$)

Base	Start	Finish	Change	%Change	Chg/Per
NAVPGSCOL MONTEREY	7,982,613	0	-7,982,613	-100%	2,414
Wright-Patterson AFB	29,545,343	29,767,463	222,120	1%	71
TOTAL	37,527,956	29,767,463	-7,760,493	-21%	48,202

Recapitalization (2005$)

Base	Start	Finish	Change	%Change	Chg/Per
NAVPGSCOL MONTEREY	6,903,944	0	-6,903,944	-100%	2,088
Wright-Patterson AFB	33,360,037	33,537,306	177,269	1%	56
TOTAL	40,263,981	33,537,306	-6,726,675	-17%	41,780

Sustain + Recap + BOS (2005$)

Base	Start	Finish	Change	%Change	Chg/Per
NAVPGSCOL MONTEREY	44,816,508	0	-44,816,508	-100%	13,552
Wright-Patterson AFB	163,374,834	180,482,840	17,108,006	10%	5,438
TOTAL	208,191,342	180,482,840	-27,708,502	-13%	172,102

Plant Replacement Value (2005$)

Base	Start	Finish	Change	%Change	Chg/Per
NAVPGSCOL MONTEREY	787,049,650	0	-787,049,650	-100%	237,995
Wright-Patterson AFB	4,036,564,439	4,058,014,037	21,449,598	1%	6,818
TOTAL	4,823,614,089	4,058,014,037	-765,600,052	-16%	4,755,280

DCN: 11935

COBRA PERSONNEL/SF/SUSTAINMENT/RECAP/BOS DELTAS REPORT (COBRA v6.10) - Page 2
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
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Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

- "Start" and "Finish" values for Personnel and BOS both include the Programmed Installation Population (non-BRAC) Changes, so that only changes attributable to the BRAC action are reflected in the "Change" columns of this report.

DCN: 11935

TOTAL COBRA MILITARY CONSTRUCTION ASSETS REPORT (COBRA v6.10)
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
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All values in 2005 Constant Dollars

Base Name	Total MilCon*	Milcon Cost Avoidence	Total Net Costs
NAVPGSCOL MONTEREY	0	0	0
Wright-Patterson AFB	23,380,061	0	23,380,061
Totals:	23,380,061	0	23,380,061

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

DCN: 11935

COBRA MILITARY CONSTRUCTION ASSETS REPORT (COBRA v6.10) - Page 2
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

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Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

MilCon for Base: Wright-Patterson AFB, OH (ZHTV)

All values in 2005 Constant Dollars ($K)

FAC	Title	UM	New MilCon	New Cost*	Using Rehab	Rehab Type	Rehab Cost*	Total Cost*
1711	General Purpose Instruction Building	SF	116,000	21,032	0	Default	0	21,032
8511	Road, Surfaced	SY	5,382	139	0	Default	0	139
7421	Indoor Physical Fitness Facility	SF	11,115	2,133	0	Default	0	2,133
8521	Vehicle Parking, Surfaced	SY	1,400	75	0	Default	0	75

Total Construction Cost:	23,380
- Construction Cost Avoid:	0
Total Net Milcon Cost:	23,380

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

DCN: 11935

COBRA NET PRESENT VALUES REPORT (COBRA v6.10)
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Year	Cost($)	Adjusted Cost($)	NPV($)
2006	1,288,178	1,270,513	1,270,513
2007	19,891,287	19,084,167	20,354,680
2008	19,550,480	18,246,293	38,600,973
2009	-46,716,002	-42,412,099	-3,811,126
2010	-46,716,002	-41,256,906	-45,068,031
2011	-46,716,002	-40,133,177	-85,201,208
2012	-47,913,394	-40,040,703	-125,241,911
2013	-47,913,394	-38,950,100	-164,192,011
2014	-47,913,394	-37,889,202	-202,081,213
2015	-47,913,394	-36,857,201	-238,938,414
2016	-47,913,394	-35,853,308	-274,791,722
2017	-47,913,394	-34,876,759	-309,668,481
2018	-47,913,394	-33,926,808	-343,595,289
2019	-47,913,394	-33,002,732	-376,598,021
2020	-47,913,394	-32,103,824	-408,701,845
2021	-47,913,394	-31,229,401	-439,931,247
2022	-47,913,394	-30,378,795	-470,310,042
2023	-47,913,394	-29,551,357	-499,861,399
2024	-47,913,394	-28,746,456	-528,607,855
2025	-47,913,394	-27,963,479	-556,571,334

DCN: 11935

TOTAL COBRA PERSONNEL IMPACT REPORT (COBRA v6.10) - Page 1/3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

	Rate	2006	2007	2008	2009	2010	2011	Total
CIVILIAN POSITIONS REALIGNING OUT		0	0	914	0	0	0	914
Early Retirement*	8.10%	0	0	74	0	0	0	74
Regular Retirement*	1.67%	0	0	15	0	0	0	15
Civilian Turnover*	9.16%	0	0	84	0	0	0	84
Civs Not Moving (RIFs)*	6.00%	0	0	55	0	0	0	55
Civilians Moving (the remainder)		0	0	686	0	0	0	686
Civilian Positions Available		0	0	228	0	0	0	228
CIVILIAN POSITIONS ELIMINATED		0	0	161	0	0	0	161
Early Retirement	8.10%	0	0	13	0	0	0	13
Regular Retirement	1.67%	0	0	3	0	0	0	3
Civilian Turnover	9.16%	0	0	15	0	0	0	15
Civs Not Moving (RIFs)*	6.00%	0	0	10	0	0	0	10
Priority Placement#	39.97%	0	0	64	0	0	0	64
Civilians Available to Move		0	0	56	0	0	0	56
Civilians Moving		0	0	56	0	0	0	56
Civilian RIFs (the remainder)		0	0	0	0	0	0	0
CIVILIAN POSITIONS REALIGNING IN		0	0	914	0	0	0	914
Civilians Moving		0	0	742	0	0	0	742
New Civilians Hired		0	0	172	0	0	0	172
Other Civilian Additions		0	0	0	0	0	0	0
TOTAL CIVILIAN EARLY RETIREMENTS		0	0	87	0	0	0	87
TOTAL CIVILIAN RIFS		0	0	65	0	0	0	65
TOTAL CIVILIAN PRIORITY PLACEMENTS#		0	0	64	0	0	0	64
TOTAL CIVILIAN NEW HIRES		0	0	172	0	0	0	172

* 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 PPP placements involving a PCS is 50.70%

DCN: 11935

COBRA PERSONNEL IMPACT REPORT (COBRA v6.10) - Page 2/3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: NAVPGSCOL MONTEREY, CA (N62271)	Rate	2006	2007	2008	2009	2010	2011	Total
CIVILIAN POSITIONS REALIGNING OUT		0	914	0	0	0	914	
Early Retirement*	8.10%	0	74	0	0	0	74	
Regular Retirement*	1.67%	0	15	0	0	0	15	
Civilian Turnover*	9.16%	0	84	0	0	0	84	
Civs Not Moving (RIFs)*	6.00%	0	55	0	0	0	55	
Civilians Moving (the remainder)		0	686	0	0	0	686	
Civilian Positions Available		0	228	0	0	0	228	
CIVILIAN POSITIONS ELIMINATED		0	161	0	0	0	161	
Early Retirement	8.10%	0	13	0	0	0	13	
Regular Retirement	1.67%	0	3	0	0	0	3	
Civilian Turnover	9.16%	0	15	0	0	0	15	
Civs Not Moving (RIFs)*	6.00%	0	10	0	0	0	10	
Priority Placement#	39.97%	0	64	0	0	0	64	
Civilians Available to Move		0	56	0	0	0	56	
Civilians Moving		0	56	0	0	0	56	
Civilian RIFs (the remainder)		0	0	0	0	0	0	
CIVILIAN POSITIONS REALIGNING IN		0	0	0	0	0	0	
Civilians Moving		0	0	0	0	0	0	
New Civilians Hired		0	0	0	0	0	0	
Other Civilian Additions		0	0	0	0	0	0	
TOTAL CIVILIAN EARLY RETIRMENTS		0	87	0	0	0	87	
TOTAL CIVILIAN RIFS		0	65	0	0	0	65	
TOTAL CIVILIAN PRIORITY PLACEMENTS#		0	64	0	0	0	64	
TOTAL CIVILIAN NEW HIRES		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 PPP placements involving a PCS is 50.70%

DCN: 11935

COBRA PERSONNEL IMPACT REPORT (COBRA v6.10) - Page 3/3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: Wright-Patterson AFB, OH (ZHTV)	Rate	2006	2007	2008	2009	2010	2011	Total
CIVILIAN POSITIONS REALIGNING OUT		0	0	0	0	0	0	0
Early Retirement*	8.10%	0	0	0	0	0	0	0
Regular Retirement*	1.67%	0	0	0	0	0	0	0
Civilian Turnover*	9.16%	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	8.10%	0	0	0	0	0	0	0
Regular Retirement	1.67%	0	0	0	0	0	0	0
Civilian Turnover	9.16%	0	0	0	0	0	0	0
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	0	0
Priority Placement#	39.97%	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	914	0	0	0	914
Civilians Moving		0	0	742	0	0	0	742
New Civilians Hired		0	0	172	0	0	0	172
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	172	0	0	0	172

* 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 PPP placements involving a PCS is 50.70%

DCN: 11935

COBRA PERSONNEL YEARLY PERCENTAGES REPORT (COBRA v6.10)
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
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Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Base: NAVPGSCOL MONTEREY, CA (N62271)

	Pers Moved In/Added		MilCon	Pers Moved Out/Eliminated		ShutDn
Year	Total	Percent	TimePhase	Total	Percent	TimePhase
2006	0	0.00%	66.67%	0	0.00%	0.00%
2007	0	0.00%	33.33%	0	0.00%	0.00%
2008	0	0.00%	0.00%	3,307	100.00%	100.00%
2009	0	0.00%	0.00%	0	0.00%	0.00%
2010	0	0.00%	0.00%	0	0.00%	0.00%
2011	0	0.00%	0.00%	0	0.00%	0.00%
TOTALS	0	0.00%	100.00%	3307	100.00%	100.00%

Base: Wright-Patterson AFB, OH (ZHTV)

	Pers Moved In/Added		MilCon	Pers Moved Out/Eliminated		ShutDn
Year	Total	Percent	TimePhase	Total	Percent	TimePhase
2006	0	0.00%	0.00%	0	0.00%	16.67%
2007	0	0.00%	100.00%	0	0.00%	16.67%
2008	3,146	100.00%	0.00%	0	0.00%	16.67%
2009	0	0.00%	0.00%	0	0.00%	16.67%
2010	0	0.00%	0.00%	0	0.00%	16.67%
2011	0	0.00%	0.00%	0	0.00%	16.67%
TOTALS	3146	100.00%	100.00%	0	0.00%	100.00%

DCN: 11935

COBRA TOTAL PERSONNEL SUMMARY REPORT (COBRA v6.10)
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

TOTAL SCENARIO POPULATION (FY 2005, Prior to BRAC Action):

Officers	Enlisted	Students	Civilians
2,525	2,692	1,959	12,016

TOTAL PERSONNEL REALIGNMENTS, ENTIRE SCENARIO):

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	137	0	0	0	137
Enlisted	0	0	164	0	0	0	164
Students	0	0	1,931	0	0	0	1,931
Civilians	0	0	914	0	0	0	914
TOTAL	0	0	3,146	0	0	0	3,146

TOTAL SCENARIO POSITION CHANGES, ENTIRE SCENARIO:

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilians	0	0	-161	0	0	0	-161
TOTAL	0	0	-161	0	0	0	-161

TOTAL SCENARIO POPULATION (After BRAC Action):

Officers	Enlisted	Students	Civilians
2,525	2,692	1,959	11,855

DCN: 11935

COBRA PERSONNEL SUMMARY REPORT (COBRA v6.10) - Page 2
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
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PERSONNEL SUMMARY FOR: NAVPGSCOL MONTEREY, CA (N62271)

BASE POPULATION (FY 2005, Prior to BRAC Action) FOR: NAVPGSCOL MONTEREY, CA (N62271)

Officers	Enlisted	Students	Civilians
137	164	1,931	1,075

PERSONNEL REALIGNMENTS:
To Base: Wright-Patterson AFB, OH (ZHTV)

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	137	0	0	0	137
Enlisted	0	0	164	0	0	0	164
Students	0	0	1,931	0	0	0	1,931
Civilians	0	0	914	0	0	0	914
TOTAL	0	0	3,146	0	0	0	3,146

TOTAL PERSONNEL REALIGNMENTS (Out of NAVPGSCOL MONTEREY, CA (N62271)):

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	137	0	0	0	137
Enlisted	0	0	164	0	0	0	164
Students	0	0	1,931	0	0	0	1,931
Civilians	0	0	914	0	0	0	914
TOTAL	0	0	3,146	0	0	0	3,146

SCENARIO POSITION CHANGES FOR: NAVPGSCOL MONTEREY, CA (N62271)

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilians	0	0	-161	0	0	0	-161
TOTAL	0	0	-161	0	0	0	-161

BASE POPULATION (After BRAC Action) FOR: NAVPGSCOL MONTEREY, CA (N62271)

Officers	Enlisted	Students	Civilians
0	0	0	0

PERSONNEL SUMMARY FOR: Wright-Patterson AFB, OH (ZHTV)

BASE POPULATION (FY 2005, Prior to BRAC Action) FOR: Wright-Patterson AFB, OH (ZHTV)

Officers	Enlisted	Students	Civilians
2,388	2,528	28	10,941

PERSONNEL REALIGNMENTS:
From Base: NAVPGSCOL MONTEREY, CA (N62271)

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	137	0	0	0	137
Enlisted	0	0	164	0	0	0	164
Students	0	0	1,931	0	0	0	1,931
Civilians	0	0	914	0	0	0	914
TOTAL	0	0	3,146	0	0	0	3,146

TOTAL PERSONNEL REALIGNMENTS (Into Wright-Patterson AFB, OH (ZHTV)):

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	137	0	0	0	137
Enlisted	0	0	164	0	0	0	164
Students	0	0	1,931	0	0	0	1,931
Civilians	0	0	914	0	0	0	914
TOTAL	0	0	3,146	0	0	0	3,146

DCN: 11935

COBRA PERSONNEL SUMMARY REPORT (COBRA v6.10) - Page 3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

BASE POPULATION (After BRAC Action) FOR: Wright-Patterson AFB, OH (ZHTV)

Officers	Enlisted	Students	Civilians
2,525	2,692	1,959	11,855

DCN: 11935

COBRA SUSTAINMENT/RECAP/BOS/HOUSING CHANGE REPORT (COBRA v6.10)
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Net Change($K)	2006	2007	2008	2009	2010	2011	Total	Beyond
Sustain Change	0	222	-6,563	-6,563	-6,563	-6,563	-26,030	-7,760
Recap Change	-6,904	-6,727	-6,727	-6,727	-6,727	-6,727	-40,537	-6,727
BOS Change	0	0	-13,221	-13,221	-13,221	-13,221	-52,885	-13,221
Housing Change	0	0	0	0	0	0	0	0
TOTAL CHANGES	-6,904	-6,504	-26,511	-26,511	-26,511	-26,511	-119,453	-27,708

NAVPGSCOL MONTEREY, CA (N62271)

Net Change($K)	2006	2007	2008	2009	2010	2011	Total	Beyond
Sustain Change	0	0	-6,785	-6,785	-6,785	-6,785	-27,141	-7,983
Recap Change	-6,904	-6,904	-6,904	-6,904	-6,904	-6,904	-41,424	-6,904
BOS Change	0	0	-29,930	-29,930	-29,930	-29,930	-119,720	-29,930
Housing Change	0	0	0	0	0	0	0	0
TOTAL CHANGES	-6,904	-6,904	-43,619	-43,619	-43,619	-43,619	-188,284	-44,816

Wright-Patterson AFB, OH (ZHTV)

Net Change($K)	2006	2007	2008	2009	2010	2011	Total	Beyond
Sustain Change	0	222	222	222	222	222	1,111	222
Recap Change	0	177	177	177	177	177	886	177
BOS Change	0	0	16,709	16,709	16,709	16,709	66,834	16,709
Housing Change	0	0	0	0	0	0	0	0
TOTAL CHANGES	0	399	17,108	17,108	17,108	17,108	68,831	17,108

DCN: 11935

COBRA INPUT DATA REPORT (COBRA v6.10)
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Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 2006
Model does Time-Phasing of Construction/Shutdown: Yes

Base Name, ST (Code)	Strategy:
NAVPGSCOL MONTEREY, CA (N62271)	Closes in FY 2008
Wright-Patterson AFB, OH (ZHTV)	Realignment

INPUT SCREEN TWO - DISTANCE TABLE
(Only shows distances where personnel or equipment are moving)

Point A:	Point B:	Distance:
NAVPGSCOL MONTEREY, CA (N62271)	Wright-Patterson AFB, OH (ZHTV)	2,493 mi

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NAVPGSCOL MONTEREY, CA (N62271) to Wright-Patterson AFB, OH (ZHTV)

	2006	2007	2008	2009	2010	2011
Officer Positions:	0	0	137	0	0	0
Enlisted Positions:	0	0	164	0	0	0
Civilian Positions:	0	0	914	0	0	0
Student Positions:	0	0	1,931	0	0	0
NonVeh Missn Eqpt(tons):	0	0	6	0	0	0
Suppt Eqpt (tons):	0	0	14	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: NAVPGSCOL MONTEREY, CA (N62271)

Total Officer Employees:	137	Base Service (for BOS/Sust):	Navy
Total Enlisted Employees:	164	Total Sustainment($K/Year):	12,184
Total Student Employees:	1,931	Sustain Payroll ($K/Year):	4,201
Total Civilian Employees:	1,075	BOS Non-Payroll ($K/Year):	29,930
Accomp Mil not Receiving BAH:	0.0%	BOS Payroll ($K/Year):	22,687
Officer Housing Units Avail:	0	Family Housing ($K/Year):	0
Enlisted Housing Units Avail:	0	Installation PRV($K):	787,050
Starting Facilities(KSF):	3,211	Svc/Agcy Recap Rate (Years):	114
Officer BAH ($/Month):	2,291	Homeowner Assistance Program:	No
Enlisted BAH ($/Month):	1,525		
Civ Locality Pay Factor:	1.242		
Area Cost Factor:	1.21		
Per Diem Rate ($/Day):	141		
Freight Cost ($/Ton/Mile):	0.27		
Vehicle Cost ($/Lift/Mile):	4.84		
Latitude:	36.600000		
Longitude:	-121.870000		

TRICARE	In-Pat Admits	Out-Pat Visits	Prescrip
CostFactor	6,895.00	122.00	35.04
Actv MTF	0	41,646	47,541
Actv Purch	993	54,792	
Retiree	0	680	2,422
Retiree65+	0	14	2,807

DCN: 11935

COBRA INPUT DATA REPORT (COBRA v6.10) - Page 2
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: Wright-Patterson AFB, OH (ZHTV)

Total Officer Employees:	2,388	Base Service (for BOS/Sust):	Air Force
Total Enlisted Employees:	2,528	Total Sustainment($K/Year):	54,802
Total Student Employees:	28	Sustain Payroll ($K/Year):	25,257
Total Civilian Employees:	10,941	BOS Non-Payroll ($K/Year):	100,469
Accomp Mil not Receiving BAH:	10.8%	BOS Payroll ($K/Year):	89,138
Officer Housing Units Avail:	0	Family Housing ($K/Year):	4,895
Enlisted Housing Units Avail:	0	Installation PRV($K):	4,036,564
Starting Facilities(KSF):	13,341	Svc/Agcy Recap Rate (Years):	121
Officer BAH ($/Month):	1,081	Homeowner Assistance Program:	Yes
Enlisted BAH ($/Month):	704		
Civ Locality Pay Factor:	1.120		
Area Cost Factor:	0.96		
Per Diem Rate ($/Day):	107		
Freight Cost ($/Ton/Mile):	0.44		
Vehicle Cost ($/Lift/Mile):	4.84		
Latitude:	39.820750		
Longitude:	-84.035764		

TRICARE	In-Pat Admits	Out-Pat Visits	Prescrip
CostFactor	5,767.77	89.23	14.74
Actv MTF	1,247	139,459	138,428
Actv Purch	308	20,005	
Retiree	974	116,340	311,049
Retiree65+	1,093	59,819	310,106

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NAVPGSCOL MONTEREY, CA (N62271)

	2006	2007	2008	2009	2010	2011
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 ($K):	0	0	0	0	0	0
Misn Contract Start($K):	0	0	0	0	0	0
Misn Contract Term ($K):	0	0	0	0	0	0
Supt Contract Term ($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
One-Time IT Costs ($K):	0	0	0	0	0	0
Construction Schedule(%):	0%	0%	0%	0%	0%	0%
Shutdown Schedule (%):	0%	0%	0%	0%	0%	0%
Misn Milcon Avoidnc($K):	0	0	0	0	0	0
Procurement Avoidnc($K):	0	0	0	0	0	0

MTF Closure Action: None Fac ShDn(KSF): 3,210 FH ShDn: 0.000%

DCN: 11935

COBRA INPUT DATA REPORT (COBRA v6.10) - Page 3
Data As Of 7/20/2005 3:59:19 PM, Report Created 7/21/2005 8:14:35 AM

Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: Wright-Patterson AFB, OH (ZHTV)

	2006	2007	2008	2009	2010	2011
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 ($K):	0	0	0	0	0	0
Misn Contract Start($K):	0	0	0	0	0	0
Misn Contract Term ($K):	0	0	0	0	0	0
Supt Contract Term ($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
One-Time IT Costs ($K):	1,000	1,000	0	0	0	0
Construction Schedule(%):	0%	0%	0%	0%	0%	0%
Shutdown Schedule (%):	0%	0%	0%	0%	0%	0%
Misn Milcon Avoidnc($K):	0	0	0	0	0	0
Procurement Avoidnc($K):	0	0	0	0	0	0

MTF Closure Action: None Fac ShDn(KSF): 0 FH ShDn: 0.000%

INPUT SCREEN SIX - BASE PERSONNEL INFORMATION

Name: NAVPGSCOL MONTEREY, CA (N62271)

	2006	2007	2008	2009	2010	2011
Off Scenario Change:	0	0	0	0	0	0
Enl Scenario Change:	0	0	0	0	0	0
Civ Scenario Change:	0	0	-161	0	0	0
Off Prog nonBRAC Change:	0	0	0	0	0	0
Enl Prog nonBRAC Change:	0	0	0	0	0	0
Civ Prog nonBRAC Change:	0	0	0	0	0	0
Stu Prog nonBRAC Change:	0	0	0	0	0	0
Prog FH Privatization:	0%	0%	0%	0%	0%	0%

Name: Wright-Patterson AFB, OH (ZHTV)

	2006	2007	2008	2009	2010	2011
Off Scenario Change:	0	0	0	0	0	0
Enl Scenario Change:	0	0	0	0	0	0
Civ Scenario Change:	0	0	0	0	0	0
Off Prog nonBRAC Change:	0	0	0	0	0	0
Enl Prog nonBRAC Change:	0	0	0	0	0	0
Civ Prog nonBRAC Change:	0	0	0	0	0	0
Stu Prog nonBRAC Change:	0	0	0	0	0	0
Prog FH Privatization:	100%	0%	0%	0%	0%	0%

DCN: 11935

COBRA INPUT DATA REPORT (COBRA v6.10) - Page 4
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Department : JCSG
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\E&T\NPS\Alt_CloseNPS.CBR
Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

INPUT SCREEN SEVEN - BASE MILITARY CONSTRUCTION INFORMATION

Name: Wright-Patterson AFB, OH (ZHTV)

FAC	UM	New MilCon	Rehab MilCon	TotCost($K)	FPG Con CF	FPG Sust CF
1711	SF	116,000	0 Default	0	154.99	3.65
8511	SY	5,382	0 Default	0	22.25	0.54
7421	SF	11,115	0 Default	0	164.11	3.48
8521	SY	1,400	0 Default	0	45.83	1.07

STANDARD FACTORS SCREEN ONE - PERSONNEL

SF File Descrip:

Perc Officers Accompanied:	72.00%	Priority Placement Program:	39.97%
Perc Enlisted Accompanied:	55.00%	PPP Actions Involving PCS:	50.70%
Officer Salary($/Year):	124,971.93	Civilian PCS Costs ($):	35,496.00
Enlisted Salary($/Year):	82,399.09	Home Sale Reimburse Rate:	10.00%
Civilian Salary($/Year):	59,959.18	Max Home Sale Reimburs($):	50,000.00
Avg Unemploy Cost($/Week):	272.90	Home Purch Reimburse Rate:	5.00%
Unemployment Eligibility(Weeks):	16	Max Home Purch Reimburs($):	25,000.00
Civilians Not Willing To Move:	6.00%	Civilian Homeowning Rate:	68.40%
Civilian Turnover Rate:	9.16%	HAP Home Value Reimburse Rate:	13.46%
Civilian Early Retire Rate:	8.10%	HAP Homeowner Receiving Rate:	18.44%
Civilian Regular Retire Rate:	1.67%	RSE Home Value Reimburse Rate:	0.00%
Civilian RIF Pay Factor:	86.32%	RSE Homeowner Receiving Rate:	0.00%
Civ Early Retire Pay Factor:	18.03%		

STANDARD FACTORS SCREEN TWO - FACILITIES

	Army	Navy	Air Force	Marines
Service Sustainment Rate	87.00%	93.00%	92.00%	97.00%
Unit Cost Adjustment (BOS)	10332.00	8879.00	3032.00	3904.00

Program Management Factor:	10.00	MilCon Site Prep Cost ($/SF):	0.74
Mothball (Close) ($/SF):	0.18	MilCon Contingency Plan Rate:	5.00%
Mothball (Deac/Realn) ($/SF):	0.45	MilCon Design Rate (Medical):	13.00%
Rehab vs. MilCon (Default):	47.00%	MilCon Design Rate (Other):	9.00%
Rehab vs. MilCon (Red):	64.00%	MilCon SIOH Rate:	6.00%
Rehab vs. MilCon (Amber):	29.00%	Discount Rate for NPV/Payback:	2.80%

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

Material/Assigned Mil (Lb):	710	Storage-In-Transit ($/Pers):	373.76
HHG Per Off Accomp (Lb):	15,290.00	POV Reimburse($/Mile):	0.20
HHG Per Enl Accomp (Lb):	9,204.00	Air Transport ($/Pass Mile):	0.20
HHG Per Off Unaccomp (Lb):	13,712.00	IT Connect ($/Person):	200.00
HHG Per Enl Unaccomp (Lb):	6,960.00	Misc Exp($/Direct Employee):	1,000.00
HHG Per Civilian (Lb):	18,000.00	Avg Mil Tour Length (Months):	30.02
Total HHG Cost ($/100Lb):	8.78	One-Time Off PCS Cost($):	10,477.58
Equip Pack & Crate($/Ton):	180.67	One-Time Enl PCS Cost($):	3,998.52

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Option Pkg Name: Consolidate NPS with AFIT at WP AFB
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

FOOTNOTES FOR SCREEN ONE
==========
This scenario closes Naval Post-Graduate School at Monteray, CA, and consolidates it with the Post-Graduate education at AFIT, Wright-Patterson AFB, OH.

DCN: 11935

COBRA ECONOMIC IMPACT REPORT (COBRA v6.10)
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Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

NAVPGSCOL MONTEREY, CA (N62271)

	2006	2007	2008	2009	2010	2011	Total
Jobs Gained-Mil	0	0	0	0	0	0	0
Jobs Lost-Mil	0	0	301	0	0	0	301
NET CHANGE-Mil	0	0	-301	0	0	0	-301
Jobs Gained-Civ	0	0	0	0	0	0	0
Jobs Lost-Civ	0	0	1,075	0	0	0	1,075
NET CHANGE-Civ	0	0	-1,075	0	0	0	-1,075
Jobs Gained-Stu	0	0	0	0	0	0	0
Jobs Lost-Stu	0	0	1,931	0	0	0	1,931
NET CHANGE-Stu	0	0	-1,931	0	0	0	-1,931

Wright-Patterson AFB, OH (ZHTV)

	2006	2007	2008	2009	2010	2011	Total
Jobs Gained-Mil	0	0	301	0	0	0	301
Jobs Lost-Mil	0	0	0	0	0	0	0
NET CHANGE-Mil	0	0	301	0	0	0	301
Jobs Gained-Civ	0	0	914	0	0	0	914
Jobs Lost-Civ	0	0	0	0	0	0	0
NET CHANGE-Civ	0	0	914	0	0	0	914
Jobs Gained-Stu	0	0	1,931	0	0	0	1,931
Jobs Lost-Stu	0	0	0	0	0	0	0
NET CHANGE-Stu	0	0	1,931	0	0	0	1,931

DCN: 11935

Schedule for Friday 5 August 2005

Time	Event	Location	Attendees	Comments
0800-0900	Command Brief (Julie)	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti, Dr Rob Dell, CDR Matt Suess, COL (Ret) Joe Andrade, Dr. Harold Trinkunas	
0900-1000	Question One (Julie)	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti	
1000-1030	Q 2,4 GRADUATE SCHOOL OF OPERATIONS & INFORMATION SCIENCES	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti, Dr Dan Boger, Dr Peter Denning, Dr Gordon McCormick, Dr Jim Eagle, Dr Rudy Darken	
1030-1100	Q 2,4 GRADUATE SCHOOL OF ENGINEERING & APPLIED SCIENCES	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti, Dr Tony Healey, Dr Mary Batteen, Dr Jeff Knorr, Dr Jim Luscombe, Dr Don Brutzman, Dr Rudy Panholzer, Dr. Phil Durkee	
1100-1130	Q 2,4 GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti, Dr Doug Moses	
1130-1200	Q 2,4 SCHOOL OF INTERNATIONAL GRADUATE	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes,	

DCN: 11935

	STUDIES		CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti, Dr Harold Trinkunas, Dr Paul Stockton, Dr Rich Hoffman, Dr Kent Wall, COL(Ret) Joe Andrade	
1200-1300	LUNCH			
1300-1330	Q 2,4 SYSTEMS ENGINEERING ACADEMIC COMMITTEE, AND RESEARCH	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti, Dr Dave Olwell, Dr Carson Eoyang	
1330-1400	Question 3	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti,	
1400-1430	Question 5	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti, CDR Matt Suess	
1430-1500	Questions	PCR	Mr. Carroll, Mr. Van Saun, Mr. Hood, Mr. Dean, RDML Dunne, Provost Dick Elster, Dean Wayne Hughes, Dean Tom Hughes, CDR Chris Adams, Dean Leonard Ferrari, Dr Peter Purdue, CAPT (Ret) George Conner, Col Dave Smarsh, COL (Ret) Pete Dausen, Dr Julie Filizetti	

DCN: 11935

1 NPS → AFIT

Big Costs –

		[W.P.]	[NPS]
1-time	MILCON	$231 M	CIV Retire/RIF $3.7 M
	INFOTECH	$30 M	CIV MOVING $40 M
	MOVE	$33 M	OTHER $47 M
	OTHER	$37 M	MIL moving $1.3 M
Recurring	TOTAL	$31 M	misc recurring $0.8 M
	BOS	$14.5 M	
	CIV SAL	$9.7 M	

TOTAL NET COSTS for Scenario

6 yr NET $416 M

annual beyond $-7.4 M

20 yr NPV $310 M

Payback · 100+ yrs

2 AFIT → NPS 1314

→ MAXWELL 158

		[W.P.]	[NPS]	[MAXWELL]
1-TIME	CIV Retire, RIF	$3.7 M	MILCON $39.57 M	$39.65 M
	CIV MOV	$10.2 M	INFO TECH $1.7 M	$0.3 M
	OTHER	$6.3 M	1-time other $9.2 M	$6.6 M
	MIL MOV	$1.1 M		
	1-Time OTHER	$-200 M		
Recurring	None	$0.	BOS $3.5 M	$0.7
			CIV SAL $7.3 M	$0.5
			MIL SAL $3.0 M	$0.9
			misc Recr $2.1 M	$0.

TOTAL NET COSTS for [0020 v2]

6 yr NET $-133.9 M

annual beyond $-18.0 M

20 yr NPV $-301.6 M

Payback - Immediate

DCN: 11935

Carroll, Ray, CIV, WSO-BRAC

From: White, CAPT Jonathan [jonathan.white@fnmoc.navy.mil]
Sent: Wednesday, July 27, 2005 8:16 PM
To: 'Tasker, Michael LCDR NRSW SRM'
Cc: Titley, CAPT David; 'Dausen, Pete USA'; 'Suess, Matt USA'; 'Smarsh, Dave USA'; 'Conner, George USA'; 'Flather, Jennifer R. CDR BRAC'; Foy, David D CAPT BRAC; paul.warhola@wso.whs.mil; 'Ray.Carroll@wso.whs.mil'; Chang, Dr. Simon; Lane, CDR Tim; Furze, Peter CAPT (CNMOC); Denz, Chris
Subject: NPS/DLI Monterey BRAC Study - Impact on FNMOC

Attachments: DLI itinerary.doc; PDE questions.doc

DLI itinerary.doc (24 KB) PDE questions.doc (34 KB)

LCDR Tasker,

I request you forward this email up the BRAC/NRSW chain as necessary to address the items below. The attached documents regarding the prospective visit of BRAC Commissioners on 08 Aug 05 are provided for reference.

I am concerned that the BRAC Commission and staff-members are not aware that the potential closure/consolidation they are studying with respect to NPS would force relocation of other Naval activities in Monterey that are not part of NPS, to include this operational command of over 250 personnel. I was advised by IAT reps during the BRAC data call earlier in the week that if NPS was to close or relocate, then FNMOC (located on separate grounds from NPS) would also be forced to move as all Navy installations in Monterey would be divested. However, we have received no data calls or other official documentation to this effect. Thus I am also concerned that neither Navy nor DoD is considering the cost associated with a potential relocation (in excess of $125M over five years as previously reported during earlier Navy BRAC scenarios).

I therefore request the following:

1. Confirmation that if NPS is closed or relocated as a result of BRAC, that FNMOC will also be relocated.

2. Confirmation that the BRAC Commission/staff is aware of this collateral impact.

3. As an impacted command, an opportunity for FNMOC to address the BRAC Commissioners/staff-members during their visit to Monterey, and the BRAC analysts who are visiting on 05 Aug.

4. Confirmation that BRAC resources will be available to relocate and reconstitute FNMOC should we be directed to move.

5. A description of the process that will be used to determine where we will be relocated to, given that the BRAC Commission is not studying our command (as they are NPS).

Your assistance in addressing these concerns is greatly appreciated. As an aside, the Naval Research Lab (NRL) Monterey is collocated with this command, and I believe has similar concerns.

Respectfully,

Jonathan W. White, CAPT, USN
Executive Officer, FNMOC
Monterey CA
(831) 656-4327
Cell: 850-723-8579

DCN: 11935

<<DLI itinerary.doc>> <<PDE questions.doc>>

DCN: 11935

BRAC Seating Chart

PRESIDENT'S CONFERENCE ROOM

August 8, 2005

CAPT Titley/Dr. Julie Filizetti

WALKER

MOLINARI

TAMMINEN

DECKER

BERTEAU

MEURER

Capt Titley

Mr. Tasker

Rear Admiral Dunne

Dr. Dick Elster
Provost and Academic Dean

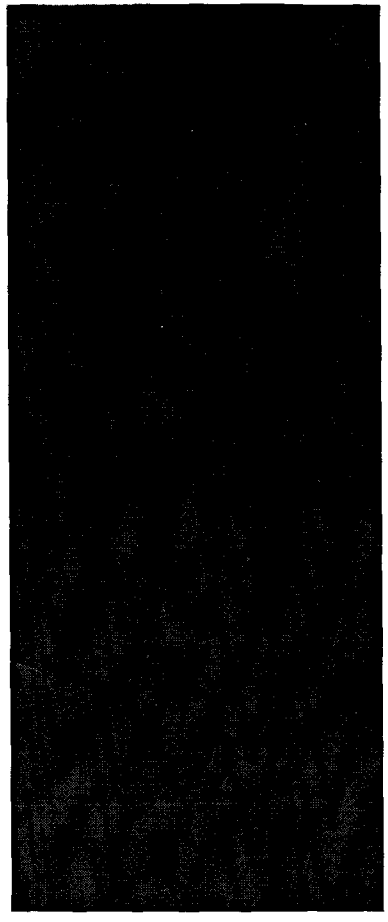
Colonel David Smarsh
Chief of Staff

Capt (Ret) George Conner
Strategic Planning

Dean Jim Kays
GSEAS

Dean Bob Ord,
SIGS

VADM (Ret) Tom Hughes
GSOBPP



Congressman Farr

ENTRANCE

Honorable James Bilbray,
BRAC Commissioner

Honorable James V. Hansen,
BRAC Commissioner

Honorable Phillip Coyle,
BRAC Commissioner

Admiral Harold W. Gehman,
BRAC Commissioner

Col (Ret) Dausen

Dean Wayne Hughes,
GSOIS

Dean Leonard Ferrari,
Dean of Research

CARROLL

SAUN

HOOD

DEAN

Adm Mauz

SANDERS

DCN: 11935

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SANDERS

Congressman Farr

ENTRANCE

DCN: 11935

Briefing on Final Report

NPS OUTSOURCING IN-PLACE

DIRECTOR OF NAVY TRAINING

VADM John W. Craine, Jr., U.S. Navy

Washington, D.C.
January 26, 2000

This document is intended solely for the use and information of the organization to whom it is addressed.

BOOZ·ALLEN & HAMILTON

Objectives ...

CNO N-7 TASKED BOOZ·ALLEN TO DETERMINE THE FEASIBILITY OF ACHIEVING A 50% COST SAVINGS AT THE NAVAL POSTGRADUATE SCHOOL THROUGH OUTSOURCING IN PLACE

TERMS OF REFERENCE

- The study included two independent objectives:
  - Activity-Based Costing Analysis to identify the baseline costs of the activities, processes, and outputs of NPS and compare these costs to civilian university benchmarks — and to identify potential tradeoffs the Navy faces between cost, quality/value of the output, and responsiveness to Navy requirements
  - Analysis to determine the feasibility of achieving a 50 percent savings by outsourcing in place

- Among other things, the study was to answer the following questions:
  - What is the uniqueness of NPS?
  - Can any aspects/functions at NPS be outsourced to effect the desired cost savings?

- We were directed to observe the following parameters in our analyses:
  - NPS remains in Monterey, California
  - NPS remains accredited
  - Navy provides direction and guidance with regards to Navy-unique curricula.
  - Program entry for Navy officers is based on performance measures and promotion potential
  - Tenured professors are retained and tenure track professors are given the opportunity to continue
  - Security procedures are followed in handling classified material

Uniqueness of NPS ...

NPS IS CHARACTERIZED AS A UNIQUE EDUCATIONAL INSTITUTION

- To develop and offer unique curricula which are unavailable elsewhere to increase the combat effectiveness of the Navy and Marine Corps
- The vision of the NPS is to be the Department of Defense university of the future

BUT ...

- Surveyed universities appear to have much in common with NPS
  - Diluting the arguments
  - Some universities opined they would be willing to develop any curricula needed by the Navy providing it could be profitable to them
- Today, NPS needs to refocus on its capability to provide a unique combination of education and research centered on the Navy and Marine Corps

Uniqueness of NPS ...

NPS STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

STRENGTHS

- Attractive campus and location
- Large number of programs — student choice
- Diverse student body
- Increasing sponsored research
- Rich faculty-student dialog on Navy and Marine Corps requirements

WEAKNESSES

- Desirability of graduate education not universally accepted by Fleet
- Large number of programs — complex to manage
- Aging physical plant
- Insufficient pool of Navy and Marine Corps students
- No endowment
- Burdened with landlord responsibilities
- Geographically remote

OPPORTUNITIES

- Increasing requirements for graduate education in the Navy and Marine Corps
- Increasing role of technology in the Navy and Marine Corps
- Network-centric warfare affecting every facet of naval warfare
- Emerging educational technologies (e.g., ADL)

THREATS

- Stiffer competition for scarcer resources
- Perception that its cost is excessive
- Non-traditional providers of graduate education (e.g., CIVINS distance learning)
- Environment concerns in California may impede growth
- Service academies supplementing appropriated funds with private funding

OBSERVATIONS AND RECOMMENDATIONS ON THE UNIQUENESS OF NPS

- Reassess the mission of the NPS
  - Align academic programs with the needs of network centric warfare
  - Assure curricula provide a uniqueness not readily available elsewhere
- Tightly couple research with curricula — channel entrepreneurial model in use
  - Seek significant funding from curricula resource sponsors
  - Investigate Center of Excellence approach
    - Provide focus to curricula and research
    - Align with Pillars of the Navy strategy
    - Align research with the operating forces, SYSCOM labs
- Give economic considerations greater weight in curricula decisions
  - Essential to do given reduced budgets (likely to continue well into the future)
  - Eliminate low-demand programs, courses (identify alternate source, perhaps via ADL)
  - When one course/curriculum added, eliminate one (i.e., zero-sum game)
  - Identify Educational Skill Requirements under cost constraints (today unconstrained)
- Expand Navy/MC officer student pool for degreed programs using non-traditional means
  - Web based instruction
  - Video training technologies
  - Part-time graduate education

ABC ...

AN ACTIVITY-BASED COSTING ANALYSIS WAS CONDUCTED TO IDENTIFY THE BASELINE COSTS OF THE NPS — AND TO IDENTIFY POTENTIAL TRADEOFFS

- The ABC Analysis identified — at an aggregate level — the baseline costs of the activities, processes, and outputs of NPS in order to:
  - Determine the feasibility of achieving a 50% cost savings of operating NPS
  - Identify potential tradeoffs between costs, quality/value of the output and responsiveness to Navy requirements

- The analysis was developed in close coordination and cooperation with NPS and represents a consensus model
  - A detailed ABC analysis is underway within the NPS
  - Comparison of the detailed results with this study will be possible at a later date

- This analysis was a high level rapid prototype view of ABC
  - Cost Object assignment rates were derived both independently and in coordination with NPS
  - FTE, Revenue, square footage, and student population were the most common metrics used to arrive at the assignment rates

Note; ABC is a process of simplification, not complication. Measures the cost and performance of activities, resources, and cost objects. Resources are assigned to activities, then the activities are assigned to cost objects based on their use

ABC ...

THE NPS FINANCIAL DATA FOR FY99 WAS GROUPED INTO FIVE MAJOR ACCOUNTING CATEGORIES

NPS ACCOUNTING CATEGORIES

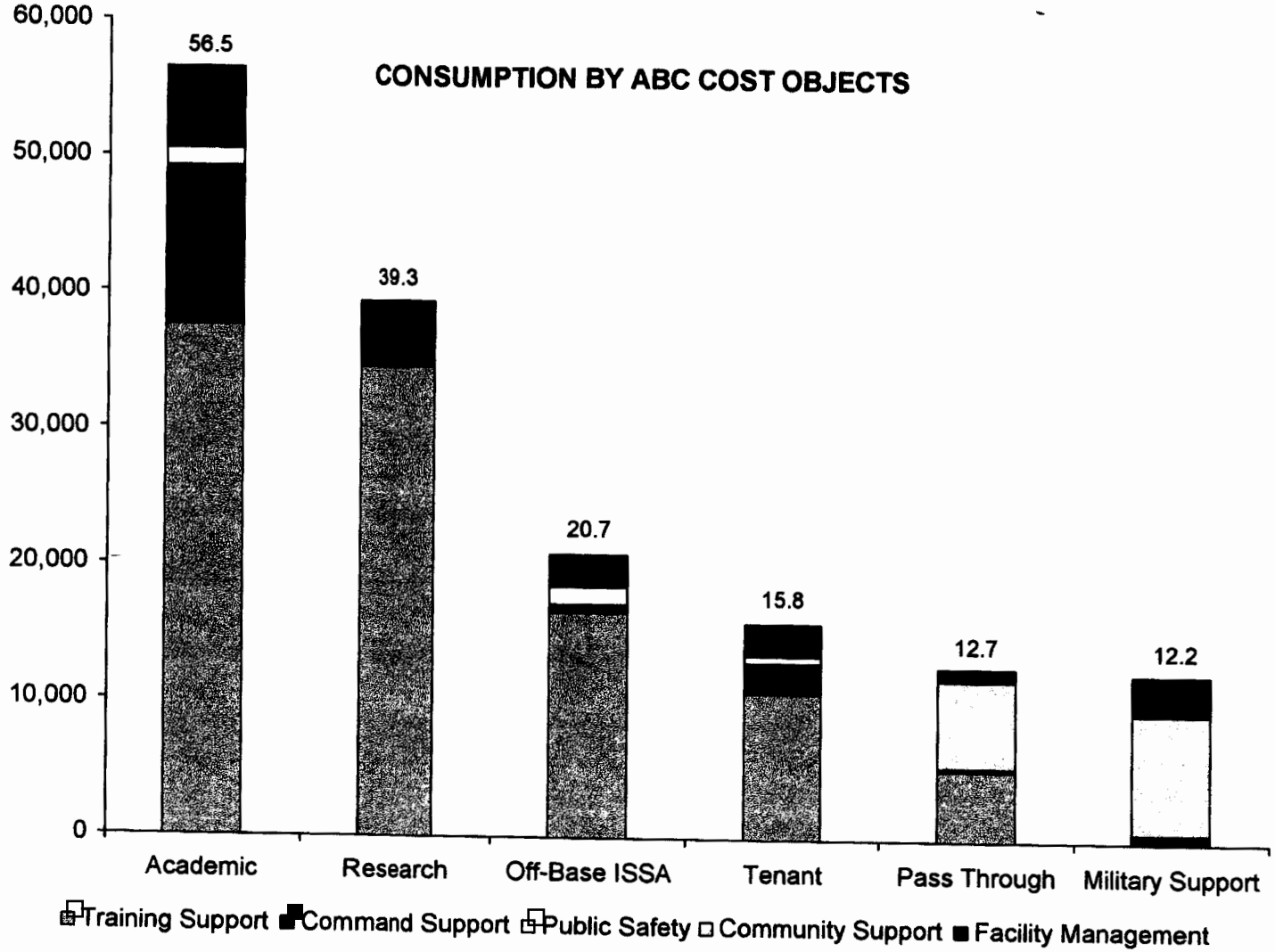
- TRAINING SUPPORT
  - Grad Education at NPS
  - Grad Education at CIVINS
  - Officer Short Courses
  - Aviation Safety Courses
- COMMAND SUPPORT
  - Command
  - Resource Management
  - Supply
  - Information Services
- PUBLIC SAFETY
  - Fire and Safety
  - Force Protection
- COMMUNITY SUPPORT
  - MWR
  - Shelter
  - Child Development Program
  - Family Housing Support
  - MILPERS Services
  - Family Service Center
- FACILITY MANAGEMENT
  - Utilities
  - PW Management
  - Facility Management
  - Transportation
  - Environmental
  - Building Services
  - Grounds Maintenance

SIX COST OBJECTS WERE IDENTIFIED FOR THE HIGH-LEVEL ABC MODEL

- Academic: Postgraduate education at the NPS, i.e., degreed programs
- Research: Sponsored research at the NPS, includes all sponsors
- Tenant: Tenant activities on base that do not directly contribute to degreed graduate education at the NPS (e.g., CCMR, IDEA, DMDC, DRMI, NCAT, CEE)
- Off-base Tenant/ISSA: Off-base tenant activities and other commands in the Monterey Peninsula region that do not directly contribute to degreed graduate education at the NPS or are supported by the NPS under ISSAs (e.g., DLI)
- Military Support: Military welfare, housing, and family services that are provided to all naval personnel
- Pass-through: Funds that are not expended in support of the NPS but "passed-through" to other activities, e.g.,
  - Tuition for Navy students attending civilian universities
  - Funds for Army housing (located at the site previously known as Ford Ord)

Note: Details of the ABC Model are provided separately in Appendix A

IN FY99, ACADEMICS CONSUMED $56.5M, 36% OF THE TOTAL NPS FUNDS ($157.2M)



WITHIN TRAINING, FUNDING FOR RESEACH NEARLY EQUALS THAT FOR ACADEMICS

CONSUMPTION OF FUNDS (FY99 $US)

NPS Accounting Categories	Academic	Research	Off-Base ISSA	Tenant	Pass Throug	Military Support	Total
Training Support	37,562	34,471	16,400	10,703	5,072		104,208
Command Support	11,606	2,362	672	2,177	337	573	17,727
Public Safety	1,383	124	1,320	585		148	3,560
Community Support					6,338	8,680	15,018
Facility Management	5,940	2,322	2,349	2,310	911	2,798	16,630
Total	56,491	39,279	20,741	15,775	12,658	12,199	157,143
Percentage	**35.9%**	**25.0%**	**13.2%**	**10.0%**	**8.1%**	**7.8%**	**100.0%**
Training Support	36.0%	33.1%	15.7%	10.3%	4.9%	0.0%	100.0%
Command Support	65.5%	13.3%	3.8%	12.3%	1.9%	3.2%	100.0%
Public Safety	38.8%	3.5%	37.1%	16.4%	0.0%	4.2%	100.0%
Community Support	0.0%	0.0%	0.0%	0.0%	42.2%	57.8%	100.0%
Facility Management	35.7%	14.0%	14.1%	13.9%	5.5%	16.8%	100.0%

NPS IS INCREASINGLY DEPENDENT UPON REIMBURSABLE FUNDING — BUT REIMBURSABLE ACTIVITIES MAY NOT BE PAYING THEIR FAIR SHARE OF THE COSTS

INSIGHTS GAINED FROM THE ABC ANALYSIS

- NPS is running a military base — not simply a university
  - Academics (degreed programs) consumes only 36% of the total funds managed by the Superintendent
- Tenant activities, both on and off base, are cost sinks
  - NPS receives about $12M less than the cost of services provided
  - "Subsidy" of about $5.5M to tenants, $5.4M for MWR, and $2M for sponsored research
- While $5.8M provided to NPS for Navy housing, it is not obvious this is sufficient to cover all associated costs — similarly for the $6.3 received for Army-owned housing
- Sponsored research, while increasing, is not paying its fair share of base support and facility management
  - Eliminating research may not reduce costs (unless faculty positions are eliminated)
  - Training support funds for academics and research are almost equal
- While the Army provides $6.3M to NPS for housing, Army housing consumes an additional $911K of resources

Trade-offs ...

FIVE ALTERNATIVE SCENARIOS WERE DEVELOPED TO CHARACTERIZE THE RANGE OF CHOICES FOR THE NAVY

ALTERNATIVE SCENARIOS

- **Status quo** — NPS as it exists today
- **Restructure NPS**
  - Apply civilian institution best practices
  - Restructure programs and personnel on economic case basis
  - Align research with curricula sponsors
  - Leverage non-traditional technologies
- **Lease space**
  - Lease excess capacity to civilian institution to reduce Navy's operating costs
  - Initially, a physical collocation — with terms of partnership to be determined
- **Lease school**
  - Lease school to civilian institution
  - Retain small Navy graduate school on campus for Navy-unique courses
- **Pay tuition**
  - Pay tuition to civilian institutions for all Navy postgraduate education (degreed programs)
  - Close NPS — while this violates the terms of reference, this alternative is included to illustrate the lower boundary condition on cost

Trade-offs ...

EACH SCENARIO WAS EVALUATED AGAINST THE MISSION CRITERIA FOR NPS ESTABLISHED BY SECNAV

TRADEOFF CRITERIA FOR SCENARIOS

- Its ability to develop and offer **unique curricula** which are unavailable elsewhere because of lack of civilian interest, uneconomically small classes, constraints on classified research, and the absence of relevant expertise and experience
- Its flexibility in **tailoring general educational** subjects to the particular needs and interests of the military
- Its ability to **meet DoN requirements, rapidly and effectively**, by creating and adapting relevant programs and terminating obsolete programs
- The encouragement of a **professional dialogue** among officer students and faculty engaged in related efforts to solve significant military problems
- The cultivation of a unique pool of **specialized faculty** whose expertise is particularly relevant and useful to the Department of Defense

Source: SECNAV INSTRUCTION 1524.21, Policies concerning the Naval Postgraduate School, April 1989

CRITERIA (ALL BUT COST, SET TO TWICE THE IMPORTANCE OF THE OTHER) WEIGHTED EQUALLY FOR THIS ASSESSMENT — BUT CAN BE CHANGED TO REFLECT ALTERNATIVE VIEWS

TRADE-OFF ASSESSMENT

Criteria	Weight	Status Quo	Restructured	Lease Space	Lease School	Pay Tuition
Unique Curricula	◑	◑	◕	◑	◑	◔
Tailored General Education	◑	◕	◕	◑	◔	◔
Rapidly , Effectively Meet Requirements	◑	◑	◕	◑	◔	◑
Professional Dialogue	◑	◑	◕	◑	◑	◑
Specialized Faculty	◑	◑	◕	◑	◔	◔
Cost to the Navy	●	◑	◕	◑	◕	●
Overall		◑	◕	◑	◑	◑
Numerical Score (0-4)		2.1	3.0	2.0	1.9	2.1

Legend	Strongly Meets Criteria	Meets criteria	Meets criteria with some reservation	Difficult to meet criteria	Does not meet criteria
	●	◕	◑	◔	○

IT'S NOT JUST ABOUT COST ...

OBSERVATION OF THE TRADE-OFF ANALYSIS

- The Navy decided that it had a requirement to sponsor and conduct its own in-house graduate education programs for selected officers — the NPS has admirably fulfilled that function in Monterey since 1951

- But in recent years, the NPS has been under budgetary scrutiny
  - Faculty are frustrated, if not departing
  - Navy and Marine Corps student population is decreasing
  - California legislators are concerned

- Declining defense budgets have perhaps shifted the focus unfairly to cost when:
  - The need for officer graduate education in the Navy is increasing
  - Civilian universities are ranked on educational excellence — not cost

- With technology ever increasing (and in its sophistication) in the Navy, the graduate education needed by its officers becomes ever more unique and complex (and rapidly evolving)

- Civilian institutions, as a reflection of the general population, have little interest in warfighting sciences and technologies — or their research

SEVERAL CIVILIAN UNIVERSITIES EXPRESSED SIGNIFICANT INTEREST IN PARTNERING WITH THE NPS

ASSESSMENT OF INTEREST IN PARTNERING WITH NPS

Listed in three groups, from most to least interested in a partnership with NPS

University	Official	Interested in Expansion	Interested in Remote Campus	Pursuing Partnerships	Existing DoD Relationship	Desire Further Dialog with Navy
Johns Hopkins	Exec. Director PT Programs	◕	◕	●	●	●
UC System	Provost UC-Berkeley	◕	◕	◑	◔	◕
RPI	President	◕	◕	◑	◕	◕
USC	Vice-Provost Graduate Ed.	◑	◑	◑	◑	◑
Northeastern	Executive Vice-Provost	◕	◑	◕	◔	◑
CIT	Provost				◕	○
MIT	Vice President	◑	○	◑	●	○
Stanford	Vice-Provost	◕	○	◑	◑	○
Tufts	Vice-Provost Dir., Fletcher	◕	◔	○	●	○

●	*Ready to take next steps*	◕	*Significant Interest*	◑	*Some Interest*	◔	*Continue Discussion*	○	*No Interest*

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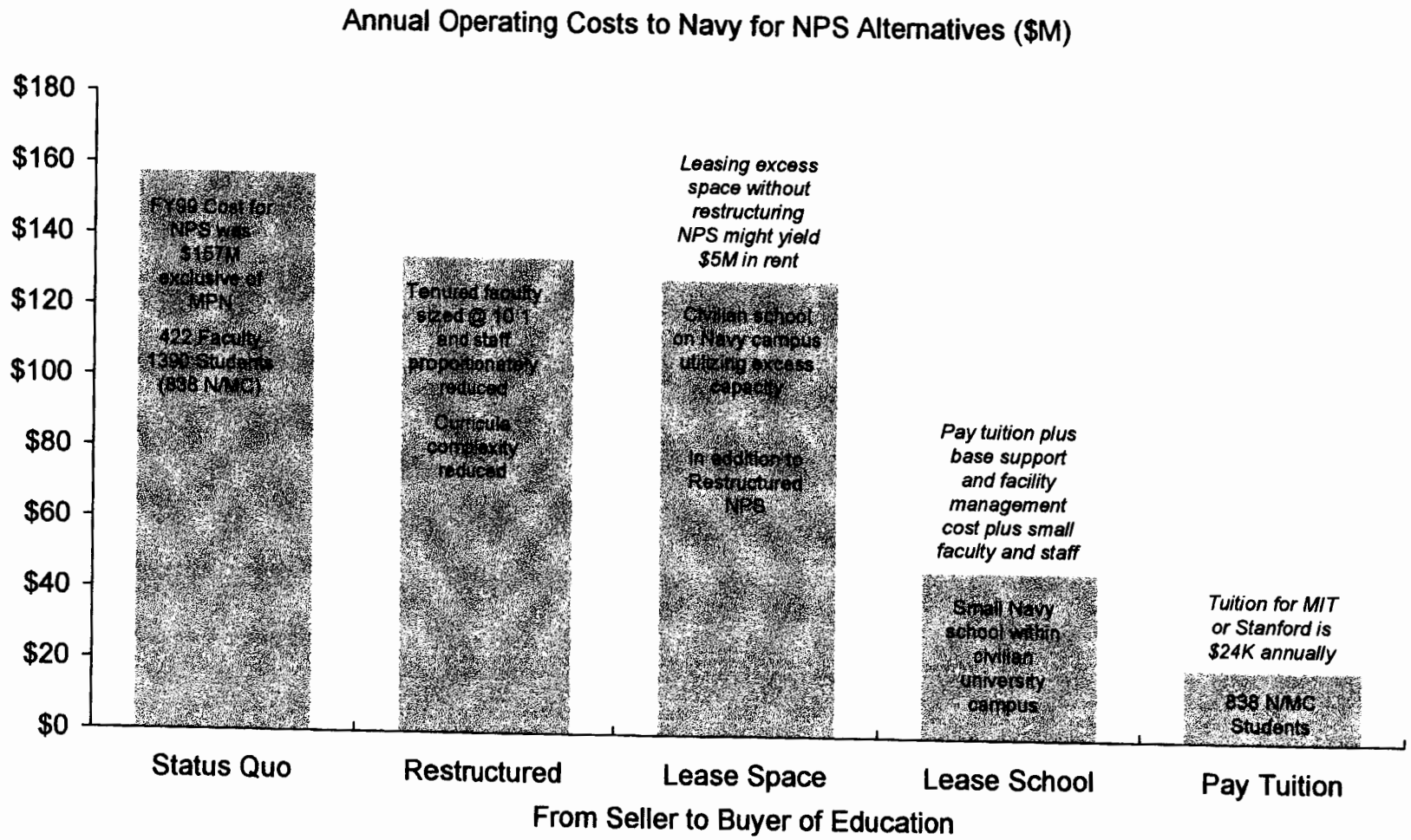
ORDER OF MAGNITUDE COST SAVINGS WERE ESTIMATED FOR THE ALTERNATIVES — BUT FURTHER DISCUSSION AND COST ANALYSIS IS ESSENTIAL



Study Findings ...

THIS STUDY ATTEMPTED TO ANSWER TWO QUESTIONS — UNIQUESS AND 50% SAVINGS

What is the uniqueness of the Naval Postgraduate School?

- Education at NPS is not as unique as commonly articulated
  - Much in common with leading graduate schools (civilian institutions)
  - Unique as a Navy institution, especially student-faculty dialog centered on N/MC
- The Navy should work to increase the relevance of research at NPS
  - Entrepreneurial approach by NPS needs to be channeled
  - A Center of Excellence approach should be adopted with curricula sponsor funding
  - Student research at NPS would benefit from the collocation or closer association with the Navy labs
- Move graduate education closer to the Naval officer in an expedited manner
  - Educate more officers, especially in Fleet Concentration Areas
  - Leverage distance learning — but, not in competition with CIVINS

Can any aspects/functions at NPS be outsourced to achieve a 50 percents savings?

- Navy is restricted in its options
  - A number of civilian institutions expressed an interest in outsourcing in place of the NPS
  - But, the Navy cannot expect significant savings in the near term
  - Details of a partnership need to be explored in a dialog between the Navy and CIVINS
- The Navy should investigate outsourcing the base functions
  - Facility management should be transferred to Commander, Navy Region Southwest
  - May save costs, and will save focus (i.e., allow NPS to focus on graduate education)

NPS NEEDS TO BECOME A CUSTOMER-FOCUSED ORGANIZATION FOR ITS NAVY AND MARINE CORPS GRADUATE STUDENTS

- Entrepreneurial approach to research and short courses is not entirely focused on "increasing the combat effectiveness of the Navy and the Marine Corps"
  - Not focused on its real customer, the Navy warfighter
  - Any further expansion of research tips the balance away from teaching
- Lack of economic discipline in curricula design adds complexity and spiraling costs
  - Unbridled Educational Skill Requirements drive up costs
  - With no incentives to reduce costs, NPS operates much like it always has
- Sponsored research and tenant activities are not paying their fair share of the costs
- Significantly lags civilian institutions in offering web-based instruction
  - Implementation of non-traditional approaches to graduate education to expand the Navy and Marine Corps student pool needs to be greatly accelerated
  - Navy officers either do not have time for two-year assignment to NPS or believe it to be career threatening
- Benefits and costs of transition/refresher courses remain a difficult issue to resolve

does not count in curriculum time

THE COST OF THE NPS CAN BE SIGNIFICANTLY REDUCED THROUGH RESTRUTURING TO ADOPT BEST PRACTICES AND ECONOMIC RIGOR

- Restructuring alone may not save 50%
- But, if the Navy works very hard at restructuring, there is a reasonable expectation of significant savings
- Some goodness in partnering with a civilian institution
  - Greater diversity
  - Potential to leverage private funding
  - But the Navy needs to evaluate what it really wants at NPS

DCN: 11935

Discussion of Privatization of NPS Graduate Education Programs

Assumptions:

1. The Programs offered at the NPS will be replicated at civilian institutions at the same number of quarter units as currently approved by Navy, USMC, Air Force and Army Curriculum sponsors.
2. The number of FTE students currently being served by NPS from the $70M mission appropriation is 2,100.
3. Civilian universities will charge their published out-of-state, per credit tuition levels.

University	$ Per Qtr Unit	Cost/Student/Year (64 Units)	Total Cost/Year	Annual Cost $ Compared to NPS	Twenty Year Additional Cost $
NPS	520[1]	33,333	70,000,000	----	----
Stanford	1068[2]	68,352	143,539,200[3]	+73,539,200	+1,470,784,000
MIT	949	60,736	127,545,600	+57,545,600	+1,150,912,000
Columbia	1100	70,400	147,840,000	+77,840,000	+1,556,800,000
George Mason	550	35,200	73,920,000	+3,920,000	+78,400,000
UC Irvine	676	43,297	90,925,333	+20,925,333	+418,506,666
Carnegie Mellon	916	58,624	123,110,400	+53,110,400	+1,062,208,000
U of Michigan	853	54,592	114,643,200	+44,643,200	+892,864,000
Harvard U.	900	57,600	120,960,000	+50,960,000	+1,019,200,000

Discussion

(1) NPS costs are lower because government salaries are significantly lower than at civilian universities, the number of support staff is smaller, and physical plant maintenance is regionalized.

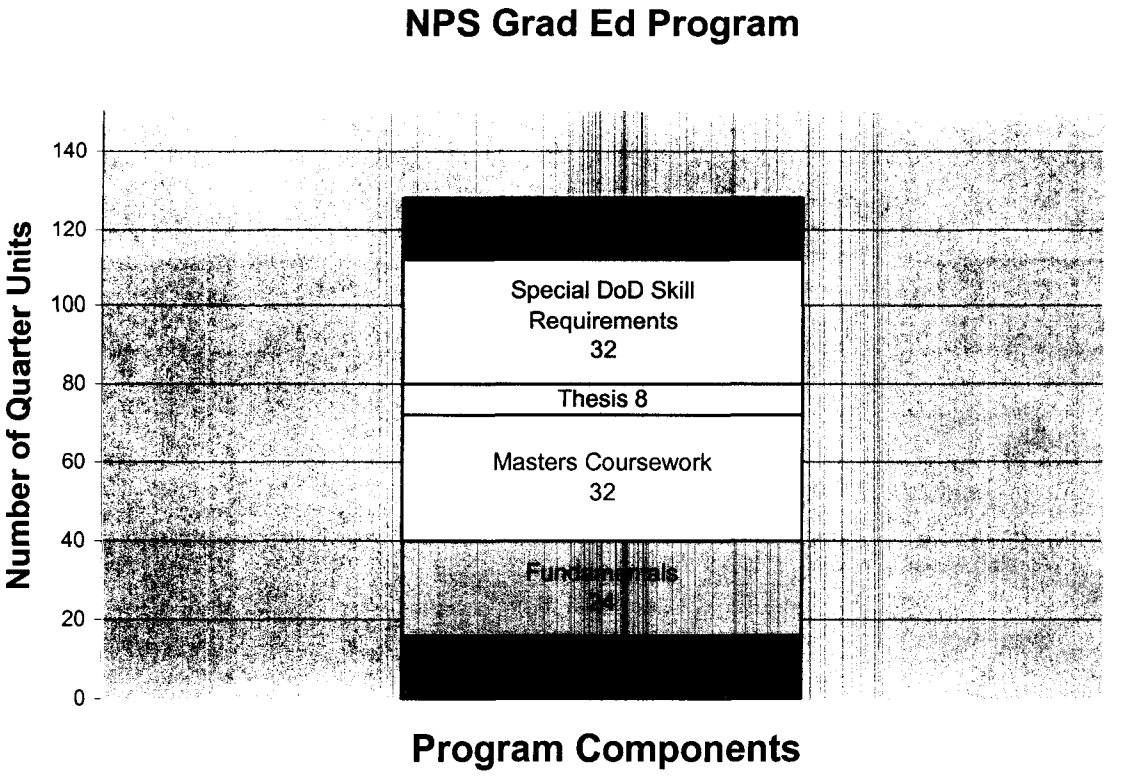
[1] NPS Cost per Qtr Unit is found by dividing the total mission funds by the total number of units taught per year.
[2] Civilian tuition and fees are found from the respective institution's website and normalized to Qtr Units
[3] Total cost is computed using per unit cost, 2,100 students and 64 units/student/year

DCN: 11935

(2) Civilian MS programs have 30-40 units, NPS graduate education programs, which include an MS, total 120-128 units (see figure below). Could we scrap the first assumption and substitute the civilian program for the NPS program? No for two reasons:

a. NPS program is unique. It provides BS level prerequisites and upper division fundamentals in addition to MS level course. This requirement is needed because many students do not have a BS in the same field of their selected MS studies. These students would not be admitted to civilian MS programs in their chosen field of study, because of the requirement of a recent BS degree in the same field. To obtain formal BS equivalency, most universities require the completion of the junior and senior years, which would add another 60 units and another two years. The additional time would be unacceptable to DoD and the resulting total cost, which includes additional student salaries ($120,000/student/year), would be substantially higher than the equivalent program at NPS.

b. DoD sponsors have assigned high value to the MS theses. In addition to being an invaluable and unique learning experience for the students, a large majority of these theses produce direct value to DoD operational commands by providing prototype systems or feasibility studies. Many of these projects would cost hundreds of thousands of additional dollars if they were conducted by contractors. Civilian universities often make MS theses optional because of insufficient faculty time available. Moreover, at a civilian university, it is very unlikely that a military officer could find an appropriate faculty advisor for a DoD-relevant thesis topic.



DCN: 11935

Carroll, Ray, CIV, WSO-BRAC

From: Carroll, Ray, CIV, WSO-BRAC

Sent: Tuesday, July 26, 2005 5:11 PM

To: 'dsmarsh@nps.edu'

Cc: Van Saun, David, CIV, WSO-BRAC; Hood, Wesley, CIV, WSO-BRAC; Dean, Ryan, CIV, WSO-BRAC

Subject: BRAC visit information

Attachments: DLI itinerary.doc; Biographies - FINAL.pdf; PDE questions.doc

Col. Smarsh,

Your assistance in helping the Commission with its work is sincerely appreciated. We look forward to visiting NPS on August 5th and 8th. My understanding of the itinerary for our visit is attached. The only open action in the itinerary is arrangements for travel between NPS and DLI on the 8th. It would be appreciated if NPS and DLI could coordinate transportation for the Commissioners and four BRAC analysts. The four analysts who will visit NPS on the 5th and 8th are myself, Mr. Dave Van Saun, Mr Wes Hood, and Mr. Ryan Dean.

With regard to the commands' presentation for the Commissioners, I would suggest a short command briefing followed by a tour of the school facilities. The briefing should highlight the programs offered at NPS, the value added to DoD's overall mission by the school, and unique aspects of the school. Attached to this message are the commissioner's biographies. As mentioned earlier, commissioners Gehman and Hansen will visit NPS.

Also attached is a list of questions requesting data on your education programs. We would appreciate written responses to these, and would like to discuss the responses during our staff visit on August 5.

Again, thank you for your help.

VR

Syd Carroll

Senior Analyst

BRAC Commission

DCN: 11935

NPS QUESTIONS

1. Please provide the following data regarding NPS students.
    a. The number of master's and doctorate degrees awarded, by type, for school years 2000-2004.
    b. The number of students enrolled in masters and doctorate programs, by type, for school years 2000-2005.
    c. The number of students enrolled in masters and doctorate programs, by type, for school years 2000-2005.
    d. The number of military, civilian, and contractor faculty, by degree program, for school years 2000-2005.
    e. The number of non-US students, by country, enrolled in and graduated from the NPS for school years 2000-2005.

2. We recognize that the Naval Postgraduate School provides defense focused courses to improve their relevancy for service and DoD personnel. This aside, what specific master's program courses does the school teach that are not available through the private university system.

3. During its BRAC assessment process, the DoD Education and Training Joint Cross Service Group considered several scenarios pertaining to postgraduate education. These scenarios included (1) privatizing all postgraduate education, and (2) consolidating all postgraduate education at the Naval Postgraduate School. A third scenario, which the DoD did not consider, would be to consolidate all postgraduate education at AFIT. What is AFIT's position, and why, on each of the scenarios with regard to:

    a. Its affect on instructional quality.
    b. Its impact on the military's officer corp.
    c. Its impact on DoD's education system.
    d. Program costs.
    e. The value added to DoD's overall mission.

4. Are there specific courses or research programs that should not be considered for privatization or consolidation? If so, please explain what they are and why.

5. Explain your BOS structure and procedures. Include details on cost, manning, and how you might expand your program to cover other organizations and/or locations in the same local area.

DCN: 11935

VISIT ITINERARY – August 8, 2005

Admiral Harold W. Gehman, Jr. USN (Ret)
and
The Honorable James V. Hansen

Naval Postgraduate School and Defense Language Institute
Monterey, California

DATE & TIME	EVENT	LOCATION	POC	ACTION
August 08 0730 - 0800	Commissioners Travel from Hotel to Naval Postgraduate School	Monterey, CA	Dave Van Saun And Syd Carroll	Transport Commissioners to NPS
0800 - 0930	Commissioner's brief and tour of NPS	Naval Postgraduate School, Monterey, CA	Commandant Chief of Staff	Mission Brief and NPS Tour
0930 - 1000	Travel from Naval Postgraduate School to Defense Language Institute	Monterey, CA	TBD	Transport Commissioners to DLI
1000 - 1130	Commissioner's brief and tour of Defense Language Institute	Defense Language Institute (Presidio) Monterey, CA	Commandant Chief of Protocol	Mission Brief and DLI Tour
1130-1145	Media	TBD	Dave Van Saun And Syd Carroll	Respond to Media Questions
1145	Commissioners depart for Regional Hearing	Monterey, CA	Dave Van Saun And Syd Carroll	Transport commissioners from DLI to Regional Hearinng

THE TRANSFORMATIONAL BRAC

Issue: BRAC results are intended to be transformational.

When viewed in its totality, the Naval Postgraduate School is usually the only DoD educational institution to anticipate a changing security and technological environment and to develop effective programs to equip today's warfighters to meet future challenges. There are programs that exist at NPS today that are offered no where else.

Some facts:

- NPS has long been a leader in information technology
  - the origin of the operating system undergirding WINDOWS was in the NPS Computer Science Department in the mid-1970s
  - the first transistor-based digital computer (CDC 1604, #1) was installed at NPS in the early 1960s
  - NPS was developing and exploring knowledge management (KM) long before KM became the buzz
  - NPS challenged the Navy Marine Corps Intranet, recognizing its limits. NPS does not delight in this conflict with Big Navy
  - NPS has been engaged in cybersecurity education and research for a decade, and these programs have been recognized by the National Security Agency and the National Science Foundation
  - NPS is respected as the foremost center for study and research at the graduate level in Information Systems, Information Operations, and Information Assurance, while the Service Colleges teach token programs. This is why SecDef designated NPS the DoD Center for Information Operations (IO) and established a real IO curriculum at NPS to show the way in DoD.

- NPS has been active in unmanned vehicles (air, surface and sub-surface) for many years
  - NPS operates a fleet of UAVs, including Predators, which are used to support experiments for SOCOM
  - NPS students and faculty are engaged in the experiments with SOF units at nearby Camp Roberts and at the former Fort Ord, and in Monterey Bay.

- NPS has been active in developing wireless networks for use in Afghanistan, Singapore and Thailand
  - This experimental work is being expanded to ports of Long Beach and San Francisco in conjunction with Lawrence Livermore National Lab.

- NPS has offered graduate-level regional studies and language programs for decades
  - Army, Air Force and Marine Corps have dominated the enrollments, although in recent months Navy leadership has rediscovered the importance of equipping warfighters with information about regional events and conditions

- Foreign language training, for NPS students, to include cross-enrollment of NPS students at the Defense Language Institute (DLI) has been a fact for decades
  - Army, Air Force and Marine Corps have taken great advantage of the DLI-NPS relationship to create real regional experts who know about the culture, language, history and politics of a region

- NPS developed a program of education and research for SOCOM in Special Operations and Low-Intensity Conflict about a decade ago
  - o faculty and students from NPS are currently in great demand from both Theater Commands and JFCOM to help analyze increasing amounts of data generated by combat operations
  - a search of courses offered at the War Colleges reveals little or no such focus on special operations

- NPS established a Homeland Security and Defense program of education and research within a year after 9-11
  - the innovative in-residence/distance learning masters degree program is the only degree program funded by the Department of Homeland Security
  - demand for new in-residence programs is unprecedented as all services seek better ways to support HLS
  - a Google search of courses offered at the War Colleges reveals little or no such focus

- The NPS Program has been exported to the University of Connecticut

- NPS has a joint and inter-agency student body
  - 777 of the 1697 on-campus students are Navy officers, 99 are Army, 264 are Air Force, 229 Marine Corps, 5 are Coast Guard and 275 are international civilian and military officers
  - the School's Homeland Security masters program draws about 150 students from NORTHCOM, Air Force, FBI, executives from state governments, New York Fire Department and so on (These enrollments are in addition to those reported above.)
  - a National Science Foundation funded cybersecurity program enrolls civilians who must work in the U.S. government after receiving their masters degrees

- NPS has an international student body, making it a leader in fostering Strategic Communications
  - former Secretary of State Powell designated NPS as The nation's Partnership for Peace education center
  - 303 internationals from 61 nations are enrolled in NPS on-campus degree programs

- NPS initiated systems engineering programs about six years ago - before demand signals were received from DoD

- NPS maintained a robust research and small educational program in undersea warfare (USW) when the Navy lost interest in USW
  - USW has now come back as a Navy priority, and NPS has responded with both resident and distributed learning options

- NPS began offering off-campus degree programs a decade ago and devising innovative ways to project knowledge directly to the warfighter wherever he or she may be
  - off-campus degree enrollments now number about 600
  - thousands of Sailors and Marine have benefited from the Regional Security Education Program

delivered on-board to all Navy Battlegroups and Expeditionary Strike Groups

- NPS began offering on-line graduate-level certificate programs several years ago
  - enrollments now exceed 140, limited only by funding by Navy

- NPS has an accredited web-based computer technology masters degree program ready for launch
  - Navy is pondering the question of whether there is a requirement for this education

The Naval Postgraduate School is a unique national resource where hundreds of officers, allies and members of the interagency community come together to understand and devise effective responses to a changing security environment. To lose this asset would greatly reduce the ability of the DoD to meet emerging threats.

DCN: 11935

Naval Postgraduate School Facts

Students		
• Resident Graduate		1697
○ Navy	777	
○ International (60 Countries)	275	
○ Air Force	264	
○ Marine Corps	229	
○ Army	99	
○ DoD Civilians	48	
○ Coast Guard	5	
• Distance Learning Graduate		523
○ Navy	235	
○ Homeland Security	71	
○ DoD Civilian	193	
○ Other US Services	24	
• Short Course Students		49,159
Employees		1171
• Faculty	525	
• Staff	466	
• Military	180	
Contractors		141
Fiscal Resources		$185,341,541
• Direct Congressional Appropriation	$ 76,239,000	
• Reimbursable Research, Education	$109,102,541	
Student Salaries (estimated)		$170,900,000
Curricula		
• Resident Masters and PhD		41
○ Sample: Defense Analysis, Information Assurance, Information Warfare, Undersea Warfare, Combat Systems, Homeland Security…		
• Distance Learning Masters		14
○ Sample: System Analysis, EMBA…		
Education delivered in International Countries		45
Facilities		
• Buildings		114
• Square Footage		~1.7 Million
• Acres		322.25

Graduates include 34 astronauts, King of Jordan, Chief of Naval Operations, Commandant of the Marine Corps, former Secretary of Army and Air Force, Director, National Security Agency…

DCN: 11935

Integration of AFIT into NPS

Capacity:

NPS can accommodate up to 700 more students in the short run, and more than that in the long-run if MilCon is provided.

-NPS has the classroom capacity, if class sections are filled to the maximum size and class scheduling hours are extended

-faculty offices can be provided for AFIT faculty moving to NPS by moving some current programs off campus until MilCon provides more space

NPS has an adequate supply of housing for additional students.

-all military housing (2000 units) has been turned over to a RCI and new homes are replacing all of the old homes

NPS has an adequate supply of housing for additional faculty and staff

-homes and townhouses are available for lease at Fort Ord

BAH is adequate to rent many apartments and homes in the Monterey area.

As a result of another RCI, new homes will be available for purchase by faculty and staff at Fort Ord two years from now

NPS and DLI collaborate to supply child care—no issues foreseen

Medical care, particularly OB/Gyn care is not a problem. Problems were resolved by Tri-Care/Tri-West several months ago.

Benefits:

A combined school will be more able to respond to emerging national security issues, because the combined school will have a larger faculty with an increased diversity of advanced knowledge and skills

The "jointness" of the student body will be even greater than it is today

The number of internationals enrolled at the same place will increase

Placed together, the one school will be able to build better lab facilities in fields such as nanotechnology (labs for nano are expensive)

A combined school will provide a larger pool of faculty human capital to work with students in courses, and on theses and projects

OSD and all of the Services will have a one-stop shop for their uniquely-military graduate education requirements

There should be savings as duplicate organizations, such as safety, public works, HR, etc. are integrated into one

UNCLASSIFIED
DCN: 11935

CDR M. E. Suess
(831) 656-2261
08 July 2005

Subj: NPS MONTEREY AND MUNICIPAL SERVICE LEGISLATION

Background: The 1995 Defense Authorization Bill included demonstration project legislation that allowed military installations in Monterey County to contract for municipal utilities and services. This legislation was renewed each year. In 1998, the U.S. Army's Presidio of Monterey (POM) abolished an ISSA with Naval Postgraduate School (NPS) Public Works Department and transitioned to the City of Monterey (CoM) for facility support services. The original contract with the city was a sole-source, cost-reimbursement contract. In December 2000, the Army Audit Agency validated a savings of $2.5 Million (41% of budget) for the first full performance year. The previous Navy-provided service was admittedly inefficient and overpriced.

In March 2001, because of uncertainty regarding annual renewals of the special legislation, the Army decided to re-award the Base Support contract using full and open competition. After an exception was obtained from the Small Business Administration, the solicitation was issued for an unrestricted, cost plus award fee, best value contract. CoM competed against several well-qualified companies and won the contract. Now in their third year of the contract, CoM has made continual improvements in their performance.

The 2004 Defense Authorization Bill made the municipal contracting authority permanent for Monterey County.

Discussion:
Many have inquired, "Why isn't NPS using the authority?" There are several reasons:

- NPS tried. In 2002, while in the midst of an A-76 study of Public Works, NPS proposed an initiative to combine both NPS and City of Monterey services, whomever was more efficient in each sub-function. Higher Navy authorities conceded that the initiative had merit but decided that the A76 study was too far along to change course.
- In Aug 2002, the NPS Public Works Most Efficient Organization (MEO) retained the function in-house. The 5-year contract (base year plus four options) began 1 October 2003. There are questions about the legality and ramifications of again trying to outsource any of the recently "awarded" services.
- The cost-effectiveness of outsourcing to CoM is questionable. NPS Public Works dramatically streamlined its operations for the A-76 competition, reducing billets from 95 to 58, and annual costs from $7M to $3.5M (validated by CNO audit). Furthermore, the one-time cost of a reduction in force (RIF) for Public Works would be considerable. When POM hired the CoM, they did not have an in-house force to RIF.
- Navy acquisition lawyers have ruled more conservatively than the Army regarding the scope of the special legislation. The Navy legal position is that the legislation does not allow for sole source contracts with the CoM -- all contracts must still be competed.
- Furthermore, the Navy is opposed to cost-reimbursement contracts for facility services, whereas the CoM insists on cost reimbursement contracts. They insist on this because, as a publicly funded entity, they cannot risk losing money.
- NPS has still been successful in establishing some one-time service contracts with the CoM, including trash disposal, asphalt resurfacing, and tree maintenance. Custodial services were recently compared but the CoM cost was more than NPS could afford because of the city's emphasis on quality and use of an in-house workforce.

Recommendation: For information only.

DCN: 11935

Naval Postgraduate School and the Defense Language Institute: Academic Interactions

1. NPS Courses for DLI

Course titles: ***Comparative Politics***
International Relations

Course duration: 4 week accelerated 4 unit courses (4 course meetings per week, 4 hours per day or course meeting).

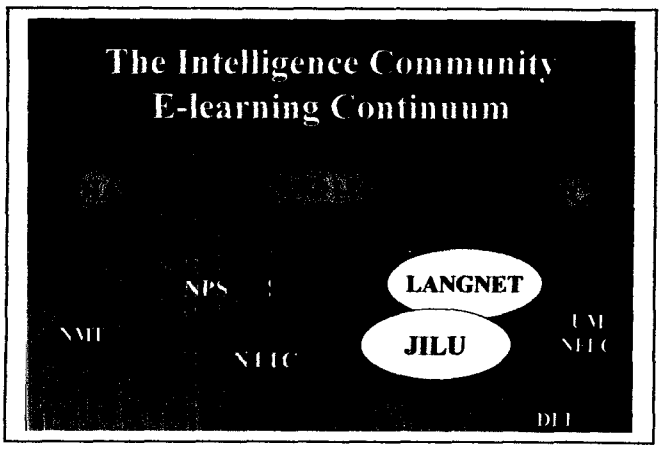
Rationale: The USAF sponsors these courses to provide undergraduate level education (fully accredited) to enlisted personnel waiting to begin language instruction at DLI. Due to the surge in demand for language instruction in 2002 and 2003, DLI developed a substantial waiting list for enrollment. NPS stepped forward to support a USAF requirement by providing education during the time period before language instruction began. The courses are designed to provide students with political-military context of the region/country/language they are studying. These courses are taught at the upper division undergraduate level, and are part of the DLI AA degree requirement, qualifying as college-level credits fully transferable to 2 and 4 year university programs. Class size averages about 50 students per class.

2. DLI Military Staff & Faculty

DLI Military Staff & Faculty are eligible to enroll for a degree at NPS on a space available basis.

3. Joint Intelligence Virtual University at NPS

Purpose: The purpose of the Joint Intelligence Virtual University (JIVU) is to provide desktop education and training to intelligence and cryptology communities via synchronous (realtime) or asynchronous (non-realtime) modes, or some blend of the two. JIVU is delivered to the desktop, and is accessible anytime from anywhere. JIVU uses PC/Laptop/CD/DVD based platforms to enable virtual laboratories, course modules, reference materials, scenarios and war gaming.



Approach: Implement a new, state of the art, but economic and simple VTE/VTC system. The system will be used to provide a classified / unclassified distance learning capability.

Communities of Interest: DIA/GITC (General Intel Training Council), NSA/CTC (Cryptologic Training Council), NRO/NGA (NIMA), Service Technical Schools (NTTC)
Regional Joint Training Centers (Worldwide), DOD Advanced Distributed Learning (ADL)
Selected Universities (NPS, UM, NMT), and Industry.

Education, Mission Support and Wargaming: Classified and unclassified education will be available both for degree and non degree programs, from Master's/PHD Programs to formal and informal courses, short courses, certification programs, joint advance exercises, mission support workshops, and exercise/wargaming support. Courseware is currently available to over 75,000 Intelligence community users on INTELINK ,JWICS, SIPRnet and NSAnet. Soon will be available on the Internet (.com, .mil, .edu).

JIVU Sites-- 2004 Installations

- Misawa Security Operations Center (MSOC), Japan
- Naval Technical Training Center (NTTC), Pensacola, Florida
- U.S. Army Intelligence Center (USAIC), Fort Huachuca, Arizona
- Menwith Hill Station (MHS), England (unclass 2005)
- Naval Postgraduate School (NPS), Monterey, California (unclass 2005)

VUport Sites-- 2005 Planned Installations/Connectivity

- Kunia Remote Security Operations Center, Hawaii
- Medina Remote Security Operations Center, Texas
- Fort Gordon Remote Security Operations Center, Georgia
- Royal Air Force Digby, England
- Goodfellow Technical Training Center, Texas
- Field Station Denver, Denver, Colorado
- USMC Security Group Detachment Kaneohe Bay, Hawaii
- Defense Language Institute (DLI), Monterey, California
- Reserve and National Guard Units (UT, CA, TX, GA)
- U.S. Navy (Shipboard included)
- Deployed unit
- Selected Universities

DCN: 11935

Collaborations between Naval Postgraduate School, Defense Language Institute, and the City of Monterey: Base Operations Support

Background: The BRAC Commission is investigating whether or not it makes sense to consolidate the Naval Postgraduate School (NPS) with the Defense Language School (DLI), and possibly the Air Force Institute of Technology (AFIT). Each of these institutions has an academic or mission side, and an additional ase operations support (BOS) side. Base Operations Support for NPS is provided by the Naval Support Detachment Monterey, Naval Region Southwest (NRSW). The Presidio of Monterey (POM) Army Garrison, Installation Management Activity (IMA) Southwest, supports DLI on the BOS side. Wright-Patterson Air Force Base supports AFIT. For the purpose of this paper, NPS, DLI, and AFIT will be used as the descriptive organization rather than using the name of the actual BOS provider. Both NPS and DLI are located within the City of Monterey (COM), and both enjoy mutual support from the COM and each other to differing degrees. This paper describes the current cooperative relationships in Base Operations Support between NPS and DLI from the NPS perspective.

Discussion: DLI has earned acclaim through its BOS relationship with the COM that has come to be known as 'The Monterey Model.' The model led to a significant level of cost savings and efficiency. NPS also works separate BOS contracts with the COM, and numerous collaborations with the DLI, some rooted in formal contract, most via cooperative relationships that exist for mutual benefit. Examples of representative collaborations are described below.

1. Street Maintenance: Street maintenance is accomplished for NPS through a COM contract that provides a large volume of work. NPS, DLI, COM, and City of Seaside are joined together in the same contract, discounting the cost to the Navy by one third. The Navy status on these contracts is 'firm, fixed price.' NPS has had the street maintenance contract with COM for the last three years.
2. Refuse Collection and Recycling: NPS contracts with a DLI contract vehicle for refuse collection and recycling through its umbrella BOS contract with the COM. In this way both institutions enjoy a discounted price from COM.
3. Tree Maintenance: NPS contracts for the COM arborist in both identifying sick trees and also with the COM Public Works for fallen debris that exceeds the NPS Public Works capability.
4. Housing Privatization: In 2002, NPS joined with DLI in a housing privatization project with a developer-partner under an Army Residential Community Initiative contract vehicle. This is a $500 million project and the first joint housing privatization project in DoD. The initial development period spans ten years and will completely rebuild over 2200 homes. Both NPS and DLI jointly govern along with their developer-partner, Clark-

Pinnacle, through a monthly corporate board. Over 252 homes have already been built. Phase 2 will complete an additional 357 homes by January 2006.

5. Medical Support: Both the NPS and DLI active duty military population are supported through the Joint Medical Clinic provided on the POM by California Medical Command (Army). The Joint Medical Clinic performs all the physical requirements for NPS NAF employment as well as special physical requirements for police, food handlers, firefighters, etc.
6. Veterinarian &Medical Clinic: The Army Veterinarian and Medical Clinic conduct all food service/health and sanitation inspection requirements for NPS food and beverage program, as well as requirements from the Navy Exchange Food Court & Barbershop, NPS Gym facility, Navy Golf Course snack bar, La Mesa Village Youth Center, Child Development Center, and others.
7. TRI-CARE: NPS and DLI are both represented at MORE Health quarterly board meetings that provide a forum with all the Monterey County CEOs and TRI-West (Western States TRI-CARE provider), and others to ensure the needs of military personnel are represented and provided for.
8. Dental Support: Both NPS and DLI have dental providers on their respective campuses who have joined in a cooperative relationship to support each other for emergency care. The prospect of a joint dental facility is being examined.
9. Morale, Welfare, and Recreation (MWR): NPS and DLI coordinate their MWR programs to ensure they are complementary. For example, NPS has an outstanding catering department used to support both NPS and DLI functions. DLI has an outstanding transportation program through their Outdoor Recreation Dept that is used to support various NPS events. NPS offers a sailing program while DLI offers snow sports. NPS has a golf course that hosts tournaments and provides play for both NPS and DLI. NPS and DLI programs are non-competitive, mutually supportive, and both organizations advertise each other's activities.
10. Monterey Peninsula DoDNet: The MP DoDNet was a COM initiative resulting from their negotiation of additional fiber infrastructure, as part of the municipal cable television contract. COM dedicated the additional fiber for DoD use. MP DoDNet is now an innovative high-speed infrastructure linking all of the DoD organizations on the Monterey Peninsula including NPS, DLI, , Fleet Numerical Meteorology and Oceanography Center, Naval Research Laboratory, and Defense Data Manpower Center. The infrastructure enhances collaborative efforts and yields seamless connectivity across administrative domains. The MP DoDNet runs gigabit Ethernet and saves dollars in T-1 lines, phone circuit charges, and off-site equipment hosting. The DoD CIOs meet quarterly for to hear from working groups and generate recommendations for new initiatives, and hold an annual strategic planning meeting. Projects include provision of tech center support, web server hosting, main-frame processing, high-speed data transfer for the meteorology/oceanography community, shared security protocols, and network attached storage.
11. BOQ and transient lodging: NPS and DLI use each other's lodging as first alternative if their own lodging has no vacancy. Additionally, the Navy

Lodge located in the La Mesa Village has 72 premium rooms with kitchenettes to support PCS moves and other transient lodging missions for the Monterey military community.

12. Faculty/Staff Home Ownership Program: NPS and DLI representatives are spearheading a workforce affordable home ownership program for their faculty and staff. This program is planned to be a community land trust (CLT) of approximately 120 homes, (land and water provided) that will be available in late 2007 for home ownership by both NPS and DLI faculty and staff, as well as other DoD institutions within Monterey Peninsula. The CLT will allow for sustained affordability through land ownership retained by the trust with a moderate cost to the home owner for the land lease; it is estimated that homes can be offered at approximately 1/3 to 1/2 the market price within the area.
13. Security: Both security forces for NPS and DLI are mutually supportive. In addition, the DLI provides the patrolling/policing for La Mesa Village, characteristically a housing area that supports NPS.
14. Fire Protection Services: The COM provides fire protection services to NPS by law, and to DLI through contract. The COM provides fire support to La Mesa Village through contract with the housing privatization LLC. DLI has its own fire company for the Ord Military Community, and responsibilities for the former military range. NPS retains two fire prevention staff for prevention functions and for liaison with the COM Fire Dept.
15. Fleet and Family Support Center (FFSC), and Army Community Services (ACS): FFSC supports NPS, and ACS supports DLI. Both of these organizations work together with the medical clinic to ensure optimum delivery of services for respective service members. FFSC provides all the clinical counseling for the area, while the medical clinic has a psychologist on staff and employs the services of a psychiatrist through contract. FFSC provides the Transition Assistance Program (TAP) for the area. ACS provides a family team-building course for spouses of all services that are new to the military. Both FFSC and ACS have their own respective Family Advocacy Programs. There is natural coordination between the programs because each organizations' school and staff population are represented by all military services.
16. Exchanges: A Navy Exchange with gas station is located on NPS while DLI is supported by a small troop store and gas station on the POM, with a larger AAFES store and gas station on the Ord Military Community. The respective exchange managers' work together to offer different merchandise for their customers as well as cooperate on gas pricing.
17. Logistics: A Navy Supply Officer supports NPS and a small contract staff while the DLI is supported with a Directorate of Logistics. Both organizations support each other to provide services from warehousing, excess property, HHG and Personal Property.
18. Staff Judge Advocate (SJA) and Public Affairs Officer (PAO): In both of these areas, NPS enjoys support from much larger staff structures supporting DLI. Both coordinate activities together and DLI recently spearheaded a joint

military news offering for the entire community, which features both NPS and DLI.

19. Environment and Safety: Both of these NPS organizations work together on a regular basis with their DLI counterparts. One recent success is the joint motorcycle safety course, currently utilizing a course layout on the Ord Military Community (Army), alternating instructors from NPS & DLI. NPS has taught the last two courses.
20. Chaplains: The installation chaplains coordinate their weekly services, and appoint a single duty chaplain watch bill to supports the entire area.
21. Miscellaneous projects with COM: These include a joint storm water runoff project from/to Lake DelMonte, Sloat Road traffic control, Sloat Road parking and force protection enhancement, gate improvements and surrounding street enhancements, neighborhood relations, etc.

NPS and the Monterey Model. The question is often asked why NPS does not employ the same 'Monterey Model' for BOS as DLI. In fact, NPS proposed a similar model using a combined MEO and COM Public Works organization as an alternate for an A76 study. NPS was too far along in the study, Navy was concerned about an Anti-Deficiency Act, and the proposal was rejected. The A76 resulted in a contract award to the MEO that had reduced billets from 95 to 58 and annual costs from $7 million to $3.5 million (validated by CNO audit). NPS is now supported by a 'barebones' organization at minimal cost. The main benefit at this time would be synergistic, as cost efficiencies have already been gleaned. While NPS is not opposed to pursuing this Monterey Model option, some obstacles remain. Issues include the disposal of the MEO contract and resultant RIF costs, legal issues over sole sourcing, the required waiver to Small Business Act due to size of contract, and Navy concern over 'cost reimbursement 'contracts which are the vehicle used by COM.

Summary. NPS, DLI, and COM conduct their distinct missions within a collaborative Base Operations Support environment, accomplishing their mutual goal to support the needs of the military. This cooperation fosters enhanced efficiency, cost savings, time savings, matrixing of human assets to cover the tasks, all within a rich, sustainable partnership.

DCN: 11935

Naval Postgraduate School and
Army Intermediate Level Education

Background

- The Naval Postgraduate School is one of the few sites that offers the Intermediate Level Education (ILE) to Army officers.

- The Army Intermediate Level Education (ILE) is part of the Army's effort to reorganize its officer management system. This reorganization is designed to streamline how the Army prepares its officers through an entire officer life cycle. ILE addresses officer education at the mid-career point (Major, CPT(P)). ILE has replaced the Army Command and General Staff Course (CGSC) (AKA "Legacy" course).

- ILE removes competitive selection for attendance to Army Professional Military Education at the mid-career point. Everyone attends an ILE of some sort. Depending on the officer's career field and/or functional area designation, he or she will attend a two phase program. The first phase is known as the Common Core Course (CCC), and is currently fifteen weeks long. Everyone attends CCC (only the locations are different). In addition, Phase I awards both JPME and Army MEL4.

Phase II is career field determinant. Some Phase II programs require a Master's degree, some require a 7 month military course, while others require 2-7 week courses. The locations for CCC are currently Fort Belvoir VA, Fort Leavenworth KS, Fort Lee VA, and the Naval Postgraduate School/Defense Language Institute, Monterey, CA (NPS/DLI).

Only Fort Leavenworth, KS, and NPS/DLI offer both Phase I and Phase II at the same location. Whereas Fort Leavenworth offers Phase I and II for operations career field (officers only). NPS/DLI currently offer Phase I and II for various other career fields and selective OCF offices (special operations, psychological operations and civil affairs branches). The advantages of one location (NPS/DLI) serving a variety of needs, for both Phases is not lost on officers, managers, and the senior leadership of the Army. The ability for an Army officer to receive his/her required Master's degree and required PME (Phase I) at the same location (NPS/DLI) reduces unnecessary friction. Efficiency improvements are exemplified by the reduction in costs, officer movement, family turbulence, and most importantly, reducing the amount of time an officer is out of the operational environment.

ILE at NPS is so popular, the Army has increased its "fixed sum" allocation of students to NPS while introducing additional Army students to NPS through new career field participation. Financial Management, and the Operations Career Field Master's Degree program (OCF) are examples. The OCF program provides a great example of NPS' important role in Army education. The OCF Program was requested by the Army

Human Resource Command specifically based on the existing NPS Special Operations Curriculum (Department of Defense Analysis). The Army recognized a requirement to provide its OCF officers a Master's degree opportunity, when at the time none existed. Given the success of the Special Operations Curriculum for specific operation career field officers (special ops, psy ops, and civil affairs) the Army quickly designed a unique OCF program of its own.

□ After four years of coordination, ILE is currently being conducted at the Naval Postgraduate School. The current ILE class at NPS, consisting of 64 officers, will graduate on the 23 of September, 2005. In regard to OCF officers, the savings in both time and money are substantial, as the officers are not required to attend the 10 month Phase II program at Fort Leavenworth, KS.

□ Throughout the execution of ILE at NPS/DLI, both installations have entered into a unique partnership of cooperation and effectiveness. Currently, while NPS provides all academic support (class rooms, AV, faculty offices, library, computer/internet access), DLI supplies all administrative support, including messing, lodging for faculty, students in a TAD/TDY status). Once it was determined that NPS could not continue to provide for classroom support ILE (given its increase from 11 weeks to 15 weeks in duration), DLI immediately assumed the responsibility of sponsoring the ILE program at DLI. The Army is committed to coupling the NPS Degree Program and ILE. Beginning in March 2006, ILE will go to "steady state," continuing the relationship between NPS, DLI, and Fort Leavenworth, KS, the ILE proponent.

DCN: 11935

Military Service Member and DoD/Staff & Faculty Housing Fact Sheet

Active Duty Military Service Members

Military housing in the Monterey Bay area was privatized in 2003. 2,268 existing housing units were transferred by the military to a public private partnership known as Monterey Bay Military Housing, LLC.

Using privately raised funds, across the next 10 years, the partnership will demolish the existing housing units and build new units on the approximately 1,000 acres of Navy and Army housing areas. The first 250 new units have been completed. Much flexibility exists in the LLC's ability to accommodate additional housing units in the future. 2,549 units could be constructed at the current housing density on properties controlled, or soon to be controlled by the LLC. This matches the current estimate of homes required by the Housing Market Analysis conducted in 2002. However, if expansion was required, and if densities were used to match densities common to new residential housing construction in California, then the properties could accommodate 3,500+ housing units in single and two-story formats, an expansion of approximately 1000 units.

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DCN: 11935

Naval Postgraduate School and the Defense Language Institute: Academic Interactions

1. NPS Courses for DLI

Course titles: ***Comparative Politics***
International Relations

Course duration: 4 week accelerated 4 unit courses (4 course meetings per week, 4 hours per day or course meeting).

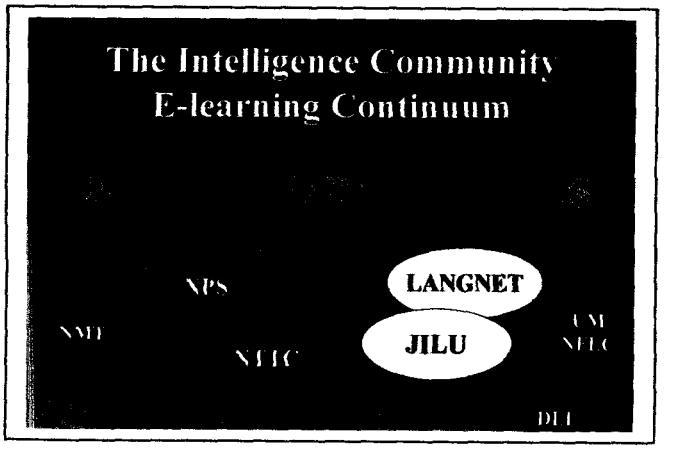
Rationale: The USAF sponsors these courses to provide undergraduate level education (fully accredited) to enlisted personnel waiting to begin language instruction at DLI. Due to the surge in demand for language instruction in 2002 and 2003, DLI developed a substantial waiting list for enrollment. NPS stepped forward to support a USAF requirement by providing education during the time period before language instruction began. The courses are designed to provide students with political-military context of the region/country/language they are studying. These courses are taught at the upper division undergraduate level, and are part of the DLI AA degree requirement, qualifying as college-level credits fully transferable to 2 and 4 year university programs. Class size averages about 50 students per class.

2. DLI Military Staff & Faculty

DLI Military Staff & Faculty are eligible to enroll for a degree at NPS on a space available basis.

3. Joint Intelligence Virtual University at NPS

Purpose: The purpose of the Joint Intelligence Virtual University (JIVU) is to provide desktop education and training to intelligence and cryptology communities via synchronous (realtime) or asynchronous (non-realtime) modes, or some blend of the two. JIVU is delivered to the desktop, and is accessible anytime from anywhere. JIVU uses PC/Laptop/CD/DVD based platforms to enable virtual laboratories, course modules, reference materials, scenarios and war gaming.



Approach: Implement a new, state of the art, but economic and simple VTE/VTC system. The system will be used to provide a classified / unclassified distance learning capability.

Communities of Interest: DIA/GITC (General Intel Training Council), NSA/CTC (Cryptologic Training Council), NRO/NGA (NIMA), Service Technical Schools (NTTC)
Regional Joint Training Centers (Worldwide), DOD Advanced Distributed Learning (ADL)
Selected Universities (NPS, UM, NMT), and Industry.

Education, Mission Support and Wargaming: Classified and unclassified education will be available both for degree and non degree programs, from Master's/PHD Programs to formal and informal courses, short courses, certification programs, joint advance exercises, mission support workshops, and exercise/wargaming support. Courseware is currently available to over 75,000 Intelligence community users on INTELINK ,JWICS, SIPRnet and NSAnet. Soon will be available on the Internet (.com, .mil, .edu).

JIVU Sites-- 2004 Installations

- Misawa Security Operations Center (MSOC), Japan
- Naval Technical Training Center (NTTC), Pensacola, Florida
- U.S. Army Intelligence Center (USAIC), Fort Huachuca, Arizona
- Menwith Hill Station (MHS), England (unclass 2005)
- Naval Postgraduate School (NPS), Monterey, California (unclass 2005)

VUport Sites-- 2005 Planned Installations/Connectivity

- Kunia Remote Security Operations Center, Hawaii
- Medina Remote Security Operations Center, Texas
- Fort Gordon Remote Security Operations Center, Georgia
- Royal Air Force Digby, England
- Goodfellow Technical Training Center, Texas
- Field Station Denver, Denver, Colorado
- USMC Security Group Detachment Kaneohe Bay, Hawaii
- Defense Language Institute (DLI), Monterey, California
- Reserve and National Guard Units (UT, CA, TX, GA)
- U.S. Navy (Shipboard included)
- Deployed unit
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Collaborations between Naval Postgraduate School, Defense Language Institute, and the City of Monterey: Base Operations Support

Background: The BRAC Commission is investigating whether or not it makes sense to consolidate the Naval Postgraduate School (NPS) with the Defense Language School (DLI), and possibly the Air Force Institute of Technology (AFIT). Each of these institutions has an academic or mission side, and an additional ase operations support (BOS) side. Base Operations Support for NPS is provided by the Naval Support Detachment Monterey, Naval Region Southwest (NRSW). The Presidio of Monterey (POM) Army Garrison, Installation Management Activity (IMA) Southwest, supports DLI on the BOS side. Wright-Patterson Air Force Base supports AFIT. For the purpose of this paper, NPS, DLI, and AFIT will be used as the descriptive organization rather than using the name of the actual BOS provider. Both NPS and DLI are located within the City of Monterey (COM), and both enjoy mutual support from the COM and each other to differing degrees. This paper describes the current cooperative relationships in Base Operations Support between NPS and DLI from the NPS perspective.

Discussion: DLI has earned acclaim through its BOS relationship with the COM that has come to be known as 'The Monterey Model.' The model led to a significant level of cost savings and efficiency. NPS also works separate BOS contracts with the COM, and numerous collaborations with the DLI, some rooted in formal contract, most via cooperative relationships that exist for mutual benefit. Examples of representative collaborations are described below.

1. Street Maintenance: Street maintenance is accomplished for NPS through a COM contract that provides a large volume of work. NPS, DLI, COM, and City of Seaside are joined together in the same contract, discounting the cost to the Navy by one third. The Navy status on these contracts is 'firm, fixed price.' NPS has had the street maintenance contract with COM for the last three years.
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3. Tree Maintenance: NPS contracts for the COM arborist in both identifying sick trees and also with the COM Public Works for fallen debris that exceeds the NPS Public Works capability.
4. Housing Privatization: In 2002, NPS joined with DLI in a housing privatization project with a developer-partner under an Army Residential Community Initiative contract vehicle. This is a $500 million project and the first joint housing privatization project in DoD. The initial development period spans ten years and will completely rebuild over 2200 homes. Both NPS and DLI jointly govern along with their developer-partner, Clark-

Pinnacle, through a monthly corporate board. Over 252 homes have already been built. Phase 2 will complete an additional 357 homes by January 2006.

5. Medical Support: Both the NPS and DLI active duty military population are supported through the Joint Medical Clinic provided on the POM by California Medical Command (Army). The Joint Medical Clinic performs all the physical requirements for NPS NAF employment as well as special physical requirements for police, food handlers, firefighters, etc.
6. Veterinarian &Medical Clinic: The Army Veterinarian and Medical Clinic conduct all food service/health and sanitation inspection requirements for NPS food and beverage program, as well as requirements from the Navy Exchange Food Court & Barbershop, NPS Gym facility, Navy Golf Course snack bar, La Mesa Village Youth Center, Child Development Center, and others.
7. TRI-CARE: NPS and DLI are both represented at MORE Health quarterly board meetings that provide a forum with all the Monterey County CEOs and TRI-West (Western States TRI-CARE provider), and others to ensure the needs of military personnel are represented and provided for.
8. Dental Support: Both NPS and DLI have dental providers on their respective campuses who have joined in a cooperative relationship to support each other for emergency care. The prospect of a joint dental facility is being examined.
9. Morale, Welfare, and Recreation (MWR): NPS and DLI coordinate their MWR programs to ensure they are complementary. For example, NPS has an outstanding catering department used to support both NPS and DLI functions. DLI has an outstanding transportation program through their Outdoor Recreation Dept that is used to support various NPS events. NPS offers a sailing program while DLI offers snow sports. NPS has a golf course that hosts tournaments and provides play for both NPS and DLI. NPS and DLI programs are non-competitive, mutually supportive, and both organizations advertise each other's activities.
10. Monterey Peninsula DoDNet: The MP DoDNet was a COM initiative resulting from their negotiation of additional fiber infrastructure, as part of the municipal cable television contract. COM dedicated the additional fiber for DoD use. MP DoDNet is now an innovative high-speed infrastructure linking all of the DoD organizations on the Monterey Peninsula including NPS, DLI, , Fleet Numerical Meteorology and Oceanography Center, Naval Research Laboratory, and Defense Data Manpower Center. The infrastructure enhances collaborative efforts and yields seamless connectivity across administrative domains. The MP DoDNet runs gigabit Ethernet and saves dollars in T-1 lines, phone circuit charges, and off-site equipment hosting. The DoD CIOs meet quarterly for to hear from working groups and generate recommendations for new initiatives, and hold an annual strategic planning meeting. Projects include provision of tech center support, web server hosting, main-frame processing, high-speed data transfer for the meteorology/oceanography community, shared security protocols, and network attached storage.
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Lodge located in the La Mesa Village has 72 premium rooms with kitchenettes to support PCS moves and other transient lodging missions for the Monterey military community.

12. Faculty/Staff Home Ownership Program: NPS and DLI representatives are spearheading a workforce affordable home ownership program for their faculty and staff. This program is planned to be a community land trust (CLT) of approximately 120 homes, (land and water provided) that will be available in late 2007 for home ownership by both NPS and DLI faculty and staff, as well as other DoD institutions within Monterey Peninsula. The CLT will allow for sustained affordability through land ownership retained by the trust with a moderate cost to the home owner for the land lease; it is estimated that homes can be offered at approximately 1/3 to 1/2 the market price within the area.
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18. Staff Judge Advocate (SJA) and Public Affairs Officer (PAO): In both of these areas, NPS enjoys support from much larger staff structures supporting DLI. Both coordinate activities together and DLI recently spearheaded a joint

military news offering for the entire community, which features both NPS and DLI.

19. Environment and Safety: Both of these NPS organizations work together on a regular basis with their DLI counterparts. One recent success is the joint motorcycle safety course, currently utilizing a course layout on the Ord Military Community (Army), alternating instructors from NPS & DLI. NPS has taught the last two courses.
20. Chaplains: The installation chaplains coordinate their weekly services, and appoint a single duty chaplain watch bill to supports the entire area.
21. Miscellaneous projects with COM: These include a joint storm water runoff project from/to Lake DelMonte, Sloat Road traffic control, Sloat Road parking and force protection enhancement, gate improvements and surrounding street enhancements, neighborhood relations, etc.

NPS and the Monterey Model. The question is often asked why NPS does not employ the same 'Monterey Model' for BOS as DLI. In fact, NPS proposed a similar model using a combined MEO and COM Public Works organization as an alternate for an A76 study. NPS was too far along in the study, Navy was concerned about an Anti-Deficiency Act, and the proposal was rejected. The A76 resulted in a contract award to the MEO that had reduced billets from 95 to 58 and annual costs from $7 million to $3.5 million (validated by CNO audit). NPS is now supported by a 'barebones' organization at minimal cost. The main benefit at this time would be synergistic, as cost efficiencies have already been gleaned. While NPS is not opposed to pursuing this Monterey Model option, some obstacles remain. Issues include the disposal of the MEO contract and resultant RIF costs, legal issues over sole sourcing, the required waiver to Small Business Act due to size of contract, and Navy concern over 'cost reimbursement 'contracts which are the vehicle used by COM.

Summary. NPS, DLI, and COM conduct their distinct missions within a collaborative Base Operations Support environment, accomplishing their mutual goal to support the needs of the military. This cooperation fosters enhanced efficiency, cost savings, time savings, matrixing of human assets to cover the tasks, all within a rich, sustainable partnership.

DCN: 11935

Naval Postgraduate School and
Army Intermediate Level Education

Background

- The Naval Postgraduate School is one of the few sites that offers the Intermediate Level Education (ILE) to Army officers.

- The Army Intermediate Level Education (ILE) is part of the Army's effort to reorganize its officer management system. This reorganization is designed to streamline how the Army prepares its officers through an entire officer life cycle. ILE addresses officer education at the mid-career point (Major, CPT(P)). ILE has replaced the Army Command and General Staff Course (CGSC) (AKA "Legacy" course).

- ILE removes competitive selection for attendance to Army Professional Military Education at the mid-career point. Everyone attends an ILE of some sort. Depending on the officer's career field and/or functional area designation, he or she will attend a two phase program. The first phase is known as the Common Core Course (CCC), and is currently fifteen weeks long. Everyone attends CCC (only the locations are different). In addition, Phase I awards both JPME and Army MEL4.

Phase II is career field determinant. Some Phase II programs require a Master's degree, some require a 7 month military course, while others require 2-7 week courses. The locations for CCC are currently Fort Belvoir VA, Fort Leavenworth KS, Fort Lee VA, and the Naval Postgraduate School/Defense Language Institute, Monterey, CA (NPS/DLI).

Only Fort Leavenworth, KS, and NPS/DLI offer both Phase I and Phase II at the same location. Whereas Fort Leavenworth offers Phase I and II for operations career field (officers only). NPS/DLI currently offer Phase I and II for various other career fields and selective OCF offices (special operations, psychological operations and civil affairs branches). The advantages of one location (NPS/DLI) serving a variety of needs, for both Phases is not lost on officers, managers, and the senior leadership of the Army. The ability for an Army officer to receive his/her required Master's degree and required PME (Phase I) at the same location (NPS/DLI) reduces unnecessary friction. Efficiency improvements are exemplified by the reduction in costs, officer movement, family turbulence, and most importantly, reducing the amount of time an officer is out of the operational environment.

ILE at NPS is so popular, the Army has increased its "fixed sum" allocation of students to NPS while introducing additional Army students to NPS through new career field participation. Financial Management, and the Operations Career Field Master's Degree program (OCF) are examples. The OCF program provides a great example of NPS' important role in Army education. The OCF Program was requested by the Army

Human Resource Command specifically based on the existing NPS Special Operations Curriculum (Department of Defense Analysis). The Army recognized a requirement to provide its OCF officers a Master's degree opportunity, when at the time none existed. Given the success of the Special Operations Curriculum for specific operation career field officers (special ops, psy ops, and civil affairs) the Army quickly designed a unique OCF program of its own.

- After four years of coordination, ILE is currently being conducted at the Naval Postgraduate School. The current ILE class at NPS, consisting of 64 officers, will graduate on the 23 of September, 2005. In regard to OCF officers, the savings in both time and money are substantial, as the officers are not required to attend the 10 month Phase II program at Fort Leavenworth, KS.

- Throughout the execution of ILE at NPS/DLI, both installations have entered into a unique partnership of cooperation and effectiveness. Currently, while NPS provides all academic support (class rooms, AV, faculty offices, library, computer/internet access), DLI supplies all administrative support, including messing, lodging for faculty, students in a TAD/TDY status). Once it was determined that NPS could not continue to provide for classroom support ILE (given its increase from 11 weeks to 15 weeks in duration), DLI immediately assumed the responsibility of sponsoring the ILE program at DLI. The Army is committed to coupling the NPS Degree Program and ILE. Beginning in March 2006, ILE will go to "steady state," continuing the relationship between NPS, DLI, and Fort Leavenworth, KS, the ILE proponent.

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Military Service Member and DoD/Staff & Faculty Housing Fact Sheet

Active Duty Military Service Members

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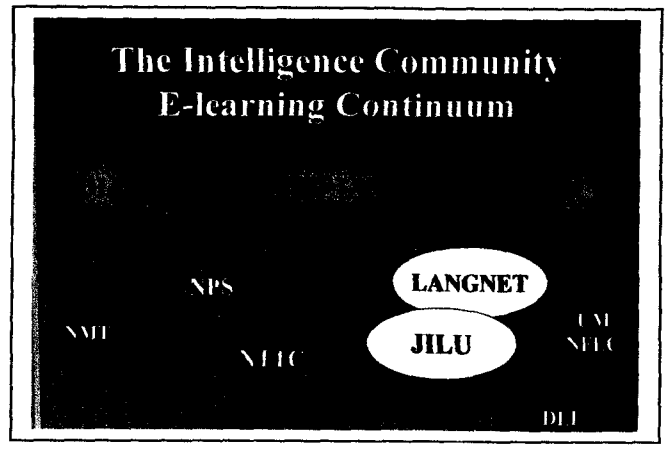

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19. Environment and Safety: Both of these NPS organizations work together on a regular basis with their DLI counterparts. One recent success is the joint motorcycle safety course, currently utilizing a course layout on the Ord Military Community (Army), alternating instructors from NPS & DLI. NPS has taught the last two courses.
20. Chaplains: The installation chaplains coordinate their weekly services, and appoint a single duty chaplain watch bill to supports the entire area.
21. Miscellaneous projects with COM: These include a joint storm water runoff project from/to Lake DelMonte, Sloat Road traffic control, Sloat Road parking and force protection enhancement, gate improvements and surrounding street enhancements, neighborhood relations, etc.

NPS and the Monterey Model. The question is often asked why NPS does not employ the same 'Monterey Model' for BOS as DLI. In fact, NPS proposed a similar model using a combined MEO and COM Public Works organization as an alternate for an A76 study. NPS was too far along in the study, Navy was concerned about an Anti-Deficiency Act, and the proposal was rejected. The A76 resulted in a contract award to the MEO that had reduced billets from 95 to 58 and annual costs from $7 million to $3.5 million (validated by CNO audit). NPS is now supported by a 'barebones' organization at minimal cost. The main benefit at this time would be synergistic, as cost efficiencies have already been gleaned. While NPS is not opposed to pursuing this Monterey Model option, some obstacles remain. Issues include the disposal of the MEO contract and resultant RIF costs, legal issues over sole sourcing, the required waiver to Small Business Act due to size of contract, and Navy concern over 'cost reimbursement 'contracts which are the vehicle used by COM.

Summary. NPS, DLI, and COM conduct their distinct missions within a collaborative Base Operations Support environment, accomplishing their mutual goal to support the needs of the military. This cooperation fosters enhanced efficiency, cost savings, time savings, matrixing of human assets to cover the tasks, all within a rich, sustainable partnership.

DCN: 11935

Naval Postgraduate School and
Army Intermediate Level Education

Background

- The Naval Postgraduate School is one of the few sites that offers the Intermediate Level Education (ILE) to Army officers.

- The Army Intermediate Level Education (ILE) is part of the Army's effort to reorganize its officer management system. This reorganization is designed to streamline how the Army prepares its officers through an entire officer life cycle. ILE addresses officer education at the mid-career point (Major, CPT(P)). ILE has replaced the Army Command and General Staff Course (CGSC) (AKA "Legacy" course).

- ILE removes competitive selection for attendance to Army Professional Military Education at the mid-career point. Everyone attends an ILE of some sort. Depending on the officer's career field and/or functional area designation, he or she will attend a two phase program. The first phase is known as the Common Core Course (CCC), and is currently fifteen weeks long. Everyone attends CCC (only the locations are different). In addition, Phase I awards both JPME and Army MEL4.

Phase II is career field determinant. Some Phase II programs require a Master's degree, some require a 7 month military course, while others require 2-7 week courses. The locations for CCC are currently Fort Belvoir VA, Fort Leavenworth KS, Fort Lee VA, and the Naval Postgraduate School/Defense Language Institute, Monterey, CA (NPS/DLI).

Only Fort Leavenworth, KS, and NPS/DLI offer both Phase I and Phase II at the same location. Whereas Fort Leavenworth offers Phase I and II for operations career field (officers only). NPS/DLI currently offer Phase I and II for various other career fields and selective OCF offices (special operations, psychological operations and civil affairs branches). The advantages of one location (NPS/DLI) serving a variety of needs, for both Phases is not lost on officers, managers, and the senior leadership of the Army. The ability for an Army officer to receive his/her required Master's degree and required PME (Phase I) at the same location (NPS/DLI) reduces unnecessary friction. Efficiency improvements are exemplified by the reduction in costs, officer movement, family turbulence, and most importantly, reducing the amount of time an officer is out of the operational environment.

ILE at NPS is so popular, the Army has increased its "fixed sum" allocation of students to NPS while introducing additional Army students to NPS through new career field participation. Financial Management, and the Operations Career Field Master's Degree program (OCF) are examples. The OCF program provides a great example of NPS' important role in Army education. The OCF Program was requested by the Army

Human Resource Command specifically based on the existing NPS Special Operations Curriculum (Department of Defense Analysis). The Army recognized a requirement to provide its OCF officers a Master's degree opportunity, when at the time none existed. Given the success of the Special Operations Curriculum for specific operation career field officers (special ops, psy ops, and civil affairs) the Army quickly designed a unique OCF program of its own.

□ After four years of coordination, ILE is currently being conducted at the Naval Postgraduate School. The current ILE class at NPS, consisting of 64 officers, will graduate on the 23 of September, 2005. In regard to OCF officers, the savings in both time and money are substantial, as the officers are not required to attend the 10 month Phase II program at Fort Leavenworth, KS.

□ Throughout the execution of ILE at NPS/DLI, both installations have entered into a unique partnership of cooperation and effectiveness. Currently, while NPS provides all academic support (class rooms, AV, faculty offices, library, computer/internet access), DLI supplies all administrative support, including messing, lodging for faculty, students in a TAD/TDY status). Once it was determined that NPS could not continue to provide for classroom support ILE (given its increase from 11 weeks to 15 weeks in duration), DLI immediately assumed the responsibility of sponsoring the ILE program at DLI. The Army is committed to coupling the NPS Degree Program and ILE. Beginning in March 2006, ILE will go to "steady state," continuing the relationship between NPS, DLI, and Fort Leavenworth, KS, the ILE proponent.

DCN: 11935

Naval Postgraduate School and its Military Uniqueness
Dudley Knox Library Support

Special Collections

Theses and Technical Reports

- Archive for all public release NPS theses, MBA Professional Reports and Technical Reports
- Archive for DoN Theses done at civilian institutions

Classified Library [houses classified materials through the SECRET level]

- Archive for all limited and classified NPS theses and reports through SECRET
  - Project to post above materials on SIPRNET in the early planning stages
- SIPRNET access in facility along with other materials enables users "one stop research"

Homeland Security Digital Library

- Supports the Homeland Defense and Security MA program
- Supports the homeland defense and security needs of federal,state, local agencies
- Resulted in the development of a unique taxonomy

Digital Archives [the DKL has been capturing and maintaining copies of important military related publications that tend to disappear when newer versions are produced]

- NPS Publications [e.g. theses, MBA reports, technical reports, newsletters etc.]
- Joint Publications [current and superseded]
- Service vision and strategy documents
- Military handbooks and manuals
- Defense Science Board reports

Buckley Collection

- Historical naval and maritime focus [over 4200 titles]

Intelligence Collection

- Open source intelligence resources [over 1100 titles]

Course and military focused library collection

- Print publications purchases in various areas to support all curricula including the very unique ones [e.g. special operations, undersea warfare, PME etc]
- Purchase access to the important but unique commercial resources [e.g. Janes, Military Periodicals, MilSearch for Defense Org Charts, Global Information System, Stratfor, etc.]

- Keep abreast of and link to important non-commercial databases and resources [AKO, NKO, Air Force Portal, Early Bird, STINET, Military Education and Research Library Network, DOD IG reports, etc.]

Joint Professional Military Education [PME/JPME] focus

- Additions to the DKL collection [particularly reports, documents, books and journals] include an emphasis on PME/JPME issues and with military history in mind.

Special Projects

Maritime Domain Protection

- Collecting and will be building a classified library of materials as well as creating a website as a pathfinder to other resources
- Collecting and maintaining open sources materials as part of the Homeland Security Digital Library project

Subject Bibliographies
http://library.nps.navy.mil/home/bibliogs.htm

- Battle of Midway
- PME
- Chemical, Biological, Nuclear Terrorism/Warfare
- Directed Energy Weapons
- Information Warfare and Information Operations
- Intelligence and Policy Making
- Land Mines and Demining in the 20th Century
- Sea Mines & Countermeasures
- Submarine Warfare in the 20th & 21st Centuries
- Vietnam Prisoners of War
- Yangtze Patrol: American Naval Forces in China

Specialized Web Pages

- Course and Special focus Web pages [we also have other pages for the less unique areas such as Physics and Aeronautics & Aerospace]
  - Acquisition &Contracting -- http://library.nps.navy.mil/home/acqui.htm
  - Defense Budget Information -- http://library.nps.navy.mil/home/legislation.htm
  - Directives, Instructions & Standards -- http://library.nps.navy.mil/home/directives.htm
  - Homeland Defense and Security – http://library.nps.navy.mil/home/homeland.htm
  - Manpower – http://library.nps.navy.mil/home/sm/manpower.htm
  - National Security Affairs – http://library.nps.navy.mil/home/ns2011.htm
  - Operations Research – http://library.nps.navy.mil/home/or2.htm
  - Special Operations – http://library.nps.navy.mil/home/specops.htm

- Terrorism – http://library.nps.navy.mil/home/terrorism.htm
- Terrorist Group Profiles – http://library.nps.navy.mil/home/tgp/tgpmain.htm
- Transportation and Logistics -- http://library.nps.navy.mil/home/sm/transportation.htm

- Military Focused Web pages [many are heavily linked to from sites all over the world]
  - Military Information -- http://library.nps.navy.mil/home/militaryinfo.htm
  - Military Equipment -- http://library.nps.navy.mil/home/equipment.htm
  - Military Images -- http://library.nps.navy.mil/home/images.htm
  - Military Internet -- http://library.nps.navy.mil/home/milinternet.htm
  - Military Publications -- http://library.nps.navy.mil/home/militarypubs.htm
  - Joint Issues -- http://library.nps.navy.mil/home/jointchf.htm
  - Lessons Learned -- http://library.nps.navy.mil/home/lessons.htm
  - Maps [with military and conflict specific sections] -- http://library.nps.navy.mil/home/mapcollection.htm

Other

Highly Skilled and Knowledgeable Library Staff

- Due to longevity and commitment to the NPS mission, the DKL librarians have substantial continuity and have developed considerable knowledge and expertise over time and are therefore able to provide specialized consultation for faculty and students. The Library and staff were named the Federal Library of the Year for 2004.

- Librarians serve as liaisons to the various Schools and subject areas and are highly knowledgeable as to the specialized needs and resources pertinent to the NPS research areas particularly those focusing on military related areas. They also monitor specialized resources and tools to keep informed of changes including the areas specific to military and other topics and selectively disseminate information about important resources and changes.

Distributed Learning Support

- Library staff provides assistance and services to military members in NPS classes around the world through mail, fax, email and VTC.

Military Librarian Community Network

- Heavy librarian participation/sharing in the military librarian community network systems for all branches.

Joint and International Focus

- Resources are collected with joint service and international needs in mind

- Library support services [e.g. Reference service and Ask a Librarian] are well utilized by military members both locally and around the world due to the established expertise of the staff in military related areas.

Participation in Navy and DoD-wide Consortia

- Participation in various Navy and DoD-wide consortia allows for better prices on various journal and database purchases.
- Participation in these groups also provides networking opportunities and a greater knowledge base to draw from for military related research needs.

DCN: 11935

Military Service Member and DoD/Staff & Faculty Housing Fact Sheet

Active Duty Military Service Members

Military housing in the Monterey Bay area was privatized in 2003. 2,268 existing housing units were transferred by the military to a public private partnership known as Monterey Bay Military Housing, LLC.

Using privately raised funds, across the next 10 years, the partnership will demolish the existing housing units and build new units on the approximately 1,000 acres of Navy and Army housing areas. The first 250 new units have been completed. Much flexibility exists in the LLC's ability to accommodate additional housing units in the future. 2,549 units could be constructed at the current housing density on properties controlled, or soon to be controlled by the LLC. This matches the current estimate of homes required by the Housing Market Analysis conducted in 2002. However, if expansion was required, and if densities were used to match densities common to new residential housing construction in California, then the properties could accommodate 3,500+ housing units in single and two-story formats, an expansion of approximately 1000 units.

DoD Staff and Faculty

DoD staff and faculty are currently authorized to rent excess military family housing owned by Monterey Bay Military Housing, LLC. Monthly rents charged for two bedroom, three bedroom, and four bedroom houses are $1,260, $1,379, and $1,634 respectively. 249 existing rental houses have currently been set aside for DoD staff and faculty occupancy.

The local installations and Monterey Bay Military Housing LLC are currently coordinating to set aside property for 120 "workforce affordable" houses to be constructed and sold to DoD civilian staff and faculty. These units will be deed restricted or part of a community land trust to ensure that the houses remain affordable for future generations of staff and faculty. These homes will be available in late 2007.

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FACT SHEET - SUMMER 2005

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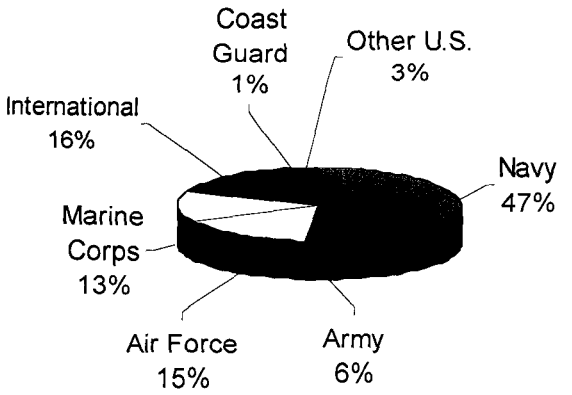
Resident Enrollment

1,697 graduate students, including 275 international students.



Distributed Learning Programs

There are 523 students participating in degree or certificate programs. NPS also provides education to thousands of other students in short courses in other nations and at NPS.

Degrees Offered

Master of Arts, Master of Science, Engineering, Master of Business Administration, Doctor of Philosophy and Doctor of Engineering degrees.

Alumni

More than 45,000 alumni from all 50 states, the District of Columbia and more than 70 different nations.

Financial

The operating budget of NPS is approximately $65 million. Combined with the salaries of military officers and civilian students and research, the impact on the Monterey Peninsula area is more than $300 million.

Research

Research at NPS is an integral part of graduate education, advancing national security and challenging students with creative problem solving experiences on relevant issues. Reimbursable research funds totaled approximately $84 million in fiscal year 2004.

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571 faculty members, including 241 tenured / tenure track and 49 military officers. Nearly all hold a doctorate.

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NPS – USSOCOM
Cooperative Field Experimentation Program

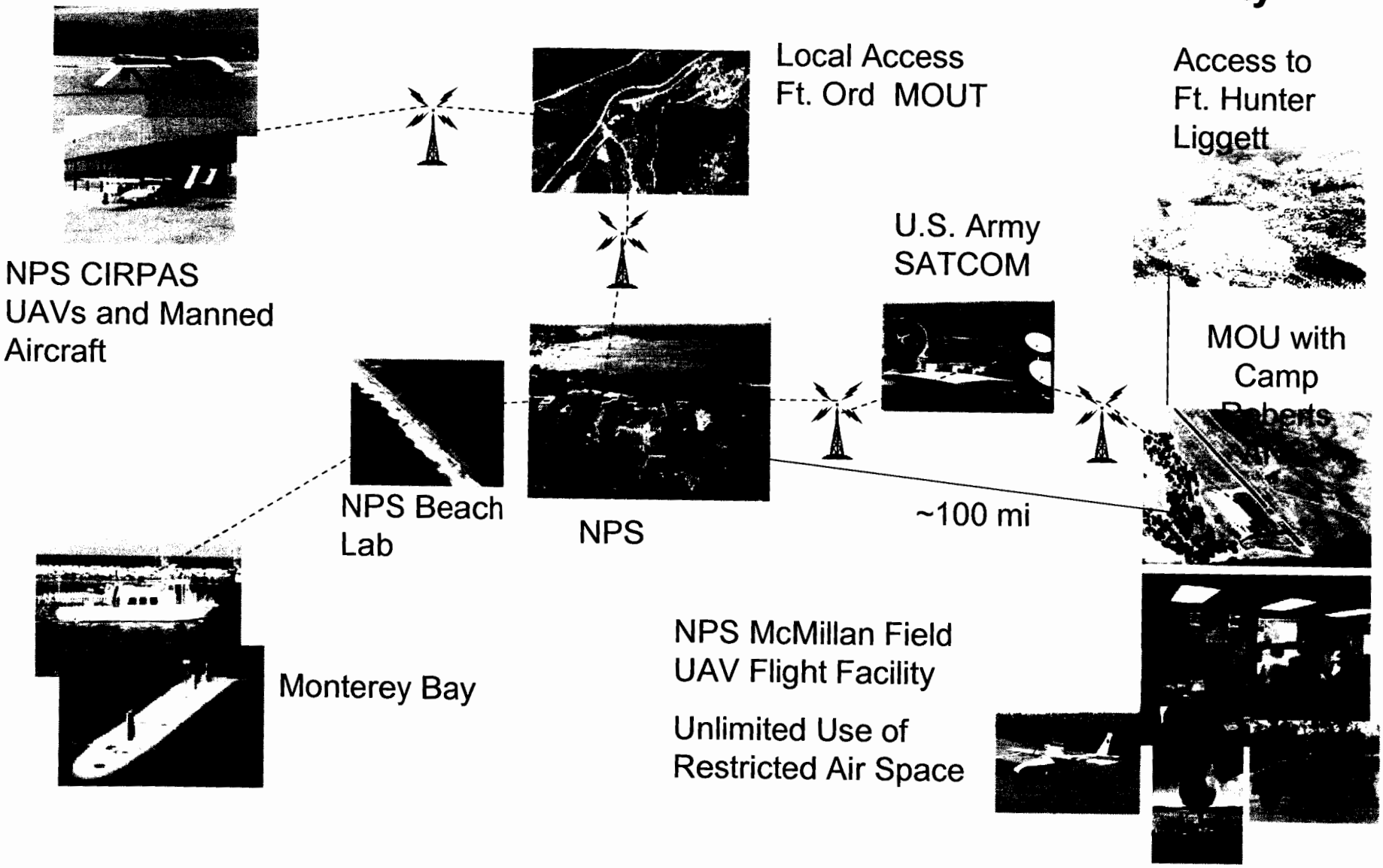
Tactical Network Topology (TNT): Plug-and-Play Testbed

- Quarterly experiments provide rapid access and response.
- Working Group with USSOCOM and all USSOCOM Component Commands results in experiment scenarios driven by challenges facing deployed forces and identified key gaps and inefficiencies in capabilities.
- Joint/all-service NPS students with recent operational experience drive solution-space and CONOPS development.
- Large NPS faculty reimbursable DoD/Gov't research program supports collaborative experimentation with latest technologies, across many disciplines.
- Students and faculty with clearances provides access to current issues and proposed solutions.
- Use of SOF in experiments for quantitative measures of performance of technologies and of SOF using the technologies → user-driven solutions.

DCN: 11935

NPS – USSOCOM
Cooperative Field Experimentation Program

Unique Facilities with 24/7 Wireless Network Connectivity



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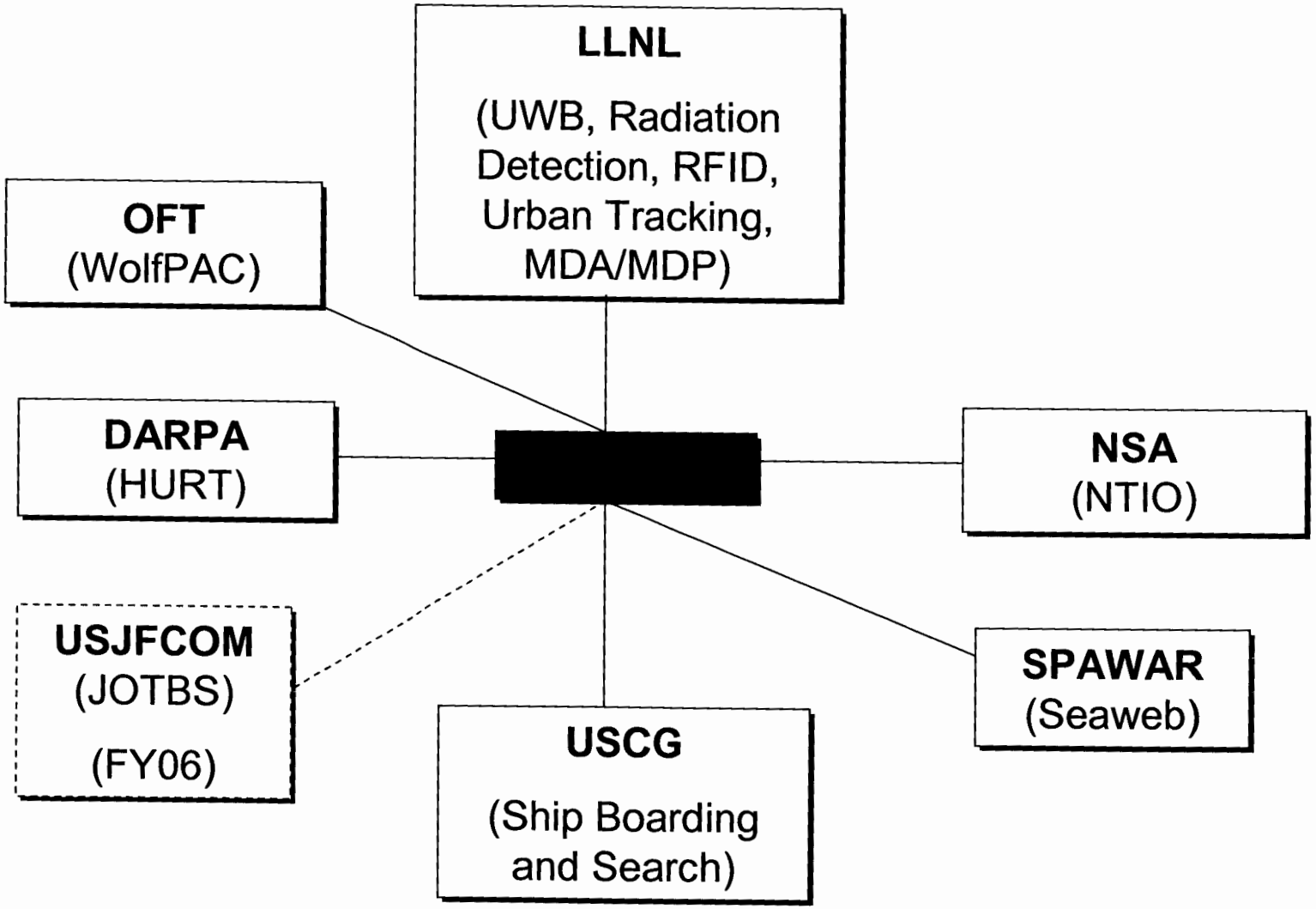
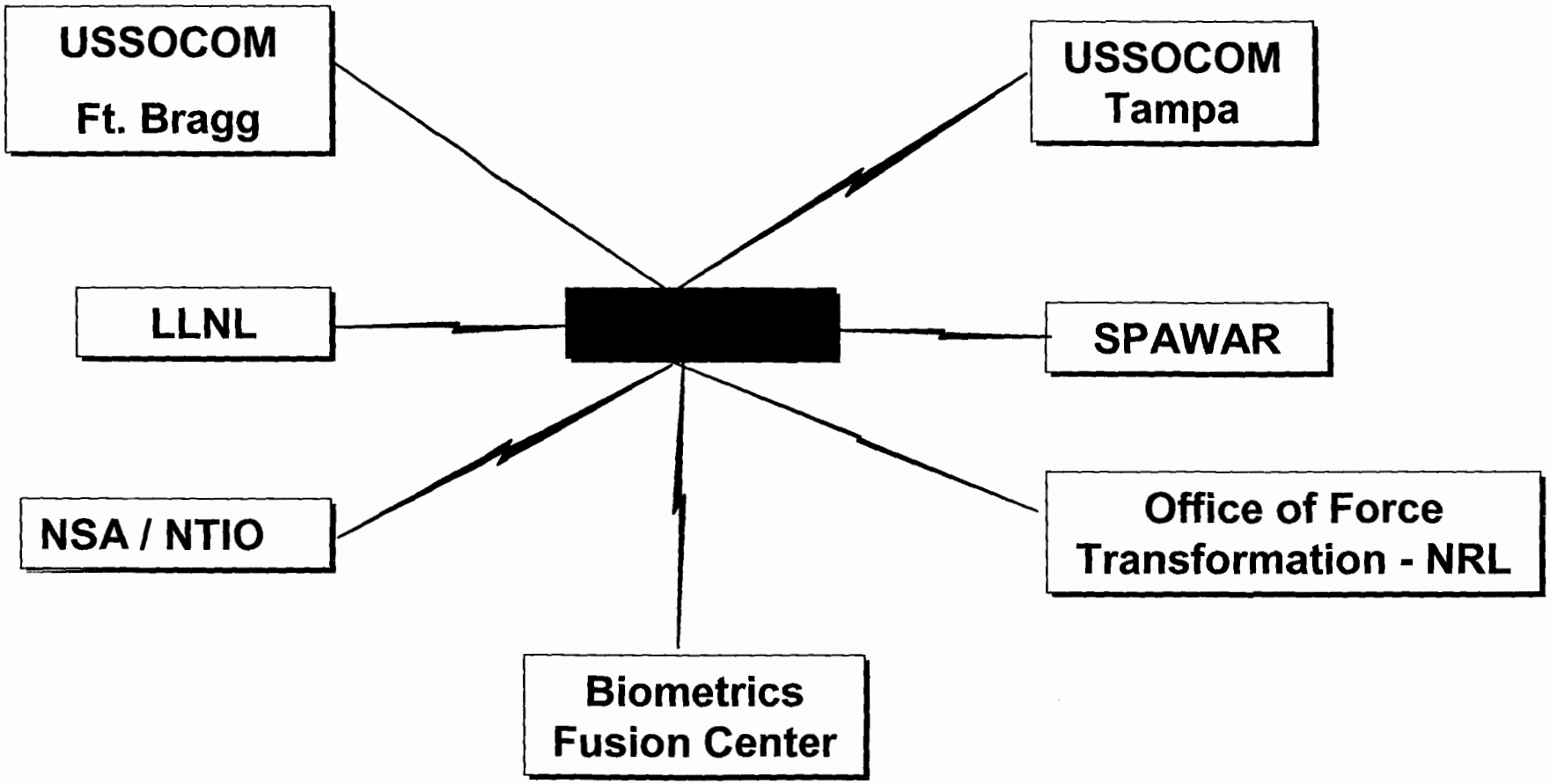
Cooperative Joint Experimentation with DoD/Gov't. Programs



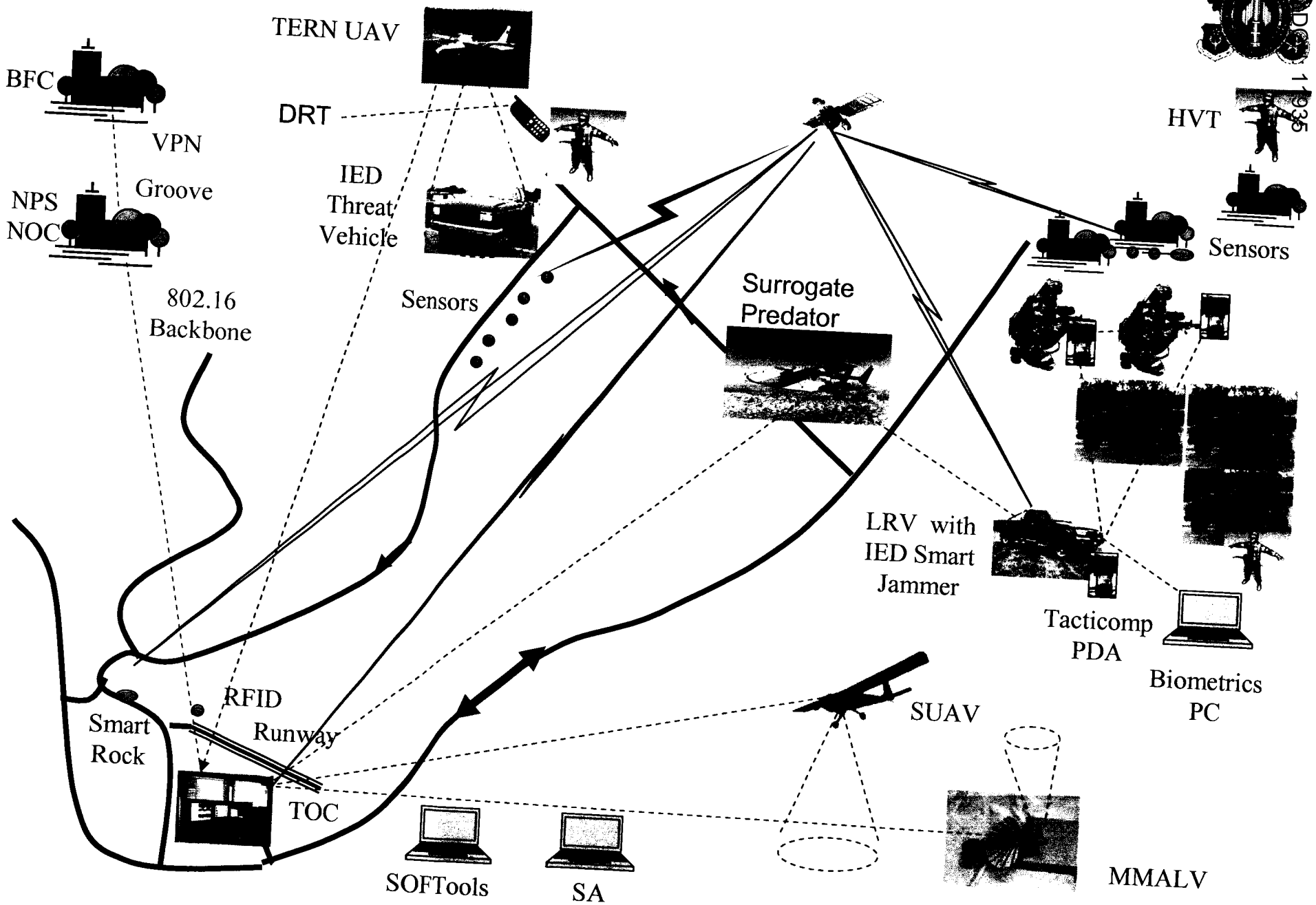
DCN: 11935

NPS – USSOCOM
Cooperative Field Experimentation Program

Rapid Collaboration/Global Reachback
for
Real-Time Participation



TNT 05-4: SOF HVT Search with Convoy IED Threat- Scenario 4



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Unique Facilities with 24/7 Wireless Network Connectivity

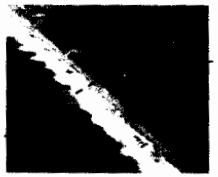
NPS CIRPAS
UAVs and Manned
Aircraft

Local Access
Ft. Ord MOUT

Access to
Ft. Hunter
Liggett

U.S. Army
SATCOM

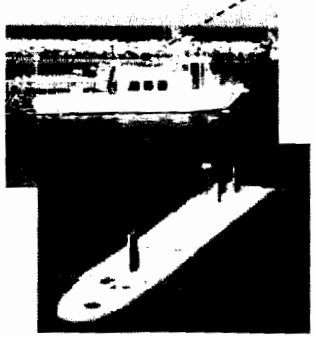
MOU with
Camp
Roberts



NPS Beach
Lab

NPS

~100 mi



Monterey Bay

NPS McMillan Field
UAV Flight Facility

Unlimited Use of
Restricted Air Space

DCN: 11935

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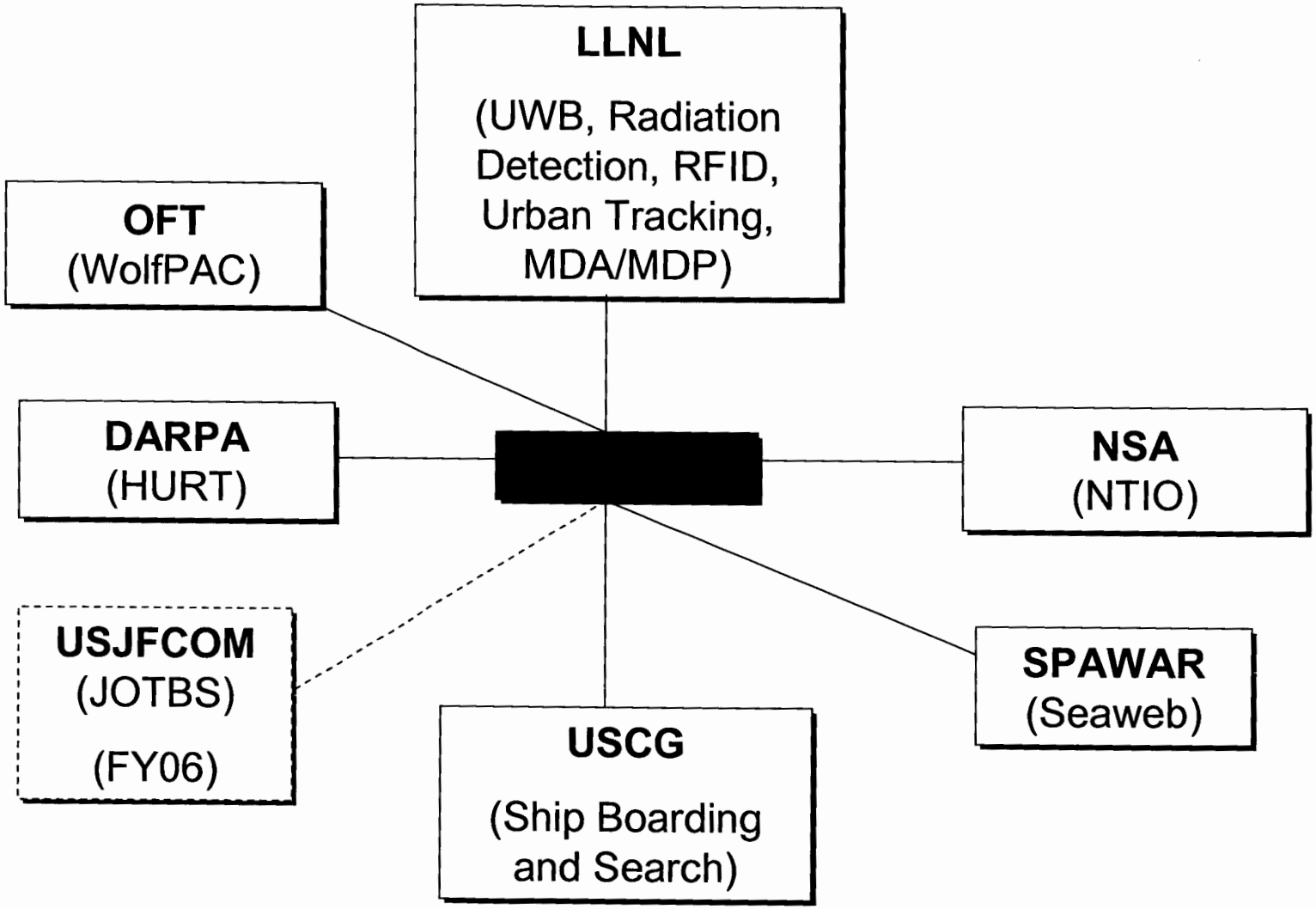
Cooperative Joint Experimentation with DoD/Gov't. Programs



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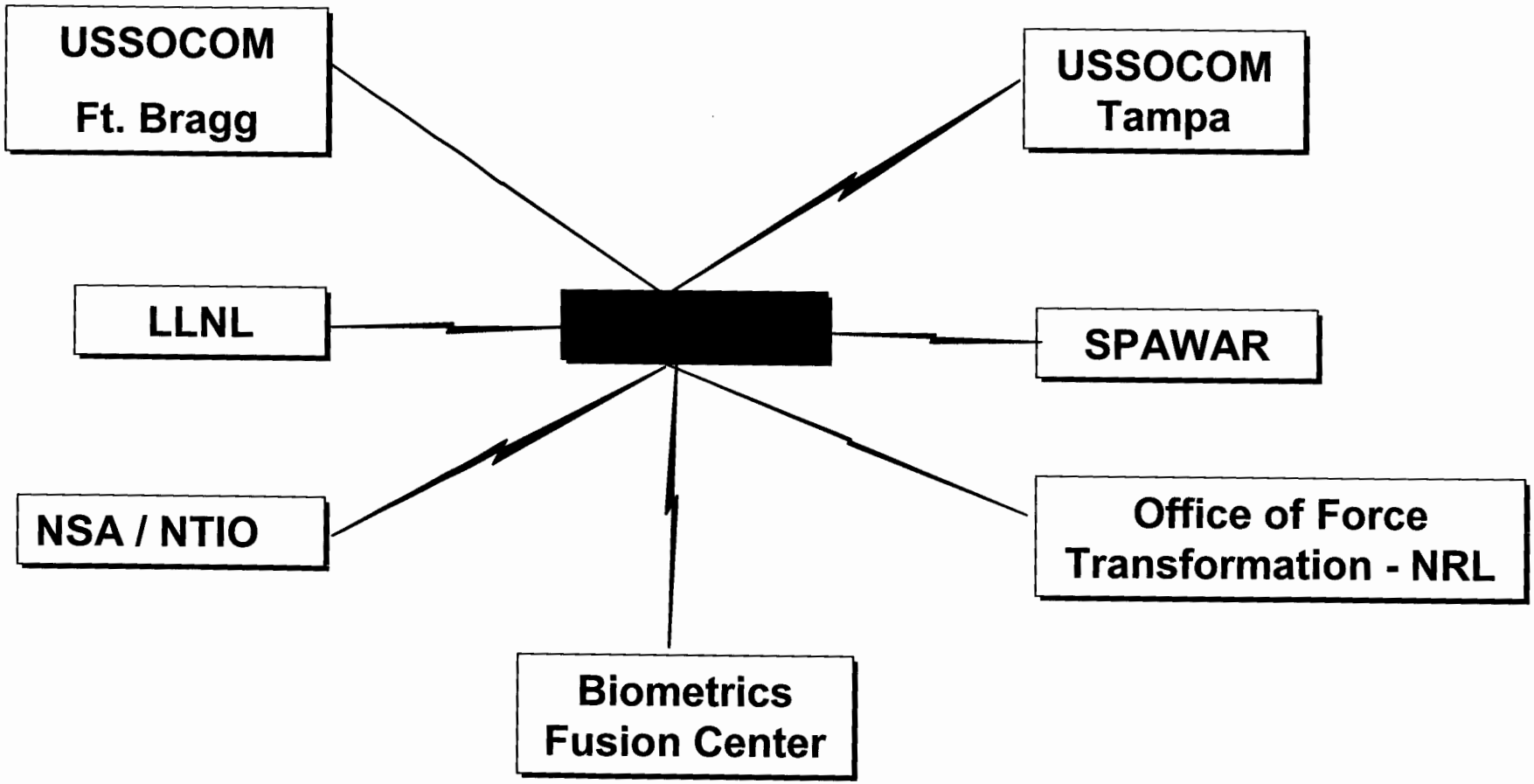

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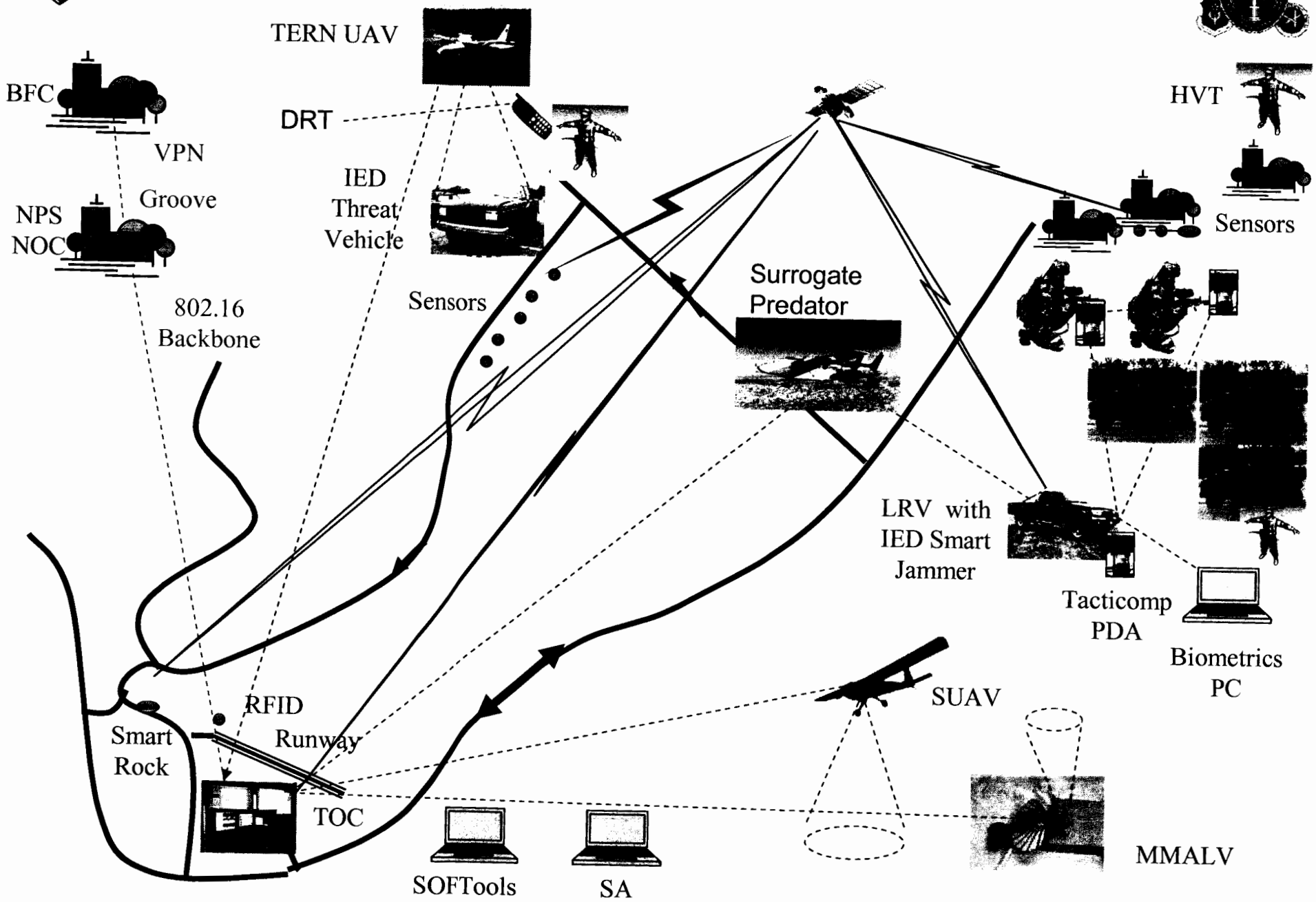

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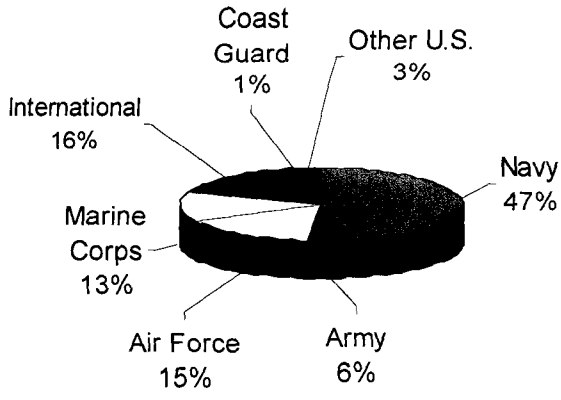

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The Naval Postgraduate School: Overview

In its almost 100 year history, NPS has evolved from a single engineering department at the US Naval Academy into the Nation's premier defense-oriented research university. NPS provides the DOD with an effective, diverse, and sustainable educational institution that supports current and future readiness, advances in technology, and the educational programs that facilitate getting our superior technology into the hands of the warfighter.

Generations of Navy leaders have provided the Nation with a university that is ideally suited to support our efforts in waging a global war on terrorism and the Department's technical transformation.

As an institution chartered to concentrate on technology and technologically oriented areas of discovery, the Naval Postgraduate School has operated for almost a century with clearly defined visions and missions, always adapting to meet new security challenges. NPS has an excellent and diverse student body; a first-rate faculty, many members of which are nationally and internationally recognized as leaders in their academic fields and in defense applications; secure facilities and an ability to conduct classified research; educational, research, and service missions that are tightly focused on military and national security issues; and the ability to provide graduates, expertise, and knowledge that make fundamental contributions to solving our nation's national and international security problems. No other institution of higher education in the country has made such a tightly focused commitment to national defense and homeland security.

NPS is rated in 2005 as the DOD educational institution ranking highest in military value. The Technical Joint Cross Service Group (TJCSG) computed Military Value Scores for more than 200 technical facilities. NPS was one of only five facilities that received a military value score for each of the 13 research technical areas considered by the TJCSG. The other four were: Wright-Patterson AFB, NAS Patuxent River, Naval Research Laboratory, and White Sands Missile Range. This emphasizes the breadth of research undertaken at NPS and the focus on areas of primary importance to DOD and the warfighter. The TJCSG also identified 17 technological areas as having "significant importance to future warfighting capabilities." NPS faculty and students are involved in various research projects that support all 17 technologies. It is worth noting that the TJCSG evaluated technical facilities across 13 different technical areas and in three functional areas: Research, Development and Acquisition, and Test and Evaluation. NPS received the highest military value rating of all facilities in "Battlespace Environments, D&A.

Another critical NPS contribution is the enormous impact of having nearly three hundred allied and international officers spending 18-24 months living, learning and discovering side by side with Navy, Marine, Army and Air Force officers how to conceptualize, analyze, and solve the global challenges that we all face in the 21st century. The mutual understanding, trust, and good will that result from intensive interactions across this 'global village' of future military leaders may in fact contribute as much to international peace and harmony as does their formal

education. As future military operations become increasingly more joint and international, it is imperative that our officers understand, appreciate, and interact with their foreign counterparts with the sensitivity, intelligence, and grace that can only come from sustained experience with our international allies and partners. NPS provides an ideal environment for those relationships to flourish; its close proximity to the Defense Language Institute and other partners in Northern California enriches the learning experiences for all its students.

The NPS has reached out to partner with many institutions in order to strengthen its programs and improve its support for national security and defense. An NPS, University of California, Santa Barbara (UCSB) collaboration greatly enhances the support and capabilities of all US military commands and warfighters: UCSB world-class semiconductor and nano-fabrication facilities and the operational experience of NPS faculty and students are coming together to develop new sensors, secure integrated circuits, electro-optical components and materials for specific military applications. A long-standing relationship with the Lawrence Livermore National Laboratory (LLNL) has been facilitated by the NPS location in Monterey, California. For more than ten years, individual faculty members and researchers have been collaborating on research projects, sensitive and classified workshops and the graduate education of NPS and UC students. These projects span many areas of science, technology and policy that are critical to National Security. The current list includes, Homeland Security, Energetic Materials, Space Operations and Systems, Information Operations, National Security/Counter- Proliferation (CAPS), Global Security, Modeling, Simulation & Analysis, Defense Field Experimentation and Exercises, C4ISR, Laser Weapons and Communications, Sensors and UAVs and Meteorology and Oceanography. This month, we are signing a Memorandum of Understanding to create a joint Institute for National Security, Science and Technology with NPS and the University of California, Santa Barbara.

There is a perception that the NPS offers masters degrees in engineering, science, business, public policy and security studies that are also offered at many of our best civilian universities. This is simply not the case. The NPS programs are highly specialized national security education programs that include:

- traditional masters level courses found at civilian universities
- coursework, that has a DOD or national security content not offered at civilian universities
- courses that are intensely DOD centric that satisfy special DOD requirements, outside of the masters degree requirements, that cannot be found elsewhere in the US
- thesis research projects that are in direct support of the nation's warfighters and national security requirements that would not be available at civilian universities

NPS is a professionally-oriented, graduate research university that, like other research universities, creates new knowledge, synthesizes new and existing knowledge, and transmits the knowledge through publication and the education of graduate students. NPS unique role is that defense and national security constitute its knowledge base: it is the only research university with this clear focus on defense and national security. The unique synergy provided by bringing operationally experienced officer-students together with nationally ranked, seasoned, defense-oriented faculty is an essential step in forming the military forces of the 21st century.

DCN: 11935

Curriculum at the Naval Postgraduate School

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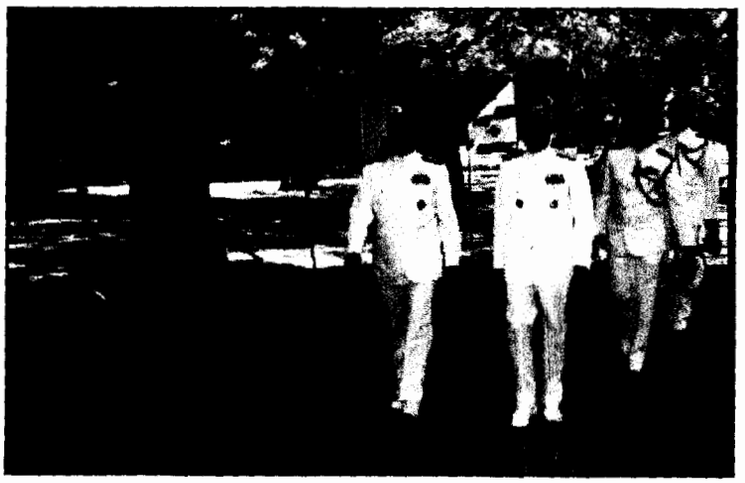


(U.S. Navy photo by Photographer's Mate 2nd Class Mike DiFranco)

Highlighting Naval Postgraduate School Students / Faculty

Maritime Domain Protection

The Meyer Institute of System Engineering & Analysis 7th cohort (SEA-7) consisted of 21 NPS students from a variety of backgrounds, including 13 US Navy, 1 US Army, 2 US civilian (Northrop-Grumman), 2 Turkish Air Force, 1 Singapore Defense Science & Technology Agency, 1 Argentinean Army, and 1 Mexican Navy.

The study focused on large ship and port security in the Port of Singapore and the nearby Straits of Malacca. The SEA team also designed and assessed ship inspection architecture alternatives for detecting explosive and dangerous materials in order to prevent a large cargo ship from being used as a terrorist vehicle.

The SEA-7 cohort began work on the cross-campus Integrated Project in October 2004 and gave their final presentation on June 1, 2005. SEA-7 was joined by 26 students from Singapore's Temasek Defense System Institute (TDSI) in January 2005. These students arrived at NPS following a six-month course of study in Singapore, and will continue work on individual theses following their participation in the SEA-7 Integrated Study, in order to graduate in December 2005.

Significant Navy Student Theses

Lt. John Rios, former Chief Engineer of USS CHIEF, one of two tactical action officers, completed his thesis *'Naval Mines in the 21st Century: Can NATO Navies Meet the Challenge?'* Lt. Rios' thesis analyzes the mine threat (particularly the proliferation of advanced mine technologies and the potential of these technologies to be utilized by both state and non-state actors to disrupt shipping/naval operations) in relation to the capabilities currently being utilized and under development by NATO to meet the threat.

Lt. Cmdr. Glenn Walt, former Squadron pilot/Department Head of VAW-113 onboard USS ABRAHAM LINCOLN, completed his thesis *'Commander Naval Air Forces Flight Hour Program: Budgeting and Execution Response to the Implementation of the Fleet Response Plan and OP-20 Pricing Model Changes.'* Lt. Cmdr. Walt's thesis will assist OPNAV in attempting to better match flight hour funding requirements with a more dynamic and uncertain level of global operations. i.e. OEF and OIF.

Cmdr. Jerry Stokes, former Squadron Operations Officer of VAW-115 onboard USS KITTY HAWK deployed to Arabian Gulf, completed his thesis *'An Ultracapacitor Based Energy Storage System for an Electromagnetic Aircraft Launch System (EMALS).'* Cmdr. Stokes' thesis discusses EMALS installed in CVN-21 Class carriers; enabling shipboard catapult launch of MQ-1 Predator UAV (other UAVs are also candidates); benefit is strong probability of 30% reduced catapult manning.

Conrad Scholars

On 9 June, three Conrad Scholars form NPS presented their theses to ASN(FM&C), acting FMB and staff, and Dir. Navy Staff (Vice Adm. Tom Church). The three theses were presented by Lt. Jason Miller - *Analysis of Sea Enterprise Program;* Lt Cmdr. Pam Theorgood - *Model Process Validation: An Analysis of Performance-based Pricing Models;* and Cmdr. Ron Arnold - *Useful Performance Metrics for PEO for Integrated Warfare Systems 1.0 and 2.0.*

In this Issue...

Page 2
Global Support / Research / CHDS / AUV News
Page 3
Students Aide TNT Research / NPS Supports the Fleet / V.I.P. Visits
Page 4
Student and Faculty Awards

DCN: 11935

NPS Provides Global Support

Worldwide Education Outreach (Short Courses)

The Center for Civil Military Relations (CCMR) held 52 events during this quarter, both in Monterey and in other countries, reaching over 2,800 civilians and military officers from 46 nations.

Civil-Military Relations (CMR) Programs

In May, CCMR conducted two extremely successful METs in Ulaanbaatar, Mongolia and Bucharest, Romania.

In addition, CCMR conducted a civil-military relations seminar in Ouagadougou, Burkina Faso from 25-29 April, for 32 military and 25 civilians, focusing on civil-military relations in transitional societies.

Combating Terrorism Program

The Civil-Military Responses to Terrorism Resident Course (23 May-4 June) brought together 28 military officers and civilian officials from Colombia, Romania, Azerbaijan, Turkey, Brazil, Ecuador, Mongolia, Sri Lanka, Nepal, Bulgaria, Malaysia, Guatemala, Kenya, Indonesia, Jordan, Bosnia, Malta, El Salvador, Yemen, Tanzania, Pakistan to consider how governments can more effectively prevent terrorism and respond to it when they cannot.

Enhanced International Peacekeeping Capabilities (EIPC)

From 25-29 April, CCMR educated 30 participants of Ukraine's 95th Brigade or subordinate units, in Zhytomyr, Ukraine. The participants developed a first draft of a Brigade Mission Essential Task List (BDE METL).

International Defense Acquisition Resource Management (IDARM) Program

From 11-15 April, IDARM participated in a DSCA-led project on Force Modernization Priorities for Bulgaria's Ministry of Defense. From 20-24 June, IDARM conducted a conference on NATO's Black Sea Region Security.

Leader Development and Education for Sustained Peace Program (LDESP) Support

Iraq — The LDESP team conducted nine intensive seminars with more than 1,200 senior leaders prior to their deployments to Iraq. Training was conducted in Colorado, Mississippi, Texas, California and Indiana.

Afghanistan — From 17-22 April and 25-27 June, the LDESP team traveled to Camp Shelby, Mississippi to prepare 250 senior leaders from the 53rd BCT, Florida Army National Guard for Afghanistan.

KFOR — From 12-16 June, 100 senior leader from the Texas 36th.

Executive Director of Defense Resources Management Institute, Prof. C.J. Lacivita (far right) and a group of Turkish Army Officers. (U.S. Navy Photo by Javier Chagoya)

Center for Homeland Defense and Security

The DHS Homeland Security Advisory Council (HSAC) met April 25-26 at NPS with representatives from the private sector to review homeland security vulnerabilities and critical infrastructure protection.

The National Homeland Security Consortium Meeting was held May 24-25 at the Monterey Convention Center. Leaders from various agencies and national associations gathered to discuss topics such as HSPD-8, Bioterrorism Preparedness, and Cities Readiness Programs. The CHDS Executive Education team, led by Ellen Gordon, conducted a MET as part of the meeting.

The 5th Homeland Security master's degree program class (31 students) started in May.

On April 25, CHDS conducted its first Major Urban Area MET seminar. The event was held in Seattle, Wash. for senior Homeland Security officials in the greater Seattle area region. In addition, there were ten METs conducted throughout the nation this quarter.

NPS Research

A research initiative focusing on future network centric operations took a major step forward with a "launch symposium" in May. The NPS research project – an open consortium called the World Wide Consortium on the Grid (W2COG) — will address the major technical and organizational challenges facing developers of the DOD Grid, the future global networking system that will support network centric operations.

Marine Corps Captains, Bret Hyla and Adrian Arnold, attended the Network Centric Operations Industry Consortium. The students were invited to describe their hands-on field experience and their views of current information system interoperability's strengths and weaknesses.

In the Defense Analysis Department Air Force Maj. Angela Burth is working on a highly original thesis based on using military customer 'markets' to help shape the new W2COG network.

Marine Corps Capt. Dwayne Lancaster, an NPS C4I Curriculum student, is working with the W2COG and several industry partners to build a prototype Hastily Formed Networks Flyaway Kit to assist in rapid deployment of network communications during emergencies. NPS is assisting DoD to enhance collaboration and communications with NGO's, IO's, and UN Agencies with civil-military Humanitarian Assistance/Disaster Relief and Complex Humanitarian Emergencies.

Undersea Warfare News

The NPS Center for AUV Research participated in the 2005 AUV FEST 6-16 June at the Underwater Test Range at NUWC Keyport, Wash. This year's exercise demonstrated a new technology for small AUVs that are used for mine field reconnaissance and neutralization. The new technology uses a low power and cost "Blazed Array" forward look sonar to both detect and classify objects in the water column in front of these vehicles. Using the detection capability of this sonar, dynamic image processing is used to provide the autonomous vehicle with avoidance decisions leading the vehicle to change its path and avoid collision. NPS faculty showed that dynamic image processing and closed loop detection and avoidance is both feasible and desirable. The exercise and the technology development were funded by ONR.

Five Naval students graduated with thesis topics related to this effort: Lt. Jason Grabelle, Ens. Daniel Hemminger, Ens. Alan R. Van Reet, Ens. Joel Gow and Ens. Kevin Michael Goering.

DCN: 11935

Students Aide TNT Research

The Tactical Network Topology research team conducted a new series of field experiments in May to enhance SOF warfighting capabilities and support GWOT efforts. Navy Lt. Shawn Johnson and Marine Corps Maj. Jeff Thiry created deployable network operations center. The field experiments have been sponsored by Congressional funds and Special Operations Command and have examined methods to: improve ability to find, fix, and identify enemy and equipment; reduce blue-on-blue incidents; design, develop and provide recommendations for integration of a tetherless transmit-receive link between soldiers, ground sensors, manned and unmanned vehicles; develop push-pull of secure data and video; and incorporate biometric-like software for identification of enemy and equipment. The 2005 team currently includes 22 thesis students and 31 faculty members from seven NPS academic departments, the MOVES and Meyer institutes and CIRPAS. Other collaborators include Lawrence Livermore National Lab, MIT, Virginia Tech, and several partnering companies.

NPS Supports the Fleet

Prof. Brian Swanland executed the first half of the USS NIMITZ's RSEP during its transit from San Diego to Hawaii, May 8 to May 17. Focus was on China and Korea. The second half will be conducted later in their deployment and focus on the Mid-East.

On May 4-13, Prof. Jim Wirtz and Prof. Mike Malley conducted an RSEP event for CARAT '05 (Cooperation Afloat Readiness and Training). It focused on Southeast Asia and the Asia-Pacific and involved Thailand, Singapore, Malaysia, Indonesia, Brunei and the Philippines and involved six United States Ships.

Distinguished Visitors and Major Conferences

28 Mar-8 Apr	Information Professional Senior Officer Course (CEE)
31 Mar-1 Apr	The Honorable Ryan Henry Principal Deputy Under Secretary of Defense for Policy
6-7 Apr	Anita K. Blair, Deputy Assistant Secretary of the Navy (Military Personnel Policy)
11-12 Apr	Brig. Gen. Steven D. Saunders, USA Director, Joint Doctrine, Training and Force Development
19-22 Apr	Adm. (Ret) James D. Watkins, USN, Chair of U.S. Commission on Ocean Policy and former CNO, NPS Hall of Fame Induction, Bldg. Naming & SGL *(below)*

20-21 Apr	NPS Board of Advisors Meeting
20-21 Apr	Pakistan National Defense College
25 Apr	Homeland Security Advisory Council Critical Infrastructure Task Force (CITF) Meeting
27 Apr	Brig. Gen. Volker Zimmer Commander German Armed Forces Command
28-30 Apr	Rear Adm. Dan Mastagni Deputy CDR, Fleet Air Force Mediterranean
3-5 May	Joint Electronic Warfare Conference
13 May	Mr. Terry Halversen Executive Director for the Navy Personnel Development Command
15-20 May	Rear Adm. James Johnson Regional Director, TRICARE Regional Office-West
17 May	Mr. Jim Knox DoN CIO Knowledge Management Director
18-19 May	2nd Annual Research Symposium, Honorable John J. Young, Jr. Assistant Secretary of the Navy for Research, Development and Acquisition; Rear Adm. Charles Hamilton, Program Executive Officer for Ships
31-1 June	Mr. John Chapla U.S. House Armed Services Committee

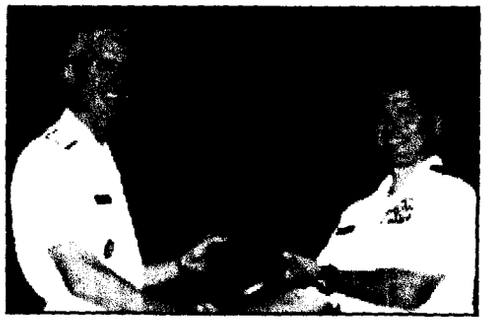
6 June	Honorable Leon Panetta, Former Senators Alan Simpson (WY) and William Bradley (NJ) *(above)*
7-8 June	Dr P.C. Lui, Singapore Ministry of Defense
7-15 June	Executive Business Course Vice Adm. Donald Arthur Medical Corps Surgeon General, Chief, BUMED *(below)*

8-10 June:	Rear Adm. Jacob Shuford President, Naval War College
13-16 June	2nd Annual Navy Higher Education IT Consortium Conference Vice Adm. Rodney Rempt, Superintendent of the U.S. Naval Academy
17 June	Adm. Vern Clark, CNO Graduation Speaker

DCN: 11935

NPS Recognizes Outstanding Students and Faculty

Student Awards



Monterey Council Navy League Award for Highest Academic Achievement; The Louis D. Liskin Award for Excellence in Business and Public Policy; Rear Admiral Thomas R. McClellan Award for Academic Excellence in the Graduate School of Business and Public Policy; Department of the Navy Award for Academic Excellence in Financial Management – Cmdr. Ronald Arnold, USN *(above, with Rear Adm. Patrick Dunne)*

Naval Postgraduate School Outstanding Academic Achievement Award for Department of Defense Students; Rear Admiral Grace Murray Hopper Computer Science Award - Mr. Ryan J. Noonan, Federal Cyber Corps

NPS Outstanding Academic Achievement Award for International Students – Lt. j.g. Dessalermos, Spyridon, Hellenic Navy

Naval Postgraduate School Superior Service Award – Cmdr. James A. Imanian, USN

Marine Corps Association Superior Service Award for Outstanding U.S. Marine Student – Capt. William Donnelly III, USMC

Air Force Association Award for Outstanding U.S. Air Force Student – Capt. Thomas Meer, USAF

Armed Forces Communications and Electronics Association Award - Mr. Tay, Yeong Kiang Winston, Singapore Ministry of Defense
Ens. Collier Crouch, USN

Army Chief of Staff Award for Excellence in Operations Research - Maj. Jeffrey B. House, USA

Military Operations Research Society Stephen A. Tisdale Graduate Research Award - Capt. Gary R. Kramlich, USA

Space and Naval Warfare Systems Command Award in Electronic Systems Engineering - Capt. Brian E. Souhan, USA

Naval Sea Systems Command Award for Excellence in Combat Systems - Lt. Christopher Lindberg, USNR

Conrad Scholar Award for Distinguished Academic Achievement in Financial Management - Cmdr. Ronald Arnold, USN, Lt. Cmdr. Pamela Theorgood, USN, and Lt. Jason Miller, USN

Joint Chiefs of Staff Command, Control and Communications Award for Academic Achievement - Capt. David D. Lancaster, USMC

Army Acquisition Corps Award for Scholastic Achievement - Maj. Steven R. Ansley, USN

The Surface Navy Association's Award for Excellence in Surface Warfare Research - Lt. Sean Niles, USN

2005 Warren Randolph Church Award for Excellence in Mathematics – Capt. Anthony Johnson, USA

Assistant Secretary of the Navy (Research, Development, and Acquisition) Acquisition Excellence Award - Lt. Cmdr. Brett M. Schwartz, USN

Graduate School of Business and Public Policy Faculty Outstanding International Student Award - Lt. j.g. Aykut Guducu, Turkish Navy

The Northrop Grumman Student Award for Excellence in Systems Engineering and Analysis - Maj. Russ Wylie, USA, Lt. Cmdr. Chris McCarthy, USN and, Lt. Col. Guillermo Ferraris, Argentinean Army

Meyer Award for Outstanding Student in Systems Engineering (Integrated Projects) - Hsu, Yu Chih and Chang, Kok Meng

Liskin Award for Excellence in Regional Security Studies – Maj. Douglas L. DeWitt, USMC

The Jim and Tina Heldman Award for Excellence in Regional or Security Studies - Lt. Col. Ekkehard Stemmer, German Air Force

The Outstanding United States Air Force Graduate Award, Department of National Security Affairs - Maj. Barry W. Cook, USAF and Maj. James D. McCune, USAF

Oceanographer of the Navy Award for Outstanding Academic Performance in Meteorology and Oceanography - Lt. Cmdr. Jacob C. Hinz, USN

The Graduate School of Business and Public Policy Award for Outstanding Leadership, Education, and Development - Capt. Joseph Groah, USMC and Lt. Francisco Alsina, USN

Meyer Award for Outstanding Student in Systems Engineering (Distance Learning) - Ms. Jennifer Escarez, Mr. Noel S. Camanag and Mr. Michael E. Edwards

Naval Supply Systems Command Award for Academic Excellence in Management; American Society of Military Comptrollers Award for Excellence in Research - Lt. Cmdr. Pamela Theorgood, USN *(below, with Dean Douglas Brook and Rear Adm. Patrick Dunne)*

Faculty Awards

Rear Admiral John Jay Schieffelin Award for Excellence in Teaching – Associate Professor Carlos Borges, Department of Mathematics

The Northrop Grumman Faculty Award for Excellence in Systems Engineering and Analysis - Professor Eugene Paulo and Capt. Thomas Hoivik, USN (Ret)

First Command Military Leadership Award – Cmdr. Mark Rhoades, USN

Meyer Award for Teaching Excellence in Systems Engineering (Integrated Projects) – Professor Ken Davidson, Department of Meteorology

The Lt. Cmdr. David L. Williams Outstanding Professor Award – Assistant Professor Aurel Croissant, NSA Department

The Louis D. Liskin Award for Teaching Excellence in the Graduate School of Business and Public Policy (GSBPP) - Associate Professor David Henderson

NAVAL POSTGRADUATE SCHOOL
FACT SHEET - SUMMER 2005

"The best and brightest military officers from the United States and around the world come to the Naval Postgraduate School in Monterey, California to work with world-class faculty on real military and defense problems. At NPS, they gain both the intellectual know-how and the practical skill for improving defense technologies, systems and programs."

- Former President of the United States George H.W. Bush

Mission

To provide relevant and unique advanced education and research programs in order to increase the combat effectiveness of United States and allied armed forces and enhance the security of the United States.

Academic Organization

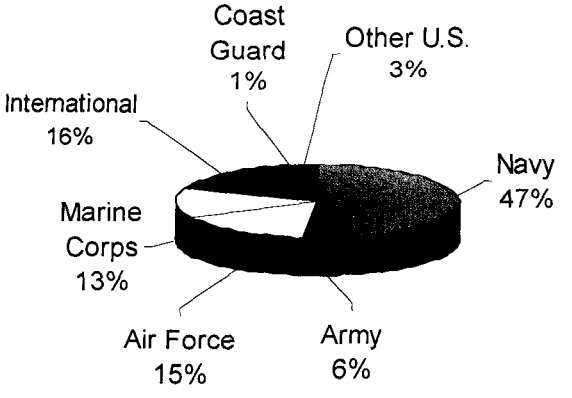
Fourteen academic departments within four degree-granting graduate schools:

- School of International Graduate Studies
- Graduate School of Business and Public Policy
- Graduate School of Engineering and Applied Sciences
- Graduate School of Operations and Information Sciences

Accredited by the Western Association of Schools and Colleges. Mechanical, Electrical and Astronautical Engineering programs accredited by the Accreditation Board for Engineering and Technology. MBA and management programs accredited by the National Association of Schools of Public Affairs and Administration and the American Association of Colleges and Schools of Business.

Resident Enrollment

1,697 graduate students, including 275 international students.



Distributed Learning Programs

There are 523 students participating in degree or certificate programs. NPS also provides education to thousands of other students in short courses in other nations and at NPS.

Degrees Offered

Master of Arts, Master of Science, Engineering, Master of Business Administration, Doctor of Philosophy and Doctor of Engineering degrees.

Alumni

More than 45,000 alumni from all 50 states, the District of Columbia and more than 70 different nations.

Financial

The operating budget of NPS is approximately $65 million. Combined with the salaries of military officers and civilian students and research, the impact on the Monterey Peninsula area is more than $300 million.

Research

Research at NPS is an integral part of graduate education, advancing national security and challenging students with creative problem solving experiences on relevant issues. Reimbursable research funds totaled approximately $84 million in fiscal year 2004.

Faculty

571 faculty members, including 241 tenured / tenure track and 49 military officers. Nearly all hold a doctorate.

Sources of faculty doctorates include:

- Stanford University
- University of California at Berkeley
- University of California at Los Angeles
- Massachusetts Institute of Technology
- Harvard University
- Yale University
- Pennsylvania State University

Board of Advisors

Walter Anderson, Adm. Stanley Arthur, USN (Ret.), Dr. Jack Borsting, Rear Adm. Jay Cohen, Lt. Gen. Michael Dunn, Brig. Gen. George Flynn, Maj. Gen. Donald Gardner, Honorable Sean O'Keefe, Vice Adm. Al Harms, Maj. Gen. David Huntoon Jr., Lt. Gen. Donald Lamontagne, Adm. T. Joseph Lopez, Dr. Elizabeth Pate-Cornell, Mr. G. Kim Wincup

"I look forward to the promise of transformational initiatives that would better integrate education into the demanding careers of our expeditionary war fighters. I intend to maintain NPS as the centerpiece of our graduate education program."

- Admiral V.E. Clark, Former Chief of Naval Operations

DCN: 11935

The Naval Postgraduate School: Overview

In its almost 100 year history, NPS has evolved from a single engineering department at the US Naval Academy into the Nation's premier defense-oriented research university. NPS provides the DOD with an effective, diverse, and sustainable educational institution that supports current and future readiness, advances in technology, and the educational programs that facilitate getting our superior technology into the hands of the warfighter.

Generations of Navy leaders have provided the Nation with a university that is ideally suited to support our efforts in waging a global war on terrorism and the Department's technical transformation.

As an institution chartered to concentrate on technology and technologically oriented areas of discovery, the Naval Postgraduate School has operated for almost a century with clearly defined visions and missions, always adapting to meet new security challenges. NPS has an excellent and diverse student body; a first-rate faculty, many members of which are nationally and internationally recognized as leaders in their academic fields and in defense applications; secure facilities and an ability to conduct classified research; educational, research, and service missions that are tightly focused on military and national security issues; and the ability to provide graduates, expertise, and knowledge that make fundamental contributions to solving our nation's national and international security problems. No other institution of higher education in the country has made such a tightly focused commitment to national defense and homeland security.

NPS is rated in 2005 as the DOD educational institution ranking highest in military value. The Technical Joint Cross Service Group (TJCSG) computed Military Value Scores for more than 200 technical facilities. NPS was one of only five facilities that received a military value score for each of the 13 research technical areas considered by the TJCSG. The other four were: Wright-Patterson AFB, NAS Patuxent River, Naval Research Laboratory, and White Sands Missile Range. This emphasizes the breadth of research undertaken at NPS and the focus on areas of primary importance to DOD and the warfighter. The TJCSG also identified 17 technological areas as having "significant importance to future warfighting capabilities." NPS faculty and students are involved in various research projects that support all 17 technologies. It is worth noting that the TJCSG evaluated technical facilities across 13 different technical areas and in three functional areas: Research, Development and Acquisition, and Test and Evaluation. NPS received the highest military value rating of all facilities in "Battlespace Environments, D&A.

Another critical NPS contribution is the enormous impact of having nearly three hundred allied and international officers spending 18-24 months living, learning and discovering side by side with Navy, Marine, Army and Air Force officers how to conceptualize, analyze, and solve the global challenges that we all face in the 21st century. The mutual understanding, trust, and good will that result from intensive interactions across this 'global village' of future military leaders may in fact contribute as much to international peace and harmony as does their formal

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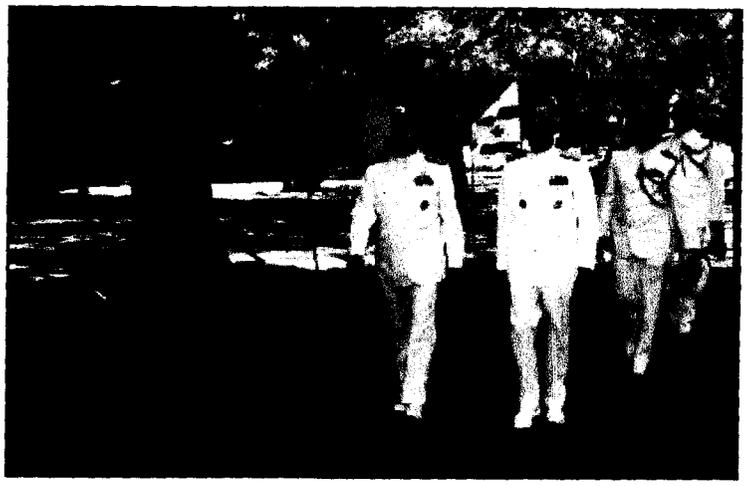
Of the 275 master's degree students, eight received dual degrees. Sixty graduates completed the Joint Professional Military Education course -- 54 Navy, four Air Force and two Marine Corps officers. There were also two PhDs and five bachelor's degrees awarded.

International students represented 26 countries spanning the globe, including students from Botswana, Canada, Ecuador, France, Germany, Greece, Hungary, Jamaica, Moldova, India, El Salvador, Japan, Lithuania, Mexico, Mongolia, Morocco, Norway, Pakistan, Singapore, Taiwan, Turkey, the Dominican Republic, the Republic of Georgia, Indonesia, Ukraine and Papua New Guinea.



(U.S. Navy photo by Photographer's Mate 2nd Class Mike DiFranco)

Highlighting Naval Postgraduate School Students / Faculty

Maritime Domain Protection

The Meyer Institute of System Engineering & Analysis 7th cohort (SEA-7) consisted of 21 NPS students from a variety of backgrounds, including 13 US Navy, 1 US Army, 2 US civilian (Northrop-Grumman), 2 Turkish Air Force, 1 Singapore Defense Science & Technology Agency, 1 Argentinean Army, and 1 Mexican Navy.

The study focused on large ship and port security in the Port of Singapore and the nearby Straits of Malacca. The SEA team also designed and assessed ship inspection architecture alternatives for detecting explosive and dangerous materials in order to prevent a large cargo ship from being used as a terrorist vehicle.

The SEA-7 cohort began work on the cross-campus Integrated Project in October 2004 and gave their final presentation on June 1, 2005. SEA-7 was joined by 26 students from Singapore's Temasek Defense System Institute (TDSI) in January 2005. These students arrived at NPS following a six-month course of study in Singapore, and will continue work on individual theses following their participation in the SEA-7 Integrated Study, in order to graduate in December 2005.

Significant Navy Student Theses

Lt. John Rios, former Chief Engineer of USS CHIEF, one of two tactical action officers, completed his thesis *'Naval Mines in the 21st Century: Can NATO Navies Meet the Challenge?'* Lt. Rios' thesis analyzes the mine threat (particularly the proliferation of advanced mine technologies and the potential of these technologies to be utilized by both state and non-state actors to disrupt shipping/naval operations) in relation to the capabilities currently being utilized and under development by NATO to meet the threat.

Lt. Cmdr. Glenn Walt, former Squadron pilot/Department Head of VAW-113 onboard USS ABRAHAM LINCOLN, completed his thesis *'Commander Naval Air Forces Flight Hour Program: Budgeting and Execution Response to the Implementation of the Fleet Response Plan and OP-20 Pricing Model Changes.'* Lt. Cmdr. Walt's thesis will assist OPNAV in attempting to better match flight hour funding requirements with a more dynamic and uncertain level of global operations. i.e. OEF and OIF.

Cmdr. Jerry Stokes, former Squadron Operations Officer of VAW-115 onboard USS KITTY HAWK deployed to Arabian Gulf, completed his thesis *'An Ultracapacitor Based Energy Storage System for an Electromagnetic Aircraft Launch System (EMALS).'* Cmdr. Stokes' thesis discusses EMALS installed in CVN-21 Class carriers; enabling shipboard catapult launch of MQ-1 Predator UAV (other UAVs are also candidates); benefit is strong probability of 30% reduced catapult manning.

Conrad Scholars

On 9 June, three Conrad Scholars form NPS presented their theses to ASN(FM&C), acting FMB and staff, and Dir. Navy Staff (Vice Adm. Tom Church). The three theses were presented by Lt. Jason Miller - *Analysis of Sea Enterprise Program;* Lt Cmdr. Pam Theorgood - *Model Process Validation: An Analysis of Performance-based Pricing Models;* and Cmdr. Ron Arnold - *Useful Performance Metrics for PEO for Integrated Warfare Systems 1.0 and 2.0.*

In this Issue...

Page 2
Global Support / Research / CHDS / AUV News
Page 3
Students Aide TNT Research / NPS Supports the Fleet / V.I.P. Visits
Page 4
Student and Faculty Awards

NPS Provides Global Support

Worldwide Education Outreach (Short Courses)

The Center for Civil Military Relations (CCMR) held 52 events during this quarter, both in Monterey and in other countries, reaching over 2,800 civilians and military officers from 46 nations.

Civil-Military Relations (CMR) Programs

In May, CCMR conducted two extremely successful METs in Ulaanbaatar, Mongolia and Bucharest, Romania.

In addition, CCMR conducted a civil-military relations seminar in Ouagadougou, Burkina Faso from 25-29 April, for 32 military and 25 civilians, focusing on civil-military relations in transitional societies.

Combating Terrorism Program

The Civil-Military Responses to Terrorism Resident Course (23 May-4 June) brought together 28 military officers and civilian officials from Colombia, Romania, Azerbaijan, Turkey, Brazil, Ecuador, Mongolia, Sri Lanka, Nepal, Bulgaria, Malaysia, Guatemala, Kenya, Indonesia, Jordan, Bosnia, Malta, El Salvador, Yemen, Tanzania, Pakistan to consider how governments can more effectively prevent terrorism and respond to it when they cannot.

Enhanced International Peacekeeping Capabilities (EIPC)

From 25-29 April, CCMR educated 30 participants of Ukraine's 95th Brigade or subordinate units, in Zhytomyr, Ukraine. The participants developed a first draft of a Brigade Mission Essential Task List (BDE METL).

International Defense Acquisition Resource Management (IDARM) Program

From 11-15 April, IDARM participated in a DSCA-led project on Force Modernization Priorities for Bulgaria's Ministry of Defense. From 20-24 June, IDARM conducted a conference on NATO's Black Sea Region Security.

Leader Development and Education for Sustained Peace Program (LDESP) Support

Iraq — The LDESP team conducted nine intensive seminars with more than 1,200 senior leaders prior to their deployments to Iraq. Training was conducted in Colorado, Mississippi, Texas, California and Indiana.

Afghanistan — From 17-22 April and 25-27 June, the LDESP team traveled to Camp Shelby, Mississippi to prepare 250 senior leaders from the 53rd BCT, Florida Army National Guard for Afghanistan.

KFOR — From 12-16 June, 100 senior leader from the Texas 36th.

Executive Director of Defense Resources Management Institute, Prof. C.J. Lacivita (far right) and a group of Turkish Army Officers. (U.S. Navy Photo by Javier Chagoya)

Center for Homeland Defense and Security

The DHS Homeland Security Advisory Council (HSAC) met April 25-26 at NPS with representatives from the private sector to review homeland security vulnerabilities and critical infrastructure protection.

The National Homeland Security Consortium Meeting was held May 24-25 at the Monterey Convention Center. Leaders from various agencies and national associations gathered to discuss topics such as HSPD-8, Bioterrorism Preparedness, and Cities Readiness Programs. The CHDS Executive Education team, led by Ellen Gordon, conducted a MET as part of the meeting.

The 5th Homeland Security master's degree program class (31 students) started in May.

On April 25, CHDS conducted its first Major Urban Area MET seminar. The event was held in Seattle, Wash. for senior Homeland Security officials in the greater Seattle area region. In addition, there were ten METs conducted throughout the nation this quarter.

NPS Research

A research initiative focusing on future network centric operations took a major step forward with a "launch symposium" in May. The NPS research project – an open consortium called the World Wide Consortium on the Grid (W2COG) — will address the major technical and organizational challenges facing developers of the DOD Grid, the future global networking system that will support network centric operations.

Marine Corps Captains, Bret Hyla and Adrian Arnold, attended the Network Centric Operations Industry Consortium. The students were invited to describe their hands-on field experience and their views of current information system interoperability's strengths and weaknesses.

In the Defense Analysis Department Air Force Maj. Angela Burth is working on a highly original thesis based on using military customer 'markets' to help shape the new W2COG network.

Marine Corps Capt. Dwayne Lancaster, an NPS C4I Curriculum student, is working with the W2COG and several industry partners to build a prototype Hastily Formed Networks Flyaway Kit to assist in rapid deployment of network communications during emergencies. NPS is assisting DoD to enhance collaboration and communications with NGO's, IO's, and UN Agencies with civil-military Humanitarian Assistance/Disaster Relief and Complex Humanitarian Emergencies.

Undersea Warfare News

The NPS Center for AUV Research participated in the 2005 AUV FEST 6-16 June at the Underwater Test Range at NUWC Keyport, Wash. This year's exercise demonstrated a new technology for small AUVs that are used for mine field reconnaissance and neutralization. The new technology uses a low power and cost "Blazed Array" forward look sonar to both detect and classify objects in the water column in front of these vehicles. Using the detection capability of this sonar, dynamic image processing is used to provide the autonomous vehicle with avoidance decisions leading the vehicle to change its path and avoid collision. NPS faculty showed that dynamic image processing and closed loop detection and avoidance is both feasible and desirable. The exercise and the technology development were funded by ONR.

Five Naval students graduated with thesis topics related to this effort: Lt. Jason Grabelle, Ens. Daniel Hemminger, Ens. Alan R. Van Reet, Ens. Joel Gow and Ens. Kevin Michael Goering.

DCN: 11935

Students Aide TNT Research

The Tactical Network Topology research team conducted a new series of field experiments in May to enhance SOF warfighting capabilities and support GWOT efforts. Navy Lt. Shawn Johnson and Marine Corps Maj. Jeff Thiry created deployable network operations center. The field experiments have been sponsored by Congressional funds and Special Operations Command and have examined methods to: improve ability to find, fix, and identify enemy and equipment; reduce blue-on-blue incidents; design, develop and provide recommendations for integration of a tetherless transmit-receive link between soldiers, ground sensors, manned and unmanned vehicles; develop push-pull of secure data and video; and incorporate biometric-like software for identification of enemy and equipment. The 2005 team currently includes 22 thesis students and 31 faculty members from seven NPS academic departments, the MOVES and Meyer institutes and CIRPAS. Other collaborators include Lawrence Livermore National Lab, MIT, Virginia Tech, and several partnering companies.

NPS Supports the Fleet

Prof. Brian Swanland executed the first half of the USS NIMITZ's RSEP during its transit from San Diego to Hawaii, May 8 to May 17. Focus was on China and Korea. The second half will be conducted later in their deployment and focus on the Mid-East.

On May 4-13, Prof. Jim Wirtz and Prof. Mike Malley conducted an RSEP event for CARAT '05 (Cooperation Afloat Readiness and Training). It focused on Southeast Asia and the Asia-Pacific and involved Thailand, Singapore, Malaysia, Indonesia, Brunei and the Philippines and involved six United States Ships.

Distinguished Visitors and Major Conferences

28 Mar-8 Apr	Information Professional Senior Officer Course (CEE)
31 Mar-1 Apr	The Honorable Ryan Henry Principal Deputy Under Secretary of Defense for Policy
6-7 Apr	Anita K. Blair, Deputy Assistant Secretary of the Navy (Military Personnel Policy)
11-12 Apr	Brig. Gen. Steven D. Saunders, USA Director, Joint Doctrine, Training and Force Development
19-22 Apr	Adm. (Ret) James D. Watkins, USN, Chair of U.S. Commission on Ocean Policy and former CNO, NPS Hall of Fame Induction, Bldg. Naming & SGL *(below)*

20-21 Apr	NPS Board of Advisors Meeting
20-21 Apr	Pakistan National Defense College
25 Apr	Homeland Security Advisory Council Critical Infrastructure Task Force (CITF) Meeting
27 Apr	Brig. Gen. Volker Zimmer Commander German Armed Forces Command
28-30 Apr	Rear Adm. Dan Mastagni Deputy CDR, Fleet Air Force Mediterranean
3-5 May	Joint Electronic Warfare Conference
13 May	Mr. Terry Halversen Executive Director for the Navy Personnel Development Command
15-20 May	Rear Adm. James Johnson Regional Director, TRICARE Regional Office-West
17 May	Mr. Jim Knox DoN CIO Knowledge Management Director
18-19 May	2nd Annual Research Symposium, Honorable John J. Young, Jr. Assistant Secretary of the Navy for Research, Development and Acquisition; Rear Adm. Charles Hamilton, Program Executive Officer for Ships
31-1 June	Mr. John Chapla U.S. House Armed Services Committee

6 June	Honorable Leon Panetta, Former Senators Alan Simpson (WY) and William Bradley (NJ) *(above)*
7-8 June	Dr P.C. Lui, Singapore Ministry of Defense
7-15 June	Executive Business Course Vice Adm. Donald Arthur Medical Corps Surgeon General, Chief, BUMED *(below)*

8-10 June:	Rear Adm. Jacob Shuford President, Naval War College
13-16 June	2nd Annual Navy Higher Education IT Consortium Conference Vice Adm. Rodney Rempt, Superintendent of the U.S. Naval Academy
17 June	Adm. Vern Clark, CNO Graduation Speaker

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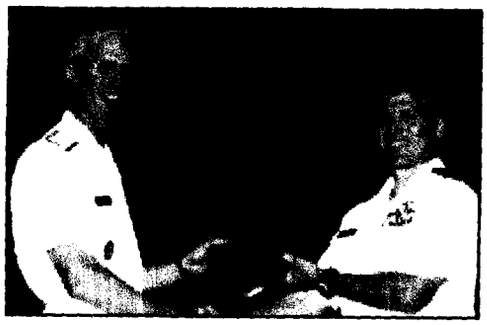
NPS Recognizes Outstanding Students and Faculty

Student Awards



Monterey Council Navy League Award for Highest Academic Achievement; The Louis D. Liskin Award for Excellence in Business and Public Policy; Rear Admiral Thomas R. McClellan Award for Academic Excellence in the Graduate School of Business and Public Policy; Department of the Navy Award for Academic Excellence in Financial Management – Cmdr. Ronald Arnold, USN *(above, with Rear Adm. Patrick Dunne)*

Naval Postgraduate School Outstanding Academic Achievement Award for Department of Defense Students; Rear Admiral Grace Murray Hopper Computer Science Award - Mr. Ryan J. Noonan, Federal Cyber Corps

NPS Outstanding Academic Achievement Award for International Students – Lt. j.g. Dessalermos, Spyridon, Hellenic Navy

Naval Postgraduate School Superior Service Award – Cmdr. James A. Imanian, USN

Marine Corps Association Superior Service Award for Outstanding U.S. Marine Student – Capt. William Donnelly III, USMC

Air Force Association Award for Outstanding U.S. Air Force Student – Capt. Thomas Meer, USAF

Armed Forces Communications and Electronics Association Award - Mr. Tay, Yeong Kiang Winston, Singapore Ministry of Defense
Ens. Collier Crouch, USN

Army Chief of Staff Award for Excellence in Operations Research - Maj. Jeffrey B. House, USA

Military Operations Research Society Stephen A. Tisdale Graduate Research Award - Capt. Gary R. Kramlich, USA

Space and Naval Warfare Systems Command Award in Electronic Systems Engineering - Capt. Brian E. Souhan, USA

Naval Sea Systems Command Award for Excellence in Combat Systems - Lt. Christopher Lindberg, USNR

Conrad Scholar Award for Distinguished Academic Achievement in Financial Management - Cmdr. Ronald Arnold, USN, Lt. Cmdr. Pamela Theorgood, USN, and Lt. Jason Miller, USN

Joint Chiefs of Staff Command, Control and Communications Award for Academic Achievement - Capt. David D. Lancaster, USMC

Army Acquisition Corps Award for Scholastic Achievement - Maj. Steven R. Ansley, USN

The Surface Navy Association's Award for Excellence in Surface Warfare Research - Lt. Sean Niles, USN

2005 Warren Randolph Church Award for Excellence in Mathematics – Capt. Anthony Johnson, USA

Assistant Secretary of the Navy (Research, Development, and Acquisition) Acquisition Excellence Award - Lt. Cmdr. Brett M. Schwartz, USN

Graduate School of Business and Public Policy Faculty Outstanding International Student Award - Lt. j.g. Aykut Guducu, Turkish Navy

The Northrop Grumman Student Award for Excellence in Systems Engineering and Analysis - Maj. Russ Wylie, USA, Lt. Cmdr. Chris McCarthy, USN and, Lt. Col. Guillermo Ferraris, Argentinean Army

Meyer Award for Outstanding Student in Systems Engineering (Integrated Projects) - Hsu, Yu Chih and Chang, Kok Meng

Liskin Award for Excellence in Regional Security Studies – Maj. Douglas L. DeWitt, USMC

The Jim and Tina Heldman Award for Excellence in Regional or Security Studies - Lt. Col. Ekkehard Stemmer, German Air Force

The Outstanding United States Air Force Graduate Award, Department of National Security Affairs - Maj. Barry W. Cook, USAF and Maj. James D. McCune, USAF

Oceanographer of the Navy Award for Outstanding Academic Performance in Meteorology and Oceanography - Lt. Cmdr. Jacob C. Hinz, USN

The Graduate School of Business and Public Policy Award for Outstanding Leadership, Education, and Development - Capt. Joseph Groah, USMC and Lt. Francisco Alsina, USN

Meyer Award for Outstanding Student in Systems Engineering (Distance Learning) - Ms. Jennifer Escarez, Mr. Noel S. Camanag and Mr. Michael E. Edwards

Naval Supply Systems Command Award for Academic Excellence in Management; American Society of Military Comptrollers Award for Excellence in Research - Lt. Cmdr. Pamela Theorgood, USN *(below, with Dean Douglas Brook and Rear Adm. Patrick Dunne)*

Faculty Awards

Rear Admiral John Jay Schieffelin Award for Excellence in Teaching – Associate Professor Carlos Borges, Department of Mathematics

The Northrop Grumman Faculty Award for Excellence in Systems Engineering and Analysis - Professor Eugene Paulo and Capt. Thomas Hoivik, USN (Ret)

First Command Military Leadership Award – Cmdr. Mark Rhoades, USN

Meyer Award for Teaching Excellence in Systems Engineering (Integrated Projects) – Professor Ken Davidson, Department of Meteorology

The Lt. Cmdr. David L. Williams Outstanding Professor Award – Assistant Professor Aurel Croissant, NSA Department

The Louis D. Liskin Award for Teaching Excellence in the Graduate School of Business and Public Policy (GSBPP) - Associate Professor David Henderson

NPS – USSOCOM
Cooperative Field Experimentation Program

DCN-11935

Tactical Network Topology (TNT): Plug-and-Play Testbed

- Quarterly experiments provide rapid access and response.
- Working Group with USSOCOM and all USSOCOM Component Commands results in experiment scenarios driven by challenges facing deployed forces and identified key gaps and inefficiencies in capabilities.
- Joint/all-service NPS students with recent operational experience drive solution-space and CONOPS development.
- Large NPS faculty reimbursable DoD/Gov't research program supports collaborative experimentation with latest technologies, across many disciplines.
- Students and faculty with clearances provides access to current issues and proposed solutions.
- Use of SOF in experiments for quantitative measures of performance of technologies and of SOF using the technologies → user-driven solutions.

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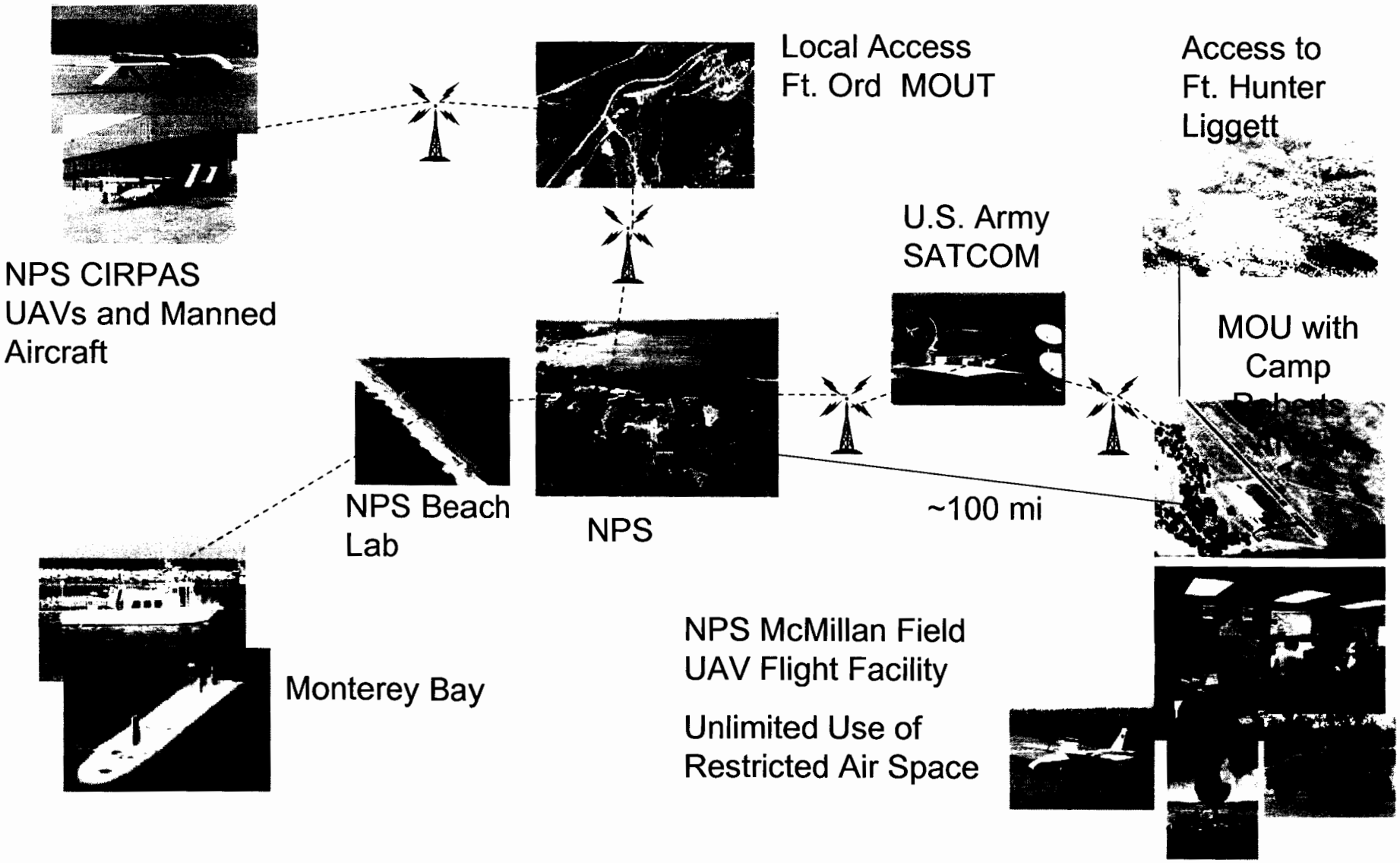
NPS – USSOCOM
Cooperative Field Experimentation Program

Unique Facilities with 24/7 Wireless Network Connectivity



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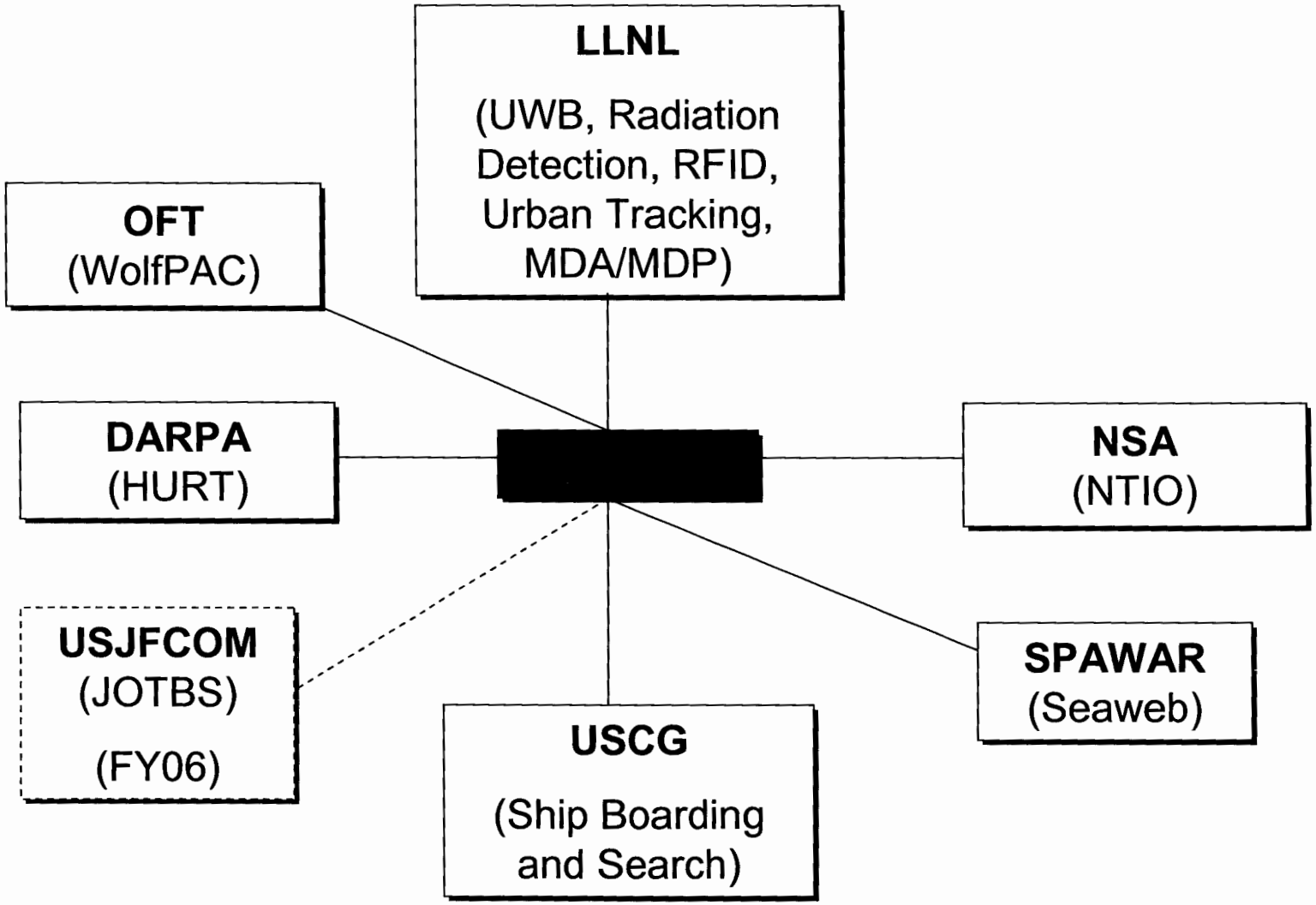
NPS – USSOCOM
Cooperative Field Experimentation Program

Cooperative Joint Experimentation with DoD/Gov't. Programs



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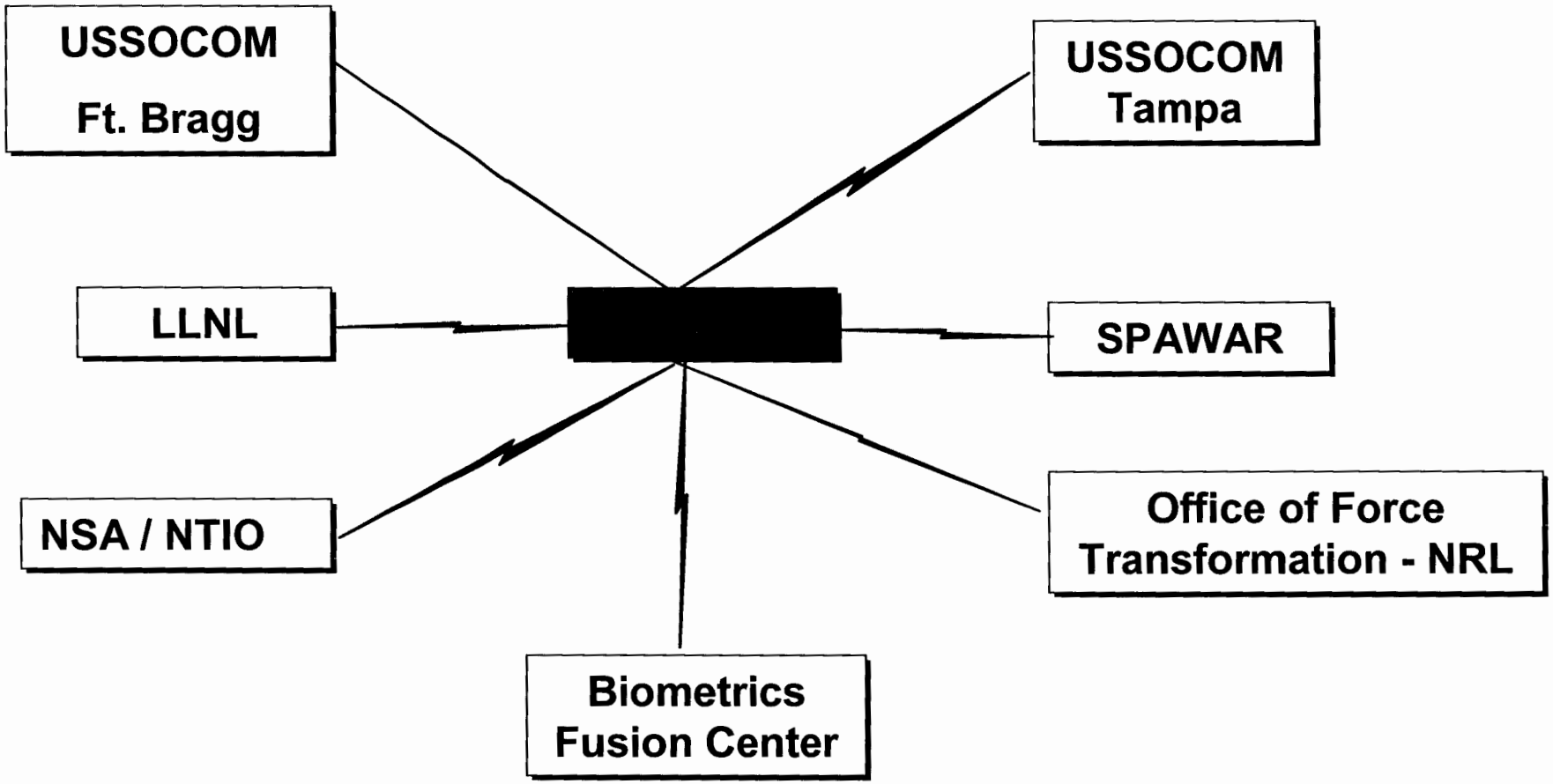
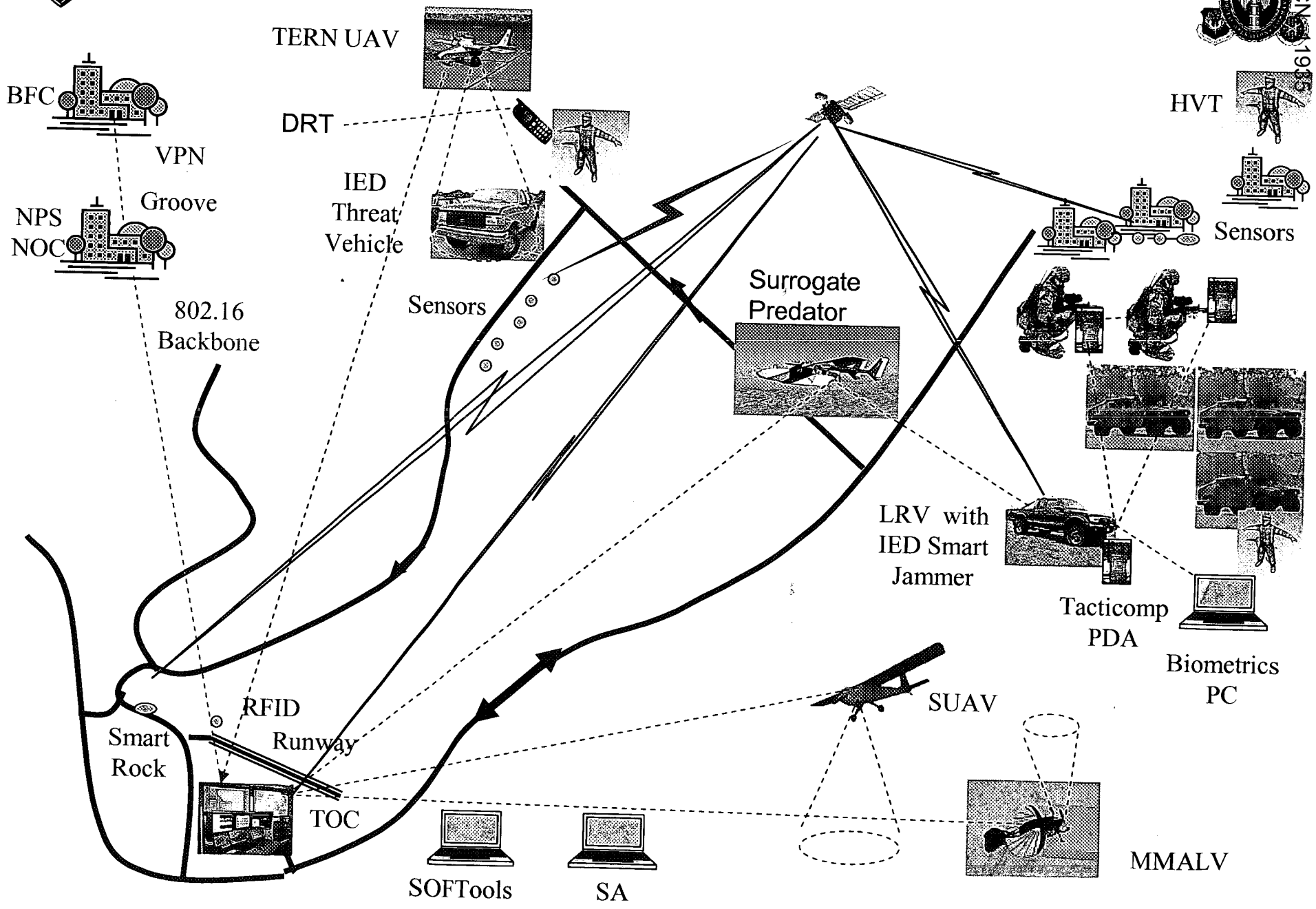
NPS – USSOCOM
Cooperative Field Experimentation Program

Rapid Collaboration/Global Reachback
for
Real-Time Participation



TNT 05-4: SOF HVT Search with Convoy IED Threat- Scenario 4



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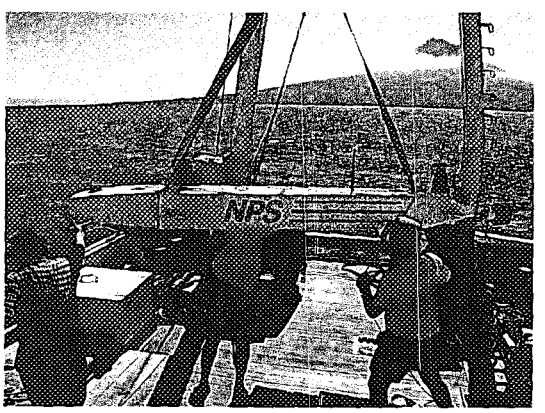
NAVAL POSTGRADUATE SCHOOL

SUPPORT FOR COMBATANT COMMANDERS

and the

OFFICE OF THE SECRETARY OF DEFENSE

The Naval Postgraduate School's unique combination of operationally experienced students and defense-oriented faculty provide a superb setting to conduct interdisciplinary research on complex issues related to national and homeland defense. As such, many of the research and academic programs at NPS relate to the operational level of war. A number of projects at NPS are performed directly for or in support of the various U. S. Combatant Commands, or are conducted side by side the Commands as part of larger integrated field experiments. Other NPS projects support or are supported by the Office of the Secretary of Defense (OSD). While many of these projects are classified, below are some unclassified examples of NPS support to the Commands, Fleets & OSD.



USPACOM
Pacific Command

Campus-Wide Integrated Project to Study Undersea Warfare in the Littoral. Thirteen System Engineering and Analysis students will lead a campus-wide integrated study on the challenges of Undersea Warfare in the Littoral. This work will focus on most challenging threats and will involve coordination with COMPACFLT, ASW Command, and TF ASW.

Campus-Wide Integrated Project to Study Maritime Counter-Terrorism in Southeast Asian waters. Twenty System Engineering and Analysis students are leading a campus-wide integrated study on defeating maritime terrorism and pirate-supported terror in the Southeast Asia waterways. NPS Singapore students will be integrated into this study. PACOM Science Advisor is aware of this project in consonance with PACOM's maritime domain ACTD proposal.

Coalition Operating Area Surveillance & Targeting System (COASTS). Develop and implement low cost, state-of-the-art, unclassified testbeds in partnership with coalition allies to reduce or mitigate border and port security vulnerabilities, and leverage & expand research through other NPS programs. COASTS uses sensors on manned and unmanned platforms, in combination with 802.11 and 802.16 wireless technologies to provide situational awareness overlay. Participants include USPACOM, NSA,US Border Patrol, US Coast Guard, Coalition Partners, Thailand (current), Singapore, Korea & others (proposed).

Southeast Asia Tsunami Relief: Hastily Formed Networks—Phuket & Khao Lok, Thailand. Taking advantage of a pre-arranged visit to Thailand by NPS faculty, NPS was able to support tsunami relief operations "on the fly", providing broadband internet to victims, families, NGOs, local government, media, and volunteers. NPS organized a team of participants from COASTS (a NPS integrated research project), and in-country agencies to set up a hastily formed network ISO tsunami relief. Many lessons were learned and reported. NPS faculty returned in mid-February and mid-March to enhance the network and build in redundant, remote monitoring/imaging capability.

Joint Defender TBMD Modeling. A PC-based operational planning tool for use by area air defense planners is being developed by Operations Research faculty and students. This model was tested in an unclassified Korean scenario and used to aid Naval War College in PACOM CONOPS (Concept of Operations) evaluation. It is being evaluated by NWDC staff for further development.

Unmanned Vehicle TACMEMO Development and Field Experimentation. In addition to TACMEMO (Tactical Memorandum) development for utilizing UAVs in Maritime Missions, NPS faculty and students are designing a field experimentation program with Singapore and Thailand for use of UAVs for ISR.

Regional Security Education Program (RSEP). NPS faculty teach on Carrier Strike Groups and Expeditionary Strike Groups in-transit, delivering graduate level education to forward-deploying forces, to enhance their strategic situational awareness and enable them to understand the regional threat environments in which they operate. Using in-person lectures, direct interaction with regional experts, and a supporting website, RSEP provides strike group Commanders critical and timely regional security knowledge, strategic level perspective, knowledge in support of forward engagement, theater security operations, bilateral/coalition cooperation, improved mission planning and current cultural and societal issues. Past presentations have focused on Middle East, Iraq, NE and SE Asia, DPR Korea, Horn of Africa, and China.

Maritime ISR and Detection (MISRAD). NPS hosted an inter-agency workshop on MISRAD under the auspices of PACOM. The workshop looked at the end-to-end supply chain that moves containers from the overseas manufacturer through the maritime traffic system to ports in the US. The particular focus of MISRAD is on WMD, particularly nuclear devices and special nuclear materials. The MISRAD group brings operators, sensor producers, intelligence professionals, port operators and shippers together to attack this problem from all sides.

Maritime Domain Protection. NPS drafted a proposed National Maritime Domain Protection Architecture with Concept of Operations and Command Structure. NPS also tested the proposal in an interagency/joint war game, developed a MDP Library Base for classified interagency reference, and extended current data mining and fusion techniques and systems based on

requirements generation. We are now examining port infrastructures in support of force protection.

Center for Executive Education (CEE): Development program for transition in USPACOM intelligence. Application of NPS' CEE program to J2/JICPAC leadership and unique theater intelligence management needs. This CEE education program provides frameworks/tools for the leadership team to input to intelligence strategy, implement change, and shape organizational structure and processes.

Center for Civil-Military Relations (CCMR). CCMR supports the PACOM Theater Security Cooperation Plan and the Global War on Terrorism by helping improve U.S. influence in the Asia-Pacific Region in Southeast Asia, the South Pacific, South Asia and Indian Ocean, and Indonesia, Taiwan and Bangladesh in particular. CCMR programs focus on improving access, training and readiness in these regions and developing competent coalition partners. CCMR provides in-residence courses and Mobile Education Teams (MET's) to participating countries, to instruct in Planning Peace Operations; Civil-Military Relations; Democracy: Methods, Techniques & Application; Developing Simulations/Scenario Development Training; Strategic Planning; and Response to Global Terrorism. CCMR contribution to PACOM planning helps establish strategic communications for creating regional dialogue on U.S. security policy in PACOM's area of responsibility.

Concept of Operations (CONOPS)/Tactics/Techniques/Procedures (TTPS) for foreign language/speech translation technologies in a coalition military environment. Research in foreign language and speech translation machine technologies for the Advanced Concept Technology Demonstration (ACTD) titled "Language and Speech Exploitation Resources": (LASER), currently in its fourth year. This research utilizes the LASER ACTD process to study how various foreign language machine translation technologies can be used in a DOD environment, & focuses on the creation of CONOPS and TTPS for the employment of these technology devices in military exercises& ops.

COMTHIRDFLT Science Advisor tour. Richard Kimmel (NPS/IS department) was selected for the Office of Naval Research Science & Technology advisor program, is detailed to COMMANDER THIRD FLEET (C3F), San Diego, CA.

NPS USPACOM Liaison Desk: Provides research support as requested by USPACOM Science Advisor and J39 in support of experimentation. Examples include web based influence operations for exercise COBRA GOLD 04 in conjunction with NPS liaison desk for USPACOM: support, construct and operate a cyber-based capability to support the planning and execution of full-spectrum information operations. NPS developed and provided a fully functional prototype website for implementation during the COBRA GOLD 2004 command post exercise.

Support to USARPAC (US Army Pacific) for Homeland Defense. Provides education, applied research, training, exercise and planning program support to strengthen DoD's capabilities for terrorism prevention and all-hazards response in the Pacific area of responsibility.

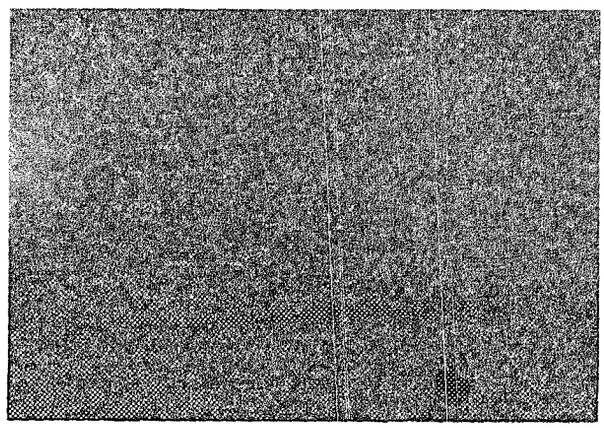
Direct Support to CTF-73 to evaluate HSV in PACOM. An Ops Research student is conducting research on the use of HSVs in a logistic role for CTF-73 and how to modify contingency support plans.

DCN: 11935

USCENTCOM
Central Command

Direct NPS Educational Support to CENTCOM. CENTCOM Area of Responsibility (AOR) countries send their officers and defense civilians to NPS for master's degrees and to attend in-residence short courses ranging from one to eleven weeks. NPS also sends mobile education teams to countries in CENTCOM AOR to assist in the development of democratic policies and programs. Most recently a team of educators went to Afghanistan, and will do the same in Iraq. NPS also conducts region and country specific education programs for active Army, National Guard and Reserve Forces deploying to CENTCOM AOR, to include Iraq and Afghanistan. In addition, NPS conducts regional security education of sailors and marines deploying to CENTCOM AOR.

Helicopter Brownout. Helicopter Brownout is a $100 million per year problem, leading to significant hardware loss, injuries, and fatalities. The NPS project objective is to find ways to define landing zones which will have reduced probability of producing brownout. The challenge is to remotely sense soil and surface characteristics in denied territory. Both civilian remote sensing systems and national technical means were and are being studied. NPS identified a system that meets the requirements and is testing it for suitability. The payoff for this work will be to dramatically reduce the loss rate for men and hardware, particularly in the SOCOM and CENTCOM AORs.



Defense Resource Management Institute at NPS: 1,710 participants representing 25 of the 27 CENTCOM countries have participated in DRMI programs since 1965, including the current King of Jordan, his brother and his sister. In the last 10 years, NPS conducted mobile courses in Ethiopia (2), Jordan, Kenya (5), Tajikistan and Uzbekistan. Prince Feisel of Jordan commented on the value of networks from his time at NPS, noting that he was amazed that he had to come all the way to Monterey to meet other people in his region of the world. He said he now felt that he could just pick up the phone and call them when there is problem.

Coalition Intelligence Architecture Development. NPS faculty member traveled to MacDill AFB in Florida, As Saliyah in Qatar, and Baghdad and Basra in Iraq in Jan/Feb 2004 to write a study recommending improvements to the Coalition and Iraqi intelligence architecture, for General John Abizaid, Commander CENTCOM. He worked as a member of General John Abizaid's personal staff, in the Commander's Advisory Group.

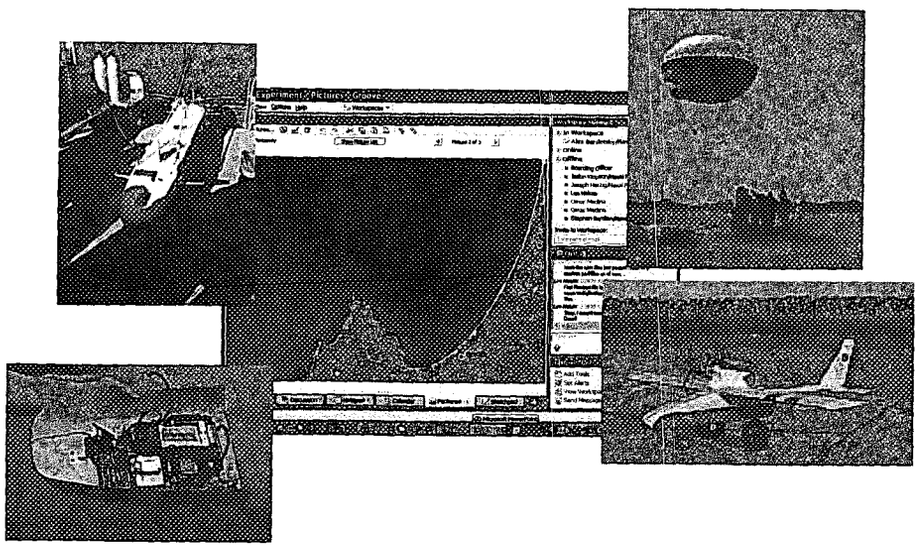
He then traveled to Kuwait City in Kuwait, and Baghdad in Iraq in Oct/Nov 2004 to work as a member of the Strategy Division of the office of the Deputy Chief of Staff for Strategy, Plans, and Assessment (DCS-SPA) in the headquarters of the Multinational Force-Iraq, in the US Embassy in Baghdad. The DCS-SPA, headed by a US Air Force major general, worked directly for General George Casey, Commander MNF-I, who is directly subordinate to General Abizaid.

USSOCOM
Special Operations Command

Man Hunting Workshop in support of U. S. Special Operation Forces (SOF). The traditional scope of military operations has never developed a doctrinal framework or process to capture fugitives, consequently military planners and intelligence analyst are not educated or trained in the investigative processes necessary to find fugitives. NPS conducted a research seminar to develop an investigative framework to understand the nature of man hunting in order to locate and apprehend fugitive insurgents and propose developmental courses of action.

Tactical Network Topology (TNT) (previously STAN). TNT is an integrated program of quarterly field experiments that develop and demonstrate new technologies to support near term needs of the warfighter. Major emphasis is on wireless networks, autonomous vehicles, sensor networks, situational awareness and target tracking and identification. Measures of performance of the technologies and operators using the technologies are also addressed. TNT is a faculty-student program working in parallel with partners that include various branches of the military, Combatant Commands, industry, and national labs. In particular, USSOCOM's Futures Directorate (J9) will be conducting experiments at NPS in conjunction with the USSOCOM Advanced Technology Directorate. These experiments will focus on identifying key gaps and deficiencies resulting from applications of advanced technology, particularly network communications, unmanned systems, and net-centric applications.

TNT includes a wide range of projects including the light reconnaissance vehicle (LRV) and special operations force (SOF) systems engineering and integration. The latter is an umbrella project to provide systems engineering applications to USSOCOM in support of all NPS work on LRVs, to integrate NPS experimental efforts and develop case studies.

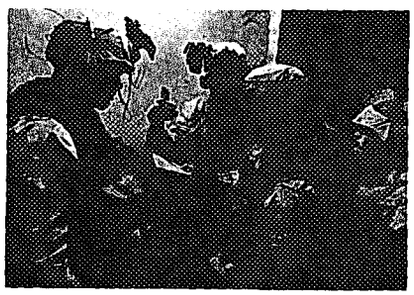


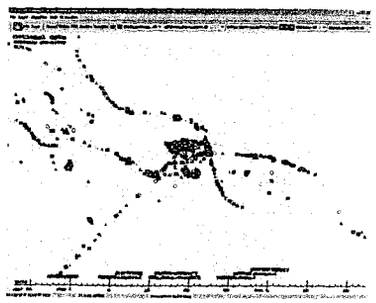
Special Operations Forces SIGINT Maritime Support to Joint Threat Warning System, (JTWS) Research, Development, Test, and Evaluation. This proposal describes Research, Development, Test, and Evaluation (RDT&E) actions, to support the Joint Threat Warning System (JTWS) Program. This will include investigating integration of smart dust technology into the JTWS Component Architecture Framework (JCAF), investigations into integrating SOF SIGINT maritime capabilities into the Tactical Network Topology effort, and classified signals analysis.

Applied warfighter Ergonomics (AWE) Research Center. This research incorporates the Human Systems Integration (HSI) research efforts to support the Tactical Network Topology (TNT) project. There are two major areas: HSI assessments of field portable devices and a research center with lab and field based research capability to assess human systems integration efforts for warfighters. The thrust of the effort will be on assessment of field portable devices to be used by warfighters.

Skytrack: Broadband switched-beam UAV-to-land vehicle communications subsystem. This is a project to develop, implement and validate a mobile UAV tracking antenna subsystem to operate with multiple UAV signal sources, in the 2.4 and 5.8 GHz ISM frequency bands.

Dynamic Mapping of IED Incidents over Space and Time. Innovative thesis work uses software from a faculty research project to display, animate, and statistically analyze the SIGACT (significant activity) data from Operation Iraqi Freedom (OIF). Identifying change points in insurgency behavior is critical to effective counterinsurgency. Due to the continuous nature of the conflict and the volume of apparently random incidents, statistical process control techniques are used to signal changes in insurgent tactics and movement. This research by faculty and students at NPS continues to improve the programming components of the project. The NPS IED mapping program is also currently being used in-theater in Afghanistan in Operation Enduring Freedom.





Case Studies for the Future. To assist in the development of operational concepts for Special Operations Forces that can be tested in exercises in theatre. Tools such as case studies, statistical analyses & mathematical modeling are used. A series of briefings and research papers are being developed, delivered, with supporting documentation, including proposed exercises plans to incorporate research results into SOF training.

Special Operations/Low Intensity Conflict (SOLIC) Academic Curriculum. Unique curriculum designed to provide students with the ability and background to think analytically and originally about the broad fields of political violence, unconventional warfare, and the role of SOLIC in U.S. foreign policy and defense planning.

USJFCOM
Joint Forces Command

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USNORTHCOM
Northern Command

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OFFICE of the SECRETARY OF DEFENSE (OSD)

Armoring Vehicles against Improvised Explosive Devices IEDs. Supporting a request from the Office of the Deputy Secretary of Defense, NPS faculty and students are working on a short term project exploring protection schemes that have the potential of decreasing the vulnerability of lightly armored vehicles, such as Bradley APCs. Initial concepts will be assessed for increasing absolute protection and weight efficiency of armor, using lightweight assembly of discrete elements, arrayed in a manner that increases the number of angled contact surfaces that a projectile will have to encounter. This serves to deflect the flow of bomb fragment streams out of harm's way. The initial work on this project simulates an IED class bomb, and assesses the baseline effectiveness of steel armor against the threat. The project uses technical surveys and supporting data from SPAWAR and LLNL, with NPS faculty/student expertise in explosive ordnance and testing, shaped charge development, effectiveness analyses, hydrodynamic code development and simulation.

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CFFC
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Updated 4-19-05

NAVAL POSTGRADUATE SCHOOL
SIX MOST FREQUENTLY ASKED QUESTIONS

1. How is the Naval Postgraduate School unique?

Unique mission:

To provide relevant and unique advanced education and research programs that increase the combat effectiveness of the United States and Allied Forces..."

Unique vision:

"Growing a new generation of leaders for tomorrow's military"

Unique Approach:

- To educate joint and coalition officers as multi-disciplinary military 'change agents"
- To equip future leaders to transform the military into a force that capitalizes on the advances and advantages of information management, network centric operations, and other emerging technologies

Unique Capabilities:

Rapid responsiveness to DoD issues: NPS aligns with rapidly changing needs of military within DoD and Combatant Commands, percolating DoD themes, requirements and priorities down to NPS curriculum and research programs.Examples: NPS Center for Homeland Defense & Security- post 9/11 requirement for fast-track education to federal, state & city first responders. NPS Maritime Domain Protection Task Force quick response to DoD needs; C4I, ASW, Space Operations, Total Ship Systems Engineering, Seabasing, Combat Systems, Modeling Virtual Environments.

Joint Military and International Cross Fertilization: Fertile intellectual environment for lifelong networking/interaction between within same service, other U.S. military organizations, and other countries.

Interdisciplinary Research and Education: NPS Courses and research are inherently interdisciplinary in nature, curricula optimizes existing in-house expertise._Example: the Special Operations/Low Intensity Conflict (SOLIC) program combines experts in National Security, Operations Analysis (C4I), Systems Management to create an analytically rigorous warfare-oriented program.

Classified Research: NPS has large SCIF capabilities for conducting classified teaching and research, VTCs with the Combatant Commands and the Pentagon, and offers the largest classified library collections in the nation.

2. How is the Naval Postgraduate School relevant?

Transformation

- The Secretary of Defense's highest priority is Force Transformation.
- Office of Force Transformation (OFT/SECDEF) sponsors a new program at NPS, consisting of a Transformation Chair, Transformation Education and Transformation Research
  - Goals - to gain insights into current transformation in DoD, foster greater awareness of defense transformation internally with NPS faculty and students, and to a broad external audience of combatant commands & military stakeholders; equipping and influencing a new generation of DoD leaders.
  - NPS will be a broker for transformation research, whereby faculty and students world-wide can seek and share information on defense transformation and network centric operations.
  - Offered both on campus and as short courses offsite

Jointness

- Joint network centric operations, joint warfighting and joint peacekeeping campaigns demand that officers know and work seamlessly with all branches of service and coalition forces. NPS supports rapidly changing military requirements through advanced graduate education for the Navy, Marine Corps, Army and Air Force, with jointness as a keystone.
- The NPS student body is comprised of 47% Navy, 13% Marine Corps, 14% Air Force, 7% Army, and about 20% international students. The number of resident students numbers about 1700.

3. A. Why not use civilian universities for graduate education for its officers?

- Special curricula that combines basic research with direct military applications that respond directly to current military needs is not found in civilian universities.
- Defense focus not duplicated by civilian universities
- The highest priority at NPS is relevant education to military officers, an educational focus that cannot be replaced by Stanford or MIT. Combining basic and applied skills contributes to decision making about future forces and warfighting capabilities. Example: NPS applied research recently supported a brief to Congress on Expeditionary Warfare Force Protection, which is now used widely in the military.

3. B. Why not use the War Colleges or National Defense University?

The War Colleges and NDU are not suited for the mission of educating junior and mid-grade officers in the scientific, engineering and technical areas essential to maintaining the combat effectiveness of the Navy. The military academies focus on the development of leaders, the war colleges on the strategy and policies of war. But it is NPS, along with the Air Force Institute of Technology, that provide education across a broad spectrum of areas that are critical to combat effectiveness as they provide officers with education that allows the conceptualization, development and use of weapons systems by our military forces. NPS provides JPME coursework on campus from dedicated War College faculty, so that officers can satisfy both their masters and military requirements from one location during a single tour.

4. Why not educate officers at the Air Force Institute of Technology (AFIT)?

Different mission than Air Force Institute of Technology (AFIT).
NPS as joint university is used extensively by the other U.S. military services.
NPS has 1500 student officers in residence with a capacity for 2000, while AFIT accommodates 400 students with an Air Force focus. NPS responds directly to the specific needs of the Combatant Commanders and military through education, targeted research projects and theses. Students contribute to efforts in three NPS Institutes via multi-year integrated theme projects that generate real time solutions to real time problems. Examples are the Sea Basing study from the Meyer Institute of Systems Engineering and Analysis, whose technologies and approach are being employed throughout the military.

5. What is the value of NPS being located in Monterey?

- UAV facilities: CIRPAS airport, airspace and landing field in Marina and UAV port at Camp Roberts near Paso Robles, allow 24/7 operation of UAVs at altitudes up to and in excess of 15000 feet in uncontrolled unrestricted airspace for joint integrated field experiments with faculty and students, including airborne sensors as part of large field tests and trials.
- Land Facilities: The MOUT at Fort Ord and Camp Roberts used for full time use for field experiments.
- Coastal access and NPS property both in Monterey, and at Pt. Sur (SOSUS submarine sonar array).
- Proximity or co-location to institutions for collaborative research partnerships, education, and unique laboratory and computing facilities. Military institutions: Defense Language Institute (Army), Fleet Numerical Meteorology and Oceanography Center (Navy), Naval Research Laboratory West. NPS partners with researchers and facilities at nearby NASA Ames Research Center at Moffat Field (wind tunnels, advanced modeling for homeland defense applications, etc.) and Lawrence Livermore National Labs. Private institutions: Monterey Bay Aquarium Research Institute (MBARI), California State University/Monterey Bay, University of California at Santa Cruz.

6. What is the added value to the Fleet of an NPS officer when they return to their next command?

Operations experience combined with and education: Officers apply their operational experiences gained in previous commands with applied military coursework and basic research on a masters thesis. A NPS graduate returns to duty with the "Why" (theory, computer modeling and simulation, problem solving, etc) in addition to the "How."
Broader world view:

- Greater perspective than 4-year degree provides, gains the value of education
- Perspective on how the military works, the "business" of national security and defense
- Equipped with understanding of the new face of war and peace in the net-centric age
- Relationships/networks within 60 other countries and coalition forces

Approach to problem solving: NPS provides a process-oriented education, with experience in integrated interdisciplinary research. A NPS graduate has a knowledge of diverse and innovative ways to attack a problem. Every graduate is required to write a masters thesis based on a real problem, finding real solutions with current and emerging technologies. This experience is invested back into the fleets and offices of DoD.

DCN: 11935

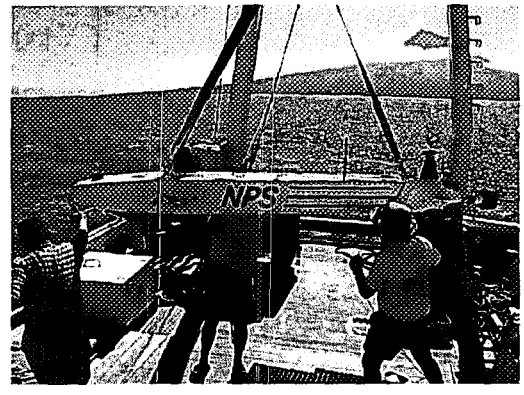
NAVAL POSTGRADUATE SCHOOL

SUPPORT FOR COMBATANT COMMANDERS

and the

OFFICE OF THE SECRETARY OF DEFENSE

The Naval Postgraduate School's unique combination of operationally experienced students and defense-oriented faculty provide a superb setting to conduct interdisciplinary research on complex issues related to national and homeland defense. As such, many of the research and academic programs at NPS relate to the operational level of war. A number of projects at NPS are performed directly for or in support of the various U. S. Combatant Commands, or are conducted side by side the Commands as part of larger integrated field experiments. Other NPS projects support or are supported by the Office of the Secretary of Defense (OSD). While many of these projects are classified, below are some unclassified examples of NPS support to the Commands, Fleets & OSD.



USPACOM
Pacific Command

Campus-Wide Integrated Project to Study Undersea Warfare in the Littoral. Thirteen System Engineering and Analysis students will lead a campus-wide integrated study on the challenges of Undersea Warfare in the Littoral. This work will focus on most challenging threats and will involve coordination with COMPACFLT, ASW Command, and TF ASW.

Campus-Wide Integrated Project to Study Maritime Counter-Terrorism in Southeast Asian waters. Twenty System Engineering and Analysis students are leading a campus-wide integrated study on defeating maritime terrorism and pirate-supported terror in the Southeast Asia waterways. NPS Singapore students will be integrated into this study. PACOM Science Advisor is aware of this project in consonance with PACOM's maritime domain ACTD proposal.

Coalition Operating Area Surveillance & Targeting System (COASTS). Develop and implement low cost, state-of-the-art, unclassified testbeds in partnership with coalition allies to reduce or mitigate border and port security vulnerabilities, and leverage & expand research through other NPS programs. COASTS uses sensors on manned and unmanned platforms, in combination with 802.11 and 802.16 wireless technologies to provide situational awareness overlay. Participants include USPACOM, NSA,US Border Patrol, US Coast Guard, Coalition Partners, Thailand (current), Singapore, Korea & others (proposed).

Southeast Asia Tsunami Relief: Hastily Formed Networks—Phuket & Khao Lok, Thailand. Taking advantage of a pre-arranged visit to Thailand by NPS faculty, NPS was able to support tsunami relief operations "on the fly", providing broadband internet to victims, families, NGOs, local government, media, and volunteers. NPS organized a team of participants from COASTS (a NPS integrated research project), and in-country agencies to set up a hastily formed network ISO tsunami relief. Many lessons were learned and reported. NPS faculty returned in mid-February and mid-March to enhance the network and build in redundant, remote monitoring/imaging capability.

Joint Defender TBMD Modeling. A PC-based operational planning tool for use by area air defense planners is being developed by Operations Research faculty and students. This model was tested in an unclassified Korean scenario and used to aid Naval War College in PACOM CONOPS (Concept of Operations) evaluation. It is being evaluated by NWDC staff for further development.

Unmanned Vehicle TACMEMO Development and Field Experimentation. In addition to TACMEMO (Tactical Memorandum) development for utilizing UAVs in Maritime Missions, NPS faculty and students are designing a field experimentation program with Singapore and Thailand for use of UAVs for ISR.

Regional Security Education Program (RSEP). NPS faculty teach on Carrier Strike Groups and Expeditionary Strike Groups in-transit, delivering graduate level education to forward-deploying forces, to enhance their strategic situational awareness and enable them to understand the regional threat environments in which they operate. Using in-person lectures, direct interaction with regional experts, and a supporting website, RSEP provides strike group Commanders critical and timely regional security knowledge, strategic level perspective, knowledge in support of forward engagement, theater security operations, bilateral/coalition cooperation, improved mission planning and current cultural and societal issues. Past presentations have focused on Middle East, Iraq, NE and SE Asia, DPR Korea, Horn of Africa, and China.

Maritime ISR and Detection (MISRAD). NPS hosted an inter-agency workshop on MISRAD under the auspices of PACOM. The workshop looked at the end-to-end supply chain that moves containers from the overseas manufacturer through the maritime traffic system to ports in the US. The particular focus of MISRAD is on WMD, particularly nuclear devices and special nuclear materials. The MISRAD group brings operators, sensor producers, intelligence professionals, port operators and shippers together to attack this problem from all sides.

Maritime Domain Protection. NPS drafted a proposed National Maritime Domain Protection Architecture with Concept of Operations and Command Structure. NPS also tested the proposal in an interagency/joint war game, developed a MDP Library Base for classified interagency reference, and extended current data mining and fusion techniques and systems based on

requirements generation. We are now examining port infrastructures in support of force protection.

Center for Executive Education (CEE): Development program for transition in USPACOM intelligence. Application of NPS' CEE program to J2/JICPAC leadership and unique theater intelligence management needs. This CEE education program provides frameworks/tools for the leadership team to input to intelligence strategy, implement change, and shape organizational structure and processes.

Center for Civil-Military Relations (CCMR). CCMR supports the PACOM Theater Security Cooperation Plan and the Global War on Terrorism by helping improve U.S. influence in the Asia-Pacific Region in Southeast Asia, the South Pacific, South Asia and Indian Ocean, and Indonesia, Taiwan and Bangladesh in particular. CCMR programs focus on improving access, training and readiness in these regions and developing competent coalition partners. CCMR provides in-residence courses and Mobile Education Teams (MET's) to participating countries, to instruct in Planning Peace Operations; Civil-Military Relations; Democracy: Methods, Techniques & Application; Developing Simulations/Scenario Development Training; Strategic Planning; and Response to Global Terrorism. CCMR contribution to PACOM planning helps establish strategic communications for creating regional dialogue on U.S. security policy in PACOM's area of responsibility.

Concept of Operations (CONOPS)/Tactics/Techniques/Procedures (TTPS) for foreign language/speech translation technologies in a coalition military environment. Research in foreign language and speech translation machine technologies for the Advanced Concept Technology Demonstration (ACTD) titled "Language and Speech Exploitation Resources": (LASER), currently in its fourth year. This research utilizes the LASER ACTD process to study how various foreign language machine translation technologies can be used in a DOD environment, & focuses on the creation of CONOPS and TTPS for the employment of these technology devices in military exercises& ops.

COMTHIRDFLT Science Advisor tour. Richard Kimmel (NPS/IS department) was selected for the Office of Naval Research Science & Technology advisor program, is detailed to COMMANDER THIRD FLEET (C3F), San Diego, CA.

NPS USPACOM Liaison Desk: Provides research support as requested by USPACOM Science Advisor and J39 in support of experimentation. Examples include web based influence operations for exercise COBRA GOLD 04 in conjunction with NPS liaison desk for USPACOM: support, construct and operate a cyber-based capability to support the planning and execution of full-spectrum information operations. NPS developed and provided a fully functional prototype website for implementation during the COBRA GOLD 2004 command post exercise.

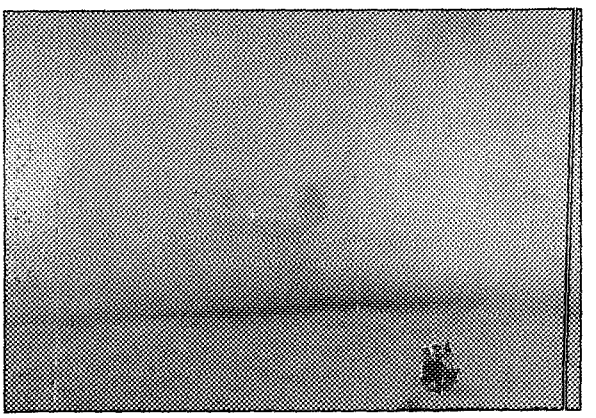
Support to USARPAC (US Army Pacific) for Homeland Defense. Provides education, applied research, training, exercise and planning program support to strengthen DoD's capabilities for terrorism prevention and all-hazards response in the Pacific area of responsibility.

Direct Support to CTF-73 to evaluate HSV in PACOM. An Ops Research student is conducting research on the use of HSVs in a logistic role for CTF-73 and how to modify contingency support plans.

USCENTCOM
Central Command

Direct NPS Educational Support to CENTCOM. CENTCOM Area of Responsibility (AOR) countries send their officers and defense civilians to NPS for master's degrees and to attend in-residence short courses ranging from one to eleven weeks. NPS also sends mobile education teams to countries in CENTCOM AOR to assist in the development of democratic policies and programs. Most recently a team of educators went to Afghanistan, and will do the same in Iraq. NPS also conducts region and country specific education programs for active Army, National Guard and Reserve Forces deploying to CENTCOM AOR, to include Iraq and Afghanistan. In addition, NPS conducts regional security education of sailors and marines deploying to CENTCOM AOR.

Helicopter Brownout. Helicopter Brownout is a $100 million per year problem, leading to significant hardware loss, injuries, and fatalities. The NPS project objective is to find ways to define landing zones which will have reduced probability of producing brownout. The challenge is to remotely sense soil and surface characteristics in denied territory. Both civilian remote sensing systems and national technical means were and are being studied. NPS identified a system that meets the requirements and is testing it for suitability. The payoff for this work will be to dramatically reduce the loss rate for men and hardware, particularly in the SOCOM and CENTCOM AORs.



Defense Resource Management Institute at NPS: 1,710 participants representing 25 of the 27 CENTCOM countries have participated in DRMI programs since 1965, including the current King of Jordan, his brother and his sister. In the last 10 years, NPS conducted mobile courses in Ethiopia (2), Jordan, Kenya (5), Tajikistan and Uzbekistan. Prince Feisel of Jordan commented on the value of networks from his time at NPS, noting that he was amazed that he had to come all the way to Monterey to meet other people in his region of the world. He said he now felt that he could just pick up the phone and call them when there is problem.

Coalition Intelligence Architecture Development. NPS faculty member traveled to MacDill AFB in Florida, As Saliyah in Qatar, and Baghdad and Basra in Iraq in Jan/Feb 2004 to write a study recommending improvements to the Coalition and Iraqi intelligence architecture, for General John Abizaid, Commander CENTCOM. He worked as a member of General John Abizaid's personal staff, in the Commander's Advisory Group.

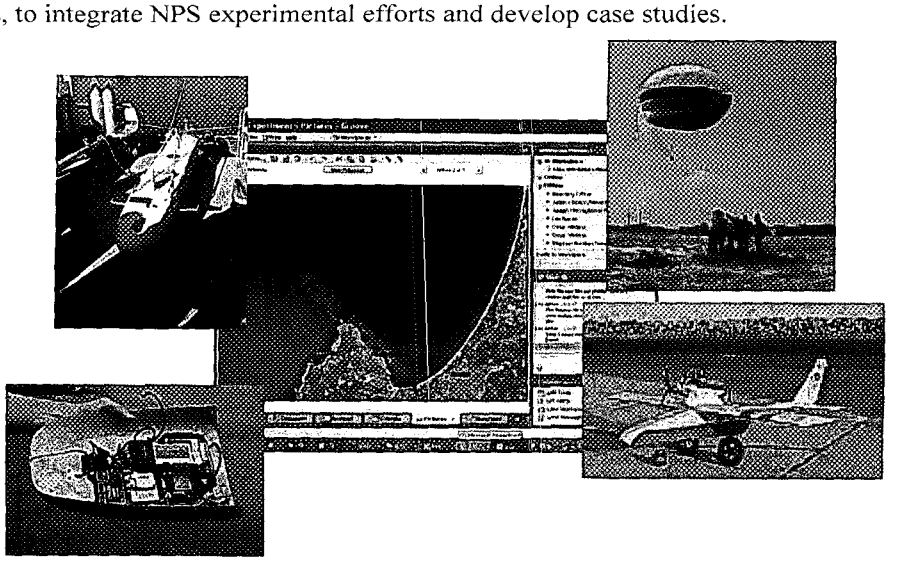
He then traveled to Kuwait City in Kuwait, and Baghdad in Iraq in Oct/Nov 2004 to work as a member of the Strategy Division of the office of the Deputy Chief of Staff for Strategy, Plans, and Assessment (DCS-SPA) in the headquarters of the Multinational Force-Iraq, in the US Embassy in Baghdad. The DCS-SPA, headed by a US Air Force major general, worked directly for General George Casey, Commander MNF-I, who is directly subordinate to General Abizaid.

USSOCOM
Special Operations Command

Man Hunting Workshop in support of U. S. Special Operation Forces (SOF). The traditional scope of military operations has never developed a doctrinal framework or process to capture fugitives, consequently military planners and intelligence analyst are not educated or trained in the investigative processes necessary to find fugitives. NPS conducted a research seminar to develop an investigative framework to understand the nature of man hunting in order to locate and apprehend fugitive insurgents and propose developmental courses of action.

Tactical Network Topology (TNT) (previously STAN). TNT is an integrated program of quarterly field experiments that develop and demonstrate new technologies to support near term needs of the warfighter. Major emphasis is on wireless networks, autonomous vehicles, sensor networks, situational awareness and target tracking and identification. Measures of performance of the technologies and operators using the technologies are also addressed. TNT is a faculty-student program working in parallel with partners that include various branches of the military, Combatant Commands, industry, and national labs. In particular, USSOCOM's Futures Directorate (J9) will be conducting experiments at NPS in conjunction with the USSOCOM Advanced Technology Directorate. These experiments will focus on identifying key gaps and deficiencies resulting from applications of advanced technology, particularly network communications, unmanned systems, and net-centric applications.

TNT includes a wide range of projects including the light reconnaissance vehicle (LRV) and special operations force (SOF) systems engineering and integration. The latter is an umbrella project to provide systems engineering applications to USSOCOM in support of all NPS work on LRVs, to integrate NPS experimental efforts and develop case studies.

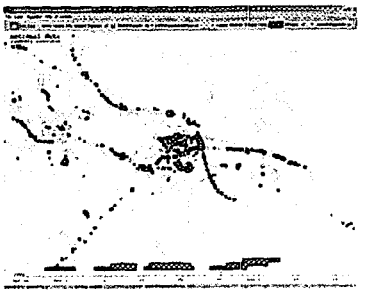


Special Operations Forces SIGINT Maritime Support to Joint Threat Warning System, (JTWS) Research, Development, Test, and Evaluation. This proposal describes Research, Development, Test, and Evaluation (RDT&E) actions, to support the Joint Threat Warning System (JTWS) Program. This will include investigating integration of smart dust technology into the JTWS Component Architecture Framework (JCAF), investigations into integrating SOF SIGINT maritime capabilities into the Tactical Network Topology effort, and classified signals analysis.

Applied warfighter Ergonomics (AWE) Research Center. This research incorporates the Human Systems Integration (HSI) research efforts to support the Tactical Network Topology (TNT) project. There are two major areas: HSI assessments of field portable devices and a research center with lab and field based research capability to assess human systems integration efforts for warfighters. The thrust of the effort will be on assessment of field portable devices to be used by warfighters.

Skytrack: Broadband switched-beam UAV-to-land vehicle communications subsystem. This is a project to develop, implement and validate a mobile UAV tracking antenna subsystem to operate with multiple UAV signal sources, in the 2.4 and 5.8 GHz ISM frequency bands.

Dynamic Mapping of IED Incidents over Space and Time. Innovative thesis work uses software from a faculty research project to display, animate, and statistically analyze the SIGACT (significant activity) data from Operation Iraqi Freedom (OIF). Identifying change points in insurgency behavior is critical to effective counterinsurgency. Due to the continuous nature of the conflict and the volume of apparently random incidents, statistical process control techniques are used to signal changes in insurgent tactics and movement. This research by faculty and students at NPS continues to improve the programming components of the project. The NPS IED mapping program is also currently being used in-theater in Afghanistan in Operation Enduring Freedom.



Case Studies for the Future. To assist in the development of operational concepts for Special Operations Forces that can be tested in exercises in theatre. Tools such as case studies, statistical analyses & mathematical modeling are used. A series of briefings and research papers are being developed, delivered, with supporting documentation, including proposed exercises plans to incorporate research results into SOF training.

Special Operations/Low Intensity Conflict (SOLIC) Academic Curriculum. Unique curriculum designed to provide students with the ability and background to think analytically and originally about the broad fields of political violence, unconventional warfare, and the role of SOLIC in U.S. foreign policy and defense planning.

NAVAL POSTGRADUATE SCHOOL
SIX MOST FREQUENTLY ASKED QUESTIONS

1. How is the Naval Postgraduate School unique?

Unique mission:

To provide relevant and unique advanced education and research programs that increase the combat effectiveness of the United States and Allied Forces..."

Unique vision:

"Growing a new generation of leaders for tomorrow's military"

Unique Approach:

- To educate joint and coalition officers as multi-disciplinary military 'change agents"
- To equip future leaders to transform the military into a force that capitalizes on the advances and advantages of information management, network centric operations, and other emerging technologies

Unique Capabilities:

Rapid responsiveness to DoD issues: NPS aligns with rapidly changing needs of military within DoD and Combatant Commands, percolating DoD themes, requirements and priorities down to NPS curriculum and research programs.Examples: NPS Center for Homeland Defense & Security- post 9/11 requirement for fast-track education to federal, state & city first responders. NPS Maritime Domain Protection Task Force quick response to DoD needs; C4I, ASW, Space Operations, Total Ship Systems Engineering, Seabasing, Combat Systems, Modeling Virtual Environments.

Joint Military and International Cross Fertilization: Fertile intellectual environment for lifelong networking/interaction between within same service, other U.S. military organizations, and other countries.

Interdisciplinary Research and Education: NPS Courses and research are inherently interdisciplinary in nature, curricula optimizes existing in-house expertise._Example: the Special Operations/Low Intensity Conflict (SOLIC) program combines experts in National Security, Operations Analysis (C4I), Systems Management to create an analytically rigorous warfare-oriented program.

Classified Research: NPS has large SCIF capabilities for conducting classified teaching and research, VTCs with the Combatant Commands and the Pentagon, and offers the largest classified library collections in the nation.

2. How is the Naval Postgraduate School relevant?

Transformation

- The Secretary of Defense's highest priority is Force Transformation.
- Office of Force Transformation (OFT/SECDEF) sponsors a new program at NPS, consisting of a Transformation Chair, Transformation Education and Transformation Research
  - Goals - to gain insights into current transformation in DoD, foster greater awareness of defense transformation internally with NPS faculty and students, and to a broad external audience of combatant commands & military stakeholders, equipping and influencing a new generation of DoD leaders.
  - NPS will be a broker for transformation research, whereby faculty and students world-wide can seek and share information on defense transformation and network centric operations.
  - Offered both on campus and as short courses offsite

Jointness

- Joint network centric operations, joint warfighting and joint peacekeeping campaigns demand that officers know and work seamlessly with all branches of service and coalition forces. NPS supports rapidly changing military requirements through advanced graduate education for the Navy, Marine Corps, Army and Air Force, with jointness as a keystone.
- The NPS student body is comprised of 47% Navy, 13% Marine Corps, 14% Air Force, 7% Army, and about 20% international students. The number of resident students numbers about 1700.

3. A. Why not use civilian universities for graduate education for its officers?

- Special curricula that combines basic research with direct military applications that respond directly to current military needs is not found in civilian universities.
- Defense focus not duplicated by civilian universities
- The highest priority at NPS is relevant education to military officers, an educational focus that cannot be replaced by Stanford or MIT. Combining basic and applied skills contributes to decision making about future forces and warfighting capabilities. Example: NPS applied research recently supported a brief to Congress on Expeditionary Warfare Force Protection, which is now used widely in the military.

3. B. Why not use the War Colleges or National Defense University?

The War Colleges and NDU are not suited for the mission of educating junior and mid-grade officers in the scientific, engineering and technical areas essential to maintaining the combat effectiveness of the Navy. The military academies focus on the development of leaders, the war colleges on the strategy and policies of war. But it is NPS, along with the Air Force Institute of Technology, that provide education across a broad spectrum of areas that are critical to combat effectiveness as they provide officers with education that allows the conceptualization, development and use of weapons systems by our military forces. NPS provides JPME coursework on campus from dedicated War College faculty, so that officers can satisfy both their masters and military requirements from one location during a single tour.

4. Why not educate officers at the Air Force Institute of Technology (AFIT)?

Different mission than Air Force Institute of Technology (AFIT).
NPS as joint university is used extensively by the other U.S. military services.
NPS has 1500 student officers in residence with a capacity for 2000, while AFIT accommodates 400 students with an Air Force focus. NPS responds directly to the specific needs of the Combatant Commanders and military through education, targeted research projects and theses. Students contribute to efforts in three NPS Institutes via multi-year integrated theme projects that generate real time solutions to real time problems. Examples are the Sea Basing study from the Meyer Institute of Systems Engineering and Analysis, whose technologies and approach are being employed throughout the military.

5. What is the value of NPS being located in Monterey?

- UAV facilities: CIRPAS airport, airspace and landing field in Marina and UAV port at Camp Roberts near Paso Robles, allow 24/7 operation of UAVs at altitudes up to and in excess of 15000 feet in uncontrolled unrestricted airspace for joint integrated field experiments with faculty and students, including airborne sensors as part of large field tests and trials.
- Land Facilities: The MOUT at Fort Ord and Camp Roberts used for full time use for field experiments.
- Coastal access and NPS property both in Monterey, and at Pt. Sur (SOSUS submarine sonar array).
- Proximity or co-location to institutions for collaborative research partnerships, education, and unique laboratory and computing facilities. Military institutions: Defense Language Institute (Army), Fleet Numerical Meteorology and Oceanography Center (Navy), Naval Research Laboratory West. NPS partners with researchers and facilities at nearby NASA Ames Research Center at Moffat Field (wind tunnels, advanced modeling for homeland defense applications, etc.) and Lawrence Livermore National Labs. Private institutions: Monterey Bay Aquarium Research Institute (MBARI), California State University/Monterey Bay, University of California at Santa Cruz.

6. What is the added value to the Fleet of an NPS officer when they return to their next command?

Operations experience combined with and education: Officers apply their operational experiences gained in previous commands with applied military coursework and basic research on a masters thesis. A NPS graduate returns to duty with the "Why" (theory, computer modeling and simulation, problem solving, etc) in addition to the "How."
Broader world view:

- Greater perspective than 4-year degree provides, gains the value of education
- Perspective on how the military works, the "business" of national security and defense
- Equipped with understanding of the new face of war and peace in the net-centric age
- Relationships/networks within 60 other countries and coalition forces

Approach to problem solving: NPS provides a process-oriented education, with experience in integrated interdisciplinary research. A NPS graduate has a knowledge of diverse and innovative ways to attack a problem. Every graduate is required to write a masters thesis based on a real problem, finding real solutions with current and emerging technologies. This experience is invested back into the fleets and offices of DoD.

QUARTERLY REPORT

Naval Postgraduate School *Spring Quarter 2005*

CNO Speaks at NPS Spring Quarter Commencement Ceremony

On June 17, 2005, 283 students received their diplomas in NPS' King Hall auditorium. In addition to graduates from four armed services, 65 Department of Defense civilians and 51 international students from 26 countries including the first graduate from Papua New Guinea marked the completion of their courses.

The ceremony's special guest speaker was Chief of Naval Operations, Adm. Vern Clark.

Of the 275 master's degree students, eight received dual degrees. Sixty graduates completed the Joint Professional Military Education course -- 54 Navy, four Air Force and two Marine Corps officers. There were also two PhDs and five bachelor's degrees awarded.

International students represented 26 countries spanning the globe, including students from Botswana, Canada, Ecuador, France, Germany, Greece, Hungary, Jamaica, Moldova, India, El Salvador, Japan, Lithuania, Mexico, Mongolia, Morocco, Norway, Pakistan, Singapore, Taiwan, Turkey, the Dominican Republic, the Republic of Georgia, Indonesia, Ukraine and Papua New Guinea.

(U.S. Navy photo by Photographer's Mate 2nd Class Mike DiFranco)

Highlighting Naval Postgraduate School Students / Faculty

Maritime Domain Protection

The Meyer Institute of System Engineering & Analysis 7th cohort (SEA-7) consisted of 21 NPS students from a variety of backgrounds, including 13 US Navy, 1 US Army, 2 US civilian (Northrop-Grumman), 2 Turkish Air Force, 1 Singapore Defense Science & Technology Agency, 1 Argentinean Army, and 1 Mexican Navy.

The study focused on large ship and port security in the Port of Singapore and the nearby Straits of Malacca. The SEA team also designed and assessed ship inspection architecture alternatives for detecting explosive and dangerous materials in order to prevent a large cargo ship from being used as a terrorist vehicle.

The SEA-7 cohort began work on the cross-campus Integrated Project in October 2004 and gave their final presentation on June 1, 2005. SEA-7 was joined by 26 students from Singapore's Temasek Defense System Institute (TDSI) in January 2005. These students arrived at NPS following a six-month course of study in Singapore, and will continue work on individual theses following their participation in the SEA-7 Integrated Study, in order to graduate in December 2005.

Significant Navy Student Theses

Lt. John Rios, former Chief Engineer of USS CHIEF, one of two tactical action officers, completed his thesis *'Naval Mines in the 21st Century: Can NATO Navies Meet the Challenge?'* Lt. Rios' thesis analyzes the mine threat (particularly the proliferation of advanced mine technologies and the potential of these technologies to be utilized by both state and non-state actors to disrupt shipping/naval operations) in relation to the capabilities currently being utilized and under development by NATO to meet the threat.

Lt. Cmdr. Glenn Walt, former Squadron pilot/Department Head of VAW-113 onboard USS ABRAHAM LINCOLN, completed his thesis *'Commander Naval Air Forces Flight Hour Program: Budgeting and Execution Response to the Implementation of the Fleet Response Plan and OP-20 Pricing Model Changes.'* Lt. Cmdr. Walt's thesis will assist OPNAV in attempting to better match flight hour funding requirements with a more dynamic and uncertain level of global operations. i.e. OEF and OIF.

Cmdr. Jerry Stokes, former Squadron Operations Officer of VAW-115 onboard USS KITTY HAWK deployed to Arabian Gulf, completed his thesis *'An Ultracapacitor Based Energy Storage System for an Electromagnetic Aircraft Launch System (EMALS).'* Cmdr. Stokes' thesis discusses EMALS installed in CVN-21 Class carriers; enabling shipboard catapult launch of MQ-1 Predator UAV (other UAVs are also candidates); benefit is strong probability of 30% reduced catapult manning.

Conrad Scholars

On 9 June, three Conrad Scholars form NPS presented their theses to ASN(FM&C), acting FMB and staff, and Dir. Navy Staff (Vice Adm. Tom Church). The three theses were presented by Lt. Jason Miller - *Analysis of Sea Enterprise Program;* Lt Cmdr. Pam Theorgood - *Model Process Validation: An Analysis of Performance-based Pricing Models;* and Cmdr. Ron Arnold - *Useful Performance Metrics for PEO for Integrated Warfare Systems 1.0 and 2.0.*

In this Issue...

Page 2
Global Support / Research / CHDS / AUV News
Page 3
Students Aide TNT Research / NPS Supports the Fleet / V.I.P. Visits
Page 4
Student and Faculty Awards

DCN: 11935

NPS Provides Global Support

Worldwide Education Outreach (Short Courses)

The Center for Civil Military Relations (CCMR) held 52 events during this quarter, both in Monterey and in other countries, reaching over 2,800 civilians and military officers from 46 nations.

Civil-Military Relations (CMR) Programs

In May, CCMR conducted two extremely successful METs in Ulaanbaatar, Mongolia and Bucharest, Romania.

In addition, CCMR conducted a civil-military relations seminar in Ouagadougou, Burkina Faso from 25-29 April, for 32 military and 25 civilians, focusing on civil-military relations in transitional societies.

Combating Terrorism Program

The Civil-Military Responses to Terrorism Resident Course (23 May-4 June) brought together 28 military officers and civilian officials from Colombia, Romania, Azerbaijan, Turkey, Brazil, Ecuador, Mongolia, Sri Lanka, Nepal, Bulgaria, Malaysia, Guatemala, Kenya, Indonesia, Jordan, Bosnia, Malta, El Salvador, Yemen, Tanzania, Pakistan to consider how governments can more effectively prevent terrorism and respond to it when they cannot.

Enhanced International Peacekeeping Capabilities (EIPC)

From 25-29 April, CCMR educated 30 participants of Ukraine's 95th Brigade or subordinate units, in Zhytomyr, Ukraine. The participants developed a first draft of a Brigade Mission Essential Task List (BDE METL).

International Defense Acquisition Resource Management (IDARM) Program

From 11-15 April, IDARM participated in a DSCA-led project on Force Modernization Priorities for Bulgaria's Ministry of Defense. From 20-24 June, IDARM conducted a conference on NATO's Black Sea Region Security.

Leader Development and Education for Sustained Peace Program (LDESP) Support

Iraq — The LDESP team conducted nine intensive seminars with more than 1,200 senior leaders prior to their deployments to Iraq. Training was conducted in Colorado, Mississippi, Texas, California and Indiana.

Afghanistan — From 17-22 April and 25-27 June, the LDESP team traveled to Camp Shelby, Mississippi to prepare 250 senior leaders from the 53rd BCT, Florida Army National Guard for Afghanistan.

KFOR — From 12-16 June, 100 senior leader from the Texas 36th.

Executive Director of Defense Resources Management Institute, Prof. C.J. Lacivita (far right) and a group of Turkish Army Officers. (U.S. Navy Photo by Javier Chagoya)

Center for Homeland Defense and Security

The DHS Homeland Security Advisory Council (HSAC) met April 25-26 at NPS with representatives from the private sector to review homeland security vulnerabilities and critical infrastructure protection.

The National Homeland Security Consortium Meeting was held May 24-25 at the Monterey Convention Center. Leaders from various agencies and national associations gathered to discuss topics such as HSPD-8, Bioterrorism Preparedness, and Cities Readiness Programs. The CHDS Executive Education team, led by Ellen Gordon, conducted a MET as part of the meeting.

The 5th Homeland Security master's degree program class (31 students) started in May.

On April 25, CHDS conducted its first Major Urban Area MET seminar. The event was held in Seattle, Wash. for senior Homeland Security officials in the greater Seattle area region. In addition, there were ten METs conducted throughout the nation this quarter.

NPS Research

A research initiative focusing on future network centric operations took a major step forward with a "launch symposium" in May. The NPS research project—an open consortium called the World Wide Consortium on the Grid (W2COG)—will address the major technical and organizational challenges facing developers of the DOD Grid, the future global networking system that will support network centric operations.

Marine Corps Captains, Bret Hyla and Adrian Arnold, attended the Network Centric Operations Industry Consortium. The students were invited to describe their hands-on field experience and their views of current information system interoperability's strengths and weaknesses.

In the Defense Analysis Department Air Force Maj. Angela Burth is working on a highly original thesis based on using military customer 'markets' to help shape the new W2COG network.

Marine Corps Capt. Dwayne Lancaster, an NPS C4I Curriculum student, is working with the W2COG and several industry partners to build a prototype Hastily Formed Networks Flyaway Kit to assist in rapid deployment of network communications during emergencies. NPS is assisting DoD to enhance collaboration and communications with NGO's, IO's and UN Agencies with civil-military Humanitarian Assistance/Disaster Relief and Complex Humanitarian Emergencies.

Undersea Warfare News

The NPS Center for AUV Research participated in the 2005 AUV FEST 6-16 June at the Underwater Test Range at NUWC Keyport, Wash. This year's exercise demonstrated a new technology for small AUVs that are used for mine field reconnaissance and neutralization. The new technology uses a low power and cost "Blazed Array" forward look sonar to both detect and classify objects in the water column in front of these vehicles. Using the detection capability of this sonar, dynamic image processing is used to provide the autonomous vehicle with avoidance decisions leading the vehicle to change its path and avoid collision. NPS faculty showed that dynamic image processing and closed loop detection and avoidance is both feasible and desirable. The exercise and the technology development were funded by ONR.

Five Naval students graduated with thesis topics related to this effort: Lt. Jason Grabelle, Ens. Daniel Hemminger, Ens. Alan R. Van Reet, Ens. Joel Gow and Ens. Kevin Michael Goering.

DCN: 11935

Students Aide TNT Research

The Tactical Network Topology research team conducted a new series of field experiments in May to enhance SOF warfighting capabilities and support GWOT efforts. Navy Lt. Shawn Johnson and Marine Corps Maj. Jeff Thiry created deployable network operations center. The field experiments have been sponsored by Congressional funds and Special Operations Command and have examined methods to improve ability to find, fix, and identify enemy and equipment; reduce blue-on-blue incidents; design, develop and provide recommendations for integration of a tetherless transmit-receive link between soldiers, ground sensors, manned and unmanned vehicles; develop push-pull of secure data and video; and incorporate biometric-like software for identification of enemy and equipment. The 2005 team currently includes 22 thesis students and 31 faculty members from seven NPS academic departments, the MOVES and Meyer institutes and CIRPAS. Other collaborators include Lawrence Livermore National Lab, MIT, Virginia Tech, and several partnering companies.

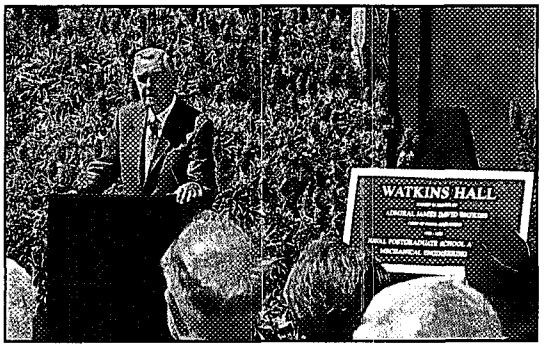
NPS Supports the Fleet

Prof. Brian Swanland executed the first half of the USS NIMITZ's RSEP during its transit from San Diego to Hawaii, May 8 to May 17. Focus was on China and Korea. The second half will be conducted later in their deployment and focus on the Mid-East.

On May 4-13, Prof. Jim Wirtz and Prof. Mike Malley conducted an RSEP event for CARAT '05 (Cooperation Afloat Readiness and Training). It focused on Southeast Asia and the Asia-Pacific and involved Thailand, Singapore, Malaysia, Indonesia, Brunei and the Philippines and involved six United States Ships.

Distinguished Visitors and Major Conferences

28 Mar-8 Apr	Information Professional Senior Officer Course (CEE)
31 Mar-1 Apr	The Honorable Ryan Henry Principal Deputy Under Secretary of Defense for Policy
6-7 Apr	Anita K. Blair, Deputy Assistant Secretary of the Navy (Military Personnel Policy)
11-12 Apr	Brig. Gen. Steven D. Saunders, USA Director, Joint Doctrine, Training and Force Development
19-22 Apr	Adm. (Ret) James D. Watkins, USN, Chair of U.S. Commission on Ocean Policy and former CNO, NPS Hall of Fame Induction, Bldg. Naming & SGL *(below)*



20-21 Apr	NPS Board of Advisors Meeting
20-21 Apr	Pakistan National Defense College
25 Apr	Homeland Security Advisory Council Critical Infrastructure Task Force (CITF) Meeting
27 Apr	Brig. Gen. Volker Zimmer Commander German Armed Forces Command
28-30 Apr	Rear Adm. Dan Mastagni Deputy CDR, Fleet Air Force Mediterranean
3-5 May	Joint Electronic Warfare Conference
13 May	Mr. Terry Halversen Executive Director for the Navy Personnel Development Command
15-20 May	Rear Adm. James Johnson Regional Director, TRICARE Regional Office-West
17 May	Mr. Jim Knox DoN CIO Knowledge Management Director
18-19 May	2nd Annual Research Symposium, Honorable John J. Young, Jr. Assistant Secretary of the Navy for Research, Development and Acquisition; Rear Adm. Charles Hamilton, Program Executive Officer for Ships
31-1 June	Mr. John Chapla U.S. House Armed Services Committee

6 June	Honorable Leon Panetta, Former Senators Alan Simpson (WY) and William Bradley (NJ) *(above)*
7-8 June	Dr P.C. Lui, Singapore Ministry of Defense
7-15 June	Executive Business Course Vice Adm. Donald Arthur Medical Corps Surgeon General, Chief, BUMED *(below)*

8-10 June:	Rear Adm. Jacob Shuford President, Naval War College
13-16 June	2nd Annual Navy Higher Education IT Consortium Conference Vice Adm. Rodney Rempt, Superintendent of the U.S. Naval Academy
17 June	Adm. Vern Clark, CNO Graduation Speaker

DCN: 11935

NPS Recognizes Outstanding Students and Faculty

Student Awards

Monterey Council Navy League Award for Highest Academic Achievement; The Louis D. Liskin Award for Excellence in Business and Public Policy; Rear Admiral Thomas R. McClellan Award for Academic Excellence in the Graduate School of Business and Public Policy; Department of the Navy Award for Academic Excellence in Financial Management – Cmdr. Ronald Arnold, USN *(above, with Rear Adm. Patrick Dunne)*

Naval Postgraduate School Outstanding Academic Achievement Award for Department of Defense Students; Rear Admiral Grace Murray Hopper Computer Science Award - Mr. Ryan J. Noonan, Federal Cyber Corps

NPS Outstanding Academic Achievement Award for International Students – Lt. j.g. Dessalermos, Spyridon, Hellenic Navy

Naval Postgraduate School Superior Service Award – Cmdr. James A. Imanian, USN

Marine Corps Association Superior Service Award for Outstanding U.S. Marine Student – Capt. William Donnelly III, USMC

Air Force Association Award for Outstanding U.S. Air Force Student – Capt. Thomas Meer, USAF

Armed Forces Communications and Electronics Association Award - Mr. Tay, Yeong Kiang Winston, Singapore Ministry of Defense
Ens. Collier Crouch, USN

Army Chief of Staff Award for Excellence in Operations Research - Maj. Jeffrey B. House, USA

Military Operations Research Society Stephen A. Tisdale Graduate Research Award - Capt. Gary R. Kramlich, USA

Space and Naval Warfare Systems Command Award in Electronic Systems Engineering - Capt. Brian E. Souhan, USA

Naval Sea Systems Command Award for Excellence in Combat Systems - Lt. Christopher Lindberg, USNR

Conrad Scholar Award for Distinguished Academic Achievement in Financial Management - Cmdr. Ronald Arnold, USN, Lt. Cmdr. Pamela Theorgood, USN, and Lt. Jason Miller, USN

Joint Chiefs of Staff Command, Control and Communications Award for Academic Achievement - Capt. David D. Lancaster, USMC

Army Acquisition Corps Award for Scholastic Achievement - Maj. Steven R. Ansley, USN

The Surface Navy Association's Award for Excellence in Surface Warfare Research - Lt. Sean Niles, USN

2005 Warren Randolph Church Award for Excellence in Mathematics – Capt. Anthony Johnson, USA

Assistant Secretary of the Navy (Research, Development, and Acquisition) Acquisition Excellence Award - Lt. Cmdr. Brett M. Schwartz, USN

Graduate School of Business and Public Policy Faculty Outstanding International Student Award - Lt. j.g. Aykut Guducu, Turkish Navy

The Northrop Grumman Student Award for Excellence in Systems Engineering and Analysis - Maj. Russ Wylie, USA, Lt. Cmdr. Chris McCarthy, USN and, Lt. Col. Guillermo Ferraris, Argentinean Army

Meyer Award for Outstanding Student in Systems Engineering (Integrated Projects) - Hsu, Yu Chih and Chang, Kok Meng

Liskin Award for Excellence in Regional Security Studies – Maj. Douglas L. DeWitt, USMC

The Jim and Tina Heldman Award for Excellence in Regional or Security Studies - Lt. Col. Ekkehard Stemmer, German Air Force

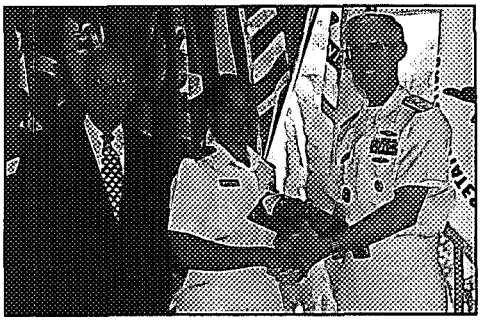
The Outstanding United States Air Force Graduate Award, Department of National Security Affairs - Maj. Barry W. Cook, USAF and Maj. James D. McCune, USAF

Oceanographer of the Navy Award for Outstanding Academic Performance in Meteorology and Oceanography - Lt. Cmdr. Jacob C. Hinz, USN

The Graduate School of Business and Public Policy Award for Outstanding Leadership, Education, and Development - Capt. Joseph Groah, USMC and Lt. Francisco Alsina, USN

Meyer Award for Outstanding Student in Systems Engineering (Distance Learning) - Ms. Jennifer Escarez, Mr. Noel S. Camanag and Mr. Michael E. Edwards

Naval Supply Systems Command Award for Academic Excellence in Management; American Society of Military Comptrollers Award for Excellence in Research - Lt. Cmdr. Pamela Theorgood, USN *(below, with Dean Douglas Brook and Rear Adm. Patrick Dunne)*



Faculty Awards

Rear Admiral John Jay Schieffelin Award for Excellence in Teaching – Associate Professor Carlos Borges, Department of Mathematics

The Northrop Grumman Faculty Award for Excellence in Systems Engineering and Analysis - Professor Eugene Paulo and Capt. Thomas Hoivik, USN (Ret)

First Command Military Leadership Award – Cmdr. Mark Rhoades, USN

Meyer Award for Teaching Excellence in Systems Engineering (Integrated Projects) – Professor Ken Davidson, Department of Meteorology

The Lt. Cmdr. David L. Williams Outstanding Professor Award – Assistant Professor Aurel Croissant, NSA Department

The Louis D. Liskin Award for Teaching Excellence in the Graduate School of Business and Public Policy (GSBPP) - Associate Professor David Henderson

DCN: 11935

Growing a New Generation of Leaders for Tomorrow's Military

Mission : "To provide relevant and unique advanced education and research programs that increase the combat effectiveness of United States and Allied armed forces and enhance the security of the United States."

The Naval Postgraduate School (NPS) as the Navy's corporate university is:

1. Essential to Navy and DoD for ensuring combat effectiveness
2. Integral to joint and combined professional military education
3. Linked to the Unified Combatant Commanders and their requirements
4. Vital to other national security organizations, agencies & nations for national security
5. The nation's national security research university

Essential to the Navy and DoD for ensuring combat effectiveness

- NPS offers education in Monterey and around the world with Masters and PhD degrees, and a full array of short courses, certificates, executive education, and mobile education.
- NPS provides engineering, technical, analytical, managerial, and national security education and research programs not available at civilian institutions to the Department of the Navy, DoD, or the national security organizations.
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- The DoD Office of Force Transformation sponsors a NPS chair and course development in one of the first programs in Transformation Education and Research,, through the NPS Cebrowski Institute of Information Innovation & Superiority.

Integral to joint and combined professional military education

- The student body of NPS reflects the operating environment. By 2006, 1800 military officers, defense civilians, enlisted, defense contractors, and other agency representatives from the United States and other nations will be studying in resident programs at NPS. Half will be naval officers.
- Another 8000 or more students will benefit from short courses, continuing education courses, and degree or certificate programs around the world.
- NPS is connected with many defense and civilian university partnerships allowing NPS to deliver tailored defense-related education when and where it is needed. Notable examples:
  - The Air Force Institute of Technology and NPS provide education that allows the conceptualization, development and use of weapons systems by our military forces.
  - Naval War College for Joint Professional Military Education.
  - Johns Hopkins University for Systems Engineering.
  - University of Maryland, Smith School of Business for a defense-related MBA.
  - Stanford for homeland defense, bioterrorism research, and teaching
  - UC Santa Barbara for education and research

DCN: 11935

Linked to the Unified Combatant Commanders and their requirements

- NPS works closely with the Unified Combatant Commanders providing relevant education and research critical to their combat missions. NPS faculty works with the UCC's on real world problems, on-site and with students back on the main campus. NPS faculty provides about $75 million of research to the Navy, Unified Combatant Commanders and the Services.
- Examples of NPS support include:
  - USNORTHCOM (Northern Command) -Homeland Defense and Security
  - USPACOM desk, linking research and operational efforts to the Pacific Command activities
  - USCENTCOM Counter-terrorism programs in support of PACOM and CENTCOM initiatives
  - USJFCOM- NPS faculty and students provided direct support to Millennium Challenge 02 for Joint Forces Command
  - USSOCOM (Special Ops) curriculum and related research on UAV's, tactical decision aids, wireless technologies, netcentric warfighting advances
  - USSTRATCOM (Strategic Command) Joint Information Operations Center of Excellence
  - USEUCOM- Graduate ed for National Guard division staffs deploying to Europe Command countries
  - USCOMPACFLT desk, antisubmarine warfare research addresses highest priority issues of C3F.
- NPS houses three institutes in:
  1. Modeling and Simulation,
  2. Information Innovation and Superiority, and
  3. Systems Engineering.

Each conducts an annual integrated multi-disciplinary study with faculty and students to address real military issues and problems, most often under the sponsorship of military commands. The results are supplied back to the fleets and commands and are often used in subsequent operations or recommended for continuing study.

Vital to DoD's interactions with other agencies and nations for national security

- NPS supports the continuing global war against terrorism and both homeland and international security efforts through education and research.
  - NPS designated by Deputy Secretary of Defense as the Joint Center of Excellence for Information Operations education and research, sponsored by U.S. Strategic Command.
  - NPS is designated DoD coordination point for Maritime Domain Protection research, and member, Senior Steering Group.
  - NPS is the Center of Education Excellence for the Information Professional community, named by commander of NETWARCOM, coordinating efforts in advanced technologies, knowledge management, advanced communications, intelligence, and cryptology.
- NPS programs strengthen democratic civil-military relationships in 85 countries throughout the world:
  - National Security Decision-making in Indonesia
  - National Security Strategy Development in Colombia
  - MoD reorganization in Taiwan
  - Security Building in Afghanistan
  - Defense restructuring in Dominican Republic and other countries
- NPS teaches a classified graduate education program for National Security Agency
- A university of choice for National Reconnaissance Office
- Homeland Defense and Security graduate program and mobile short courses for the Department of Homeland Security, NORTHCOM, the National Guard, state governors, other state and federal officials

DCN: 11935

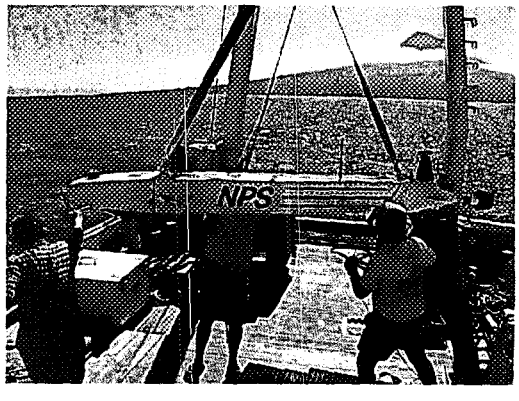
NAVAL POSTGRADUATE SCHOOL

SUPPORT FOR COMBATANT COMMANDERS

and the

OFFICE OF THE SECRETARY OF DEFENSE

The Naval Postgraduate School's unique combination of operationally experienced students and defense-oriented faculty provide a superb setting to conduct interdisciplinary research on complex issues related to national and homeland defense. As such, many of the research and academic programs at NPS relate to the operational level of war. A number of projects at NPS are performed directly for or in support of the various U. S. Combatant Commands, or are conducted side by side the Commands as part of larger integrated field experiments. Other NPS projects support or are supported by the Office of the Secretary of Defense (OSD). While many of these projects are classified, below are some unclassified examples of NPS support to the Commands, Fleets & OSD.



USPACOM
Pacific Command

Campus-Wide Integrated Project to Study Undersea Warfare in the Littoral. Thirteen System Engineering and Analysis students will lead a campus-wide integrated study on the challenges of Undersea Warfare in the Littoral. This work will focus on most challenging threats and will involve coordination with COMPACFLT, ASW Command, and TF ASW.

Campus-Wide Integrated Project to Study Maritime Counter-Terrorism in Southeast Asian waters. Twenty System Engineering and Analysis students are leading a campus-wide integrated study on defeating maritime terrorism and pirate-supported terror in the Southeast Asia waterways. NPS Singapore students will be integrated into this study. PACOM Science Advisor is aware of this project in consonance with PACOM's maritime domain ACTD proposal.

Coalition Operating Area Surveillance & Targeting System (COASTS). Develop and implement low cost, state-of-the-art, unclassified testbeds in partnership with coalition allies to reduce or mitigate border and port security vulnerabilities, and leverage & expand research through other NPS programs. COASTS uses sensors on manned and unmanned platforms, in combination with 802.11 and 802.16 wireless technologies to provide situational awareness overlay. Participants include USPACOM, NSA,US Border Patrol, US Coast Guard, Coalition Partners, Thailand (current), Singapore, Korea & others (proposed).

Southeast Asia Tsunami Relief: Hastily Formed Networks—Phuket & Khao Lok, Thailand. Taking advantage of a pre-arranged visit to Thailand by NPS faculty, NPS was able to support tsunami relief operations "on the fly", providing broadband internet to victims, families, NGOs, local government, media, and volunteers. NPS organized a team of participants from COASTS (a NPS integrated research project), and in-country agencies to set up a hastily formed network ISO tsunami relief. Many lessons were learned and reported. NPS faculty returned in mid-February and mid-March to enhance the network and build in redundant, remote monitoring/imaging capability.

Joint Defender TBMD Modeling. A PC-based operational planning tool for use by area air defense planners is being developed by Operations Research faculty and students. This model was tested in an unclassified Korean scenario and used to aid Naval War College in PACOM CONOPS (Concept of Operations) evaluation. It is being evaluated by NWDC staff for further development.

Unmanned Vehicle TACMEMO Development and Field Experimentation. In addition to TACMEMO (Tactical Memorandum) development for utilizing UAVs in Maritime Missions, NPS faculty and students are designing a field experimentation program with Singapore and Thailand for use of UAVs for ISR.

Regional Security Education Program (RSEP). NPS faculty teach on Carrier Strike Groups and Expeditionary Strike Groups in-transit, delivering graduate level education to forward-deploying forces, to enhance their strategic situational awareness and enable them to understand the regional threat environments in which they operate. Using in-person lectures, direct interaction with regional experts, and a supporting website, RSEP provides strike group Commanders critical and timely regional security knowledge, strategic level perspective, knowledge in support of forward engagement, theater security operations, bilateral/coalition cooperation, improved mission planning and current cultural and societal issues. Past presentations have focused on Middle East, Iraq, NE and SE Asia, DPR Korea, Horn of Africa, and China.

Maritime ISR and Detection (MISRAD). NPS hosted an inter-agency workshop on MISRAD under the auspices of PACOM. The workshop looked at the end-to-end supply chain that moves containers from the overseas manufacturer through the maritime traffic system to ports in the US. The particular focus of MISRAD is on WMD, particularly nuclear devices and special nuclear materials. The MISRAD group brings operators, sensor producers, intelligence professionals, port operators and shippers together to attack this problem from all sides.

Maritime Domain Protection. NPS drafted a proposed National Maritime Domain Protection Architecture with Concept of Operations and Command Structure. NPS also tested the proposal in an interagency/joint war game, developed a MDP Library Base for classified interagency reference, and extended current data mining and fusion techniques and systems based on

requirements generation. We are now examining port infrastructures in support of force protection.

Center for Executive Education (CEE): Development program for transition in USPACOM intelligence. Application of NPS' CEE program to J2/JICPAC leadership and unique theater intelligence management needs. This CEE education program provides frameworks/tools for the leadership team to input to intelligence strategy, implement change, and shape organizational structure and processes.

Center for Civil-Military Relations (CCMR). CCMR supports the PACOM Theater Security Cooperation Plan and the Global War on Terrorism by helping improve U.S. influence in the Asia-Pacific Region in Southeast Asia, the South Pacific, South Asia and Indian Ocean, and Indonesia, Taiwan and Bangladesh in particular. CCMR programs focus on improving access, training and readiness in these regions and developing competent coalition partners. CCMR provides in-residence courses and Mobile Education Teams (MET's) to participating countries, to instruct in Planning Peace Operations; Civil-Military Relations; Democracy: Methods, Techniques & Application; Developing Simulations/Scenario Development Training; Strategic Planning; and Response to Global Terrorism. CCMR contribution to PACOM planning helps establish strategic communications for creating regional dialogue on U.S. security policy in PACOM's area of responsibility.

Concept of Operations (CONOPS)/Tactics/Techniques/Procedures (TTPS) for foreign language/speech translation technologies in a coalition military environment. Research in foreign language and speech translation machine technologies for the Advanced Concept Technology Demonstration (ACTD) titled "Language and Speech Exploitation Resources": (LASER), currently in its fourth year. This research utilizes the LASER ACTD process to study how various foreign language machine translation technologies can be used in a DOD environment, & focuses on the creation of CONOPS and TTPS for the employment of these technology devices in military exercises& ops.

COMTHIRDFLT Science Advisor tour. Richard Kimmel (NPS/IS department) was selected for the Office of Naval Research Science & Technology advisor program, is detailed to COMMANDER THIRD FLEET (C3F), San Diego, CA.

NPS USPACOM Liaison Desk: Provides research support as requested by USPACOM Science Advisor and J39 in support of experimentation. Examples include web based influence operations for exercise COBRA GOLD 04 in conjunction with NPS liaison desk for USPACOM: support, construct and operate a cyber-based capability to support the planning and execution of full-spectrum information operations. NPS developed and provided a fully functional prototype website for implementation during the COBRA GOLD 2004 command post exercise.

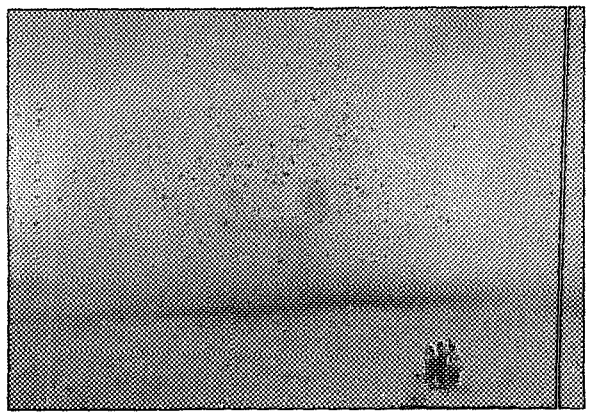
Support to USARPAC (US Army Pacific) for Homeland Defense. Provides education, applied research, training, exercise and planning program support to strengthen DoD's capabilities for terrorism prevention and all-hazards response in the Pacific area of responsibility.

Direct Support to CTF-73 to evaluate HSV in PACOM. An Ops Research student is conducting research on the use of HSVs in a logistic role for CTF-73 and how to modify contingency support plans.

USCENTCOM
Central Command

Direct NPS Educational Support to CENTCOM. CENTCOM Area of Responsibility (AOR) countries send their officers and defense civilians to NPS for master's degrees and to attend in-residence short courses ranging from one to eleven weeks. NPS also sends mobile education teams to countries in CENTCOM AOR to assist in the development of democratic policies and programs. Most recently a team of educators went to Afghanistan, and will do the same in Iraq. NPS also conducts region and country specific education programs for active Army, National Guard and Reserve Forces deploying to CENTCOM AOR, to include Iraq and Afghanistan. In addition, NPS conducts regional security education of sailors and marines deploying to CENTCOM AOR.

Helicopter Brownout. Helicopter Brownout is a $100 million per year problem, leading to significant hardware loss, injuries, and fatalities. The NPS project objective is to find ways to define landing zones which will have reduced probability of producing brownout. The challenge is to remotely sense soil and surface characteristics in denied territory. Both civilian remote sensing systems and national technical means were and are being studied. NPS identified a system that meets the requirements and is testing it for suitability. The payoff for this work will be to dramatically reduce the loss rate for men and hardware, particularly in the SOCOM and CENTCOM AORs.



Defense Resource Management Institute at NPS: 1,710 participants representing 25 of the 27 CENTCOM countries have participated in DRMI programs since 1965, including the current King of Jordan, his brother and his sister. In the last 10 years, NPS conducted mobile courses in Ethiopia (2), Jordan, Kenya (5), Tajikistan and Uzbekistan. Prince Feisel of Jordan commented on the value of networks from his time at NPS, noting that he was amazed that he had to come all the way to Monterey to meet other people in his region of the world. He said he now felt that he could just pick up the phone and call them when there is problem.

Coalition Intelligence Architecture Development. NPS faculty member traveled to MacDill AFB in Florida, As Saliyah in Qatar, and Baghdad and Basra in Iraq in Jan/Feb 2004 to write a study recommending improvements to the Coalition and Iraqi intelligence architecture, for General John Abizaid, Commander CENTCOM. He worked as a member of General John Abizaid's personal staff, in the Commander's Advisory Group.

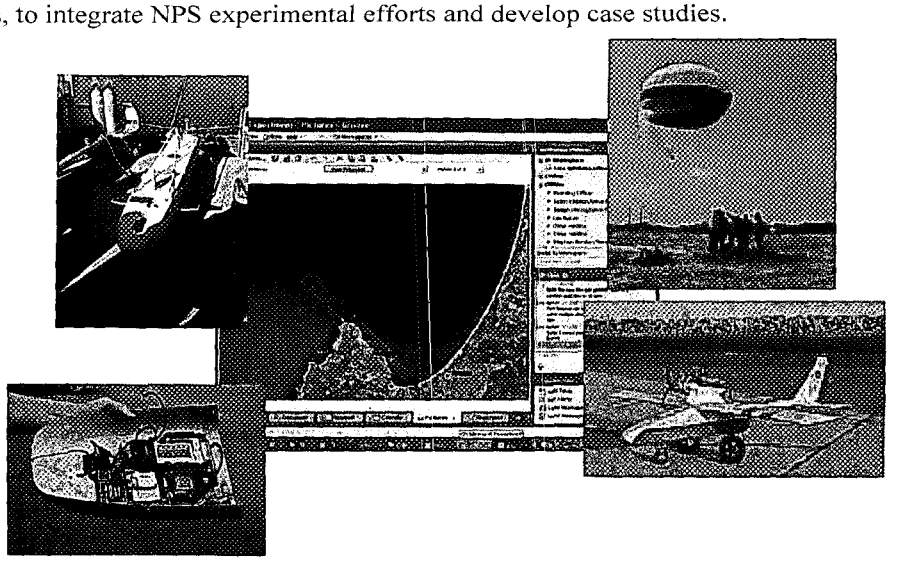
He then traveled to Kuwait City in Kuwait, and Baghdad in Iraq in Oct/Nov 2004 to work as a member of the Strategy Division of the office of the Deputy Chief of Staff for Strategy, Plans, and Assessment (DCS-SPA) in the headquarters of the Multinational Force-Iraq, in the US Embassy in Baghdad. The DCS-SPA, headed by a US Air Force major general, worked directly for General George Casey, Commander MNF-I, who is directly subordinate to General Abizaid.

USSOCOM
Special Operations Command

Man Hunting Workshop in support of U. S. Special Operation Forces (SOF). The traditional scope of military operations has never developed a doctrinal framework or process to capture fugitives, consequently military planners and intelligence analyst are not educated or trained in the investigative processes necessary to find fugitives. NPS conducted a research seminar to develop an investigative framework to understand the nature of man hunting in order to locate and apprehend fugitive insurgents and propose developmental courses of action.

Tactical Network Topology (TNT) (previously STAN). TNT is an integrated program of quarterly field experiments that develop and demonstrate new technologies to support near term needs of the warfighter. Major emphasis is on wireless networks, autonomous vehicles, sensor networks, situational awareness and target tracking and identification. Measures of performance of the technologies and operators using the technologies are also addressed. TNT is a faculty-student program working in parallel with partners that include various branches of the military, Combatant Commands, industry, and national labs. In particular, USSOCOM's Futures Directorate (J9) will be conducting experiments at NPS in conjunction with the USSOCOM Advanced Technology Directorate. These experiments will focus on identifying key gaps and deficiencies resulting from applications of advanced technology, particularly network communications, unmanned systems, and net-centric applications.

TNT includes a wide range of projects including the light reconnaissance vehicle (LRV) and special operations force (SOF) systems engineering and integration. The latter is an umbrella project to provide systems engineering applications to USSOCOM in support of all NPS work on LRVs, to integrate NPS experimental efforts and develop case studies.

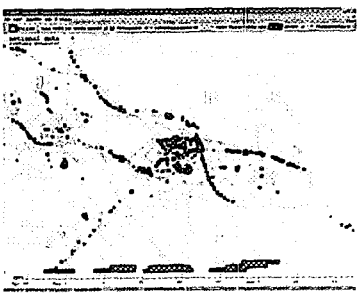


Special Operations Forces SIGINT Maritime Support to Joint Threat Warning System, (JTWS) Research, Development, Test, and Evaluation. This proposal describes Research, Development, Test, and Evaluation (RDT&E) actions, to support the Joint Threat Warning System (JTWS) Program. This will include investigating integration of smart dust technology into the JTWS Component Architecture Framework (JCAF), investigations into integrating SOF SIGINT maritime capabilities into the Tactical Network Topology effort, and classified signals analysis.

Applied warfighter Ergonomics (AWE) Research Center. This research incorporates the Human Systems Integration (HSI) research efforts to support the Tactical Network Topology (TNT) project. There are two major areas: HSI assessments of field portable devices and a research center with lab and field based research capability to assess human systems integration efforts for warfighters. The thrust of the effort will be on assessment of field portable devices to be used by warfighters.

Skytrack: Broadband switched-beam UAV-to-land vehicle communications subsystem. This is a project to develop, implement and validate a mobile UAV tracking antenna subsystem to operate with multiple UAV signal sources, in the 2.4 and 5.8 GHz ISM frequency bands.

Dynamic Mapping of IED Incidents over Space and Time. Innovative thesis work uses software from a faculty research project to display, animate, and statistically analyze the SIGACT (significant activity) data from Operation Iraqi Freedom (OIF). Identifying change points in insurgency behavior is critical to effective counterinsurgency. Due to the continuous nature of the conflict and the volume of apparently random incidents, statistical process control techniques are used to signal changes in insurgent tactics and movement. This research by faculty and students at NPS continues to improve the programming components of the project. The NPS IED mapping program is also currently being used in-theater in Afghanistan in Operation Enduring Freedom.



Case Studies for the Future. To assist in the development of operational concepts for Special Operations Forces that can be tested in exercises in theatre. Tools such as case studies, statistical analyses & mathematical modeling are used. A series of briefings and research papers are being developed, delivered, with supporting documentation, including proposed exercises plans to incorporate research results into SOF training.

Special Operations/Low Intensity Conflict (SOLIC) Academic Curriculum. Unique curriculum designed to provide students with the ability and background to think analytically and originally about the broad fields of political violence, unconventional warfare, and the role of SOLIC in U.S. foreign policy and defense planning.

USJFCOM
Joint Forces Command

Support for Extended Awareness Experimentation program. NPS provides experimentation and other analytic support to the Extended Awareness series of experiments, conducted by the Joint Operational Test Bed System (JOTBS) under USJFCOM. This includes involvement in the planning and conduct of the events leading up to two limited objective experiments.

NPS/CIRPAS UAV Predator flight support. This project supports JFCOM's UAV test objectives with Pelican and Predator air vehicles and one GCS/GDT.

Joint Intelligence Interoperability Board (JIIB) Systems Baseline Assessment (JSBA 04). This project supports the assessment of the Joint Intelligence Interoperability Board Systems Baseline Assessment. The study examines requirements and methodologies; organizes and maintains JSBA analytical models and tools and the associated data; executes model run activities, and analyzes results. NPS also provides analytical support, including scenario development and verification, execution of model runs, and direct analyses for a variety of intelligence, surveillance, and reconnaissance (ISR) assessments.

Extensible Modeling and Simulation Framework (XMSF) viewer for the Distributed Continuous Experimentation Environment (DCEE). The distributive continuous experimentation environment (DCEE), managed by the J9, U.S. JOINT FORCES COMMAND , has established a framework of common terminology for information to be exchanged between components using an enhancement of the real-time platform reference federation object model. This project will prepare for and conduct a demonstration of the benefits of XMSF concepts in the DCEE with the XMSF DCEE viewer.

Standing Joint Force Headquarters Process Modeling. The Standing Joint Force Headquarters (SJFHQ) processes will be analyzed and modeled to capture new processes that emerge with an emphasis on inter-agency, and service/functional component interactions. Information on SJFHQ will be obtained from available J9 sources, from observing planned events at PACOM, EUCOM and SOUTHCOM, interviews, and the development of use cases and user stories. Paper process models will be developed to show information flow timelines. Outputs of executable simulations developed from paper models are provided as inputs to discussion of requirements and end states.

Joint Task Force requirements determinations. This research will document the rationale, establishment and operation of recent JTFs, conduct a literature review of JTFs from military and academic sources to provide lesson learned for future JTF development and operation, develop a research protocol to be used in identifying and evaluating the decision processes, and procedures and mechanisms through which JTF are formed.

Design and analysis of simulation for advanced joint C4ISR node. This project designs, implements and analyzes the results of simulations to examine the costs and benefits of AJCN payloads following the statement of work from JSJFCOM. The intent of the simulation, for example, develops a cost-benefit analysis to determine the advantages of multiple AJCNs on single platforms, and helps develop TTPs for employing AJCNs.

USNORTHCOM
Northern Command

Homeland security leadership development. Under a MOU with USNORTHCOM, NPS develops and provides graduate education and research programs for USNORTHCOM in the area of homeland defense and security, and other MS programs in fields of direct value to HD/S. In addition, NPS takes HD/S mobile education teams (METs) to governors, and state and local leaders for short courses in first response and HD/S issues.

Center of Excellence in learning technology support for Homeland Defense and defense support to civil authorities. This project determines how Advanced Distributed Learning can best be used to reduce costs and constraints, and improves effectiveness of pre-exercise education, training and coordination. Determines how ADL can be used to individualize and tailor training and education for individuals performing the entire spectrum of homeland defense and military support to civil authorities operations.

OFFICE of the SECRETARY OF DEFENSE (OSD)

Armoring Vehicles against Improvised Explosive Devices IEDs. Supporting a request from the Office of the Deputy Secretary of Defense, NPS faculty and students are working on a short term project exploring protection schemes that have the potential of decreasing the vulnerability of lightly armored vehicles, such as Bradley APCs. Initial concepts will be assessed for increasing absolute protection and weight efficiency of armor, using lightweight assembly of discrete elements, arrayed in a manner that increases the number of angled contact surfaces that a projectile will have to encounter. This serves to deflect the flow of bomb fragment streams out of harm's way. The initial work on this project simulates an IED class bomb, and assesses the baseline effectiveness of steel armor against the threat. The project uses technical surveys and supporting data from SPAWAR and LLNL, with NPS faculty/student expertise in explosive ordnance and testing, shaped charge development, effectiveness analyses, hydrodynamic code development and simulation.

Voice Authentication "Iraqi Enrollment" Project. The Voice Authentication "Iraqi Enrollment" Project is an initiative that explores the use of voice authentication and verification technologies for implementation in Iraq and potential uses in other stabilization and reconstruction efforts, such as Afghanistan. This faculty/student project is examining a proof of concept for a voice authentication and verification system that can improve visitation screening for detainees at the Baghdad Detention Facility Abu Ghraib, and security screening for access to the International "Green Zone."

World Wide Consortium on the Grid (W2COG). OSD sponsors the World Wide Consortium for the Grid (W2COG) initiative to accelerate fielding of network centric operations capability by matching *top down* governance for Global Information Grid (GIG) policy with *bottom up* meritocracy for technical detail. W2COG uses operational mission thread analysis, field

experimentation, and demonstration to identify the imperatives of GIG architectural detail and follows the "open" model of the World Wide Web consortium wherein technical experts from global industry, academia, and government join in a distributed, efficient, repeatable process to consider ideas and artifacts on their merits and achieve rapid consensus. OSD offices supporting W2COG include Office of Force Transformation, Advanced Systems and Concepts, Networks and Information and Integration, DARPA, DISA, and JS J6.

Human Intelligence in the War on Terrorism: Defining the Problem. The goal of this project is to comprehensively describe and analyze the gaps in US human intelligence capabilities when operating in the non-Western world; to identify non-western means of securing support; to assess current capability for taking action against these methods; to apply organizational theory to intelligence organizations in terms of potential to operate effectively in the non western world; and to examine how other great powers penetrated the non-western world for intelligence collecting purposes.

Improving and Incorporating Cost Estimating and Analysis into Advanced Concept Technology Demonstrations (ACTD). This project examines how to provide OSD decision makers with improved, consistent, credible and reliable cost estimates for use in the ACTD program, to include enhancing understanding of the unique characteristics of ACTDs and the relevance of incorporating cost estimating and analysis into the ACTD selection and transition processes.

Office of Force Transformation. NPS supports the Office of Force Transformation (OFT) in several areas. ***Large Scale Change and Defense Transformation*** applies interdisciplinary expertise to large-scale change issues associated with Defense Transformation, integrating research from various disciplines related to people, process, organizations and technology. The approaches use systems dynamics/systems thinking models, emphasizing cultural awareness, knowledge management, innovation, trust, energy/sustainability. ***Capabilities Based Planning*** applies Knowledge Value-Added framework (measuring the value of corporate knowledge assets) to Capabilities Based Planning in DoD. The program uses OFT's Network Centric Operations Case Study on SOF actions in Operation Iraqi Freedom as an initial proof-of-concept reference point, to study ROI in DoD. ***Case Study on SARS Containment in Singapore*** employs Hastily Formed Network technologies to mitigate a national security medical threat. Sponsor partners are OFT, Centers for Disease Control, Office of the Assistant SECDEF/Homeland Defense, & Singapore Ministry of Defense.

Unconventional Weapons of Mass Destruction (UWMD): detailed investigation of novel nuclear physics and its implications. Continue measurements and analyses of novel methods and nuclear effects begun in 2003. This task includes experimental verification and research tracking (isotopic abundance measurements) and documentation of work to date.

Center for Stabilization and Reconstruction Studies. This Center conducts studies to enhance post-conflict recovery for states that have failed or endured calamity and require stabilization and reconstruction. The curriculum is multi-disciplinary and interactive, and incorporates members of humanitarian organizations, civilian government officials, U.S. & foreign military officers, and recovering states. Curriculum includes governance and participation; security; economic and social well being; and justice and reconciliation. The program combines the best of contemporary social science with organizational theory, with practical and applied tools.

Civil-Military Relations in China and Chinese strategy. Research conducted for OSD/NET ASSESSMENT on civilian control of China's military during wartime and on Chinese strategy.

The specific areas are: command and control of the Chinese people's liberation army during wartime by civilian leadership, the future evolution of Chinese strategy, and review of materials related to Chinese strategy.

Center for Edge Power. Initiation and management of a new Center for Edge Power. The center conducts research pertaining to Edge organizations in the context of network-centric warfare. Research conducted in the areas of hypothesis testing of Edge organizations, near-optimizing knowledge and power flows, VDT infrastructure enhancement, and exploring and exploiting intercultural knowledge flows and organizational forms.

Operations Research Support to Personnel and Readiness Office/OSD. This project analyzes the cost and readiness effects from using of alternative types of personnel to operate UAVs, and expanding analysis of alternatives to meeting the missions of operational support aircraft for the U. S. Navy, and USA.

Lessons from Afghanistan -The strategic utility of Special Operations Forces (SOFs). This project examines the institutional and organizational realities that impacted the planning and execution of the war in Afghanistan. The study conducts an in-depth assessment of U.S. unconventional warfare (UW) policy and the development of SOF capabilities for executing UW operations, as well as whether & to what extent UW operations were considered as a policy option.

Distinguished Fellows Program. A program to form partnerships to invest in the intellectual capital of the nation to fight the GWOT. The initial phase (04-05) will fund cooperative research with the University of California at Santa Barbara. Topics: Single Event Stable Finite-State Controllers, Integrated Optical Accumulators Architecture for Use in Sigma Delta ADC, Signal Processing Algorithms for High-Precision Navigation for Underwater Autonomous Sensing, Human Activity Analysis in Video Surveillance.

Technical support to the OSD. This project promotes and supports the development, demonstration and rapid transition of special technologies in response to critical DoD requirements. Also establishes a key interface among DoD, the unified commands and other specific customers.

CFFC
Fleet Forces Command

FORCEnet Engagement Packs. Sea Trial experimentation with NNWC/CFFC sponsorship: integrate a small set of joint sensors, platforms, weapons, warriors, networks and command and control systems for the purpose of performing cross-mission enabled Combat Reach Capabilities.

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NAVAL POSTGRADUATE SCHOOL
SIX MOST FREQUENTLY ASKED QUESTIONS

1. How is the Naval Postgraduate School unique?

Unique mission:

To provide relevant and unique advanced education and research programs that increase the combat effectiveness of the United States and Allied Forces..."

Unique vision:

"Growing a new generation of leaders for tomorrow's military"

Unique Approach:

- To educate joint and coalition officers as multi-disciplinary military 'change agents"
- To equip future leaders to transform the military into a force that capitalizes on the advances and advantages of information management, network centric operations, and other emerging technologies

Unique Capabilities:

Rapid responsiveness to DoD issues: NPS aligns with rapidly changing needs of military within DoD and Combatant Commands, percolating DoD themes, requirements and priorities down to NPS curriculum and research programs.Examples: NPS Center for Homeland Defense & Security- post 9/11 requirement for fast-track education to federal, state & city first responders. NPS Maritime Domain Protection Task Force quick response to DoD needs; C4I, ASW, Space Operations, Total Ship Systems Engineering, Seabasing, Combat Systems, Modeling Virtual Environments.

Joint Military and International Cross Fertilization: Fertile intellectual environment for lifelong networking/interaction between within same service, other U.S. military organizations, and other countries.

Interdisciplinary Research and Education: NPS Courses and research are inherently interdisciplinary in nature, curricula optimizes existing in-house expertise._Example: the Special Operations/Low Intensity Conflict (SOLIC) program combines experts in National Security, Operations Analysis (C4I), Systems Management to create an analytically rigorous warfare-oriented program.

Classified Research: NPS has large SCIF capabilities for conducting classified teaching and research, VTCs with the Combatant Commands and the Pentagon, and offers the largest classified library collections in the nation.

2. How is the Naval Postgraduate School relevant?

Transformation

- The Secretary of Defense's highest priority is Force Transformation.
- Office of Force Transformation (OFT/SECDEF) sponsors a new program at NPS, consisting of a Transformation Chair, Transformation Education and Transformation Research
  - Goals - to gain insights into current transformation in DoD, foster greater awareness of defense transformation internally with NPS faculty and students, and to a broad external audience of combatant commands & military stakeholders, equipping and influencing a new generation of DoD leaders.
  - NPS will be a broker for transformation research, whereby faculty and students world-wide can seek and share information on defense transformation and network centric operations.
  - Offered both on campus and as short courses offsite

Jointness

- Joint network centric operations, joint warfighting and joint peacekeeping campaigns demand that officers know and work seamlessly with all branches of service and coalition forces. NPS supports rapidly changing military requirements through advanced graduate education for the Navy, Marine Corps, Army and Air Force, with jointness as a keystone.
- The NPS student body is comprised of 42% Navy, 13% Marine Corps, 11% Air Force, 7% Army, and 24% international students.

3. A. Why not use civilian universities for graduate education for its officers?

- Special curricula that combines basic research with direct military applications that respond directly to current military needs is not found in civilian universities.
- Defense focus not duplicated by civilian universities

- The highest priority at NPS is relevant education to military officers, an educational focus that cannot be replaced by Stanford or MIT. Combining basic and applied skills contributes to decision making about future forces and warfighting capabilities. Example: NPS applied research recently supported a brief to Congress on Expeditionary Warfare Force Protection, which is now used widely in the military.

3. B. Why not use the War Colleges or National Defense University?

The War Colleges and NDU are not suited for the mission of educating junior and mid-grade officers in the scientific, engineering and technical areas essential to maintaining the combat effectiveness of the Navy. The military academies focus on the development of leaders, the war colleges on the strategy and policies of war. But it is NPS, along with the Air Force Institute of Technology, that provide education across a broad spectrum of areas that are critical to combat effectiveness as they provide officers with education that allows the conceptualization, development and use of weapons systems by our military forces. NPS provides JPME coursework on campus from dedicated War College faculty, so that officers can satisfy both their masters and military requirements from one location during a single tour.

4. Why not educate officers at the Air Force Institute of Technology (AFIT)?

Different mission than Air Force Institute of Technology (AFIT).
NPS as joint university is used extensively by the other U.S. military services.
NPS has 1500 student officers in residence with a capacity for 2000, while AFIT accommodates 400 students with an Air Force focus. NPS responds directly to the specific needs of the Combatant Commanders and military through education, targeted research projects and theses. Students contribute to efforts in three NPS Institutes via multi-year integrated theme projects that generate real time solutions to real time problems. Examples are the Sea Basing study from the Meyer Institute of Systems Engineering and Analysis, whose technologies and approach are being employed throughout the military.

5. What is the value of NPS being located in Monterey?

- UAV facilities: CIRPAS airport, airspace and landing field in Marina and UAV port at Camp Roberts near Paso Robles, allow 24/7 operation of UAVs at altitudes up to and in excess of 15000 feet in uncontrolled unrestricted airspace for joint integrated field experiments with faculty and students, including airborne sensors as part of large field tests and trials.
- Land Facilities: The MOUT at Fort Ord and Camp Roberts used for full time use for field experiments.
- Coastal access and NPS property both in Monterey, and at Pt. Sur (SOSUS submarine sonar array).
- Proximity or co-location to institutions for collaborative research partnerships, education, and unique laboratory and computing facilities. Military institutions: Defense Language Institute (Army), Fleet Numerical Meteorology and Oceanography Center (Navy), Naval Research Laboratory West. NPS partners with researchers and facilities at nearby NASA Ames Research Center at Moffat Field (wind tunnels, advanced modeling for homeland defense applications, etc.) and Lawrence Livermore National Labs. Private institutions: Monterey Bay Aquarium Research Institute (MBARI), California State University/Monterey Bay, University of California at Santa Cruz.

6. What is the added value to the Fleet of an NPS officer when they return to their next command?

<u>Operations experience combined with and education:</u> Officers apply their operational experiences gained in previous commands with applied military coursework and basic research on a masters thesis. A NPS graduate returns to duty with the "Why" (theory, computer modeling and simulation, problem solving, etc) in addition to the "How."
<u>Broader world view:</u>

- Greater perspective than 4-year degree provides, gains the value of education
- Perspective on how the military works, the "business" of national security and defense
- Equipped with understanding of the new face of war and peace in the net-centric age
- Relationships/networks within 60 other countries and coalition forces

<u>Approach to problem solving:</u> NPS provides a process-oriented education, with experience in integrated interdisciplinary

research. A NPS graduate has a knowledge of diverse and innovative ways to attack a problem. Every graduate is required to write a masters thesis based on a real problem, finding real solutions with current and emerging technologies. This experience is invested back into the fleets and offices of DoD.

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DCN: 11935

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Uniqueness & Excellence of the Naval Postgraduate School

NPS' accredited degree programs are structured to help win the War against Terrorism, from Afghanistan and Iraq to Hometown, USA

- SOCOM-Sponsored curriculum in Defense Analysis (including specialized Counterterrorism (CT)-oriented coursework)
- Stability Operations and Post-Conflict Reconstruction
- Homeland Defense and Security (the Nation's largest and most successful)
- Computer Security, Information Assurance, and other Critical Infrastructure Protection programs
- Blend of defense-oriented programs in technology, engineering, policy and management reflects agility and uniqueness of NPS

NPS student mix builds Joint, Combined, and Interagency effectiveness

- Navy comprises only 45 percent of NPS enrollment; growing flow of students from USAF, Army, and USMC
- Unparalleled International enrollment: 303 students from 61 nations, many of them critical defense partners (US and international students are co-mingled in the classroom and in student housing)
- Additional 160 senior defense officials from around the world attend leadership education in defense management
- NPS designated as the US' only NATO Partnership for Peace Education Center
- Strong Interagency input (FBI, DHS, NSA, NSF Cyber corps, NRO and others)

NPS student-faculty research directly focused on US security requirements

- UAV and network research (using NPS-controlled runways and airspace) has produced systems currently deployed by Special Forces in Afghanistan
- Classified research in Maritime Domain Awareness, Intelligence, many other war-on-terrorism topics (heavy use of Special Compartmented Information Facility)
- Work in TBMD, Directed Energy, Counterinsurgency operations, Undersea Warfare, Combat Systems advance combat effectiveness now and for the future
- Dep Sec Def has designated NPS as the Information Operations Center of Excellence

Outreach to support deployed forces, US policymakers

- Regional Security Education Program (deploys NPS professors to conduct graduate seminars for Carrier Battle Groups sailing to operating areas)
- Leadership Development for Sustained Peace (provides seminars for leadership of all Divisions deploying to Iraq and Afghanistan on security-building challenges)
- Homeland Security for Governors (seminars assist Governors in strengthening HS in their States – 22 programs already conducted)
- NPS offers 15 degree and certificate programs to over 600 off campus deployed forces, defense civilians and others working full-time in areas such as ASW, Information Systems, Systems Engineering, and Space Operations.
- Mobile Education Team programs to over 50 countries per year to assist them in strengthening their CT and coalition warfare capabilities.
- Provide operationally-relevant cultural knowledge and a real time grasp of the indigenous environment to Marine personnel deploying for OIF III, including tactical scenario-driven knowledge of the Iraq dialect of the Arabic language.

DCN: 11935

NPS costs reflect requirements imposed by Navy and others to meet operational demands and provide agile, adaptive and relevant programs

- Year round operations with 4 inputs per year (gets officers back to operational positions ASAP)
- Refresher courses, other special support programs to enable success by students who would not gain admission to equivalent civilian institutions
- Program content and length driven by defense-relevant Educational Skill Requirements, outcomes, and objectives (as specified by DON/other Sponsors)

NPS meets military requirements while maintaining national academic reputation

- NPS faculty includes PhD's from the nation's best universities including Harvard (9), Princeton (6), Yale (5), University of California (69), Stanford (25), MIT (14), Cornell (4), Columbia (3)
- The Dudley Knox Library at NPS has just been named by the Librarian of Congress as the best large Federal Library; it also serves as the Virtual Library for the Department of Homeland Security
- NSF-designated Center of Excellence for Information Assurance
- NPS programs accredited by regional (WASC) and specialized bodies including ABET, NASPAA and AACSB

NPS leverages the unique advantages of the Monterey region

- Undersea Warfare, Oceanography, and other education and research programs leverage co-location with other ocean research facilities including Monterey Bay Aquarium Research Institute, Stanford's Hopkins Lab, and the Fleet Numerical and Oceanographic Center
- NPS has priority claim (24-7) on use of 100 square KM of closed airspace at Camp Roberts in Monterey County, for UAV, network, other research.
- Joint programs with Defense Language Institute (mutually supportive)
- Close linkages with Silicon Valley, NASA AMES, and Lawrence Livermore National Laboratory.

DCN: 11935

Meeting Defense Review Challenges

Possible concerns to be addressed by the 2005 Quadrennial Defense Review:

1. Countering Islamic Extremism
2. Dealing with a failed nuclear-armed state
3. Redefining the military's role in Homeland Security
4. Readiness to deal with the conventional military of an emerging power

The Naval Postgraduate School's contributions to these challenges

Countering Islamic Extremism, which includes ensuring the demise of terrorist networks

For years, NPS provided military leaders access to a vast knowledge base through teaching a wide variety of courses dealing with the history, politics, and government of the Middle East and the faculty who teach them. More recently, we have offered courses on terrorism which provide an in-depth examination of the origins, nature, and political/military roles of contemporary international terrorism. They examine the early history of terrorism, the contending theories that purport to explain the sources of terrorist behavior, the different types of terrorism and terrorist actions, and the challenge international terrorism poses for American interests and foreign policy. Functional topics, such as the special problems posed by state-sponsored terror are also covered.

NPS faculty also go the extra mile to deliver this knowledge to the war fighter. The Regional Security Education Program (RSEP) sends teams of NPS faculty to all Navy and Expeditionary Strike Groups to enhance their understanding of the history, culture and politics of the regions in which they operate. Faculty also work with deploying National Guard Units (Leader Development and Education for Sustained Peace) (LDESP) and Marine Units (Tactical Culture for Marine Expeditionary Forces) (TCMEF) deploying to OIF to improve their situational and cultural awareness.

In addition to teaching courses covering Islamic Extremism, NPS has been performing research that has proven critical to defeating the threat of terrorism. Research sponsored by SOCOM and DOD has fielded new technologies for self-forming/self-healing mesh networks as well as new capabilities for persistent surveillance, reconnaissance, and targeting.

We have developed significant partnerships to meet this goal, as well. For example, the Center for Intelligence research has been collaborating with the intelligence community in support of our national security objectives which include support for classified research initiatives.

We have already received accolades for our work in this area. Since information operations are so vital in a low-intensity conflict, the Deputy Secretary of Defense has designated NPS as the Informational Operations Center of Excellence to support DOD initiatives to better integrate information operations, including psychological operations and computer-network attacks, into battle plans.

Dealing with a failed nuclear-armed state

NPS faculty are recognized as experts when it comes to the threat posed by the proliferation of weapons of mass destruction to state and non-state actors. They are currently undertaking a major research initiative for DoE on Strategic Stability in South Asia, and are undertaking a study of the interaction of WMD proliferation and Globalization for the Threat Reduction Agency. They are also completing studies of regional differences among terrorist financing networks, the nexus of terrorist organizations and clandestine WMD networks. In the Fall, they will host several major conferences that place these threats in a larger strategic context.

The military's role in Homeland Security

The U.S. Department of Homeland Security Office for Domestic Preparedness and the Naval Postgraduate School Center for Homeland defense and Security have partnered to offer the first Homeland Security Masters Degree in the United States. This degree is fully accredited and provides leaders with the knowledge and skills to:

- Develop strategies, plans and programs to prevent terrorist attacks within the United States and reduce America's vulnerability to terrorism;
- Build the organizational arrangements needed to strengthen Homeland Security, including local/state/federal, civil-military and interagency cooperation; and
- Help mayors and governors make improvements in Homeland Security preparedness, by conducting "real world," actionable policy development work.

Recently, we have welcomed the fourth consecutive Homeland Security program class which included over 30 federal, state, and local officials from a wide variety of critical disciplines. In addition, we have helped sponsor both an Executive Education Seminar on intelligence and fusion centers as well as the joint interagency training exercise entitled "Pacific Cloud."

The conventional military of an emerging power

The key to dealing with a failed state is through successful civil-military relations. In this regard, the Naval Postgraduate School has led the way. The Center for Civil-Military relations at NPS performs 20-30 events each quarter in over 20 nations, thereby reaching over 8000 civilian and military personnel each year.

The Leader Development and Education for Sustained Peace program has aided in this effort by serving to educate professionals from a variety of fields as they prepare to deploy and perform stability operations in Central Europe, Central Asia, the Middle East, and Africa. More recently, the program has been preparing senior leaders and U.S. units for their deployment missions in Iraq, Afghanistan, and Kosovo.

We have also developed unrivalled partnerships to meet this challenge. For example, since failed nuclear-armed states are an emerging threat to our national security, NPS and the Lawrence Livermore National Laboratory have developed a relationship which provides the strength of a premier applied-science institution with core capabilities in nuclear weapons stewardship and non-proliferation.

Finally, new methods of instruction have been developed to educate leaders about the art and science of nation building. The new master's program called "Security Building in Post Conflict Environments" is designed to provide post-conflict countries with the necessary "tools" to assist in defense restructuring efforts. In many cases, officers from different countries have the opportunity to share their experiences with civil-military relations in an open forum.

On October 26, 2004 NPS was formally recognized by NATO as the U.S. NATO Partnership for Peace (PFP) Education and Training Center.