DCN 114

DEPARTMENTS OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
111 SOUTH GEORGE MASON DRIVE
ARLINGTON, VA 22204-1382

NGB-ARO (350) 30 September 1994

MEMORANDUM FOR Director, The Army Basing Study, Pentagon
Washington, DC 20310-2500

SUBJECT: BRAC 95 Army National Guard Data Call and Assessment Narrative (Data Call #11)

1. Reference, Memorandum, The Army Basing Study, 10 August 1994, subject as above.

2. The enclosed information is provided in response to Data Call #11.

3. Without contacting individual states, we are unable to give a definitive answer to actual facilities or acreage required on each site.

4. The information contained in this report is accurate and complete to the best of my knowledge and belief.

5. POC is MAJ Weismiller, DSN 327-7306, COMM (703) 607-7306.

FOR THE CHIEF, NATIONAL GUARD BUREAU:

Encl

KENNETH D. RHOADES
Colonel, GS
Chief of Staff, ARNGRC

14 September 1994

NAME OF INSTALLATION: FORT CHAFFEE, AR.

1. LIST ARNG UNITS STATIONED ON FORT CHAFFEE, AR.

NONE

1a. CAN THEY BE MOVED? N/A

2. LIST ARNG UNITS THAT TRAIN ON FORT CHAFFEE, AR.

39TH BDE

2a. CAN WE DIVEST? Should Retain Maneuver Area and Ranges

2b. HOW HARD IS THAT?

3. OF THOSE THAT TRAIN ON FORT CHAFFEE, AR. WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?

39TH BDE IS AN ENHANCED UNIT

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT CHAFFEE, AR. **HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?**

UNKNOWN

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT CHAFFEE, AR. **SIMULTANEOUSLY?**

All ranges for Arkansas and Eastern Oklahoma are lost.

7. DOES THE ARNG WANT TO ENCLAVE IT? Possibly The Maneuver Area & Ranges

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT?

8. IS IT A DESIGNATED MOBILIZATION SITE? YES

8a. IF SO, WHO SAYS SO? FORSCOM Identifies MOB Sites

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT? FORSCOM issue

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND

CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION?
No, but would like to retain maneuver area and ranges
No Infrastructure

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?

Basing is a State decision, NGB Identfies type units.

14 September 1994

NAME OF INSTALLATION: FORT IRWIN, CA.

1. LIST ARNG UNITS STATIONED ON FORT IRWIN, CA.

MOBILIZATION AND TRAINING EQUIPMENT SITE

1a. CAN THEY BE MOVED? Yes

2. LIST ARNG UNITS THAT TRAIN ON FORT IRWIN, CA.

1-18 CAV	HHC (-) 40TH ID
2-185 AR	HHC 2D BDE, 40TH ID
3-185 AR	140 CHEM CO
132 EN BN	240 FSB
4-160 MECH BN	123RD MAINT CO

2a. CAN WE DIVEST? Yes

2b. HOW HARD IS THAT? Must find another area to train

3. OF THOSE THAT TRAIN ON FORT IRWIN, CA. WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?

NONE

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT IRWIN, CA. HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?

UNKNOWN

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT IRWIN, CA. SIMULTANEOUSLY? Nothing

7. DOES THE ARNG WANT TO ENCLAVE IT? No

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT?

8. IS IT A DESIGNATED MOBILIZATION SITE?

8a. IF SO, WHO SAYS SO? FORSCOM Identifies MOB Sites

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT? No

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? No

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?

Basing is a State decision, NGB Identfies type units.

14 September 1994

NAME OF INSTALLATION: FORT AP HILL, VA.

1. LIST ARNG UNITS STATIONED ON FORT AP HILL, VA.

ARNG INFANTRY TRAINING DETACHMENT

1a. CAN THEY BE MOVED? YES

2. LIST ARNG UNITS THAT TRAIN ON FORT AP HILL, VA.

29TH INF DIV	1380 QM CO	170TH IN BN
104 CS CO	547 TC CO	183RD IN BN
115 MED HSP	260 MP CMD	111TH AD BN
273 MP CO	372 MP HHD	229TH EN BN
274 MP CO	176TH EN GP	276TH EN BN
275 MP CO	429TH CS BN	3647 CS CO
~~121 MP DET~~	~~116TH IN BN~~	~~1032 TC BN~~
1030 EN HHD		

2a. CAN WE DIVEST? Yes

2b. HOW HARD IS THAT? Travel costs will Dramatical Increase as units are moved to other training sites for training.

3. OF THOSE THAT TRAIN ON FORT AP HILL, VA, **WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?**

1380 QM CO
547 TC CO
276TH EN BN
1032 TC BN
1030 EN HHD

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT AP HILL, VA **HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?**

Unknown

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT AP HILL, VA, **SIMULTANEOUSLY?**

Nearest Training areas are over one days drive, readiness suffers.

7. **DOES THE ARNG WANT TO ENCLAVE IT?** Possibly only maneuver area or ranges

7a. **IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT?** Same as train there now

8. **IS IT A DESIGNATED MOBILIZATION SITE?** YES

8a. **IF SO, WHO SAYS SO?** FORSCOM Identifies MOB Sites

8b. **CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT?** Unknown

9. **IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION?** No, only maneuver and ranges

10. **IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?** No, TAG will have to decide

11. **FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?** Basing is a State decision. NGB identifies type units.

14 September 1994

NAME OF INSTALLATION: FORT DIX, NJ.

1. LIST ARNG UNITS STATIONED ON FORT DIX, NJ.

42ND IN HHC	OMS #9
42ND MP CO	DET 1 250TH SBF
50 BDE	UNIT TRAINING EQUIPMENT

1a. CAN THEY BE MOVED? NOT WITHOUT TAG NJ CONCURENCE

2. LIST ARNG UNITS THAT TRAIN ON FORT DIX, NJ.

104 EN BN	2-113 INF BN	1-114 INF BN
2-102 AR BN	3-102 AR BN	1-112 FA BN
213 MED HHC	194TH MET DET	3-112 FA BN
HHC 50TH AD	HHC 1ST BDE	253 TC CO
~~154 CS HHD~~	~~119 CS HHD~~	~~144 CS CO~~
50TH AG CO	250 CS BN	50 CS BN
~~250 SC BN~~	~~444 PA DET~~	

2a. CAN WE DIVEST? Not without huge investment in New Facilities.

2b. HOW HARD IS THAT?

3. OF THOSE THAT TRAIN ON FORT DIX, NJ WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?

194TH MED DET
444 PA DET

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT DIX, NJ HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?
Unknown

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT DIX, VA SIMULTANEOUSLY?

Units will have to travel in excess of 8 hours to training sites.

7. DOES THE ARNG WANT TO ENCLAVE IT? Only areas presently occupied by ARNG units.

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT?

8. IS IT A DESIGNATED MOBILIZATION SITE? YES

8a. IF SO, WHO SAYS SO? FORSCOM Identifies MOB Sites

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT?

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? No

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?

Basing is a State decision, NGB Identifies type units.

14 September 1994

NAME OF INSTALLATION: FORT POLK, LA.

1. LIST ARNG UNITS STATIONED ON FORT POLK, LA.

Mobilization and Training Equipment Site

1a. CAN THEY BE MOVED? Yes

2. LIST ARNG UNITS THAT TRAIN ON FORT POLK, LA.

1/156TH AR	2/156TH MECH	2/152TH AR
3/156TH MECH	1/141TH FA	B/199TH SPT BN
E/256TH CAV	HHC 256TH MECH BDE	256TH EN CO
1088 EN BN		

2a. CAN WE DIVEST? Yes

2b. HOW HARD IS THAT? Requires new facilities at another site.

3. OF THOSE THAT TRAIN ON FORT POLK, LA. **WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?**

256TH MECH IS AN ENHANCED BDE.

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT POLK, LA **HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?**

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT POLK, LA **SIMULTANEOUSLY?**

7. DOES THE ARNG WANT TO ENCLAVE IT? No

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT?

8. IS IT A DESIGNATED MOBILIZATION SITE? YES

8a. IF SO, WHO SAYS SO? FORSCOM Identifies MOB Sites

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT?

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? NO

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?

Basing is a State decision, NGB Identfies type units.

14 September 1994

NAME OF INSTALLATION: FORT PICKETT, VA.

1. LIST ARNG UNITS STATIONED ON FORT PICKETT, VA.

Mobilization and Training Equipment Site OMS # 15.

1a. CAN THEY BE MOVED?

2. LIST ARNG UNITS THAT TRAIN ON FORT PICKETT, VA.

1/103 AR (28TH ID PANG)	278TH ARC CHSM CO (TNNG)
2/103 AR " "	190 ENCO " "
1/109TH FA " "	278TH ARC " "
1/229TH FA " "	1/150 CAV (107 ACR WVNG)
1/201 FA (WVNG)	3647 MAINT CO
1/109TH MECH (28TH ID PANG)	1729 QM
1/104TH CAV " "	104TH MAINT CO (DCNG)

2a. CAN WE DIVEST? Yes

2b. HOW HARD IS THAT?

Very difficult as site is used by five states.

3. OF THOSE THAT TRAIN ON FORT PICKETT, VA **WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?**

278TH ACR IS ENHANCED.

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT PICKETT, VA **HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?**

UNKNOWN

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT PICKETT, VA **SIMULTANEOUSLY?**

No other training site to support armored training exists in the area.

7. DOES THE ARNG WANT TO ENCLAVE IT? Possibly the maneuver areas and ranges along with mates.

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE

SUPPORT? Same as above

8. **IS IT A DESIGNATED MOBILIZATION SITE?** YES

8a. **IF SO, WHO SAYS SO?** FORSCOM Identifies MOB Sites

8b. **CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT?**

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? No

10. **IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?**

No, TAG will have to decide.

11. **FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?**

Basing is a State decision, NGB Identfies type units.

14 September 1994

NAME OF INSTALLATION: FORT GREELY, AK.

1. LIST ARNG UNITS STATIONED ON FORT GREELY, AK.

NONE

1a. CAN THEY BE MOVED? N/A

2. LIST ARNG UNITS THAT TRAIN ON FORT: GREELY, AK.

CO B 5TH BN 297TH INF
CO B 297TH SPT
CO A 3RD BN 297TH INF

2a. CAN WE DIVEST? Yes

2b. HOW HARD IS THAT? Not a problem

3. OF THOSE THAT TRAIN ON FORT GREELY, AK WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT GREELY, AK HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT GREELY, AK SIMULTANEOUSLY?

NOTHING

7. DOES THE ARNG WANT TO ENCLAVE IT? NO

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT?

8. IS IT A DESIGNATED MOBILIZATION SITE? NO

8a. IF SO, WHO SAYS SO? N/A

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT? YES

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? NO

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?

Basing is a State decision, NGB Identfies type units.

14 September 1994

NAME OF INSTALLATION: FORT INDIAN TOWN GAP, PA.

1. LIST ARNG UNITS STATIONED ON FORT INDIAN TOWN GAP, PA.

3662ND MAINT CO	CO F 104TH AVN	EASTERN ARMY AVN TNG SITE
128TH MIL HIST DET	CO A 228TH FSB	HQ STATE AREA COMMAND
HHD 228TH FSB	109TH PA DET	USPF&O
AR AVN SUPPORT FAC	REGION I NCOA	CO A 2/104TH AVN BN
CO C 2/104TH AVN	CO D 2/104TH AVN	HHC 2/104TH AVN

1a. CAN THEY BE MOVED? NO

2. LIST ARNG UNITS THAT TRAIN ON FORT INDIAN TOWN GAP, PA.

1/109TH FA	2/103RD AR	1/103RD AR
HQ 28TH FIN BN	1/104TH CAV	121ST TRANS CO
1/109TH INF	131ST TRANS CO	~~103RD EN BN~~
876TH EN BN	628TH FIN DET	828TH FIN DET
928TH FIN DET	528TH FIN DET	

2a. CAN WE DIVEST?

2b. HOW HARD IS THAT?

3. OF THOSE THAT TRAIN ON FORT INDIAN TOWN GAP, PA WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"?

104TH AVN CO	121ST TRANS CO	131ST TRANS CO

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT INDIAN TOWN GAP, PA HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?

UNKNOWN

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? No

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT INDIAN TOWN GAP, PA SIMULTANEOUSLY?

No training sites will remain for the 28th Division.

7. DOES THE ARNG WANT TO ENCLAVE IT? Yes

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT? Ranges and Maneuver Areas along with selected

logistical facilities and EAATS. Must consult with State on final facilities.

Units presently using the site.

8. IS IT A DESIGNATED MOBILIZATION SITE? Unknown

8a. IF SO, WHO SAYS SO? FORSCOM Recipes

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT?

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? NGB is not, but PA may desire

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

~~11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION WAS~~ THIS CONSIDERED?

Basing is a State decision, NGB Identifies type units.

14 September 1994

NAME OF INSTALLATION: FORT MCCOY, WI.

1. LIST ARNG UNITS STATIONED ON FORT MCCOY, WI.

Mobilization and Training Equipment Site.

1a. CAN THEY BE MOVED?

2. LIST ARNG UNITS THAT TRAIN ON FORT MCCOY, WI:

1/632RD AR	1/120TH FA	1/121ST FA
1/126TH FA	E/105TH CAV	32ND EN CO
229TH EN CO	724TH EN BN	2/127TH MECH
1/128TH MECH	106TH QM CO	107TH MAINT CO
132ND SPT BN	HHC 32ND IN BDE	

2a. CAN WE DIVEST? Yes

2b. HOW HARD IS THAT? New Facilities required at another site

3. OF THOSE THAT TRAIN ON FORT MCCOY, WI WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"? 724th ENBN, 106 QM Co, 1/126th FA, 229th EN Co

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT MCCOY, WI. HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?

UNKNOWN

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT MCCOY, WI SIMULTANEOUSLY?

7. DOES THE ARNG WANT TO ENCLAVE IT? NO

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT?

8. IS IT A DESIGNATED MOBILIZATION SITE? YES

8a. IF SO, WHO SAYS SO? FORSCOM

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT? NO

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND

CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? NO

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?

Basing is a State decision, NGB Identifies type units.

14 September 1994

NAME OF INSTALLATION: FORT HUNTER-LIGETT, CA

1. LIST ARNG UNITS STATIONED ON FORT HUNTER-LIGETT, CA.

NO ARNG UNITS

1a. CAN THEY BE MOVED? N/A

2. LIST ARNG UNITS THAT TRAIN ON FORT HUNTER-LIGGETT:
CAARNG UNITS USE AND PAY FOR THE MPRC.

2a. CAN WE DIVEST? No not ranges

2b. HOW HARD IS THAT? New MPRC would have to be built elsewhere.

3. OF THOSE THAT TRAIN ON FORT HUNTER-LIGGETT, WHICH ARE "CFP OR SPECIAL OPERATIONS OR ENHANCED"? None

4. WHAT ABOUT THE REGIONAL TRAINING BRIGADES. WILL CLOSING FORT HUNTER-LIGGETT HAVE ANY EFFECT ON THEM, AND IF SO, WHAT EFFECT?

UNKNOWN

5. ARE WE DISCONNECTING AN AC/NG PARTNERSHIP? NO

6. WHAT HAPPENS IF WE CLOSE ALL OTHER MAJOR TRAINING AREAS WITHIN 150 MILES OF FORT HUNTER-LIGGETT SIMULTANEOUSLY?
There will be no area for 40th Inf to train

7. DOES THE ARNG WANT TO ENCLAVE IT? YES

7a. IF SO, HOW MUCH, WHERE, AND WHAT UNITS WOULD THE ENCLAVE SUPPORT? THE MPRC

8. IS IT A DESIGNATED MOBILIZATION SITE? Unknown

8a. IF SO, WHO SAYS SO? FORSCOM decides

8b. CAN IT BE CLOSED WITHOUT MOBILIZATION IMPACT? No

9. IS THE ARMY NATIONAL GUARD INTERESTED IN ASSUMING COMMAND AND CONTROL IF THAT IS THE ONLY WAY TO "SAVE" THE INSTALLATION? No

10. IF TRAINING PATTERNS/HABITS ARE VARIABLE, WILL ARNG ACCEPT RECTIFYER/TRAINLOAD ESTIMATES?

No, TAG will have to decide.

11. FUTURE ARNG REPOSITIONING BASED ON THE REORGANIZATION-WAS THIS CONSIDERED?

Basing is a State decision, NGB Identities type units.

PROVING GROUNDS
INCLUDES AAA CHANGES

	WEIGHT		APG	DPG	WHITE SANDS	YPG
T&E MSN DIVERSITY	200		21+	15--	23++	20
T&E RANGES	100		5+	1--	5+	4
T&E FACILITIES	150		6+	0--	8++	1-
MISSION REQUIREMENTS	---	450	8.1	0.0	10.0	5.1
FACILITIES AVG AGE	75		35.00	33.00	35.00	22.00+
INFRASTRUCTURE	50		8.7+	2.6	7.6	2.9
% PERM FACILITIES	75		88%	95%	79%-	96%+
ENVIRONMENTAL CAP	25		2.6	9.8	7.4	8.0
LAND AND FACILITIES	---	225	4.0	4.7	2.6	7.6
BUILDABLE ACRES	25		1,150	10,000	270,895	229,071
ENCROACHMENT	65		931.1-	3.9	38.3	20.8
AVAILABLE WORKFORCE	25		1,125,762	11,883	55,824	41,006
IMA	10		1,415	950	1,250	1,315
FUTURE REQUIREMENTS	---	125	2.8	5.3	7.6	7.5
MCA COST FACTOR	50		0.92+	0.97	1.06	1.11-
BASOPS/MSN POP	100		13,058.58	25,844.16-	13,918.24	16,819.82
COST OF LIVING INDEX	50		105.90-	98.00	100.50	98.80
COST AND MANPOWER	---	200	5.0	4.3	4.7	4.0
		===				
SCORE		1000	5.9	2.6	7.0	5.7
RANK			2	4	1	3

SUB-MODEL FOR PG

	WEIGHT		APG	DPG	WSMR	YPG
ARCH/HIST BLDGS	10		0	0	0	0
ENDGRD FAUNA/FLORA	15		2	0	3	1
WETLANDS	15		0-	0	0	0
AIR QUALITY	15		10-	1	1	1
WATER QUALITY	15		13-	0	0	0
NOISE QUAL- ZONE II	10		50000	0	0	275
NOISE QUAL- ZONE III	15		0	0	0	20-
CONTAMINATED SITES	5		305	171	75	42
ENV CAR CAPACITY	---	100	2.6	9.8	7.4	8.0
CAPACITY WATER	25		8	4-	9+	6
CAPACITY SEWAGE	25		6+	1	1	1
CAPACITY ELECT	25		2054	3856	4348+	298-
LANDFILL COST	25		$0	$23-	$1	$9
INFRASTRUCTURE	---	100	8.1	2.3	7.6	2.7
# OF RANGES	50		62++	20-	14--	45
SIZE OF RANGES	50		63000-	142126-	2353208++	587819
T&E RANGES	---	100	5.0	0.8	5.0	4.4
SQ FEET	50		2579000++	170000--	1579000	538000-
EQUIPMENT COST	50		200000000	58500000-	1042339968++	152083008-
T&E FACILITIES	---	100	5.7	0.0	7.9	1.2
		===				
SCORE		400	5.4	3.2	7.0	4.1
RANK			2	4	1	3

PROVING GROUND

INSTALLATION = ABERDEEN PROVING GROUNDS

MISSION REQUIREMENTS AND OPERATIONAL READINESS

TEST AND EVALUATION MISSION DIVERSITY	21
TEST AND EVALUATION RANGES	
NUMBER OF RANGES	62
SIZE OF RANGES	63000 ACRES
TEST AND EVALUATION FACILITIES	
FACILITIES	2579K SQ FT
EQUIPMENT	$200 MILLION

LAND AND FACILITIES

PERCENT PERMANENT FACILITIES	88 %
AVERAGE AGE OF FACILITIES	35 YRS
INFRASTRUCTURE	
WATER SUPPLY CAPACITY	8.00 MGD
SEWAGE TREATMENT CAPACITY	5.80 MGD
ELECTRICAL CAPACITY	2054
SOLID WASTE LANDFILL COSTS	$0.00/TON
ENVIRONMENTAL CAPACITY	
ARCHEOLOGY/HISTORIC BUILDINGS FACTOR	.0155
ENDANGERED SPECIES	2
WETLANDS FACTOR	.1709
AIR QUALITY	10
WATER QUALITY	13
NOISE QUALITY	
AICUZ ZONE II OFF POST	50000 ACRES
AICUZ ZONE III OFF POST	0 ACRES
CONTAMINATED SITE IRP	69
CONTAMINATED SITE NPL	281

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

BUILDABLE ACRES	1150 ACRES
ENCROACHMENT	413.46 POP/SQ MI

INFORMATION MISSION AREA	1415 PTS
TELEPHONE SWITCHING	450 PTS
OUTSIDE CABLE PLANT	220 PTS
COMMON USER SUPPORT	450 PT
DSN/DDN NODE	75 PTS
POST WIDE WAN/LAN	75 PTS
TCC	100 PTS
VTC	45 PTS
AVAILABLE WORKFORCE	DA WILL PROVIDE

COST AND MANPOWER

COST OF LIVING INDEX	$478.15
MCA COST FACTOR	0.92
BASOPS/MISSION POPULATION	
BASOPS *	**$221,800,000**
MISSION POPULATION	**DA WILL PROVIDE** 16,975

∴ = 13,058.58/yr per person

*** UNABLE TO PROVIDE BASOPS COSTS BY PAYROLL/NON PAYROLL**
BASOPS INCLUDES $50M DERA & $9M MPA FUNDS

PROVING GROUND

INSTALLATION = DUGWAY PROVING GROUNDS

MISSION REQUIREMENTS AND OPERATIONAL READINESS

TEST AND EVALUATION MISSION DIVERSITY	15
TEST AND EVALUATION RANGES	
NUMBER OF RANGES	20
SIZE OF RANGES	142126 ACRES
TEST AND EVALUATION FACILITIES	
FACILITIES	170K SQ FT
EQUIPMENT	$58.5 MILLION

LAND AND FACILITIES

PERCENT PERMANENT FACILITIES	95 %
AVERAGE AGE OF FACILITIES	33 YRS
INFRASTRUCTURE	
WATER SUPPLY CAPACITY	3.50 MGD
SEWAGE TREATMENT CAPACITY	0.70 MGD
ELECTRICAL CAPACITY	3856
SOLID WASTE LANDFILL COSTS	$22.80/TON
ENVIRONMENTAL CAPACITY	
ARCHEOLOGY/HISTORIC BUILDINGS FACTOR	.000002
ENDANGERED SPECIES	0
WETLANDS FACTOR	.0001
AIR QUALITY	1
WATER QUALITY	0
NOISE QUALITY	
AICUZ ZONE II OFF POST	0 ACRES
AICUZ ZONE III OFF POST	0 ACRES
CONTAMINATED SITE IRP	71
CONTAMINATED SITE NPL	100

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

BUILDABLE ACRES	10000 ACRES
ENCROACHMENT	3.83 POP/SQ MI

INFORMATION MISSION AREA	950 PTS
TELEPHONE SWITCHING	300 PTS
OUTSIDE CABLE PLANT	140 PTS
COMMON USER SUPPORT	285 PTS
DSN/DDN NODE	50 PTS
POST WIDE WAN/LAN	75 PTS
TCC	55 PTS
VTC	45 PTS
AVAILABLE WORKFORCE	DA WILL PROVIDE

COST AND MANPOWER

COST OF LIVING INDEX	$48.87
MCA COST FACTOR	0.97
BASOPS/MISSION POPULATION	
BASOPS *	$39,800,000
MISSION POPULATION	**DA WILL PROVIDE** /5[illegible] ∴ 25,844.16

*** UNABLE TO PROVIDE BASOPS COSTS BY PAYROLL/NON PAYROLL**

PROVING GROUND

INSTALLATION = WHITE SANDS MISSILE RANGE

MISSION REQUIREMENTS AND OPERATIONAL READINESS

TEST AND EVALUATION MISSION DIVERSITY	23
TEST AND EVALUATION RANGES	
NUMBER OF RANGES	14
SIZE OF RANGES	2353208 ACRES
TEST AND EVALUATION FACILITIES	
FACILITIES	1579K SQ FT
EQUIPMENT	$1042.34 MILLONS

LAND AND FACILITIES

PERCENT PERMANENT FACILITIES	77 %
AVERAGE AGE OF FACILITIES	34 YRS
INFRASTRUCTURE	
WATER SUPPLY CAPACITY	5.50 MGD
SEWAGE TREATMENT CAPACITY	1.00 MGD
ELECTRICAL CAPACITY	1050
SOLID WASTE LANDFILL COSTS	$1.16/TON
ENVIRONMENTAL CAPACITY	
ARCHEOLOGY/HISTORIC BUILDINGS FACTOR	.04
ENDANGERED SPECIES	3
WETLANDS FACTOR	.0005
AIR QUALITY	1
WATER QUALITY	0
NOISE QUALITY	
AICUZ ZONE II OFF POST	0 ACRES
AICUZ ZONE III OFF POST	0 ACRES
CONTAMINATED SITE IRP	70
CONTAMINATED SITE NPL	5

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

BUILDABLE ACRES	260480 ACRES
ENCROACHMENT	35.59 POP/SQ MI

INFORMATION MISSION AREA	1325 PTS
TELEPHONE SWITCHING	450 PTS
OUTSIDE CABLE PLANT	140 PTS
COMMON USER SUPPORT	420 PTS
DSN/DDN NODE	50 PTS
POST WIDE WAN/LAN	120 PTS
TCC	100 PTS
VTC	45 PTS
AVAILABLE WORKFORCE	DA WILL PROVIDE

COST AND MANPOWER

COST OF LIVING INDEX	$251.16
MCA COST FACTOR	1.06
BASOPS/MISSION POPULATION	
BASOPS *	$88,965,400
MISSION POPULATION	DA WILL PROVIDE 6392
	∴ 13,918.24/P/yr

*** UNABLE TO PROVIDE BASOPS COSTS BY PAYROLL/NON PAYROLL**

PROVING GROUND

INSTALLATION = YUMA PROVING GROUNDS

MISSION REQUIREMENTS AND OPERATIONAL READINESS

TEST AND EVALUATION MISSION DIVERSITY	20
TEST AND EVALUATION RANGES	
NUMBER OF RANGES	45
SIZE OF RANGES	587819 ACRES
TEST AND EVALUATION FACILITIES	
FACILITIES	538K SQ FT
EQUIPMENT	$152083

LAND AND FACILITIES

PERCENT PERMANENT FACILITIES	96 %
AVERAGE AGE OF FACILITIES	22 YRS
INFRASTRUCTURE	
WATER SUPPLY CAPACITY	5.95 MGD
SEWAGE TREATMENT CAPACITY	0.50 MGD
ELECTRICAL CAPACITY	298
SOLID WASTE LANDFILL COSTS	$8.74/TON
ENVIRONMENTAL CAPACITY	
ARCHEOLOGY/HISTORIC BUILDINGS FACTOR	0
ENDANGERED SPECIES	1
WETLANDS FACTOR	0
AIR QUALITY	1
WATER QUALITY	0
NOISE QUALITY	
AICUZ ZONE II OFF POST	275 ACRES
AICUZ ZONE III OFF POST	20 ACRES
CONTAMINATED SITE IRP	42
CONTAMINATED SITE NPL	0

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

BUILDABLE ACRES	229071 ACRES
ENCROACHMENT	19.38 POP/SQ MI

INFORMATION MISSION AREA	1315 PTS
TELEPHONE SWITCHING	500 PTS
OUTSIDE CABLE PLANT	220 PTS
COMMON USER SUPPORT	405 PTS
DSN/DDN NODE	25 PTS
POST WIDE WAN/LAN	45 PTS
TCC	75 PTS
VTC	45 PTS
AVAILABLE WORKFORCE	DA WILL PROVIDE

COST AND MANPOWER

COST OF LIVING INDEX	$442.39/MON
MCA COST FACTOR	1.11
BASOPS/MISSION POPULATION	
BASOPS *	$34,295,609
MISSION POPULATION	DA WILL PROVIDE 2030
	∴ 16,819.82/yr/p

* UNABLE TO PROVIDE BASOPS COSTS BY PAYROLL/NON PAYROLL

"the last word"
ACCOUNTANTS SUPPLY HOUSE No. 690

Sea Change

Proving Ground: White Sands

Attribute	Army	FAA
Average age of facilities	33.49	35.3[illegible]
Buildable Acres	260480	27[illegible]395
Water	5501000	8592000
Electrical	155000	434846
Landfill	1.16	1.15
Percent permanent facilities	77.30	79.22

Old score 6.8

New score 6.7

No change in rankings

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, DC 20310-0200

REPLY TO
ATTENTION OF

DACS-TABS

6 April 1994

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: BRAC 95 Installation Assessment (IA) Program
(DATA CALL #1)

1. References:

a. Memorandum, Chief of Staff United States Army, 21 March 1994, Subject: Base Realignment and Closure (BRAC) 95.

b. Memorandum, Director of Management, 21 March 1994, Subject: Army Preparation for BRAC 95.

2. The Defense Base Closure and Realignment Act of 1990, as amended, provides the Army a means to make needed adjustments to our installation structure. Although the next round of BRAC recommendations is not due to the Defense Base Closure and Realignment Commission (Commission) until March 1995, we must begin the extensive preparation now. The BRAC 95 IA Program is designed to provide the senior Army leadership a measure of the relative value of installations and facilities used by Army organizations. The proponent office for the IA process is the Management Directorate of the Office of the Chief of Staff, Army.

3. This memorandum provides instructions to action addressees concerning the Army's initial BRAC 95 data call. Annex A lists installation categories and the installations included in this request. Annex B identifies the data attributes requested for each installation category. Annex C designates the responsibility for supplying, verifing and certifing each data element. Annex D provides the attribute definitions. Annex E provides a sample format.

4. Request that action addressees provide the required data for each assigned installation listed in Annex A. Data will be submitted in three printed copies and on wordprocessing disk. The suspense date for this data call is **23 May 1994.**

4. The BRAC 95 IA Program requires the development of quantitative data as well as narrative assessments. This memorandum addresses the Army's primary quantitative installation evaluation (formerly called the "Military Value Assessment"). Instructions concerning Installation Narrative and Environmental Assessments will be published NLT 1 May 1994. Additional data calls in support of OSD BRAC 95 study efforts will be addressed separately.

5. All documentation concerning the BRAC 95 IA is considered pre-decisional to the BRAC 95 process and is to be marked and handled as CLOSE HOLD.

6. The Defense Base Closure and Realignment Act of 1990, as amended, requires certification of the accuracy and completeness of all information provided to the Commission and Secretary of Defense. The IA process requires action addressees to provide products to HQDA that will be published in the Army's BRAC recommendations or as reference materials to the Army's BRAC recommendations. Accordingly, the documentation of all IA products must be thorough, accurate and detailed. The following guidelines will be used to ensure that results are supportable and that the certification requirements are met:

a. Consistency in data sources. Standard data sources for the attributes are provided in Annex D - BRAC 95 Attributes.

b. Accuracy of the data. Corporate Army data bases will be used as directed by Annex D. Any deviation from Army corporate data bases must be documented by the addressees, validated by the HQDA functional proponent and approved by TABS.

c. Completeness of records. Record keeping, although cumbersome and time-consuming, is nonetheless critical to demonstrate a sufficient decision trail. Records of the source data for values used as attributes are required to be maintained. All quantitative assessments will be forwarded with a documentation section which describes, in detail:

(1) actions taken by addressees and/or installations to assure data accuracy in compliance with guidance in above reference and this memorandum;

(2) any specific data limitations;

(3) record keeping procedures used by the action addressees to maintain an audit trail of the IA data.

d. Certification: Data submitted as a result of this or subsequent DA requests must include an accompanying memorandum signed by the reporting Chief of Staff (or equivalent) with the following statement: "The information contained in this report is accurate and complete to the best of my knowledge and belief."

7. To help implement the Army's BRAC 95 management plan and ensure the Army is prepared for potential GAO audits, the Army Audit Agency will visit the action addressees and representative installations to validate the accuracy of the data and adequacy of the decision trail.

8. Point of contact is MAJ Chuck Fletcher, DACS-TAB, (703) 697-1765/6, AV 225-8921.

5 Encls

Michael G. Jones
MICHAEL G. JONES
COL, GS
Director, The Army Basing Study

ACTION:

COMMANDING GENERAL, U.S. ARMY FORCES COMMAND
COMMANDING GENERAL, U.S. ARMY TRAINING AND DOCTRINE COMMAND
COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND
COMMANDING GENERAL, U.S. ARMY PACIFIC

DACS-TABS
SUBJECT: BRAC 95 Installation Assessment (IA) Program

COMMANDING GENERAL, U.S. ARMY HEALTH SERVICES COMMAND
COMMANDING GENERAL, U.S. ARMY MILITARY DISTRICT OF WASHINGTON
COMMANDING GENERAL, MILITARY TRAFFIC MANAGEMENT COMMAND
CHIEF OF ENGINEERS
COMMANDANT, UNITED STATES MILITARY ACADEMY

CF:
ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS
ASSISTANT SECRETARY OF THE ARMY FOR FINANCIAL MANAGEMENT
ASSISTANT SECRETARY OF THE ARMY FOR INSTALLATIONS, LOGISTICS AND ENVIRONMENT
ASSISTANT SECRETARY OF THE ARMY FOR MANPOWER AND RESERVE AFFAIRS
ASSISTANT SECRETARY OF THE ARMY FOR RESEARCH, DEVELOPMENT AND ACQUISITION
DIRECTOR OF INFORMATION SYSTEMS FOR COMMAND, CONTROL, COMMUNICATIONS AND COMPUTERS
GENERAL COUNSEL
THE AUDITOR GENERAL
CHIEF OF LEGISLATIVE LIAISON
CHIEF OF PUBLIC AFFAIRS
COMMANDING GENERAL, U.S. ARMY INFORMATION SYSTEMS COMMAND
DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS
DEPUTY CHIEF OF STAFF FOR INTELLIGENCE
DEPUTY CHIEF OF STAFF FOR PERSONNEL
COMMANDING GENERAL, U.S. ARMY INTELLIGENCE AND SECURITY COMMAND
COMMANDING GENERAL, U.S. ARMY SPECIAL OPERATIONS COMMANDDEPUTY
CHIEF OF STAFF FOR LOGISTICS
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
THE SURGEON GENERAL
CHIEF OF CHAPLAINS
THE JUDGE ADVOCATE GENERAL
OFFICE OF THE CHIEF ARMY RESERVE
CHIEF, NATIONAL GUARD BUREAU
DIRECTOR, PROGRAM ANALYSIS AND EVALUATION

ANNEX A

BRAC 95 INSTALLATION ASSESSMENTS

INSTALLATION CATEGORIES

ANNEX A - INSTALLATION CATEGORIES.

1. This Annex lists the installations to be studied under the BRAC 95 Installation Assessment program. Each installation is assigned to a category of like installations for comparison.

2. A Major Command (MACOM)is designated for each installation. The designated MACOM is responsible for managing the IA program for the installation (tasking the installation for data, collecting the data, etc).

3. Each installation is assigned to an Economic Area (EA). The EA is a county(s) or Metropolitan Statistical Area (MSA) which is the primary area of economic impact for the installation. The EA will be used to develop the potential economic impact to the community of a realignment or closure of the installation. The EA is also referenced in the attributes as the representative area for encroachment and available workforce.

4. Designated MACOMs should review the assignment of installations to EAs for accuracy. The initial assignment was done based on past BRAC assignments and subjective judgement. Comments on the EAs for each installation should be directed to Mr. Joe Vallone, The Army Basing Study, (703) 69-0077/8.

ANNEX A - INSTALLATION CATEGORIES

ADMIN SUPPORT INSTALLATIONS	MACOM	ECONOMIC AREA
C. KELLY SUPPORT CENTER,PA	FORSCOM	ALLEGHENY, PA MSA
C. M. PRICE SUPPORT CENTER,IL	AMC	ST LOUIS, MO MSA
FORT BELVOIR,VA	MDW	WASHINGTON, DC-MD-VA MSA
FORT BUCHANAN,PR	FORSCOM	SAN JUAN, PR MSA
FORT GILLEM,GA	FORSCOM	ATLANTA, GA MSA
FORT HAMILTON,NY	FORSCOM	NEW YORK, NY PMSA
FORT McPHERSON,GA	FORSCOM	ATLANTA, GA MSA
FORT MEADE MA	MDW	ANNE ARUNDEL&HOWARD COUNTIES, MD
FORT MONROE,VA	TRADOC	NORFOLK-VA BEACH-NEWPORT NEWS MSA
FORT MYER,VA	MDW	WASHINGTON, DC-MD-VA MSA
FORT RITCHIE,MD	MDW	HAGERSTOWN, MD MSA
FORT SHAFTER,HI	USARPAC	HONOLULU, HI MSA
FORT TOTTEN,NY	FORSCOM	NEW YORK, NY PMSA
PRESIDIO OF SAN FRANCISCO,CA	FORSCOM	SAN FRANSISCO, CA MSA
US ARMY GARRISON, SELFRIDGE,MI	FORSCOM	DETROIT, MI MSA

AMMO PROD INSTALLATIONS	MACOM	ECONOMIC AREA
HOLSTON ARMY AMMO PLANT,TN	AMC	JOHNSON CITY-KINGSPORT-BRISTOL MSA
IOWA ARMY AMMO PLANT,IA	AMC	DE MOINES COUNTY, IA
LAKE CITY ARMY AMMO PLANT,MO	AMC	KANSAS CITY KS-MO MSA
LONE STAR ARMY AMMO PLANT,TX	AMC	TEXARKANA, TX-AR MSA
McALESTER ARMY AMMO PLANT,OK	AMC	PITTSBURG COUNTY, OK
MILAN ARMY AMMO PLANT,TN	AMC	GIBSON COUNTY, TN
PINE BLUFF ARSENAL,AR	AMC	PINE BLUFF, AR MSA
RADFORD ARMY AMMO PLANT,VA	AMC	RADFORD CITY, VA

AMMUNITION STORAGE	MACOM	ECONOMIC AREA
BLUE GRASS ARMY DEPOT,KY	AMC	LEXINGTON, KY MSA
CAMP STANLEY STORAGE FACILITY ,TX	AMC	MASON COUNTY, TX
HAWTHORNE ARMY AMMO PLAT,NV	AMC	MINERAL COUNTY, NV
PUEBLO DEPOT,CO	AMC	PUEBLO, CO MSA
SAVANNA DEPOT,IL	AMC	CARROLL COUNTY, IL
SENECA DEPOT,NY	AMC	SENECA COUNTY, NY
SIERRA DEPOT,CA	AMC	LASSEN COUNTY, CA
TOOELE DEPOT,UT	AMC	TOOELE COUNTY, UT
UMATILLA DEPOT,OR	AMC	UMATILLA COUNTY, OR

ANNEX A - INSTALLATION CATEGORIES

COMMODITY INSTALLATIONS	MACOM	ECONOMIC AREA
ARMY RESEARCH LABORATORY,MD	AMC	ANNE ARUNDEL&HOWARD COUNTIES, MD
COLD REGION RESEARCH LAB,NH	USACE	GRAFTON COUNTY, NH
DETROIT ARSENAL,I L	AMC	DETROIT, MI MSA
FORT DETRICK,MD	HSC	WASHINGTON, DC-MD-VA MSA
FORT MONMOUTH,NJ	AMC	MONMOUTH-OCEAN, NJ PMSA
NATICK RESEARCH,ENGR CTR,MA	AMC	BOSTON-LAWRENCE-SALEM MA-NH NECMA
PICATINNY ARSENAL,NJ	AMC	NEWARK, NJ PMSA
REDSTONE ARSENAL ,AL	AMC	HUNSTVILLE, AL MSA
ROCK ISLAND ARSENAL,IL	AMC	DAVENPORT-ROCK ISLAND-MOLINE, IA-IL MSA

DEPOTS	MACOM	ECONOMIC AREA
ANNISTON DEPOT,AL	AMC	ANNISTON, AL MSA
LETTERKENNY DEPOT,PA	AMC	FRANKLIN COUNTY, PA
RED RIVER DEPOT,TX	AMC	TEXARKANK TX-AR MSA
TOBYHANNA DEPOT,PA	AMC	MONROE COUNTY, PA

MEDICAL CENTERS	MACOM	ECONOMIC AREA
FITSIMONS MEDICAL CENTER, CO	HSC	DENVER, CO PMSA
TRIPLER MEDICAL CENTER,HI	USARPAC	HONOLULU, HI MSA
WALTER REED MEDICAL CENTER,DC	HSC	WASHINGTON, DC-VA-MD MSA

INDUSTRIAL FACILITIES	MACOM	ECONOMIC AREA
LIMA TANK PLANT,OH	AMC	ALLEN COUNTY, OH
STRATFORD ENG PLNT,CT	AMC	NEWHAVEN-BRIDGEPORT-STAMFORD-DANBURY-WATERBURY,CT MSA
WATERVLIET ARSENAL,NY	AMC	ALBANY-SCHENECTADY-TROY, NY MSA

MAJOR TRAINING AREAS	MACOM	ECONOMIC AREA
FORT A.P. HILL,VA	MDW	CAROLINE COUNTY, VA
FORT CHAFFEE,AR	TRADOC	FORT SMITH, AR-OK MSA
FORT DIX,NJ	FORSCOM	PHILADELPHIA PA-NJ, PMSA
FORT GREELY,AK	USARPAC	SOUTHEAST FAIRBANKS CENSUS AREA
FORT HUNTER-LIGGETT,CA	FORSCOM	SALINAS-SEASIDE-MONTEREY MSA
FORT INDIANTOWN GAP,PA	FORSCOM	HARRISBURG-LEBANON-CARLISLE, PAMSA
FORT IRWIN, CA	FORSCOM	RIVERSIDE-SAN BERNADINO, CA MSA
FORT McCOY,WI	FORSCOM	MONROE COUNTY, WI
FORT PICKETT,VA	FORSCOM	BRUNSWICK COUNTY, VA
FORT POLK,LA	FORSCOM	VERNON PARISH, LA

ANNEX A - INSTALLATION CATEGORIES

MANEUVER INSTALLATIONS	MACOM	ECONOMIC AREA
FORT BRAGG,NC	FORSCOM	FAYETTVILLE, NC MSA
FORT CAMPBELL,KY	FORSCOM	CLARKSVILLE-HOPKINSVILLE,TN-KY MSA
FORT CARSON,CO	FORSCOM	COLORADO SPRINGS, CO MSA
FORT DRUM,NY	FORSCOM	JEFFERSON COUNTY, NY
FORT HOOD,TX	FORSCOM	KILEEN-TEMPLE, TX MSA
FORT LEWIS,WA	FORSCOM	TACOMA, WA MSA
FORT RICHARDSON,AK	USARPAC	ANKORAGE, AK MSA
FORT RILEY,KS	FORSCOM	RILEY COUNTY, KS
FORT STEWART,GA	FORSCOM	LIBERTY COUNTY, GA
FORT WAINWRIGHT,AK	USARPAC	FAIRBANKS NORTHSTAR BOROUGH
SCHOFIELD BARRACKS,HI	USARPAC	HONOLULU, HI MSA

PORTS / OCEAN TERMINALS	MACOM	ECONOMIC AREA
BAYONNE OCEAN TERMINAL,NJ	MTMC	NEWARK, NJ MSA
OAKLAND ARMY BASE,CA	MTMC	OAKLAND, CA MSA
SUNNY POINT OCEAN TERMINAL,NC	MTMC	WILMINGTON, NC MSA

PROFESSIONAN EDUCATION	MACOM	ECONOMIC AREA
CARLISLE BARRACKS,PA	TRADOC	HARRISBURG-LEBANON-CARLISLE, PAMSA
FORT LEAVENWORTH,KS	TRADOC	KANSAS CITY MO-IL, MSA
FORT LESLEY J. McNAIR,DC	TRADOC	WASHINGTON, DC-MD-VA MSA
WEST POINT,NY	USMA	NEWBURG, NY PMSA

PROVING GROUNDS	MACOM	ECONOMIC AREA
ABERDEEN PROVING GROUNDS,MD	AMC	BALTIMORE, MD MSA
DUGWAY PROVING GROUNDS ,UT	AMC	TOOELE COUNTY, UT
WHITE SANDS MISSLE RANGE,NM	AMC	LAS CRUCES, NM MSA
YUMA PROVING GROUNDS,AZ	AMC	YUMA, AZ MSA

ANNEX A - INSTALLATION CATEGORIES

TRAINING SCHOOLS	MACOM	ECONOMIC AREA
FORT BENNING,GA	TRADOC	COLUMBUS, GA-AL MSA
FORT BLISS, TX	TRADOC	EL PASO, TX MSA
FORT EUSTIS ,VA	TRADOC	NORFOLK-VA BEACH-NEWPORT NEWS MSA
FORT GORDON ,GA	TRADOC	AUGUSTA, GA-SC MSA
FORT HUACHUCA,AZ	TRADOC	COCHISE COUNTY, AZ
FORT JACKSON,SC	TRADOC	COLUMBIA, SC MSA
FORT KNOX,KY	TRADOC	HARDIN COUNTY, KY
FORT LEE,VA	TRADOC	RICHMOND-PETERSBURG, VA MSA
FORT LEONARD WOOD,MO	TRADOC	LACLEDE, PHELPS, AND PULASKI COUNTIES, MO
FORT McCLELLAN,AL	TRADOC	ANNISTON, AL MSA
FORT RUCKER ,AL	TRADOC	DOTHAN, AL MSA
FORT SAM HOUSTON,TX	FORSCOM	SAN ANTONIO, TX MSA
FORT SILL,OK	TRADOC	LAWTON, OK MSA
PRESIDIO OF MONTEREY,CA	FORSCOM	SALINAS-SEASIDE-MONTEREY, CA MSA

ANNEX B

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

ATTRIBUTES AND WEIGHTS

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
·Reserve Training	50
·Ops/Admin Facilities	140
·Information Mission Area	70
·Accessibility	50
·Barracks and Family Housing	140
Total	450

LAND AND FACILITIES

Attribute	Points
·Percent Permanent Facilities	40
·Average Age of Facilities	40
·Infrastructure	40
·Maintenance Facilities	40
·Supply and Storage	40
·Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
·Mobilization Capability	40
·Buildable Acres	60
·Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
·Cost of Living Index	50
·VHA factor	15
·Housing Cost per DU	15
·Locality Pay Factor	30
·BASOPS/Mission Population	60
·MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR COMMAND AND CONTROL/ ADMINISTRATIVE SUPPORT INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Maneuver Acres	80
Ranges	70
Deployment Network	60
Reserve Training	60
Impact Area	70
Mechanized Maneuver Acres	70
Special Airspace	40
Total	450

LAND AND FACILITIES

Attribute	Points
Barracks and Family Housing	60
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	55
Buildable Acres	35
IMA	10
Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
Housing Cost per DU	15
VHA Factor	15
Locality Pay Factor	30
BASOPS/Mission Population	60
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization and Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR MANEUVER INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Maneuver Acres	120
Ranges	70
Reserve Training	70
Impact Area	70
Mechanized Maneuver Acres	80
Special Airspace	40
Total	450

LAND AND FACILITIES

Attribute	Points
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Barracks	60
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	30
Buildable Acres	35
Encroachment	20
IMA	10
Deployment Network	30
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	60
Locality Pay Factor	35
BASOPS/Mission Population	75
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR TRAINING AREAS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Maneuver Acres	65
Ranges	45
Deployment Network	35
Reserve Training	30
Impact Area	40
Mechanized Maneuver Acres	20
General Instructional Facilities	60
Applied Instructional Facilities	60
IMA	30
Special Airspace	65
Total	450

LAND AND FACILITIES

Attribute	Points
Barracks	40
Family Housing	20
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	65
Buildable Acres	35
Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
Housing Cost per DU	15
VHA Factor	15
Locality Pay Factor	30
BASOPS/Mission Population	60
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR TRAINING SCHOOLS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Reserve Training	50
IMA	30
General Instructional Facilities	235
Applied Instructional Facilities	135
Total	450

LAND AND FACILITIES

Attribute	Points
Barracks	20
Family Housing	40
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	65
Buildable Acres	35
Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
Housing Cost per DU	15
VHA Factor	15
Locality Pay Factor	30
BASOPS/Mission Population	60
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR PROFESSIONAL EDUCATION INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Capacity-Maintenance	150
Capacity-Supply	150
Reserve Training	30
Deployment Network	50
Available Workforce	30
Maintenance Flexibility	40
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Excess Capacity-Maintenance	40
Excess Capacity-Storage	40
Buildable Acres	20
Encroachment	15
Information Mission Area	10
Total	125

COST AND MANPOWER

Attribute	Points
IBOE	100
MCA Cost Factor	50
Mission Overhead	50
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR MAINTENANCE DEPOTS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Production Capacity	230
Deployment Network	50
Available Workforce	30
Storage Capacity	80
Production Flexibility	60
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Excess Capacity-Production	50
Buildable Acres	25
Encroachment	20
IMA	10
Excess Capacity-Storage	20
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR INDUSTRIAL FACILITIES.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Available Workforce	50
Ops/Admin Facilities	200
Research and Development Fac	200
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Buildable Acres	90
Information Mission Area	35
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR COMMODITY INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Reserve Training	30
Deployment Network	50
Available Workforce	30
Production Flexibility	80
Ammunition Storage	130
Production Capacity	130
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	50
Infrastructure	35
Percent Permanent Facilities	45
Quantity-Distance	70
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Buildable Acres	35
Encroachment	15
Information Mission Area	10
Excess Capacity-Production	65
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR AMMUNITION PRODUCTION (ACTIVE) INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Ammunition Storage	240
Reserve Training	40
Deployment Network	80
Available Workforce	40
Maintenance Flexibility	50
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	50
Infrastructure	25
Percent Permanent Facilities	50
Quantity-Distance	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Excess Capacity-Storage	50
Buildable Acres	35
IMA	10
Encroachment	30
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR AMMUNITION STORAGE INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Mission Flexibility	150
Test and Evaluation Ranges	200
Test and Evaluation Facilities	100
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Buildable Acres	25
Encroachment	65
IMA	10
Available Workforce	20
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR PROVING GROUNDS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Special Cargo Capacity	100
Support Facilities	75
Normal Throughput	100
Piers and Wharves	100
Staging Areas	75
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	85
Infrastructure	50
Percent Permanent Facilities	65
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Buildable Acres	50
Available Workforce	20
Mobilization Throughput	45
IMA	10
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR PORTS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Patient Care Facilities	150
Applied Instruction Facils	100
Medical Research Facilities	50
Deployment Network	75
Reserve Support	75
Total	450

LAND AND FACILITIES

Attribute	Points
Percent Permanent Facilities	75
Average Age of Facilities	85
Infrastructure	40
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Encroachment	20
Mobilization Capability	50
IMA	20
Buildable Acres	35
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	40
Housing Cost	30
Health Care Support Index	100
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR MEDICAL CENTERS

ANNEX C

BRAC 95 INSTALLATION ASSESSMENT

DATA ELEMENT RESPONSIBILITIES

ANNEX C - DATA ELEMENT RESPONSIBILITIES

1. This Annex will describe the responsibilities for data elements required by the BRAC 95 Installation Assessment program.

a. Supplying Agency. The organization designated to supply the data element will:

- Refer to Annex D for the attribute definition.
- Locate the data source.
- Record the data element.
- Forward the data and supporting source documents to the verifying agency.

b. Verifying Agency. The organization designated to verify the data element will:

- Refer to Annex D for the attribute definition.
- Receive the data element and documentation from the supplying agency.
- Check the data element to insure it has been provided IAW the attribute definitions.

c. Certifying Agency. The organization designated to certify the data element will:

- Maintain the formal documentation for the data element(s) source and audit trail.
- Maintain a signed certification statement for the data element(s).

2. Questions concerning this process should be addressed to MAJ Chuck Fletcher, The Army Basing Study, (703) 697-1765/6.

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
1	ACCESSIBILITY		C,V	S
2	AMMUNITION STORAGE		V,C	S
3	APPLIED INSTRUCTIONAL FACILITIES	V	C	S
4	AVAILABLE WORK FORCE	C,S	V	
5	AVERAGE AGE OF FACILITIES	C,S	V	
6	BARRACKS (UPH)	V	C	S
7	BARRACKS (UPH) AND FAMILY HOUSING	V	C	S
8	BASOPS/MISSION POPULATION	V	C,S	
9	BUILDABLE ACRES		C,V	S
10	CAPACITY - PRODUCTION		C,V	S
11	CAPACITY - MAINTENANCE		C,V	S
12	CAPACITY - SUPPLY		C,V	S
13	COST OF LIVING INDEX	C,S	V	
14	DEPLOYMENT NETWORK		C,V	S
15	ENCROACHMENT	C,S	V	
16	ENVIRONMENTAL CARRYING CAPACITY		C,V	S
17	EXCESS CAPACITY - MAINTENANCE	V	C	S
18	EXCESS CAPACITY - PRODUCTION	V	C	S
19	EXCESS CAPACITY - STORAGE	V	C	S
20	FAMILY HOUSING	V	C	S
21	FAMILY HOUSING COST PER DWELLING UNIT		C,V	S
22	GENERAL INSTRUCTIONAL FACILITIES	V	C	S
23	HEALTH CARE SUPPORT INDEX		C,S	
24	IMPACT ACRES		C,V	S
25	INFORMATION MISSION AREA (IMA)		C,V	S

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
26	INFRASTRUCTURE		C,V	S
27	INSTALLATION AND BASE OPERATING EXPENSE		C,V	S
28	LOCALITY PAY FACTOR	C,S	V	
29	MAINTENANCE FACILITIES	V	C	S
30	MAINTENANCE FLEXIBILITY		C,V	S
31	MANEUVER ACRES		C,V	S
32	MCA COST FACTOR	C,S	V	
33	MECHANIZED MANEUVER ACRES		C,V	S
34	MEDICAL RESEARCH FACILITIES	V	C	S
35	MISSION OVERHEAD		C,V	S
36	MOBILIZATION CAPABILIY		C,V	S
37	MOBILIZATION THROUGHPUT		C,V	S
38	NORMAL THROUGHPUT		C,V	S
39	OPS/ADMIN FACILITIES		C,V	S
40	PATIENT CARE FACILITIES		C,V	S
41	PERCENT PERMANENT FACILITIES	C,S	V	
42	PIERS AND WHARVES		C,V	S
43	PRODUCTION FLEXIBILITY		C,V	S
44	QUANTITY - DISTANCE		C,V	S
45	RANGES		C,V	S
46	RESEARCH AND DEVELOPMENT FACILITIES		C,V	S
47	RESERVE TRAINING		C,V	S
48	SPECIAL AIRSPACE	C,S	V	
49	SPECIAL CARGO CAPABILITY		C,V	S
50	STAGING ARES		C,V	S

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
51	SUPPLY AND STORAGE FACILITIES	V	C	S
52	SUPPORT FACILITIES		C,V	S
53	TEST AND EVALUATION FACILITIES		C,V	S
54	TEST AND EVALUATION FLEXIBILITY		C,V	S
55	TEST AND EVALUATION RANGES		C,V	S
56	VHA FACTOR	C,S	V	
57	WORK SPACE	V	C	S

ANNEX D

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

ATTRIBUTE DEFINITIONS

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ACCESSIBILITY

1. **DEFINITION**: The accessibility of an installation as measured by calculating the number of miles to the four most "travelled to" destinations from that installation, one of which must be the installation's next higher headquarters.

2. **PURPOSE**: To assess how well located an installation is to perform its command, control, and management functions in terms of its physical distance from major subordinate units and higher headquarters.

3. **METHODOLOGY**: The average distance in miles from the installation to its four most "travelled to" locations, one of which must be the installation's higher headquarters, will be calculated using actual travel data for FY 93. Each installation will report the four most "travelled to" locations and the distance they use to calculate travel costs to those locations.

4. **REFERENCES**: Installation travel records for FY 93.

5. **UNIT OF MEASURE**: Average distance in miles.

6. **EQUATION**:

$$\frac{DHQ + DLOC1 + DLOC2 + DLOC3}{4} = \text{Avg Distance}$$

Where:

DHQ = Distance to Higher HQ

DLOC1 = Distance to most travelled to location

DLOC2 = Distance to second most travelled to location

DLOC3 = Distance to third most travelled to location

7. **ATTRIBUTE SCORING**: A low number is best.

AMMUNITION STORAGE

1. **DEFINITION:** Ammunition storage capability measured square feet.

2. **PURPOSE:** A measure of an installation's capability to store and handle and ammunition.

3. **METHODOLOGY:** Assets are determined by summing the permanent square footage from FCGs 4110, 42100 and 42200.

4. **REFERENCE:** March update of HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** A larger number = a better score.

AVAILABLE WORK FORCE

1. **DEFINITION:** Available workforce density of the surrounding area around the installation.

2. **PURPOSE:** This is an indirect measure of availability of an adequate workforce in the surrounding community. Representative area is the area identified as the Region of Influence by the BRAC Economic Impact model (This area is generally the county or counties surrounding the installation or the Metropolitan Statistical Area (MSA)).

3. **METHODOLOGY:** This is an indirect measure of the availability of an adequate civilian workforce.

4. **REFERENCES:** Department of Defense Economic Impact model. Office of Economic Adjustment (OEA) workforce populations.

5. **UNIT OF MEASURE:** Available Work Force population.

6. **EQUATION:** NA

7. **CRITERION SCORING:** A larger number is a better score.

APPLIED INSTRUCTIONAL FACILITIES

1. **DEFINITION:** Total square footage of permanent and specialized training and instructional facilities on the installation.

2. **PURPOSE:** Indicates special purpose facilities used for training and instruction. Special purpose facilities represent a significant cost investment to the military. Relocation of elements requiring special purpose facilities would cause significant expenditure of MCA funds and would require more time to complete realignment.

3. **METHODOLOGY:** Summation of the square footage of special applied instructional facilities.

Facility Category Group: 17130 (Applied Instructional Building). New construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing assets.

4. **REFERENCES:** March 1994 HQRPLANS. Engineer review.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** As above.

7. **ATTRIBUTE SCORING:** Total square footage--higher number results in a better score.

BARRACKS
(Unaccompanied Personnel Housing)

1. **DEFINITION:** Total number of permanent on post spaces available for unaccompanied officers and enlisted personnel.

2. **PURPOSE:** To determine the availability of adequate UOPH and UEPH at the installation. Measures the total unaccompanied officer personnel housing (UOPH) and unaccompanied enlisted personnel housing (UEPH) spaces available on the installation.

3. **METHODOLOGY:** Summation of the total number of permanent unaccompanied officer housing spaces available on the installation. The FCG is 72400.

Unaccompanied Enlisted Personnel Housing (UEPH) is measured by the total number of permanent enlisted member housing spaces on the installation. On-post available spaces are measured at no more than two persons per room at 90 NET square feet per person. The FCG is 7210S. UEPH also includes trainee assets. The FCG is 7218P.

New construction projects in the FY 91 - FY 95 Military Construction or Army Family Housing Program are counted as existing assets.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Permanent spaces.

6. **EQUATION:** UOPH spaces + UEPH spaces.

7. **ATTRIBUTE SCORING:** Number of spaces - higher number results in a better ranking.

AVERAGE AGE OF FACILITIES

1. **DEFINITION:** Average age of all existing facilities on the installation.

2. **PURPOSE:** Average facility age is an indicator of the overall quality and condition of the facilities on the installation.

3. **METHODOLOGY:** Historical data of construction completion dates used to calculate the age of all permanent facilities on the installation.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Average (mean) age per square foot.

6. **EQUATION:**

$\sum$(***SQ FT X Age of Building***)/***TOTAL INSTALLATION SQRFT***

7. **ATTRIBUTE SCORING:** Lower number (ie. lower age) results in a better score.

BASOPS/MISSION POPULATION

1. **DEFINITION:** Measure of the base operations (BASOPS) cost required to support mission population.

2. **PURPOSE:** To measure the relative cost of operating an installation in support of the mission requirements. This provides a relative cost factor used to assess the relative cost of operations of an installation.

3. **METHODOLOGY:** Report total Base Support cost data (RPMA payroll, RPMA Non-payroll, Base Communication Costs, BASOPS Payroll/Non-payroll) for each installation. Data provided should include all known costs paid for operation and support including reimbursable and RDTE. The total mission population supported is obtained from the Base Operations Support Mission Model (BOSMM) supported by USAFISA. Additionally, any government workspace provided to mission contractors will be included (do not include contractors providing base support functions).

4. **REFERENCES:**

a. Base Operations Support Manpower Model (BOSMM) for "mission" personnel.

b. Installation data validated by MACOMS for Total Base Support costs.

5. **UNIT OF MEASURE:** Dollars per mission population.

6. **EQUATION:** Total Base Support Costs/Total Mission Population.

7. **CRITERION SCORING:** The lower value results in a better ranking.

BARRACKS(UPH) AND FAMILY HOUSING

1. **DEFINITION:** Number of permanent, adequate barracks and family dwelling units (on and off-post).

2. **PURPOSE:** To measure the total availability of living quarters for unaccompanied officer, permanent party enlisted personnel, married/single parent soldiers and their families.

3. **METHODOLOGY:** Army Family Housing (AFH) information is obtained from the installations' segmented housing market analysis and adjusted with FY 90 Census and local installation data, DD Form 1523, Military Family Housing Justification, and DD 1410 Family Housing Inventory and Occupancy Report (validated by DAIM-FDH-M) by using HQRPLANS. Family housing assets in HQRPLANS include both government controlled assets and the installation's expected share of local economy assets. FCGs for family dwelling units are 7110F for on-post and (TBD) for off-post.

Unaccompanied Officer Personnel Housing (UOPH) is measured by the total number of permanent unaccompanied officer housing spaces available on the installation. The FCG is 72400.

Unaccompanied Enlisted Personnel Housing (UEPH) is measured by the total number of permanent enlisted member housing spaces on the installation. On-post available spaces are measured at no more than two persons per room at 90 NET square feet per person . The FCG is 7210S. UEPH also includes trainee assets. The FCG is 7218P. New barracks and AFH construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing spaces on the installation.

4. **REFERENCES:** AR 415-15, AR 210-50, March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Family housing in dwelling units.
UOPH and UEPH in spaces.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Higher number results in a better ranking.

CAPACITY - MAINTENANCE

1. **DEFINITION:** The amount of workload, expressed in direct labor hours, that a facility can accommodate with all work positions manned on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

2. **PURPOSE:** To measure the available maintenance capacity at the installation.

3. **METHODOLOGY:** See Equation below.

4. **REFERENCES:** Depot Maintenance Capacity Utilization Report. Computed IAW Revised DOD 4151.15H.

5. **UNIT OF MEASURE:** Direct Labor Manhours.

6. **EQUATION:** Production\maintenance capacity.

Maximum Number of Available Production Line Workstations
X 1615 Productive Hours
X 95 percent of the Total Hours (Availability Factor)
Total Direct Labor Hours Available

7. **CRITERION SCORING:** A larger number is a better score.

BUILDABLE ACRES

1. DEFINITION: This measures the ability of the installation to expand within its current property line in accordance with accepted master planning policy and guidance as reflected on the long range component of the approved installation master plan. The result is the total acreage available for construction of additional facilities on the installation.

2. PURPOSE: Measure the installation's capacity to support additional permanent structures.

3. METHODOLOGY:

a. In accordance with the long range component of the installation master plan, identify areas compatible with new development, such as areas zoned for Administration, housing, industrial, maintenance, supply or storage, or community facilities, that are not currently filled with permanent facilities. Areas such as maneuver/training ranges, impact areas, safety fan areas, required buffer areas, and environmentally sensitive ares <u>will not be considered</u> for expansion construction under this methodology.

b. Measure the total number of available acres which then could be used for locating permanent new mission structures. Areas lacking current utility support or where there are under-utilized or un-utilized wood facilities should be considered for expansion construction. Exclude acreage to be used for construction through FY95.

4. REFERENCES: Installation analysis of MACOM approved master plan.

5. UNIT OF MEASURE: Acres.

6. EQUATION: Not Applicable.

CAPACITY - SUPPLY

1. **DEFINITION:** The square footage of warehouse space for the storage of items other than ammunition and bulk fuel.

2. **PURPOSE:** To measure the warehouse storage capacity of the installation.

3. **METHODOLOGY:** Rating is based on data obtained from referenced management report for general purpose warehouses, both heated and unheated. The extracted data is listed as warehouse total, net space total.

4. **REFERENCES:** AMC Storage Space Management Report, (RCS DRCMM-328), dated 30 Sep 90.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Gross storage space - (Aisles & Structural Loss & Support) equals net available storage space.

7. **CRITERION SCORING:** A larger number is a better score.

CAPACITY - PRODUCTION

1. **DEFINITION:** The amount of workload, expressed in actual direct labor hours, that a facility can accommodate with all work positions manned on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

2. **PURPOSE:** To measure the available production capacity at the installation.

3. **METHODOLOGY:** See equation below.

4. **REFERENCES:** Computed IAW Revised DOD 4151.15H.

5. **UNIT OF MEASURE:** Direct Labor Manhours.

6. **EQUATION:** Production capacity.

Maximum Number of Available Production Line Workstations
X 1615 Productive Hours
X 95 percent of the Total Hours (Availability Factor)
Total Direct Labor Hours Available

7. **CRITERION SCORING:** A larger number is a better score.

DEPLOYMENT NETWORK

1. **DEFINITION**: The distance from installation to its critical deployment structure: airfields, ports, railheads and interstate highways.

2. **PURPOSE:** To evaluate installation's capability to support deployments, which is an important element in projecting land forces to locations outside the United States.

3. **METHODOLOGY:** The distances (in miles) from installation to interstate highway, railhead, C-141/747 capable airport and Ocean vessel capable seaport. A Decision Pad submodel is used giving each factor the following weights:

Distance to Facility	Points
Railhead	30
Airport	30
Seaport	30
Highway	10
Total	100

4. **REFERENCES:** FORSCOM Mobilization Expansion Capability Worksheet, TRADOC Pam 210-2, and MACOM validation. Air field distance will be validated by the installations USAF (Air Combat Command) Liaison Officer.

5. **UNIT OF MEASURE:** Miles.

6. **EQUATION:** This rating is determined by using a Decision Pad submodel.

7. **ATTRIBUTE SCORING:**

For submodel: A lower number (for distance) is a higher score.

For main model: A higher value results is a better score.

COST OF LIVING INDEX

1. **DEFINITION:** Measure the relative cost of living at each installation.

2. **PURPOSE:** To measure the relative cost of living for military and civilian personnel in communities surrounding the installation. This is an indicator of location costs to the Army to live and conduct business at the installation.

3. **METHODOLOGY:** Used the information from the American Chamber of Commerce Research Association (ACCRA) Cost of Living Index for 1993. The index measures the relative price levels for consumer goods and services based on local community input. The cost index is selected directly from the table if installation is located within a 50 mile radius of the Metropolitan Statistical Areas (MSAs), Primary Metropolitan Statistical Areas (PMSAs) or Non-metropolitan Areas as defined by the Office of Management and Budget on December 28, 1992. In cases were the installation is not included in the ACCRA report, a linear relationship will be used to predict the COL Index using the VHA factor.

4. **REFERENCES:** ACCRA Cost of Living Index, 1993.

5. **UNIT OF MEASURE:** Each community index is read as a percentage of the average for all places surveyed with the average equal to 100.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** Lower index results in a higher ranking.

ENVIRONMENTAL CARRYING CAPACITY

1. **DEFINITION:** Composite consideration of various environmental factors.

2. **PURPOSE:** Measure the ability of the Army to conduct current missions, receive additional units and expand operations in light of environmental constraints.

3. **METHODOLOGY:** This is a measure of the following aspects of environmental carrying capacity:

FACTOR	WEIGHT
Archaeology & Historic Buildings	5
Endangered Species	15
Wetlands	15
Air Quality	10
Water Quality	15
Noise Quality:	
Zone II off post	10
Zone III off post	15
Contaminated Sites	15
Total	100

4. **REFERENCES:** The most recent reference as identified for each factor.

5. **UNIT OF MEASURE:** Composite index. A sub-model is used with the factors defined as:

Archeology/Historic Buildings Factor = A/B

A = (Number of sites/structures listed on the National Register(NR)) + (Number of sites determined eligible or potentially eligible for the NR)
B = Total installation acres.
DATA Sources: Installation Cultural Surveys, Installation environmental office, National Register (NR), Installation Historic Preservation Plan, Installation EIS, SHPO.

Endangered Species Factor = Number of endangered and threatened

ENCROACHMENT

1. **DEFINITION:** Population density of the surrounding area to the installation.

2. **PURPOSE:** This is a measure of encroachment on the installation as a function of population density (population/square mile).

3. **METHODOLOGY:** Weighted Average of population density of the Region of Influence as identified by the BRAC Economic Impact model (This area is generally the county or counties surrounding the installation or the Metropolitan Statistical Area (MSA)). The rationale is the lower the population density around the post, the easier it will be to expand mission activity without impacting the surrounding community.

4. **REFERENCES:** 1990 Summary of Population and Housing Statistics, U.S. Department of Commerce, Bureau of the Census.

5. **UNIT OF MEASURE:** Population per square mile.

6. **EQUATION:** None.

7. **ATTRIBUTE SCORING:** Number - lower value results in better ranking.

EXCESS CAPACITY - MAINTENANCE

1. **DEFINITION:** Maintenance plant capacity that is excess to utilized and surge requirements expressed in thousands of square feet.

2. **PURPOSE:** To measure the maintenance capacity in square feet that is currently available for expansion at an installation. Excess Capacity is a direct measurement of the expandability of the installation. It provides value for mobilization as well as the capability to receive additional missions.

3. **METHODOLOGY:** Total maintenance square feet minus utilized square feet (200 series EEA facilities) at an installation.

4. **REFERENCES:** DOD 4151.15H, AR 750-2, AMC-R 750-28, March 1994 HQRPLANS and Installation data.

5. **UNIT OF MEASURE:** Thousands of gross Square feet.

6. **EQUATION:** NA

7. **CRITERION SCORING:** A higher value is a better score.

species (plant or animal) present on the installation.

DATA Sources: Installation biological surveys, Installation Master Plan NEPA document or equivalent, Installation Environmental Office.

Wetlands Factor = A/Total Installation Acres

A = Total wetlands acreage.

DATA Source: Installation wetlands inventory, National wetlands inventory, Installation master plan NEPA document or equivalent.

Air Quality Factor =

1 if air quality region is in attainment.
10 if air quality region is not in attainment.

DATA Source: AEHA surveys, Installation master plan NEPA document or equivalent, Installation Air Quality inventory.

Water Quality Factor = Number times the installation has exceeded the parameters of the NPDES permits during FY 1992.

DATA Source: Installation Environmental office, Installation Master plan NEPA document or equivalent.

Noise Quality Factor = Total area (acres) of AICUZ/ICUZ zones II and/or III that extend offpost.

DATA Sources: Installation Master plan NEPA document or equivalent, Installation ICUZ/AICUZ.

Contaminated Sites Factor = A+B

A = Total number of IRP sites
B = Total number of NPL sites

DATA Sources: USATHAMA surveys, Installation environmental office.

6. **ATTRIBUTE SCORING:** Composite number larger value is a better score.

EXCESS CAPACITY - STORAGE

DEFINITION: Total unused square footage of warehouse space for the storage of items other than ammunition and bulk fuel.

2. **PURPOSE:** To measure the warehouse capacity that is currently unused at an installation. Indicates the capability of an installation to expand supply support in support of surge/mobilization.

3. **METHODOLOGY:** Summation of the square footage based on data obtained from referenced management report for general purpose warehouses, both heated and unheated. Utilized storage space is subtracted from the total to provide a vacant bulk, warehouse total.

4. **REFERENCES:** HQRPLANS March 94. FCGs 44100 (Depot Storage) and 44200 (Installation Storage).

5. **UNIT OF MEASURE:** Thousands of gross Square feet.

6. **EQUATION:** Total Warehouse space minus the utilized warehouse space.

7. **CRITERION SCORING:** A larger number is a better score.

EXCESS CAPACITY - PRODUCTION

1. **DEFINITION:** Industrial Production plant capacity that is excess to utilized and surge requirements expressed in production facility square feet.

2. **PURPOSE:** To measure the production capacity in square feet that is currently unused at an installation.

3. **METHODOLOGY:** Excess Capacity is a direct measurement of the expandability of the installation. It provides value for mobilization as well as the capability to receive additional missions.

4. **REFERENCES:** Data call.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Total production square feet minus utilized square feet (200 series and 300 series EEA facilities) at an installation.

7. **CRITERION SCORING:** A higher value is a better score.

FAMILY HOUSING COST PER DWELLING UNIT (DU)

1. **DEFINITION:** Measure of the cost to maintain one set of family quarters at each installation.

2. **PURPOSE:** This attribute compliments the VHA Attribute. Together they provide an assessment of relative cost for housing a family at the installation.

3. **METHODOLOGY:** Number of on-post housing units as reported in HQRPLANS (March 1994). Cost information provided by the STANFINS 218 Report. Values generated by dividing an installation's average AFH Operations (AFHO) costs for three fiscal years (91,92,93) by the number of AFH units.

4. **REFERENCES:** March 1994 HQRPLANS and annual cost data from Resource Directorate for FY 91,92,93.

5. **UNIT OF MEASURE:** Dollars per AFH unit.

6. **EQUATION:** (AFHO obligations FY 91 + AFHO obligations FY 92 + AFHO obligations FY 93)/3 = average AFHO costs/AFH units = Dollar cost per AFH unit.

7. **CRITERION SCORING:** Lower number results in better ranking.

FAMILY HOUSING

1. **DEFINITION:** Number of permanent, adequate family dwelling units (on and off-post).

2. **PURPOSE:** To measure the total availability of living quarters for married/single parent soldiers and their families.

3. **METHODOLOGY:** Family Housing (AFH) information is obtained from the installations' segmented housing market analysis and adjusted with FY 90 Census and local installation data, DD Form 1523, Military Family Housing Justification, and DD 1410 Family Housing Inventory and Occupancy Report (validated by DAIM-FDH-M) by using HQRPLANS. Family housing assets in HQRPLANS include both government controlled assets and the installation's expected share of local economy assets. FCGs for family dwelling units are 7110F for on-post and (TBD) for off-post.

AFH construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing spaces on the installation.

4. **REFERENCES:** AR 415-15, AR 210-50, March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Total number of family dwelling units.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Total number of family housing dwelling units - higher number results in a better ranking.

HEALTH CARE INDEX

1. DEFINITION: Capitation Cost per Beneficiary (CCB) is the per capita funding a medical treatment facility (MTF) requires to provide all necessary medical care to the beneficiary population served by the MTF. This is not a measure of quantity of services delivered or MTF capacity.

2. PURPOSE: This is a measure of the effective use of health care dollars on a capitation basis. All future MTF funding will be capitation based.

3. METHODOLOGY: The following is a general methodology. For each MTF: Compute total direct and reimbursable health care cost then divide by the Total Beneficiary Population. The calculated score for each facility is assigned a rank order.

4. REFERENCES:
a. Operations and Maintenance, Defense (OMD) data obtained from the baseline FY93 Resource Summary.
b. Military pay (MP) is computed from the MED 87 Strength Report costed at the civilian replacement value.
c. CHAMPUS Cost (CC) is provided in the CHAMPUS Catchment Area Billing Report.
d. Total Beneficiary Population (TBP) is the beneficiary population within a 40 mile catchment area; Army Stationing and Installaton plan and Defense Medical Information System (DMIS) data for FY 93.

5. UNIT OF MEASURE: Dollars per eligible beneficiary translated into rank order.

6. EQUATION: (OMD + MPE + CC) / TBP = FY 93 CAPITATION RATE

7. CRITERION SCORING: Rank order value. A lower rank is a better score.

GENERAL INSTRUCTIONAL FACILITIES

1. **DEFINITION:** Total square footage of permanent general training and instructional facilities on the installation.

2. **PURPOSE:** Measure the in-place capability of the installation to conduct training by considering general purpose training facilities available.

3. **METHODOLOGY:** Summation of the square footage of all general-purpose training facilities.

Facility Category Group: 17120 (General Instructional Building) New construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing assets.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Square foot.

6. **EQUATION:** As above.

7. **ATTRIBUTE SCORING:** Total square footage--higher number results in a better score.

INFORMATION MISSION AREA (IMA)

1. **DEFINITION:** Evaluation of existing IMA systems. The IMA systems to be evaluated are common user Telephone Switching System, Outside Cable Plant, Computers, Telecommunications Center (TCC), Local Area Network (LAN), Defense Data Network (DDN) Node, Video Teleconference (VTC).

2. **PURPOSE:** Evaluate IMA systems on the basis of available capacity, capability for expansion, and technology utilized.

3. **METHODOLOGY:** Utilized a questionnaire completed by the Installation Director of Information Management.

4. **REFERENCES:** Installation data Call. MACOM DCSIM staff validation of installation input.

5. **UNIT OF MEASURE:** As given in the table below.

6. **EQUATION:** A Decision Pad submodel is used.

IMA CATEGORY	SCORING	TOTAL
A. TELEPHONE SWITCHING		
1. Is Main DCOs digital switch? (if analog, go to Category B)	Yes = 5	
2. Percentage of Fill (Entire digital switch system)	<70%= 5 70-90%= 3 >90%= 1	
3. Lines (Equipped)	>5,000 = 5 2,500-5,000 = 3 <2,500 = 1	
4. Lines (Expandable To)	>10,000 = 5 5,000-10,000= 3 < 5,000 = 1	
	CATEGORY WEIGHT: 25 POINTS X TOTAL _____	

[redacted]

IMPACT ACRES

1. **DEFINITION:** Measures the size and capability of the land used for range impact area by the installation.

2. **PURPOSE:** This is an indication of the installation's range capacity to support the conduct of weapons familiarization, qualification, crew gunnery, and combined arms live fire training. The larger and more capable impact areas provide more range capacity on the installation.

3. **METHODOLOGY:** Impact areas are evaluated using a D-Pad submodel measuring and ranking the following for each post: number of impact acres, ability to conduct a Joint Air Attack Team exercise, and the ability of the installation's ranges to support firing the MLRS with training munitions.

4. **REFERENCES:** MACOM/installation data call. Installation Range Regulations.

5. **UNIT OF MEASURE:** Composite Number. A Decision Pad submodel is used with the following weights given to each sub-element:

Impact Acres (total acres)			60 points
If:			
Air Force Bombing Capable	(Y/N)	yes =	5 points
Attack Helicopter Capable	(Y/N)	yes =	5 points
Tube Artillery Capable	(Y/N)	yes =	5 points
ALL=YES			15 points
MLRS Capable	(Y/N)		10 points
	Total		100 points

6. **EQUATION:** This rating is determined by using a Decision Pad submodel.

7. **ATTRIBUTE SCORING:**

For submodel: Impact Acres--A larger number is a better score.
Other measures--Yes is better.

For main model: A higher value results in a better ranking.

D. DSN/DDN Node (Choose 1 only)		
DSN MILNET DISNET SCINET	Yes = 5 Yes = 5 Yes = 5 Yes = 5	
	CATEGORY WEIGHT: 5 POINTS X TOTAL _____	

E. Post Wide Band/DAN		
	Fiber Optic Yes = 5 Other Yes = 3	
	CATEGORY WEIGHT: 15 POINTS X TOTAL _____	

F. COI		
1. GENSER (Choose only 1)	AMS, DINAH, or FAST = 5 SRT = 3 DCT9000 or Mod 40 = 2 Courier Svc/Other = 1 None = 0	
2. DSSCS (Choose only 1)	Assist = 5 DCT9000 or Mod 40 = 3 Courier Svc/Other = 1 None = 0	
3. AMME or ASC	Yes = 5	
4. Comm. Secure Processor (CSP)	Yes = 5	
	CATEGORY WEIGHT: 5 POINTS X TOTAL _____	

G. VTC		
VTC facility	Yes = 3	
	CATEGORY WEIGHT: 15 POINTS X TOTAL _____	
	TOTAL Score	

7. **ATTRIBUTE SCORING:** A Higher number is a better score.

1. OSCAR Implementation Phase (Choose only 1)	Phase 3 Complete = 5 Phase 2 Complete = 3 Phase 1 Complete = 1	
2. Cable Type (Choose only 1)	Fiber Backbone (DS3 MUX Rate) = 5 Mixed = 3 Copper = 1	
3. Percentage of Fill	<50% = 5 50-75% = 3 76-100% = 1	
	CATEGORY WEIGHT: 20 POINTS X TOTAL _____	
C. COMMON USER MAINFRAME SUPPORT		
1. Mainframe (Choose 1 only, the highest available technology - equivalent to IBM Model)	IBM 3090 = 5 IBM 4381 = 4 IBM 4341 = 3 IBM 4361 = 2 IBM 4331 = 1	
2. Total MIPS	> 10 MIPS = 5 7-10 MIPS = 4 4-6 MIPS = 3 1-3 MIPS = 2	
3. ASIMS	RDC = 5 DPC = 3	
4. E-Mail (Choose 1)	Sperry/MMDF = 5 Other E-Mail = 3 No E-Mail Host = 0	
5. Front End Processor (FEP)	Yes = 5	
6. Super Computer	Yes = 5	
	CATEGORY WEIGHT: 15 POINTS X TOTAL _____	

INSTALLATION AND BASE OPERATING EXPENSE (IBOE)

1. **DEFINITION:** IBOE is a measure of the BASOPS support required for execution of an installation's base support mission.

2. **PURPOSE:** To measure the overall economic indicator concerning the long-term BASOPS operational cost to retain an installation. This is one of a series of factors used to assess the relative cost of operation of an installation.

3. **METHODOLOGY:** Under the Defense Business Operations Fund (DBOF), cost accrual accounting systems are required to produce the actual cost of the product to the customer. This factor is an identifiable cost associated with the production/maintenance facility DBOF stabilized rate used to bill costs to DBOF customers.

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Dollars per Direct Labor Hour.

6. **EQUATION:** Summation of all installation and base operations expense divided by the Direct Labor Hours at 85% capacity utilization.

7. **CRITERION SCORING:** A smaller value is a better score.

INFRASTRUCTURE

1. **DEFINITION:** Capacity of water, sewage treatment, electrical distribution and cost of land fill.

2. **PURPOSE:** To measure the infrastructure capacity of the installation.

3. **METHODOLOGY:** Four aspects are considered:

a. Water: Capacity in terms of million gallons per day.
b. Sewage treatment: Capacity in terms of million gallons per day.
c. Electrical distribution: Capacity in terms of million kilowatt hours.
d. Land fill: Cost of land fill used by the installation in dollars per short ton (on or off post), determined based upon historical records.

Measures a,b,c should incorporate any new infrastructure capacity resulting from projects included in the FY 91 - FY 95 military construction program.

4. **REFERENCES:** Installation and MACOM engineer analysis based on the installation master plan (utilities analysis report). Lacking the installation master plan, the DEH utilities division will provide the information.

5. **UNIT OF MEASURE:** As described in methodology above.

7. **ATTRIBUTE SCORING:**

For submodel: Water, Sewage treatment, electrical distribution - A larger number is a better score. Land fill--A smaller cost is a better score.

For main model: A higher value results in a higher ranking.

MAINTENANCE FACILITIES

1. **DEFINITION:** Maintenance facilities are defined as the total permanent square footage of maintenance (aviation and vehicle) facilities on the installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent maintenance facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of maintenance facilities for the Essential Elements of Analysis (EEA) and Facility Category Groups (FCG) shown below:

EEA	EEA DESCRIPTION	FCG	FCG DESCRIPTION
210	AVIATION MAINT	21110	MNT HANGAR AVUM
		21111	MNT HANGAR AVIM
214	VEHICLE MAINT	21407	NG MAINT FAC
		21409	AR MAINT FAC
		21410	VEH MNT SH ORG
		21420	VEH MNT SHOP DS
		21800	SP PURP MNT SHP
		21900	MNT INST O&R

New construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing assets.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Square Feet - higher number results in a better ranking.

LOCALITY PAY FACTOR

1. **DEFINITION:** The relative differences in cost of civilian work force at each installation.

2. **PURPOSE:** To measure the relative cost of labor -- not cost of living -- from one geographical area to another. This is a measure of the relative cost of labor to the Army at the installation.

3. **METHODOLOGY:** Used the Locality-Based Comparability Payments for General Schedule employees. In high cost areas (NYC, San Francisco, Los Angeles) the index used will be 1.08 as established by the Federal Employees Pay Comparability Act of 1990. 1.08 index will also be used for Hawaii and Alaska since these areas receive COLA and not a locality pay amount.

4. **REFERENCES:** Locality-Based Comparability Payments Tables

5. **UNIT OF MEASURE:** Locality-Based Comparability Payment Index expressed as a percentage.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** Index from source tables -- lower index results in a higher ranking.

MANEUVER ACRES

1. **DEFINITION:** The net total acreage of the installation available for maneuver and training.

2. **PURPOSE:** To measure the overall land size of the installation available for maneuver and field training which is an important element in stationing and training land forces. This is one of several factors used to assess the relative size of installations.

3. **METHODOLOGY:** Summation of the total maneuver acreage identified in HQRPLANS as verified by MACOMs and validated by installations. Maneuver acreage will include only land used as maneuver and training area. Impact areas, cantonment areas, ranges, off limits areas, and environmentally sensitive areas that are considered unusable will not be included. Maneuver rights areas will be included in computations at a value of one half of the value of Army-Owned Acres.

4. **REFERENCES:** HQRPLANS, MACOM input with installation validation. A current (FY94) Memorandum of Agreement (MOA) that allows maneuver and field training is required to claim maneuver rights acres.

5. **UNIT OF MEASURE:** Thousands of acres.

6. **EQUATION:** Army-Owned Maneuver Acres + 1/2 * (Maneuver Rights Area Acres).

7. **ATTRIBUTE SCORING:** Larger number of acres results in a better score.

MAINTENANCE FLEXIBILITY

1. **DEFINITION:** Maintenance flexibility is the ability to perform maintenance on a variety of different commodities.

2. **PURPOSE:** To measure a plant's maintenance flexibility which enables maintenance capabilities to be changed as demands change for different products and the ability to absorb varied workloads.

3. **METHODOLOGY:** Maintenance capabilities considered range from a single commodity to the full range of maintenance for all items of Army equipment. Inflexible capability refers to the inability to convert from one product line to another without a major conversion effort. This attribute will be measured by assigning points to each of the 13 Commodity areas categorized in the Depot Maintenance Requirements database (OP-29). Points will be assigned to each commodity and weighted based on a subjective evaluation of the relative facilitization required to repair each commodity. Depots will receive a corresponding value for each of the commodities that are included in their current workload and for commodities that could be repaired with no additional facilitization (except DMPE).

4. **REFERENCES:** DOD 4251-15H, AR 750-2, AMC-R 750-28, FY96-FY01 POM "OP-29" Database.

5. **UNIT OF MEASURE:** Number of commodities that can be repaired with no additional facililitization (except DMPE).

6. **EQUATION:** A weighted matrix of 13 commodities.

7. **CRITERION SCORING:** A larger number gives a better score.

MECHANIZED MANEUVER ACRES

1. **DEFINITION:** Measures the largest contiguous acreage of the installation available for maneuver and training of mechanized formations.

2. **PURPOSE:** To measure the largest parcel of land available to the installation for training maneuvers of mechanized forces. This measure places added weight to the maneuver acres that can be used to train mechanized forces.

3. **METHODOLOGY:** Calculate the acreage of the installation's largest contiguous maneuver area as noted on the current training area regulations. A maneuver rights area could be counted when the area is easily accessible to the installation and commonly used for training large mechanized formations. Maneuver acreage will include only land used as maneuver and training area. Impact areas, cantonment areas, ranges, off limits areas, and environmentally sensitive areas that are considered unusable will not be included.

4. **REFERENCES:** Installation data call, Installation Range regulations, March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of acres.

6. **EQUATION:** Not Applicable.

7. **ATTRIBUTE SCORING:** Acres - higher value results in a better ranking.

MCA COST FACTOR

1. **DEFINITION:** Measure of the relative cost factor for construction at an installation.

2. **PURPOSE:** Indicates the relative difference between installations for construction of the same facility. Provides relative index on cost of capital investment for modernization or expansion of facilities. This is one of a series of factors used to access the relative cost of operations of an installation.

3. **METHODOLOGY:** Continental United States (CONUS) Installation Area Cost Factor (ACF) Index values from the Area Cost Factors and Unit Prices for FY 1996-1997.

4. **REFERENCES:** Area Cost Factors and Unit Prices for FY 1996-1997, Department of Defense Facility Construction, 20 August 1993.

5. **UNIT OF MEASURE:** ACF Index Value.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** ACF Index - lower value results in a better ranking.

MISSION OVERHEAD

1. **DEFINITION:** Mission Overhead is a measure of the relative cost of providing production/maintenance capacity. Mission overhead includes, as an example, Production Support Functions, Indirect Labor, Materiel Adjustments, Equipment Management, and Depreciation/Amortization of production equipment and facilities.

2. **PURPOSE:** To measure the overall economic indicator concerning the efficiency of production/maintenance operations of the facility. This is one of a series of factors used to assess the relative cost of operation of an installation.

3. **METHODOLOGY:** Under the Defense Business Operations Fund (DBOF), cost accrual accounting systems are required to produce the actual cost of the product to the customer. This factor is an identifiable cost associated with the production/maintenance facility DBOF stabilized rate used to bill costs to DBOF customers.

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Dollars per Direct Labor Hour.

6. **EQUATION:** Summation of all indirect mission expenses divided by the Direct Labor Hours at 85% capacity utilization.

7. **CRITERION SCORING:** A smaller value is a better score.

MEDICAL RESEARCH FACILITIES

1. DEFINITION: Laboratory activities, Research Facilities. Research facilities must have suitably equipped facilities to operate efficiently.

2. PURPOSE: To measure laboratories and other research facilities used in support of Medical Centers.

3. METHODOLOGY: Assets are determined by summing the square footage from the FCG 3900 series and installation validation.

4. REFERENCES: March 1994 HQRPLANS.

5. UNIT OF MEASURE: Square footage.

6. EQUATION: Summation.

7. CRITERION SCORING: A larger number is a better score.

MOBILIZATION THROUGHPUT

1. **DEFINITION:** Capability of a port installation to expand its support during mobilization or a contingency.

2. **PURPOSE:** Measure ability to load and unload equipment during mobilization or a contingency.

3. **METHODOLOGY:** Measurement of the maximum daily throughput capacity.

4. **REFERENCES:** MTMCTEA Report SE 89-3d-31, Ports for National Defense.

5. **UNIT OF MEASURE:** Measurement Tons per day.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** A higher value results in a higher rating.

MOBILIZATION CAPABILITY

1. **DEFINITION:** Capability of an installation to support the reconstitution of forces through the ability to billet, train, and deploy soldiers.

2. **PURPOSE:** To measure an installation's capacity to train, equip and deploy units in a time of national emergency. The Army's "Mobilization Stationing Strategy and Requirements Study" identified five critical mobilization attributes that an installation should possess: (1) billeting; (2) deployment network; (3) maintenance facilities; (4) ranges and training; and (5) geographic dispersion.

3. **METHODOLOGY:** A Decision Pad submodel is used with the following weights given to each sub-element:

MEASURE	Points
Mobilization billets	10
Deployment Network	10
Ranges	10
Net Maneuver Acres	10
Contiguous Maneuver Acres	10
Work Space	10
Total	60

4. **REFERENCES:**

a. DA PAM 210-7 for housing criteria; AMOPS Annex N. MACOM Reports (TRADOC-ATEN-24 Report, FORSCOM J-3 Installation Capability Spreadsheet).

b. Mobilization data will be obtained from MACOM mobilization planners using Army Mobilization Operations Planning System (AMOPS) data as of 1 AUG 92 and will be verified at the installation level.

5. **UNIT OF MEASURE:** Mobilization Billets are measured in spaces. Other IA attributes are measured as defined.

6. **EQUATION: NA**

7. **ATTRIBUTE SCORING:** A higher value is a better score.

NORMAL THROUGHPUT

1. **DEFINITION:** Normal throughput capacity is the average material, cargo and equipment that can be loaded and unloaded a daily basis.

2. **PURPOSE**: Measure a ports capability to load and unload material and equipment.

3. **METHODOLOGY**: Use the Average measurement tons per day throughput capacity as given by the referenced report.

4. **REFERENCES:** MTMCTEA Report SE 89-3d-31, Ports for National Defense.

5. **UNIT OF MEASURE**: Measurement Tons per day.

6. **EQUATION:** None.

7. **ATTRIBUTE SCORE:** A larger number is a better score.

OPS/ADMIN FACILITIES

1. **DEFINITION:** Total square footage of permanent facilities used for operational/administrative functions.

2. **PURPOSE:** To measure the installation capacity for providing permanent general purpose administrative and operational facilities. This is one of several factors used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total square feet of an installation's permanent operations/administrative facilities for the Essential Elements of Analysis (EEA) and Facility Category Groups (FCG) shown below:

EEA	EEA DESCRIPTION	FCG	FCG DESCRIPTION
141	UNIT OPS BLDGS	14112	AV UNIT OPS BLDG
140	OPERATIONS	14110	AF OPS BLDG
650	ADMINISTRATION	14182	BDE HQ BLDG
		14183	BN HQ BLDG
		14185	CO HQ BLDG
		61050	GEN PURPOSE ADMIN

New construction projects, funded in the FY 91 - FY 95 Military Construction Program are counted as existing assets.

4. **REFERENCES:** HQRPLANS and installation validation.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** Square Feet - higher value results in a better ranking.

PERCENT PERMANENT FACILITIES

1. **DEFINITION:** Total square footage of all existing permanent buildings divided by total installation facilities square footage. This is a quality measure to reflect construction investment and WWII Wood elimination.

2. **PURPOSE:** To indicate the overall quality of the installation's facilities. The age of facilities is an indirect measurement of the quality of the installation's facility structure. Newer buildings are more comfortable, economical and safer than old buildings.

3. **METHODOLOGY:** Used total square footage of all existing permanent buildings divided by total installation facilities square footage. Projects in the FY 91 - FY 95 Military Construction Program are counted as existing permanent assets.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Percent.

6. **EQUATION:** As above.

7. **CRITERION SCORING:** Percent number - higher number results in a better ranking.

PATIENT CARE FACILITIES

1. **DEFINITION:** The total space used for patient care at a medical treatment facility.

2. **PURPOSE:** To measure an MTFs ability to treat and care for patients.

3. **METHODOLOGY:** Summation of all space used for patient treatment. EEAs include .....

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** A larger number is a better score.

PRODUCTION FLEXIBILITY

1. **DEFINITION:** Production flexibility is the ability to produce a variety of different commodities.

2. **PURPOSE:** To measure a plant's production flexibility which enables maintenance capabilities to be changed as demands change for different products and the ability to absorb varied workloads.

3. **METHODOLOGY:** Production capabilities considered range from a single commodity to the full range of maintenance for all items of Army equipment. Inflexible capability refers to the inability to convert from one product line to another without a major conversion effort. This attribute will be measured by assigning points to each of 12 Commodity areas (Aircraft, Automotive, Combat Vehicles, Construction, Communications/Electronics, Missiles, Watercraft, Munitions, Weapons, Rail, General Equipment, and Other). Points will be assigned to each commodity and weighted based on a subjective evaluation of the relative facilitization required to produce each commodity. Industrial facilities will receive a corresponding value for each of the commodities that are included in their current workload and for commodities that could be repaired with no additional facilitization (except DMPE).

4. **REFERENCES:** Data Call.

5. **UNIT OF MEASURE:** Number of commodities that can be produced with no additional facililitization (except DMPE).

6. **EQUATION:** A weighted matrix of 12 commodities.

7. **CRITERION SCORING:** A larger number gives a better score.

PIERS AND WHARVES

1. **DEFINITION:** Deep water accessibility and sufficient water at pier side at mean low tide to permit loading of vessels.

2. **PURPOSE:** To determine the capacity of the terminal to perform its mission.

3. **METHODOLOGY:** Developed three factors to describe the pier structure of a Port facility:

Measurement of water depth: Water depth measured in feet Actual water depth data maintained by HQMTMC Engineer.

Type vessels Accommodated:		
	RORO	yes = 5 pts
	LOLO	yes = 5 pts
	Container	yes = 5 pts
	Heavy Lift	yes = 5 pts

Length of Pier in feet: Data maintained by HQMTMC Engineer.

4. REFERENCES: Stated in methodology, plus installation data call.

5. **UNITS OF MEASURE:** Feet, yes/no.

6. **EQUATION:** D-pad sub-model is used with the following weights.

WATER DEPTH	40 points
TYPE VESSELS	20 points
LENGTH OF PIER	40 points

7. **ATTRIBUTE SCORING:** Higher value results in a higher rank.

RANGES

1. **DEFINITION:** The total number of firing points equipped with the Remote Target System (RETS), the number of Multi-Purpose Range Complexes (MPRC) and the availability of a standard design MOUT range and total number of ranges are weighted and combined to provide a measure of the overall capability of the installation's range structure.

2. **PURPOSE:** To evaluate the capability of the installation to support range operations such as qualification and live fire exercises.

3. **METHODOLOGY:** A Decision Pad submodel is used with the following weights given to each sub-element:

NUMBER OF MPRC RANGES		45 points
NUMBER OF RETS EQUIPPED FIRING POINTS		45 points
STANDARD MOUT RANGE AVAILABLE?	YES =	5 POINTS
TOTAL NUMBER OF RANGES		5 points
Total		100 points

4. **REFERENCES:** March 1994 HQRPLANS, validated TRAINLOAD data and installation data call as applicable.

5. **UNIT OF MEASURE:** All ranges, MPRC, and RETS equipped ranges are measures in eaches. All ranges counted must be in operational condition and used for weapons firing.

6. **EQUATION:** NA

7. **ATTRIBUTE SCORING:**

For submodel: A higher number is a better score.

For main model: The submodel rating is the input and a higher value results in a higher ranking.

QUANTITY - DISTANCE

1. **DEFINITION:** The quantity of explosives material and distance separation relationships provide defined types of protection. These relationships are based on levels of risk considered acceptable for the stipulated exposures and are tabulated in the appropriate Quantity Distance tables.

2. **PURPOSE:** To determine whether an installation requires waivers due to inadequate buffer zones.

3. **METHODOLOGY:** Specified Quantity-Distance Tables determine whether waivers are required for storage of ammunition. The preferred situation is an installation that can store ammunition without waivers.

4. **REFERENCES:** MSC input based on TM 9-1300-206, DOD 4145.26-M, DOD 6055.9-STD.

5. **UNIT OF MEASURE:** Waivers.

6. **EQUATION:** NA

7. **ATTRIBUTE SCORING:** A no waiver determination indicates that the installation does not require waivers and results in a higher score.

RESERVE TRAINING

1. **DEFINITION:** A measure of support provided by an installation to the Reserve Components, including individual and unit training.

2. **PURPOSE:** To evaluate an installation on available capacity to support Reserve Component units and individuals during peacetime.

3. **METHODOLOGY:** Reserve Component support is evaluated using a Decision Pad submodel measuring and ranking the Annual Training (AT), Inactive Duty Training (IDT). Each of the above factors is measured for each installation. The raw data is used in the model and a weighted average score is calculated for each installation. This score will be calculated by taking a three-year average (FY 91-93).

4. **REFERENCES:** Training data, documented by the installation Director of Reserve Component Support (or its equivalent), and validated at installation level, will be used.

5. **UNIT OF MEASURE:**

   a. Annual Training is measured in number of personnel.
   b. Inactive Duty Training is measured in Mandays.

6. **EQUATION:** A Decision Pad submodel is used with the following weights given to each sub-element:

		WEIGHT
Annual Training (Number of People)		25
Inactive Duty Training (Mandays)		75
	Total	100

7. **ATTRIBUTE SCORING:**

Raw data/number: A higher number is a better score.
For main model: A higher number is a better score.

RESEARCH AND DEVELOPMENT FACILITIES

1. **DEFINITION:** Laboratory activities, environmental control chamber facilities, Research and Development Facilities. R & D facilities must have suitably equipped facilities to operate efficiently.

2. **PURPOSE:** To measure laboratories and other research facilities used in support of material development.

3. **METHODOLOGY:** Assets are determined by summing the permanent square footage from the 300 and 200 series EEAs. This sum is only for the FCGs that are measured in square feet.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** Higher number is a better score.

SPECIAL CARGO CAPABILITY

1. **DEFINITION:** Adequacy of the port facility to handle special cargo requirements.

2. **PURPOSE:** To indicate the terminal's ability to provide responsive and timely support to customers during peacetime, mobilization, and wartime.

3. **METHODOLOGY:** Assessment of the capability of the port to handle special cargo.

   a. Hazardous material yes = 50 points

   b. Ammunition yes = 50 points

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Yes/No

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** Higher value is a better score.

SPECIAL AIRSPACE

1. **DEFINITION:** The total cubic area of special use airspace operated by the installation.

2. **PURPOSE:** To measure the overall special use air space of the installation under military control. This is one of several factors used to assess the relative size of the training area(s) controlled by installations.

3. **METHODOLOGY:** The airspace dimensions (longitude, latitude and altitude) identified in the us Army Airspace Master Plan is converted to cubic miles. The result is provided for MACOM and installation verification.

4. **REFERENCES:** US Army Airspace Master Plan and installation validation.

5. **UNIT OF MEASURE:** Cubic miles.

6. **EQUATION:** USMA Math Department Model.

7. **ATTRIBUTE SCORING:** Higher value results in a better ranking.

SUPPLY AND STORAGE FACILITIES

1. **DEFINITION:** Total permanent square footage of Supply and Storage facilities on an installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent storage facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of supply and storage facilities for the following Facility Category Groups (FCG) shown below:

FCG	FCG DESCRIPTION
43200	Cold Storage - Inst
44100	Gen Purp Whse - Dep
44200	Gen Purp Whse - Inst
44230	Cont Hum Whse
44240	Infl Matls Whse
44260	Veh Stor Shed

New construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing assets.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Higher number results in a better ranking.

STAGING AREAS

1. **DEFINITION:** Total Square feet of hard surface area at the terminal used for staging cargo prior to loading on the ship.

2. **PURPOSE:** To determine the terminal's capacity to perform its mission.

3. **METHODOLOGY:** Measurement of hard surface staging square feet.

4. **REFERENCES:** Department of the Army Facilities Engineering and Housing Annual Summary of Operations, Volume III, Installations Performance, FY 92.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** Number. Higher value results in a higher score.

TEST AND EVALUATION FACILITIES

1. **DEFINITION:** Square feet of all test and evaluation facilities and value of all installed test equipment.

2. **PURPOSE:** To measure the ability of an installation to conduct test and evaluation missions.

3. **METHODOLOGY:** A D-Pad submodel is used giving equal weight to facilities and equipment. Facilities assets are determined by summing the square footage from the category code groups listed in 39010 series of HQRPLANS. Equipment assets are determined by summing all equipment (over $100,000 in value) from the TESTFACTS database. Each type of asset is given equal weight.

4. **REFERENCES:** March 1994 HQRPLANS, Current TESTFACTS data w/installation validation.

5. **UNIT OF MEASURE:** Thousands of square feet - Facilities.
Thousands of dollars - Equipment

6. **EQUATION:** Summation

7. **ATTRIBUTE SCORING:** A larger number = a better score.

SUPPORT FACILITIES

1. **DEFINITION:** Facilities providing logistical support for the primary mission.

2. **PURPOSE:** To indicate the capacity of the terminal to provide logistical support.

3. **METHODOLOGY:** Measurement of logistical facilities square footage.

4. **REFERENCES:** 1993 HQRPLANS.

5. **UNIT OF MEASURE:** Square feet in thousands.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORE:** Higher value results in a higher score.

VARIABLE HOUSING ALLOWANCE (VHA) FACTOR

1. **DEFINITION:** Measure of the cost of variable housing allowance for military personnel living off-post.

2. **PURPOSE:** To measure cost of housing military personnel in communities surrounding the installation. This is an indicator of the location cost to the Army for assignment of military personnel to the installation.

3. **METHODOLOGY:** Used the information from the VHA Zip Code Microfiche, distributed to Finance Offices by ASA(FM), for January 1993. Summation of the "with dependents" rate for E5, W3 and 03 as representative of the grades at these installations.

4. **REFERENCES:** 1994 VHA Tables.

5. **UNIT OF MEASURE:** Dollars.

6. **EQUATION:**

E-5 w/dependents
+ W-3 w/dependents
+ O-3 w/dependents
BRAC 95 VHA FACTOR

7. **CRITERION SCORING:** Dollars - the lower value results in a higher rank.

TEST AND EVALUATION RANGES

1. **DEFINITION:** The total number of test and evaluation ranges on the installation and the total impact acres available on an installation.

2. **PURPOSE:** To measure the number and size of test and evaluation ranges on an installation.

3. **METHODOLOGY:** A D-Pad submodel is used giving equal weight to Number and Size of ranges. Number of ranges are determined by summing the total number of individual ranges from the series 371 category code group from HQRPLANS. Size of ranges is determined by the total number of impact acres available on the installation.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Number of ranges - Eaches.
   Size of ranges - Acres.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** A larger number gives a better score.

WORK SPACE

1. **DEFINITION:** Work space is defined as the total permanent square footage of maintenance (aviation and vehicle) facilities and operational/administrative facilities on the installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent maintenance, general purpose administrative and operational facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of operations/administrative and maintenance facilities for the Essential Elements of Analysis (EEA) and Facility Category Groups (FCG) shown below:

EEA	EEA DESCRIPTION	FCG	FCG DESCRIPTION
210	AVIATION MAINT	21110	MNT HANGAR AVUM
		21111	MNT HANGAR AVIM
214	VEHICLE MAINT	21407	NG MAINT FAC
		21409	AR MAINT FAC
		21410	VEH MNT SH ORG
		21420	VEH MNT SHOP DS
		21800	SP PURP MNT SHP
		21900	MNT INST O&R
141	UNIT OPS BLDGS	14112	AV UNIT OPS BLDG
140	OPERATIONS	14110	AF OPS BLDG
650	ADMINISTRATION	14182	BDE HQ BLDG
		14183	BN HQ BLDG
		14185	CO HQ BLDG
		61050	GEN PURPOSE ADMIN

New construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing assets.

4. **REFERENCES:** March 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** NA

7. **CRITERION SCORING:** Higher number is a better score.

ANNEX E

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

SAMPLE FORMAT

ANNEX E - SAMPLE FORMAT

	LAND AND FACILITIES				
	DATA ELEMENT	**FT A**	**FT B**	**FT C**	**FT D**
	OFF POST ADEQUATE FAMILY UNITS (EA)				
	ON POST FAMILY DWELLING UNITS (EA)				
	UOPH (EA)				
	UEPH (EA)				
	AVIATION MAINTENANCE FACILITIES (SQFT)				
	VEHICLE MAINT FACILITIES (SQFT)				
	OPERATIONAL FACILITIES (SQFT)				
	ADMIN FACILITIES (SQFT)				
	% PERMANENT FACILITIES	DA provided			
	AVERAGE AGE OF FACILITIES (YEARS)	DA Provided			
	SEWAGE TREATMENT CAPACITY (MGD)				
	WATER SUPPLY CAPACITY (MGD)				
	ELECTRICAL CAPACITY (MKWHR)				
	SOLID WASTE LANDFILL COSTS ($/TON)				
	HISTORIC SITES (EA)				
	ENDANGERED SPECIES				
	TOTAL INSTALLATION ACRES				
	WETLANDS ACRES				
	AIR QUALITY IN ATTAINMENT (Y/N)				
	WATER QUALITY VIOLATIONS				
	AICUZ ZONE II OFF POST (ACRES)				
	AICUZ ZONE III OFF POST (ACREA)				

SAMPLE FORMAT

BION REQUIREMENTS AND RATIONAL READINES				
TA ELEMENT	FT A	FT B	FT C	FT D
NEUVER ACRES (ARMY OWNED)				
ANEUVER RIGHTS ACRES				
UMBER OF MPRC (EA)				
NUMBER OF RETS EQUIPPED FIRING POINTS (EA)				
STANDARD DESIGN MOUT FACILITY (Y/N)				
TOTAL NUMBER OF RANGES (EA)				
DISTANCE TO RAILHEAD (MILES)				
DISTANCE TO PORT (MILES)				
DISTANCE TO AIRFIELD (MILES)				
DISTANCE TO INTERSTATE HIGHWAY (MILES)				
ANNUAL TRAINING (NUMBER OF PERSONNEL)				
INACTIVE DUTY TRAINING (MANDAYS)				
IMPACT AREA ACRES				
AIR FORCE BOMBING CAPABILITY (Y/N)				
ATTACK HELICOPTER CAPABILITY (Y/N)				
TUBE ARTILLERY CAPABLE (Y/N)				
MLRS PRACTICE MUNITIONS CAPABLE (Y/N)				
MECHANIZED MANEUVER ACRES (ARMY OWNED)				
MECHANIZED MANEUVER ACRES (MANEUVER RIGHTS)				
SPECIAL AIRSPACE (SQ MILES)				
	DA Provided			

ANNEX E - SAMPLE FORMAT

	LAND AND FACILITIES				
	DATA ELEMENT	**FT A**	**FT B**	**FT C**	**FT D**
	OFF POST ADEQUATE FAMILY UNITS (EA)				
	ON POST FAMILY DWELLING UNITS (EA)				
	UOPH (EA)				
	UEPH (EA)				
	AVIATION MAINTENANCE FACILITIES (SQFT)				
	VEHICLE MAINT FACILITIES (SQFT)				
	OPERATIONAL FACILITIES (SQFT)				
	ADMIN FACILITIES (SQFT)				
	% PERMANENT FACILITIES	DA provided			
	AVERAGE AGE OF FACILITIES (YEARS)	DA Provided			
	SEWAGE TREATMENT CAPACITY (MGD)				
	WATER SUPPLY CAPACITY (MGD)				
	ELECTRICAL CAPACITY (MKWHR)				
	SOLID WASTE LANDFILL COSTS ($/TON)				
	HISTORIC SITES (EA)				
	ENDANGERED SPECIES				
	TOTAL INSTALLATION ACRES				
	WETLANDS ACRES				
	AIR QUALITY IN ATTAINMENT (Y/N)				
	WATER QUALITY VIOLATIONS				
	AICUZ ZONE II OFF POST (ACRES)				
	AICUZ ZONE III OFF POST (ACREA)				

ANNEX E - SAMPLE FORMAT

	FUTURE REQUIREMENTS				
	DATA ELEMENT	**FT A**	**FT B**	**FT C**	**FT D**
	MOBILIZATION BILLETS (EA)				
	BUILDABLE ACRES				
	ENCROACHMENT (POPULATION DENSITY)				
	COST AND MANPOWER				
	DATA ELEMENT	**FT A**	**FT B**	**FT C**	**FT D**
	COST OF LIVING INDEX	DA Provided			
	ARMY FAMILY HOUSING COST ($ PER DU)				
	E-5 VHA WITH DEPENDENTS				
	W-3 VHA WITH DEPENDENTS				
	O-3 VHA WITH DEPENDENTS				
	LOCALITY PAY FACTOR				
	BASE SUPPORT COSTS (TOTAL) ($)				
	RPMA NON PAYROLL ($)				
	RPMA PAYROLL ($)				
	BASE SUPPORT (-) PAYROLL ($)				
	BASE SUPPORT NONPAYROLL(-) ($)				
	MISSION POPULATION (PERSONNEL)				
	MILITARY CONSTRUCTION COST FACTOR	DA Provided			

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, DC 20310-0200

REPLY TO
ATTENTION OF

DACS-TAB

26 APR 1994

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Change 1 to HQDA BRAC 95 Installation Assessment (IA) Data Call #1

1. Reference memorandum, HQDA, DACS-TAB, 6 April 1994, Subject: BRAC 95 Installation Assessment Program.

2. This change consists of two sections. The first section is a redline/strikeout version of the 6 April 1994 IA Program Memorandum. It will highlight how and where the changes were made. In the redline/strikeout version changes are recorded in the following manner:

DELETIONS are ~~lined through as shown.~~

ADDITIONS are highlighted as shown.

3. The second section consists of a new BRAC 95 IA Program Memorandum, with changes posted, dated 22 April 1994. The following footer has been placed on each page of the new IA Memorandum:

CHANGE 1 TO BRAC 95 IA PROGRAM (22 APR 94 CHANGES ARE POSTED)

4. Point of contact is MAJ Chuck Fletcher, DACS-TAB, (703) 697-1765/6, DSN 227-1765/6.

2 Encls

MICHAEL G. JONES
COL, GS
Director, The Army Basing Study

ACTION:

COMMANDING GENERAL, U.S. ARMY FORCES COMMAND
COMMANDING GENERAL, U.S. ARMY TRAINING AND DOCTRINE COMMAND
COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND
COMMANDING GENERAL, U.S. ARMY PACIFIC
COMMANDING GENERAL, U.S. ARMY HEALTH SERVICES COMMAND
COMMANDING GENERAL, U.S. ARMY MILITARY DISTRICT OF WASHINGTON
COMMANDING GENERAL, MILITARY TRAFFIC MANAGEMENT COMMAND

SUBJECT: Change 1 to the BRAC 95 Installation Assessment Program

CHIEF OF ENGINEERS
COMMANDANT, UNITED STATES MILITARY ACADEMY

CF:
ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS
ASSISTANT SECRETARY OF THE ARMY FOR FINANCIAL MANAGEMENT
ASSISTANT SECRETARY OF THE ARMY FOR INSTALLATIONS, LOGISTICS AND ENVIRONMENT
ASSISTANT SECRETARY OF THE ARMY FOR MANPOWER AND RESERVE AFFAIRS
ASSISTANT SECRETARY OF THE ARMY FOR RESEARCH, DEVELOPMENT AND ACQUISITION
DIRECTOR OF INFORMATION SYSTEMS FOR COMMAND, CONTROL, COMMUNICATIONS AND COMPUTERS
GENERAL COUNSEL
THE AUDITOR GENERAL
CHIEF OF LEGISLATIVE LIAISON
CHIEF OF PUBLIC AFFAIRS
COMMANDING GENERAL, U.S. ARMY INFORMATION SYSTEMS COMMAND
DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS
DEPUTY CHIEF OF STAFF FOR INTELLIGENCE
DEPUTY CHIEF OF STAFF FOR PERSONNEL
COMMANDING GENERAL, U.S. ARMY INTELLIGENCE AND SECURITY COMMAND
COMMANDING GENERAL, U.S. ARMY SPECIAL OPERATIONS COMMANDDEPUTY
CHIEF OF STAFF FOR LOGISTICS
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
THE SURGEON GENERAL
CHIEF OF CHAPLAINS
THE JUDGE ADVOCATE GENERAL
OFFICE OF THE CHIEF ARMY RESERVE
CHIEF, NATIONAL GUARD BUREAU
DIRECTOR, PROGRAM ANALYSIS AND EVALUATION

b. Accuracy of the data. Corporate Army data bases will be used as directed by Annex D. Any deviation from Army corporate data bases must be documented by the addressees, validated by the HQDA functional proponent and approved by TABS.

c. Completeness of records. Record keeping, although cumbersome and time-consuming, is nonetheless critical to demonstrate a sufficient decision trail. Records of the source data for values used as attributes are required to be maintained. All quantitative assessments will be forwarded with a documentation section which describes, in detail:

(1) actions taken by addressees and/or installations to assure data accuracy in compliance with guidance in above reference and this memorandum;

(2) any <u>specific</u> data limitations;

(3) record keeping procedures used by the action addressees to maintain an audit trail of the IA data.

d. Certification: Data submitted as a result of this or subsequent DA requests must include an accompanying memorandum signed by the reporting Chief of Staff (or equivalent) with the following statement: "The information contained in this report is accurate and complete to the best of my knowledge and belief."

7. To help implement the Army's BRAC 95 management plan and ensure the Army is prepared for potential GAO audits, the Army Audit Agency will visit the action addressees and representative installations to validate the accuracy of the data and adequacy of the decision trail.

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, DC 20310-0200

REPLY TO
ATTENTION OF

DACS-TABS ~~6 April 1994~~

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: BRAC 95 Installation Assessment (IA) Program

~~//BRAC 95 DATA CALL #1//~~

1. References:

a. Memorandum, Chief of Staff United States Army, 21 March 1994, Subject: Base Realignment and Closure (BRAC) 95.

b. Memorandum, Director of Management, 21 March 1994, Subject: Army Preparation for BRAC 95.

2. The Defense Base Closure and Realignment Act of 1990, as amended, provides the Army a means to make needed adjustments to our installation structure. Although the next round of BRAC recommendations is not due to the Defense Base Closure and Realignment Commission (Commission) until March 1995, we must begin the extensive preparation now. The BRAC 95 IA Program is designed to provide the senior Army leadership a measure of the relative value of installations and facilities used by Army organizations. The proponent office for the IA process is the Management Directorate of the Office of the Chief of Staff, Army.

3. This memorandum provides instructions to action addressees concerning the Army's initial BRAC 95 data call. Annex A lists installation categories and the installations included in this request. Annex B identifies the data attributes requested for each installation category. Annex C designates the responsibility for supplying, verifing and certifing each data element. Annex D provides the attribute definitions. Annex E provides a sample format.

4. Request that action addressees provide the required data for each assigned installation listed in Annex A. Data will be submitted in three printed copies and on wordprocessing disk. The suspense date for this data call is **23 May 1994.**

4. The BRAC 95 IA Program requires the development of quantitative data as well as narrative assessments. This memorandum addresses the Army's primary quantitative installation evaluation (formerly called the "Military Value Assessment"). Instructions concerning Installation Narrative and Environmental Assessments will be published NLT 1 May 1994. Additional data calls in support of OSD BRAC 95 study efforts will be addressed separately.

5. All documentation concerning the BRAC 95 IA is considered pre-decisional to the BRAC 95 process and is to be marked and handled as CLOSE HOLD.

6. The Defense Base Closure and Realignment Act of 1990, as amended, requires certification of the accuracy and completeness of all information provided to the Commission and Secretary of Defense. The IA process requires action addressees to provide products to HQDA that will be published in the Army's BRAC recommendations or as reference materials to the Army's BRAC recommendations. Accordingly, the documentation of all IA products must be thorough, accurate and detailed. The following guidelines will be used to ensure that results are supportable and that the certification requirements are met:

a. Consistency in data sources. Standard data sources for the attributes are provided in Annex D - BRAC 95 Attributes. ~~The reference listed as the April 1994 HQRPLANS is the Army corporate HQRPLANS database, version 4.00 dated 4 April 1994, containing the 31 December 1993 HQIFS asset data submitted by the installations and the January 1994 ASIP data based on the SAMMS as of 22 November 1993. When the June 1994 HQRPLANS update (31 March 1994 HQIFS assets data) is available, HQDA will pull the BRAC attribute data required in Annex D for all installations listed in Annex A and will provide the data to installations through the MACOM headquarters.~~

b. Accuracy of the data. Corporate Army data bases will be used as directed by Annex D. Any deviation from Army corporate data bases must be documented by the addressees, validated by the HQDA functional proponent and approved by TABS.

c. Completeness of records. Record keeping, although cumbersome and time-consuming, is nonetheless critical to demonstrate a sufficient decision trail. Records of the source data for values used as attributes are required to be maintained. All quantitative assessments will be forwarded with a documentation section which describes, in detail:

(1) actions taken by addressees and/or installations to assure data accuracy in compliance with guidance in above reference and this memorandum;

(2) any specific data limitations;

(3) record keeping procedures used by the action addressees to maintain an audit trail of the IA data.

d. Certification: Data submitted as a result of this or subsequent DA requests must include an accompanying memorandum signed by the reporting Chief of Staff (or equivalent) with the following statement: "The information contained in this report is accurate and complete to the best of my knowledge and belief."

7. To help implement the Army's BRAC 95 management plan and ensure the Army is prepared for potential GAO audits, the Army Audit Agency will visit the action addressees and representative installations to validate the accuracy of the data and adequacy of the decision trail.

DACS-TABS
SUBJECT: BRAC 95 Installation Assessment (IA) Program

8. Point of contact is MAJ Chuck Fletcher, DACS-TAB, (703) 697-1765/6, AV 225-8921.

SIGNED

5 Encls

MICHAEL G. JONES
COL, GS
Director, The Army Basing Study

ACTION:

COMMANDING GENERAL, U.S. ARMY FORCES COMMAND
COMMANDING GENERAL, U.S. ARMY TRAINING AND DOCTRINE COMMAND
COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND
COMMANDING GENERAL, U.S. ARMY PACIFIC

COMMANDING GENERAL, U.S. ARMY HEALTH SERVICES COMMAND
COMMANDING GENERAL, U.S. ARMY MILITARY DISTRICT OF WASHINGTON
COMMANDING GENERAL, MILITARY TRAFFIC MANAGEMENT COMMAND
CHIEF OF ENGINEERS
COMMANDANT, UNITED STATES MILITARY ACADEMY

CF:
ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS
ASSISTANT SECRETARY OF THE ARMY FOR FINANCIAL MANAGEMENT
ASSISTANT SECRETARY OF THE ARMY FOR INSTALLATIONS, LOGISTICS AND ENVIRONMENT
ASSISTANT SECRETARY OF THE ARMY FOR MANPOWER AND RESERVE AFFAIRS
ASSISTANT SECRETARY OF THE ARMY FOR RESEARCH, DEVELOPMENT AND ACQUISITION
DIRECTOR OF INFORMATION SYSTEMS FOR COMMAND, CONTROL, COMMUNICATIONS AND COMPUTERS
GENERAL COUNSEL
THE AUDITOR GENERAL
CHIEF OF LEGISLATIVE LIAISON
CHIEF OF PUBLIC AFFAIRS

DACS-TABS
SUBJECT: BRAC 95 Installation Assessment (IA) Program

COMMANDING GENERAL, U.S. ARMY INFORMATION SYSTEMS COMMAND
DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS
DEPUTY CHIEF OF STAFF FOR INTELLIGENCE
DEPUTY CHIEF OF STAFF FOR PERSONNEL
COMMANDING GENERAL, U.S. ARMY INTELLIGENCE AND SECURITY COMMAND
COMMANDING GENERAL, U.S. ARMY SPECIAL OPERATIONS COMMANDDEPUTY
CHIEF OF STAFF FOR LOGISTICS
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
THE SURGEON GENERAL
CHIEF OF CHAPLAINS
THE JUDGE ADVOCATE GENERAL
OFFICE OF THE CHIEF ARMY RESERVE
CHIEF, NATIONAL GUARD BUREAU
DIRECTOR, PROGRAM ANALYSIS AND EVALUATION

REDLINE AND STRIKEOUT VERSION
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ANNEX A

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

INSTALLATION CATEGORIES

ANNEX A - INSTALLATION CATEGORIES.

1. This Annex lists the installations to be studied under the BRAC 95 Installation Assessment program. Each installation is assigned to a category of like installations for comparison.

2. A Major Command (MACOM) is designated for each installation. The designated MACOM is responsible for managing the IA program for the installation (tasking the installation for data, collecting the data, etc).

3. Each installation is assigned to an Economic Area (EA). The EA is a county(s) or Metropolitan Statistical Area (MSA) which is the primary area of economic impact for the installation. The EA will be used to develop the potential economic impact to the community of a realignment or closure of the installation. The EA is also referenced in the attributes as the representative area for encroachment and available workforce.

4. Designated MACOMs should review the assignment of installations to EAs for accuracy. The initial assignment was done based on past BRAC assignments and subjective judgement. Comments on the EAs for each installation should be directed to Mr. Joe Vallone, The Army Basing Study, (703) 69-0077/8.

ANNEX A - INSTALLATION CATEGORIES

ADMIN SUPPORT INSTALLATIONS	MACOM	ECONOMIC AREA
C. KELLY SUPPORT CENTER,PA	FORSCOM	ALLEGHENY, PA MSA
C. M. PRICE SUPPORT CENTER,IL	AMC	ST LOUIS, MO MSA
FORT BELVOIR,VA	MDW	WASHINGTON, DC-MD-VA MSA
FORT BUCHANAN,PR	FORSCOM	SAN JUAN, PR MSA
FORT GILLEM,GA	FORSCOM	ATLANTA, GA MSA
FORT HAMILTON,NY	FORSCOM	NEW YORK, NY PMSA
FORT McPHERSON,GA	FORSCOM	ATLANTA, GA MSA
FORT MEADE ~~MA~~, MD	MDW	ANNE ARUNDEL&HOWARD COUNTIES, MD
FORT MONROE,VA	TRADOC	NORFOLK-VA BEACH-NEWPORT NEWS MSA
FORT MYER,VA	MDW	WASHINGTON, DC-MD-VA MSA
FORT RITCHIE,MD	MDW	HAGERSTOWN, MD MSA
FORT SHAFTER,HI	USARPAC	HONOLULU, HI MSA
FORT TOTTEN,NY	FORSCOM	NEW YORK, NY PMSA
PRESIDIO OF SAN FRANCISCO,CA	FORSCOM	SAN FRANSISCO, CA MSA
~~US~~TACOM ~~ARMY~~SUPPORT ~~GARRISO~~NCENTER,	SELFRID~~GE,MI~~ ~~AMC~~ ~~FORSCOM~~	DETROIT, MI MSA

AMMO PROD INSTALLATIONS	MACOM	ECONOMIC AREA
HOLSTON ARMY AMMO PLANT,TN	AMC	JOHNSON CITY-KINGSPORT-BRISTOL MSA
IOWA ARMY AMMO PLANT,IA	AMC	DE MOINES COUNTY, IA
LAKE CITY ARMY AMMO PLANT,MO	AMC	KANSAS CITY KS-MO MSA
LONE STAR ARMY AMMO PLANT,TX	AMC	TEXARKANA, TX-AR MSA
McALESTER ARMY AMMO PLANT,OK	AMC	PITTSBURG COUNTY, OK
MILAN ARMY AMMO PLANT,TN	AMC	GIBSON COUNTY, TN
PINE BLUFF ARSENAL,AR	AMC	PINE BLUFF, AR MSA
RADFORD ARMY AMMO PLANT,VA	AMC	RADFORD CITY, VA

AMMUNITION STORAGE	MACOM	ECONOMIC AREA
BLUE GRASS ARMY DEPOT,KY	AMC	LEXINGTON, KY MSA
CAMP STANLEY STORAGE FACILITY ,TX	AMC	MASON COUNTY, TX
HAWTHORNE ARMY AMMO PLAT,NV	AMC	MINERAL COUNTY, NV
PUEBLO DEPOT,CO	AMC	PUEBLO, CO MSA
SAVANNA DEPOT,IL	AMC	CARROLL COUNTY, IL
SENECA DEPOT,NY	AMC	SENECA COUNTY, NY
SIERRA DEPOT,CA	AMC	LASSEN COUNTY, CA
TOOELE DEPOT,UT	AMC	TOOELE COUNTY, UT
UMATILLA DEPOT,OR	AMC	UMATILLA COUNTY, OR

ANNEX A - INSTALLATION CATEGORIES

COMMODITY INSTALLATIONS	MACOM	ECONOMIC AREA
ARMY RESEARCH LABORATORY,MD	AMC	~~ANNE~~PRINCE ~~ARUNDEL&HOWARD~~GEORGE & ~~CHARLES~~ COUNTIES, MD
COLD REGION RESEARCH LAB,NH	USACE	GRAFTON COUNTY, NH
DETROIT ARSENAL,I L	AMC	DETROIT, MI MSA
FORT DETRICK,MD	~~HSC~~MEDCOM	WASHINGTON, DC-MD-VA MSA
FORT MONMOUTH,NJ	AMC	MONMOUTH-OCEAN, NJ PMSA
NATICK RESEARCH,ENGR CTR,MA	AMC	BOSTON-LAWRENCE-SALEM MA-NH NECMA
PICATINNY ARSENAL,NJ	AMC	NEWARK, NJ PMSA
REDSTONE ARSENAL ,AL	AMC	HUNSTVILLE, AL MSA
ROCK ISLAND ARSENAL,IL	AMC	DAVENPORT-ROCK ISLAND-MOLINE, IA-IL MSA

DEPOTS	MACOM	ECONOMIC AREA
ANNISTON DEPOT,AL	AMC	ANNISTON, AL MSA
LETTERKENNY DEPOT,PA	AMC	FRANKLIN COUNTY, PA
RED RIVER DEPOT,TX	AMC	TEXARKANK TX-AR MSA
TOBYHANNA DEPOT,PA	AMC	MONROE COUNTY, PA

MEDICAL CENTERS	MACOM	ECONOMIC AREA
FITSIMONS MEDICAL CENTER, CO	~~HSC~~MEDCOM	DENVER, CO PMSA
TRIPLER MEDICAL CENTER,HI	USARPAC	HONOLULU, HI MSA
WALTER REED MEDICAL CENTER,DC	~~HSC~~MEDCOM	WASHINGTON, DC-VA-MD MSA

INDUSTRIAL FACILITIES	MACOM	ECONOMIC AREA
LIMA TANK PLANT,OH	AMC	ALLEN COUNTY, OH
STRATFORD ENG PLNT,CT	AMC	NEWHAVEN-BRIDGEPORT-STAMFORD-DANBURY-WATERBURY,CT MSA
WATERVLIET ARSENAL,NY	AMC	ALBANY-SCHENECTADY-TROY, NY MSA

MAJOR TRAINING AREAS	MACOM	ECONOMIC AREA
FORT A.P. HILL,VA	MDW	CAROLINE COUNTY, VA
FORT CHAFFEE,AR	TRADOC	FORT SMITH, AR-OK MSA
FORT DIX,NJ	FORSCOM	PHILADELPHIA PA-NJ, PMSA
FORT GREELY,AK	USARPAC	SOUTHEAST FAIRBANKS CENSUS AREA
FORT HUNTER-LIGGETT,CA	FORSCOM	SALINAS-SEASIDE-MONTEREY MSA
FORT INDIANTOWN GAP,PA	FORSCOM	HARRISBURG-LEBANON-CARLISLE, PAMSA
FORT IRWIN, CA	FORSCOM	RIVERSIDE-SAN BERNADINO, CA MSA
FORT McCOY,WI	FORSCOM	MONROE COUNTY, WI
FORT PICKETT,VA	FORSCOM	BRUNSWICK COUNTY, VA
FORT POLK,LA	FORSCOM	VERNON PARISH, LA

MANEUVER INSTALLATIONS	MACOM	ECONOMIC AREA
FORT BRAGG,NC	FORSCOM	FAYETTVILLE, NC MSA
FORT CAMPBELL,KY	FORSCOM	CLARKSVILLE-HOPKINSVILLE,TN-KY MSA
FORT CARSON,CO	FORSCOM	COLORADO SPRINGS, CO MSA
FORT DRUM,NY	FORSCOM	JEFFERSON COUNTY, NY
FORT HOOD,TX	FORSCOM	KILEEN-TEMPLE, TX MSA

ANNEX A - INSTALLATION CATEGORIES

FORT LEWIS,WA	FORSCOM	TACOMA, WA MSA
FORT RICHARDSON,AK	USARPAC	ANKORAGE, AK MSA
FORT RILEY,KS	FORSCOM	RILEY COUNTY, KS
FORT STEWART,GA	FORSCOM	LIBERTY COUNTY, GA
FORT WAINWRIGHT,AK	USARPAC	FAIRBANKS NORTHSTAR BOROUGH
SCHOFIELD BARRACKS,HI	USARPAC	HONOLULU, HI MSA

PORTS / OCEAN TERMINALS	**MACOM**	**ECONOMIC AREA**
BAYONNE OCEAN TERMINAL,NJ	MTMC	NEWARK, NJ MSA
OAKLAND ARMY BASE,CA	MTMC	OAKLAND, CA MSA
SUNNY POINT OCEAN TERMINAL,NC	MTMC	WILMINGTON, NC MSA

PROFESSIONAN EDUCATION	**MACOM**	**ECONOMIC AREA**
CARLISLE BARRACKS,PA	TRADOC	HARRISBURG-LEBANON-CARLISLE, PAMSA
FORT LEAVENWORTH,KS	TRADOC	KANSAS CITY MO-IL, MSA
FORT LESLEY J. McNAIR,DC	~~TRADOC~~MDW	WASHINGTON, DC-MD-VA MSA
WEST POINT,NY	USMA	NEWBURG, NY PMSA

PROVING GROUNDS	**MACOM**	**ECONOMIC AREA**
ABERDEEN PROVING GROUNDS,MD	AMC	BALTIMORE, MD MSA
DUGWAY PROVING GROUNDS ,UT	AMC	TOOELE COUNTY, UT
WHITE SANDS MISSLE RANGE,NM	AMC	LAS CRUCES, NM MSA
YUMA PROVING GROUNDS,AZ	AMC	YUMA, AZ MSA

ANNEX A - INSTALLATION CATEGORIES

TRAINING SCHOOLS	MACOM	ECONOMIC AREA
FORT BENNING,GA	TRADOC	COLUMBUS, GA-AL MSA
FORT BLISS, TX	TRADOC	EL PASO, TX MSA
FORT EUSTIS ,VA	TRADOC	NORFOLK-VA BEACH-NEWPORT NEWS MSA
FORT GORDON ,GA	TRADOC	AUGUSTA, GA-SC MSA
FORT HUACHUCA,AZ	TRADOC	COCHISE COUNTY, AZ
FORT JACKSON,SC	TRADOC	COLUMBIA, SC MSA
FORT KNOX,KY	TRADOC	HARDIN COUNTY, KY
FORT LEE,VA	TRADOC	RICHMOND-PETERSBURG, VA MSA
FORT LEONARD WOOD,MO	TRADOC	LACLEDE, PHELPS, AND PULASKI COUNTIES, MO
FORT McCLELLAN,AL	TRADOC	ANNISTON, AL MSA
FORT RUCKER ,AL	TRADOC	DOTHAN, AL MSA
FORT SAM HOUSTON,TX	FORSCOM	SAN ANTONIO, TX MSA
FORT SILL,OK	TRADOC	LAWTON, OK MSA
PRESIDIO OF MONTEREY,CA	~~FORSCOM~~TRADOC	SALINAS-SEASIDE-MONTEREY, CA MSA

REDLINE AND STRIKEOUT VERSION
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ANNEX B

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

ATTRIBUTES AND WEIGHTS

MISSION REQUIREMENTS AND OPERATIONAL READINESS	
Attribute	Points
~~Test and Evaluation~~ Mission ~~Flexibility 150~~	
~~Test Diversity and Evaluation Ranges~~	200
Test and Evaluation ~~Facilities Ranges~~	100
~~Test and Evaluation Facilities 150~~	
Total	450

LAND AND FACILITIES	
Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS	
Attribute	Points
Buildable Acres	25
Encroachment	65
IMA	10
Available Workforce	20
Total	125

COST AND MANPOWER	
Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR PROVING GROUNDS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Patient Care Facilities	150
Applied Instruction Facils	100
Medical Research Facilities	50
Deployment Network	75
Reserve ~~Training~~	
75	
Total	450

LAND AND FACILITIES

Attribute	Points
Percent Permanent Facilities	75
Average Age of Facilities	85
Infrastructure	40
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Encroachment	20
Mobilization Capability	50
IMA	20
Buildable Acres	35
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	40
Housing Cost	30
Health Care Support Index	100
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR MEDICAL CENTERS

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ANNEX C

BRAC 95 INSTALLATION ASSESSMENT

DATA ELEMENT RESPONSIBILITIES

ANNEX C - DATA ELEMENT RESPONSIBILITIES

1. This Annex will describe the responsibilities for data elements required by the BRAC 95 Installation Assessment program.

a. ~~Supplying Source~~ Agency. The organization designated to supply the data element will:

- Refer to Annex D for the attribute definition.
- Locate the data source.
- Record the data element.
- Forward the data and supporting source documents to the verifying agency.

b. Verifying Agency. The organization designated to verify the data element will:

- Refer to Annex D for the attribute definition.
- Receive the data element and documentation from the supplying agency.
- Check the data element to insure it has been provided IAW the attribute definitions.

c. Certifying Agency. The organization designated to certify the data element will:

- Maintain the formal documentation for the data element(s) source and audit trail.
- Maintain a signed certification statement for the data element(s).

2. Questions concerning this process should be addressed to MAJ Chuck Fletcher, The Army Basing Study, (703) 697-1765/6.

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
1	ACCESSIBILITY		C,V	S
2	AMMUNITION STORAGE		V,C	S
3	APPLIED INSTRUCTIONAL FACILITIES	V	C	S
4	AVAILABLE WORK FORCE	C,S	V	
5	AVERAGE AGE OF FACILITIES	~~C,S~~	~~V~~	~~S~~
6	BARRACKS (UPH)	V	C	S
7	BARRACKS (UPH) AND FAMILY HOUSING	V	C	S
8	BASOPS/MISSION POPULATION	V	C,S	
9	BUILDABLE ACRES		C,V	S
10	CAPACITY - PRODUCTION		C,V	S
11	CAPACITY - MAINTENANCE		C,V	S
12	CAPACITY - SUPPLY		C,V	S
13	COST OF LIVING INDEX	C,S	V	
14	DEPLOYMENT NETWORK		C,V	S
15	ENCROACHMENT	C,S	V	
16	ENVIRONMENTAL CARRYING CAPACITY		C,V	S
17	EXCESS CAPACITY - MAINTENANCE	V	C	S
18	EXCESS CAPACITY - PRODUCTION	V	C	S
19	EXCESS CAPACITY - STORAGE	V	C	S
20	FAMILY HOUSING	V	C	S
21	FAMILY HOUSING COST PER DWELLING UNIT		C,V	S
22	GENERAL INSTRUCTIONAL FACILITIES	V	C	S
23	HEALTH CARE SUPPORT INDEX		C,S	
24	IMPACT ACRES		C,V	S
25	INFORMATION MISSION AREA (IMA)		C,V	S

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
26	INFRASTRUCTURE		C,V	S
27	INSTALLATION AND BASE OPERATING EXPENSE		C,V	S
28	LOCALITY PAY FACTOR	C,S	V	
29	MAINTENANCE FACILITIES	V	C	S
30	MAINTENANCE FLEXIBILITY		C,V	S
31	MANEUVER ACRES		C,V	S
32	MCA COST FACTOR	C,S	V	
33	MECHANIZED MANEUVER ACRES		C,V	S
34	MEDICAL RESEARCH FACILITIES	V	C	S
35	MISSION OVERHEAD		C,V	S
36	MOBILIZATION CAPABILIY		C,V	S
37	MOBILIZATION THROUGHPUT		C,V	S
38	NORMAL THROUGHPUT		C,V	S
39	OPS/ADMIN FACILITIES		C,V	S
40	PATIENT CARE FACILITIES		C,V	S
41	PERCENT PERMANENT FACILITIES	~~C,SV~~	~~VC~~	~~S~~
42	PIERS AND WHARVES		C,V	S
43	PRODUCTION FLEXIBILITY		C,V	S
44	QUANTITY - DISTANCE		C,V	S
45	RANGES		C,V	S
46	RESEARCH AND DEVELOPMENT FACILITIES		C,V	S
47	RESERVE TRAINING		C,V	S
48	SPECIAL AIRSPACE	C,S	V	
49	SPECIAL CARGO CAPABILITY		C,V	S
50	STAGING ARES		C,V	S

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
51	SUPPLY AND STORAGE FACILITIES	V	C	S
52	SUPPORT FACILITIES		C,V	S
53	TEST AND EVALUATION FACILITIES		C,V	S
54	TEST AND EVALUATION ~~FLEXIBILITYMISSION DIVERSITY~~		C,V	S
55	TEST AND EVALUATION RANGES		C,V	S
56	VHA FACTOR	C,S	V	
57	WORK SPACE	V	C	S

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ANNEX D

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

ATTRIBUTE DEFINITIONS

ACCESSIBILITY

1. **DEFINITION**: The accessibility of an installation as measured by calculating the number of miles to the four most "travelled to" destinations from that installation, one of which must be the installation's next higher headquarters.

2. **PURPOSE**: To assess how well located an installation is to perform its command, control, and management functions in terms of its physical distance from major subordinate units and higher headquarters.

3. **METHODOLOGY**: The average distance in miles from the installation to its four most "travelled to" locations, one of which must be the installation's higher headquarters, will be calculated using actual travel data for FY 93. Each installation will report the four most "travelled to" locations and the distance they use to calculate travel costs to those locations.

4. **REFERENCES**: Installation travel records for FY 93.

5. **UNIT OF MEASURE**: Average distance in miles.

6. **EQUATION**:

$$\frac{DHQ + DLOC1 + DLOC2 + DLOC3}{4} = \text{Avg Distance}$$

Where:

DHQ = Distance to Higher HQ

DLOC1 = Distance to most travelled to location

DLOC2 = Distance to second most travelled to location

DLOC3 = Distance to third most travelled to location

7. **ATTRIBUTE SCORING**: A low number is best.

AMMUNITION STORAGE

1. **DEFINITION:** Ammunition storage capability measured square feet.

2. **PURPOSE:** A measure of an installation's capability to store and handle and ammunition.

3. **METHODOLOGY:** Assets are determined by summing the permanent square footage from FCGs ~~4110,~~ 42100 and 42200. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCE:** ~~March~~April 94 update of HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** A larger number = a better score.

APPLIED INSTRUCTIONAL FACILITIES

1. **DEFINITION:** Total square footage of permanent ~~and~~, specialized training and instructional facilities on the installation.

2. **PURPOSE:** Indicates special purpose facilities used for applied training and instruction. Special purpose facilities represent a significant cost investment to the military. Relocation of elements requiring special purpose facilities would cause significant expenditure of MCA funds and would require more time to complete realignment.

3. **METHODOLOGY:** Summation of the square footage of ~~special~~permanent applied instructional facilities. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

Facility Category Group: 17130 (Applied Instructional Building). ~~New construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing assets.~~

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS. Engineer review.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** As above.

7. **ATTRIBUTE SCORING:** Total square footage--higher number results in a better score.

AVAILABLE WORK FORCE

1. **DEFINITION:** Available workforce density of the surrounding area around the installation.

2. **PURPOSE:** This is an indirect measure of availability of an adequate workforce in the surrounding community. Representative area is the area identified as the Region of Influence by the BRAC Economic Impact model (This area is generally the county or counties surrounding the installation or the Metropolitan Statistical Area (MSA)).

3. **METHODOLOGY:** This is an indirect measure of the availability of an adequate civilian workforce.

4. **REFERENCES:** Department of Defense Economic Impact model. Office of Economic Adjustment (OEA) workforce populations.

5. **UNIT OF MEASURE:** Available Work Force population.

6. **EQUATION:** NA

7. **CRITERION SCORING:** A larger number is a better score.

AVERAGE AGE OF FACILITIES

1. **DEFINITION:** Average age of all existing facilities on the installation.

2. **PURPOSE:** Average facility age is an indicator of the overall quality and condition of the facilities on the installation.

3. **METHODOLOGY:** ~~Historical~~Use ~~data~~the ~~of~~building ~~construction~~Age ~~completion~~Distribution ~~dates~~report, PART #3, in HQRPLANS, in the facility Revitalization Analysis ~~used~~section to ~~calculate~~construct ~~the~~a weighted ~~of~~average ~~all~~of ~~permanent~~the facilities ~~on the installation~~age. SELECY ALL FCG AND YEAR 1994. Note that the April 94 HQRPLANS includes FY 92 planned construction in the first column percentage.
For each base: ~~4.~~
~~REFERENCES: March 1994 HQRPLANS~~ a.
Multiply the percent in the first column by 5
the percent in the second column by 15
the percent in the third column by 25
the percent in the fourth column by 35
the percent in the fith column by 45
and the percent in the sixth column by 55

b. Sum the products from above and divide by 100.

4. **REFERENCES:** April 1994 HQRPLANS pending special update in June 1994 HQRPLANS. ***NOTE: The June 94 HQRPLANS is expected to have a more accurate algorithm (based on the actual year vs 10 year increments). HQDA will provide the updated average age calculations for substitution in the IA when available. The new algorithm will NOT include planned construction or leased housing in the calculation.***

5. **UNIT OF MEASURE:** Average (mean) age per square foot.

6. **EQUATION:** As above.

~~Σ(SQ FT X Age of Building)/TOTAL INSTALLATION SQRFT~~

7. **ATTRIBUTE SCORING:** Lower number (ie. lower age) results in a better score.

BARRACKS
(Unaccompanied Personnel Housing)

1. **DEFINITION:** Total number of permanent on post spaces available for unaccompanied officers and enlisted personnel.

2. **PURPOSE:** To determine the availability of adequate UOPH and UEPH at the installation. Measures the total unaccompanied officer personnel housing (UOPH) and unaccompanied enlisted personnel housing (UEPH) spaces available on the installation.

3. **METHODOLOGY:** Summation of the total number of permanent unaccompanied officer housing spaces available on the installation. The FCG is ~~72400~~7240P.

Unaccompanied Enlisted Personnel Housing (UEPH) is measured by the total number of permanent enlisted member housing spaces on the installation. On-post available spaces are measured at no more than two persons per room at 90 NET square feet per person. The FCG is 7210S. UEPH also includes trainee assets. The FCG is 7218P.

Planned FY92-96 construction projects are counted as existing projects in HQRPLANS. ~~New construction projects in the FY 91-FY 95 Military Construction or Army Family Housing Program are counted as existing assets.~~

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Permanent spaces.

6. **EQUATION:** UOPH spaces + UEPH spaces.

7. **ATTRIBUTE SCORING:** Number of spaces - higher number results in a better ranking.

BARRACKS(UPH) AND FAMILY HOUSING

1. **DEFINITION:** Number of permanent, adequate barracks and family dwelling units (on and off-post).

2. **PURPOSE:** To measure the total availability of living quarters for unaccompanied officer, permanent party enlisted personnel, married/single parent soldiers and their families.

3. **METHODOLOGY:** Army Family Housing (AFH) information is obtained from the installations' segmented housing market analysis and adjusted with FY 90 Census and local installation data, DD Form 1523, Military Family Housing Justification, and DD 1410 Family Housing Inventory and Occupancy Report (validated by DAIM-FDH-M) by using HQRPLANS. Family housing assets in HQRPLANS include both government controlled assets and the installation's expected share of local economy assets. FCGs for family dwelling units are 7110F for on-post and ~~(TBD)~~7110P for off-post.

Unaccompanied Officer Personnel Housing (UOPH) is measured by the total number of permanent unaccompanied officer housing spaces available on the installation. The FCG is ~~72400~~7240P.

Unaccompanied Enlisted Personnel Housing (UEPH) is measured by the total number of permanent enlisted member housing spaces on the installation. On-post available spaces are measured at no more than two persons per room at 90 NET square feet per person . The FCG is 7210S. UEPH also includes trainee assets. The FCG is 7218P.~~ New barracks and~~ Planned ~~AFH~~FY92-96 construction projects are counted as existing ~~spaces~~projects ~~on the installation~~in ~~the FY 91 - FY 95 Military Construction Program~~ HQRPLANS.

4. **REFERENCES:** AR 415-15, AR 210-50, ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Family housing in dwelling units.
UOPH and UEPH in spaces.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Higher number results in a better ranking.

BASOPS/MISSION POPULATION

1. **DEFINITION:** Measure of the base operations (BASOPS) cost required to support the mission population.

2. **PURPOSE:** To measure the relative cost of operating an installation in support of the mission requirements. This provides a relative cost factor used to assess the relative cost of operations of an installation.

3. **METHODOLOGY:** ~~Report~~Used ~~total~~Total Base Support cost data (RPMA~~ payroll, RPMA Non payroll~~, Base Communication Costs, BASOPS Payroll/Non-payroll) for each installation. These data elements are derived by capturing the expenditures in **FY 93** by installation:

Base support (O&MA, RDT&E):

a. BASPOS(-), Account (xxxx96)
   - A. Real Estate Leases
   - B. Suply Operations
   - C. Maintenance of Material
   - D. Transportation Services
   - E. Laundry and Dry Cleaning
   - F. Army Food Services
   - G. Personnel Support
   - H. Unaccompanied Pers Housing Ops
   - J. Utilities
   - M. Other Engineering Support
   - N. Administration
   - P. Automation Activities
   - Q. Reserve Component Support
   - S. Community & Morale Support
   - T. Preservation of Order
   - U. Dir of Resource Management
   - W. Dir of Contracting
   - X. Security and Counterintel Ops
   - Y. Records Management, Pubs

b. Real Property Maintenance, Accounts (xxxx76 & xxxx78)
   - K. Maint & Repair of Real Property
   - L. Minor Construction

c. Environmental Programs, Account (xxxx56)

d. Audio-Visual, Account (xxxx90)

e. Base Commo, Account (xxxx95)

f. Family Programs, Accounts (878708,878719,878720)

In cases where a single fiscal station provides data for more than one installation, a breakout will be provided. Data provided should include all known costs paid for operation and support including reimbursable and RDTE. ~~The total mission population supported is obtained from the~~ Additionally, ~~Base~~any ~~Operations~~government ~~Support~~workspace ~~Mission~~provided ~~Model~~to ~~(BOSMM)~~contractors ~~supported~~will ~~by~~be ~~USAFISA~~included. ~~Additionally, any government workspace provided to mission contractors will be included (do~~This not include contractors providing base support ~~functions)~~functions.

The mission population supported will be provided by HQDA.

~~4.~~

~~REFERENCES.~~4.

REFERENCES: Installation STANFINS 218 report data validated by MACOMS for Total Base Support costs.

~~a. Base Operations Support Manpower Model (BOSMM) for~~ "mission" personnel.

~~b. Installation data validated by MACOMS for Total Base Support costs.~~

5. **UNIT OF MEASURE:** Dollars per ~~mission~~person ~~population~~per year.

6. **EQUATION:** Total Base Support Costs/Total Mission Population.

7. **CRITERION SCORING:** The lower value results in a better ranking.

BUILDABLE ACRES

1. **DEFINITION:** This measures the ability of the installation to expand within its current property line in accordance with accepted master planning policy and guidance as reflected on the long range component of the approved installation master plan. The result is the total acreage available for construction of additional facilities on the installation.

2. **PURPOSE:** Measure the installation's capacity to support additional permanent structures.

3. **METHODOLOGY:**

a. In accordance with the long range component of the installation master plan, identify areas compatible with new development, such as areas zoned for Administration, housing, industrial, maintenance, supply or storage, or community facilities, that are not currently filled with permanent facilities. Areas such as maneuver/training ranges, impact areas, safety fan areas, required buffer areas, and environmentally sensitive ~~areas~~acres will not be considered for expansion construction under this methodology.

b. Measure the total number of available acres which then could be used for locating permanent new mission structures. Areas lacking current utility support or where there are under-utilized or un-utilized wood facilities should be considered for expansion construction. Exclude acreage to be used for construction through FY95.

4. **REFERENCES:** Installation analysis of MACOM approved master plan.

5. **UNIT OF MEASURE:** Acres.

6. **EQUATION:** Not Applicable.

CAPACITY - MAINTENANCE

1. **DEFINITION:** The amount of workload, expressed in direct labor hours, that a facility can accommodate with all work positions manned on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

2. **PURPOSE:** To measure the available maintenance capacity at the installation.

3. **METHODOLOGY:** See Equation below.

4. **REFERENCES:** Depot Maintenance Capacity Utilization Report. Computed IAW Revised DOD 4151.15H.

5. **UNIT OF MEASURE:** Direct Labor Manhours.

6. **EQUATION:** Production\maintenance capacity.

Maximum Number of Available Production Line Workstations
X 1615 Productive Hours
X 95 percent of the Total Hours (Availability Factor)
Total Direct Labor Hours Available

7. **CRITERION SCORING:** A larger number is a better score.

CAPACITY - PRODUCTION

1. **DEFINITION:** The amount of workload, expressed in actual direct labor hours, that a facility can accommodate with all work positions manned on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

2. **PURPOSE:** To measure the available production capacity at the installation.

3. **METHODOLOGY:** See equation below.

4. **REFERENCES:** Computed IAW Revised DOD 4151.15H.

5. **UNIT OF MEASURE:** Direct Labor Manhours.

6. **EQUATION:** Production capacity.

Maximum Number of Available Production Line Workstations
X 1615 Productive Hours
X 95 percent of the Total Hours (Availability Factor)
Total Direct Labor Hours Available

7. **CRITERION SCORING:** A larger number is a better score.

CAPACITY - SUPPLY

1. **DEFINITION:** The square footage of warehouse space for the storage of items other than ammunition and bulk fuel.

2. **PURPOSE:** To measure the warehouse storage capacity of the installation.

3. **METHODOLOGY:** Rating is based on data obtained from referenced management report for general purpose warehouses, both heated and unheated. The extracted data is listed as warehouse total, net space total.

4. **REFERENCES:** AMC Storage Space Management Report, (RCS DRCMM-328), dated 30 Sep 90.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Gross storage space - (Aisles & Structural Loss & Support) equals net available storage space.

7. **CRITERION SCORING:** A larger number is a better score.

COST OF LIVING INDEX

1. **DEFINITION:** Measure the relative cost of living at each installation.

2. **PURPOSE:** To measure the relative cost of living for military and civilian personnel in communities surrounding the installation. This is an indicator of location costs to the Army to live and conduct business at the installation.

3. **METHODOLOGY:** Used the information from the American Chamber of Commerce Research Association (ACCRA) Cost of Living Index for 1993. The index measures the relative price levels for consumer goods and services based on local community input. The cost index is selected directly from the table if installation is located within a 50 mile radius of the Metropolitan Statistical Areas (MSAs), Primary Metropolitan Statistical Areas (PMSAs) or Non-metropolitan Areas as defined by the Office of Management and Budget on December 28, 1992. In cases were the installation is not included in the ACCRA report, a linear relationship will be used to predict the COL Index using the VHA factor.

4. **REFERENCES:** ACCRA Cost of Living Index, 1993.

5. **UNIT OF MEASURE:** Each community index is read as a percentage of the average for all places surveyed with the average equal to 100.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** Lower index results in a higher ranking.

DEPLOYMENT NETWORK

1. **DEFINITION**: The distance from installation to its critical deployment structure: airfields, ports, railheads and interstate highways.

2. **PURPOSE**: To evaluate installation's capability to support deployments, which is an important element in projecting land forces to locations outside the United States.

3. **METHODOLOGY**: The distances (in miles) from installation to interstate highway, railhead, C-141/747 capable airport and Ocean vessel capable seaport. A Decision Pad submodel is used giving each factor the following weights:

Distance to Facility	Points
Railhead	30
Airport	30
Seaport	30
Highway	10
Total	100

4. **REFERENCES**: FORSCOM Mobilization Expansion Capability Worksheet, TRADOC Pam 210-2, and MACOM validation. Air field distance will be validated by the installations USAF (Air Combat Command) Liaison Officer.

5. **UNIT OF MEASURE**: Miles.

6. **EQUATION**: This rating is determined by using a Decision Pad submodel.

7. **ATTRIBUTE SCORING**:

For submodel: A lower number (for distance) is a higher score.

For main model: A higher value results is a better score.

ENCROACHMENT

1. **DEFINITION:** Population density of the surrounding area to the installation.

2. **PURPOSE:** This is a measure of encroachment on the installation as a function of population density (population/square mile).

3. **METHODOLOGY:** Weighted Average of population density of the Region of Influence as identified by the BRAC Economic Impact model (This area is generally the county or counties surrounding the installation or the Metropolitan Statistical Area (MSA)). The rationale is the lower the population density around the post, the easier it will be to expand mission activity without impacting the surrounding community.

4. **REFERENCES:** 1990 Summary of Population and Housing Statistics, U.S. Department of Commerce, Bureau of the Census.

5. **UNIT OF MEASURE:** Population per square mile.

6. **EQUATION:** None.

7. **ATTRIBUTE SCORING:** Number - lower value results in better ranking.

ENVIRONMENTAL CARRYING CAPACITY

1. **DEFINITION:** Composite consideration of various environmental factors.

2. **PURPOSE:** Measure the ability of the Army to conduct current missions, receive additional units and expand operations in light of environmental constraints.

3. **METHODOLOGY:** This is a measure of the following aspects of environmental carrying capacity:

FACTOR	WEIGHT
Archaeology & Historic Buildings	~~5~~10
Endangered Species	15
Wetlands	15
Air Quality	~~10~~15
Water Quality	15
Noise Quality:	
Zone II off post	10
Zone III off post	15
Contaminated Sites	~~15~~ 5
Total	100

4. **REFERENCES:** The most recent reference as identified for each factor.

5. **UNIT OF MEASURE:** Composite index. A sub-model is used with the factors defined as:

Archeology/Historic Buildings Factor = A/B

A = (Number of sites/structures listed on the National Register(NR)) + (Number of sites determined eligible or potentially eligible for the NR)
B = Total installation acres.
DATA Sources: Installation Cultural Surveys, Installation environmental office, National Register (NR), Installation Historic Preservation Plan, Installation EIS, SHPO.

Endangered Species Factor = Number of FEDERAL endangered and threatened species (plant or animal) present on the installation.
DATA Sources: Installation biological surveys, Installation Master Plan NEPA document or equivalent, Installation Environmental Office.

Wetlands Factor = A/Total Installation Acres

A = Total wetlands acreage.
DATA Source: Installation wetlands inventory, National

wetlands inventory, Installation master plan NEPA document or equivalent.

Air Quality Factor =

1 if air quality region is in attainment.
10 if air quality region is not in attainment.

DATA Source: AEHA surveys, Installation master plan NEPA document or equivalent, Installation Air Quality inventory.

Water Quality Factor = Number times the installation has exceeded the parameters of the NPDES permits during FY 1992.

DATA Source: Installation Environmental office, Installation Master plan NEPA document or equivalent.

Noise Quality Factor = Total area (acres) of AICUZ/ICUZ zones II and/or III that extend offpost.

DATA Sources: Installation Master plan NEPA document or equivalent, Installation ICUZ/AICUZ.

Contaminated Sites Factor = A+B

A = Total number of IRP sites
B = Total number of NPL sites

DATA Sources: USATHAMA surveys, Installation environmental office.

6. **ATTRIBUTE SCORING:** Composite number larger value is a better score.

EXCESS CAPACITY - MAINTENANCE

1. **DEFINITION:** Maintenance plant capacity that is excess to utilized and surge requirements expressed in thousands of square feet.

2. **PURPOSE:** To measure the maintenance capacity in square feet that is currently available for expansion at an installation. Excess Capacity is a direct measurement of the expandability of the installation. It provides value for mobilization as well as the capability to receive additional missions.

3. **METHODOLOGY:** Total maintenance square feet minus utilized square feet ~~(200~~(EEA ~~series EEA~~210,212,214,215,216, ~~and facilities)~~218) at an installation. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** DOD 4151.15H, AR 750-2, AMC-R 750-28, ~~March~~April 1994 HQRPLANS and Installation data.

5. **UNIT OF MEASURE:** Thousands of gross Square feet.

6. **EQUATION:** NA

7. **CRITERION SCORING:** A higher value is a better score.

EXCESS CAPACITY - PRODUCTION

1. **DEFINITION:** Industrial Production plant capacity that is excess to utilized and surge requirements expressed in production facility square feet.

2. **PURPOSE:** To measure the production capacity in square feet that is currently unused at an installation.

3. **METHODOLOGY:** Excess Capacity is a direct measurement of the expandability of the installation. It provides value for mobilization as well as the capability to receive additional missions. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** ~~Data~~April 94 HQRPLANS and installation data call.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Total production square feet minus utilized square feet ~~(200 series and 300 series~~ ~~EEA~~(EEA ~~facilities)~~220) at an installation.

7. **CRITERION SCORING:** A higher value is a better score.

EXCESS CAPACITY - STORAGE

DEFINITION: Total unused square footage of warehouse space for the storage of items other than ammunition and bulk fuel.

2. **PURPOSE:** To measure the warehouse capacity that is currently unused at an installation. Indicates the capability of an installation to expand supply support in support of surge/mobilization.

3. **METHODOLOGY:** Summation of the square footage ~~based on data~~for ~~general~~FCG ~~purpose~~44100 ~~warehouses~~and ~~obtained~~44200 from ~~referenced management report~~ HQRPLANS, both heated and unheated. Utilized storage space is subtracted from the total to provide a vacant bulk, warehouse total.
Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.
~~4.~~
~~REFERENCES: HQRPLANS March 944~~. ~~FCGs 44100REFERENCES:~~ ~~(Depot~~ April 1994 ~~Storage)~~HQRPLANS and ~~44200~~installations ~~(Installation~~utilized ~~Storage)~~storage data.

5. **UNIT OF MEASURE:** Thousands of gross Square feet.

6. **EQUATION:** Total Warehouse space minus the utilized warehouse space.

7. **CRITERION SCORING:** A larger number is a better score.

FAMILY HOUSING

1. **DEFINITION:** Number of permanent, adequate family dwelling units (on and off-post).

2. **PURPOSE:** To measure the total availability of living quarters for married/single parent soldiers and their families.

3. **METHODOLOGY:** Family Housing (AFH) information is obtained from the installations' segmented housing market analysis and adjusted with FY 90 Census and local installation data, DD Form 1523, Military Family Housing Justification, and DD 1410 Family Housing Inventory and Occupancy Report ~~-~~(validated by DAIM-FDH-M) by using HQRPLANS. Family housing assets in HQRPLANS include both government controlled assets and the installation's expected share of local economy assets. FCGs for family dwelling units are 7110F for on-post and ~~(TBD)~~7110P for off-post.
Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.
~~AFH construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing spaces on the installation.~~

4. **REFERENCES:** AR 415-15, AR 210-50, ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Total number of family dwelling units.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** ~~Total~~Higher number ~~of~~is ~~family housing dwelling units - higher number results in~~ a better ranking.

FAMILY HOUSING COST PER DWELLING UNIT (DU)

1. **DEFINITION:** Measure of the cost to maintain one set of family quarters at each installation.

2. **PURPOSE:** This attribute compliments the VHA Attribute. Together they provide an assessment of relative cost for housing a family at the installation.

3. **METHODOLOGY:** Number of permanent on-post -housing units as reported in the April 1994 HQRPLANS, NOT including ~~(March leased 1994) assets~~. Cost information provided by the STANFINS 218 Report. Values generated by dividing an installation's average AFH Operations (AFHO) costs for three fiscal years (91,92,93) by the number of AFH units.- Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS and annual cost data from Resource Directorate for FY 91,92,93.

5. **UNIT OF MEASURE:** Dollars per AFH unit.

6. **EQUATION:** (AFHO obligations FY 91 + AFHO obligations FY 92 + AFHO obligations FY 93)/3 = average AFHO costs/AFH units = Dollar cost per AFH unit.

7. **CRITERION SCORING:** Lower number results in better ranking.

GENERAL INSTRUCTIONAL FACILITIES

1. **DEFINITION:** Total square footage of permanent general training and instructional facilities on the installation.

2. **PURPOSE:** Measure the in-place capability of the installation to conduct training by considering general purpose training facilities available.

3. **METHODOLOGY:** Summation of the square footage of all permanent general purpose training facilities.
Facility Category Group: 17120 (General Instructional Building).
Planned FY92-96 construction projects are counted as existing projects in HQRPLANS. ~~Facility Category Group: 17120 (General Instructional Building) New construction projects in the FY 91-FY 95 Military Construction Program are counted as existing assets.~~

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of Square ~~foot~~feet.

6. **EQUATION:** As above.

7. **ATTRIBUTE SCORING:** Total square footage--higher number results in a better score.

HEALTH CARE INDEX

1. **DEFINITION:** Capitation Cost per Beneficiary (CCB) is the per capita funding a medical treatment facility (MTF) requires to provide all necessary medical care to the beneficiary population served by the MTF. This is not a measure of quantity of services delivered or MTF capacity.

2. **PURPOSE:** This is a measure of the effective use of health care dollars on a capitation basis. All future MTF funding will be capitation based.

3. **METHODOLOGY:** The following is a general methodology. For each MTF: Compute total direct and reimbursable health care cost then divide by the Total Beneficiary Population. The calculated score for each facility is assigned a rank order.

4. **REFERENCES:**
a. Operations and Maintenance, Defense (OMD) data obtained from the baseline FY93 Resource Summary.
b. Military pay (MP) is computed from the MED 87 Strength Report costed at the civilian replacement value.
c. CHAMPUS Cost (CC) is provided in the CHAMPUS Catchment Area Billing Report.
d. Total Beneficiary Population (TBP) is the beneficiary population within a 40 mile catchment area; Army Stationing and Installaton plan and Defense Medical Information System (DMIS) data for FY 93.

5. **UNIT OF MEASURE:** Dollars per eligible beneficiary translated into rank order.

6. **EQUATION:** (OMD + MPE + CC) / TBP = FY 93 CAPITATION RATE

7. **CRITERION SCORING:** Rank order value. A lower rank is a better score.

IMPACT ACRES

1. **DEFINITION:** Measures the size and capability of the land used for range impact area by the installation.

2. **PURPOSE:** This is an indication of the installation's range capacity to support the conduct of weapons familiarization, qualification, crew gunnery, and combined arms live fire training. The larger and more capable impact areas provide more range capacity on the installation.

3. **METHODOLOGY:** Impact areas are evaluated using a D-Pad submodel measuring and ranking the following for each post: number of impact acres, ability to conduct a Joint Air Attack Team exercise, and the ability of the installation's ranges to support firing the MLRS with training munitions.

4. **REFERENCES:** MACOM/installation data call. Installation Range Regulations.

5. **UNIT OF MEASURE:** Composite Number. A Decision Pad submodel is used with the following weights given to each sub-element:

Impact Acres (total acres)			60 points
If:			
Air Force Bombing Capable	(Y/N)	yes =	5 points
Attack Helicopter Capable	(Y/N)	yes =	5 points
Tube Artillery Capable	(Y/N)	yes =	5 points
ALL=YES			15 points
MLRS Capable	(Y/N)		10 points
	Total		100 points

6. **EQUATION:** This rating is determined by using a Decision Pad submodel.

7. **ATTRIBUTE SCORING:**

For submodel: Impact Acres--A larger number is a better score.
Other measures--Yes is better.

For main model: A higher value results in a better ranking.

INFORMATION MISSION AREA (IMA)

1. **DEFINITION:** Evaluation of existing IMA systems. The IMA systems to be evaluated are common user Telephone Switching System, Outside Cable Plant, Computers, Telecommunications Center (TCC), Local Area Network (LAN), Defense Data Network (DDN) Node, Video Teleconference (VTC).

2. **PURPOSE:** Evaluate IMA systems on the basis of available capacity, capability for expansion, and technology utilized.

3. **METHODOLOGY:** Utilized a questionnaire completed by the Installation Director of Information Management. Include programmed, funded equipment as installed and on hand.

4. **REFERENCES:** Installation data Call. MACOM DCSIM staff validation of installation input.

5. **UNIT OF MEASURE:** As given in the table below.

6. **EQUATION:** A Decision Pad submodel is used.

IMA CATEGORY	SCORING	TOTAL
~~IMA CATEGORYSCORINGTOTAL~~ A. TELEPHONE SWITCHING		
1. Is Main DCOs digital switch? ~~(if analog, go to Category B)~~ (if analog, go to Category B)	Yes = 5	
~~Yes = 5~~ 2. Percentage of Fill (Entire digital switch system)	<70% = 5 ~~70-90% = 3~~	<70% = 5
~~70-90% = 3~~ ~~>90% = 1~~	>90% = 1	
3. Lines (Equipped) ~~>5,000 = 5~~	>5,000 = ~~5 3. Lines (Equipped)~~ 2,500-5,000 = 3 <2,500 = 1	
4. Lines (Expandable To) ~~(Expandable To)~~ >10,000 = 5	>10,000 = ~~5 4. Lines~~ 5,000-10,000= 3 < 5,000 = 1	
~~CATEGORY WEIGHT:~~ ~~25 POINTS X TOTAL~~		

CATEGORY WEIGHT: 25 POINTS X TOTAL

~~B. OUTSIDE CABLE PLANT (IF LEASED, CATEGORY SCORE IS ZERO, GO TO CATEGORY~~ C)
~~B. OUTSIDE CABLE PLANT~~
~~(IF LEASED, CATEGORY SCORE IS ZERO, GO TO CATEGORY~~ C) 1. OSCAR Implementation Phase
(Choose only 1)

~~Phase 3 Complete = 5~~~~Phase 3 Complete = 5~~

Phase 2 Complete = 3
Phase 1 Complete = 1

2. Cable Type

(Choose only 1) Fiber Backbone(DS3 MUX Rate)= 5
Mixed = 3Fiber Backbone
(DS3 MUX Copper Rate) = 51
Mixed = 3
Copper = 1 3. Percentage of Fill <50% = 5
50-75% = 3
76-100% = 1

3. Percentage of Fill <50% = 5
50 75% CATEGORY WEIGHT: 20 POINTS X
TOTAL ___ = 3
76 100% = 1C. COMMON USER SUPPORT
1. Common User Mainframe/Client Server-Architecture
(Choose 1 only, the highest available technology
- equivalent to IBM Model)
IBM 3090 or Client Server= 5
IBM 4381 = 4
IBM 4341 = 3 CATEGORY WEIGHT:
20 POINTS X TOTAL_____ C. COMMON USER MAINFRAME SUPPORT 1. Mainframe
(Choose 1 only, the highest available technology equivalent to IBM
Model)
IBM 3090 = 5
IBM 4381 = 4
IBM 4341 = 3
IBM 4361 = 2
IBM 4331 = 1

2. Total MIPS in Mainframe Environment:> 10 MIPS = 5 2. Total MIPS > 10
MIPS = 5
7-10 MIPS = 4
OR 4-6 MIPS = 3
1-3 MIPS = 2
Server Speed (MEGAHERTZ) in Client-
Server environment (choose speed 31+ MH = 5
related to majority of servers) 16-30 MH = 3 3. ASIMS
RDC = 5
1-15 MH = 1
<1 MH = 0
3. ASIMS RDC = 5
DPC = 3
4. E-Mail
(Choose 1) Sperry/MMDF = 5Sperry/MMDF = 5
Other E-Mail = 3
No E-Mail Host = 0

5. Front End Processor (FEP) Yes = 5

Yes = 5 6. Super Computer Yes = 5

7. Common User DASD (GIGABYTES) 6+ GB = 5
4-6 GB = 3 Yes = 5
CATEGORY WEIGHT:
15 POINTS X 1-3 GB TOTAL = 1
<1 GB = 0

CATEGORY WEIGHT 15 POINTS X TOTAL_____

D. DSN/DDN Node (Choose ALL THAT APPLY)
DSN Yes = 5
MILNET Yes = 5
DISNET Yes = 5
SCINET Yes = 5
~~D. DSN/DDN Node (Choose 1 only) DSN~~
~~MILNET~~
~~DISNET~~
~~SCINET Yes = 5~~
~~Yes = 5~~
~~Yes = 5~~
~~Yes = 5 CATEGORY WEIGHT:~~
~~CATEGORY WEIGHT:~~ 5 POINTS X TOTAL___
_

E. Post Wide WAN/LAN
~~Fiber Optic Yes = 5~~
Other Yes = 3

CATEGORY WEIGHT: 15 POINTS X TOTAL_____
~~CATEGORY WEIGHT:~~
~~15 POINTS X TOTAL_____~~ F. TCC

1. GENSER(Choose only 1) AMS,DINAH,MDT,FAST = ~~5 1. GENSER~~
~~(Choose only 1)AMS, DINAH, or FAST = 5~~
SRT = 3
DCT9000 or Mod 40 = 2
Courier Svc/Other = 1
None = 0

2. DSSCS (Choose only 1) Assist = 5
~~(Choose only 1)Assist~~ 5
DCT9000 or Mod 40 = 3
Courier Svc/Other = 1
None = 0

3. AMME or ASC Yes = 5

~~Yes = 5~~ 4. Comm. Secure Processor (CSP) Yes = 5
~~Yes = 5 CATEGORY WEIGHT~~:
CATEGORY WEIGHT: 5 POINTS X TOTAL

G. VTC

VTC facility Yes = 3 ~~VTC facilityYes = 3CATEGORY WEIGHT~~:
CATEGORY WEIGHT: 15 POINTS X TOTAL

TOTAL Score : Summation of category scores

~~TOTAL Score~~

7. **ATTRIBUTE SCORING:** A Higher number is a better score.

INFRASTRUCTURE

1. **DEFINITION:** Capacity of water, sewage treatment, electrical distribution and cost of land fill.

2. **PURPOSE:** To measure the infrastructure capacity of the installation.

3. **METHODOLOGY:** Four aspects are considered:

a. Water: Capacity in terms of million gallons per day.
b. Sewage treatment: Capacity in terms of million gallons per day.
c. Electrical distribution: Capacity in terms of million kilowatt hours.
d. Land fill: Cost of land fill used by the installation in dollars per short ton (on or off post), determined based upon historical records.

Measures a,b,c should incorporate any new infrastructure capacity resulting from projects included in the FY 91 - FY 95 military construction program.

4. **REFERENCES:** Installation and MACOM engineer analysis based on the installation master plan (utilities analysis report). Lacking the installation master plan, the DEH utilities division will provide the information.

5. **UNIT OF MEASURE:** As described in methodology above.

7. **ATTRIBUTE SCORING:**

For submodel: Water, Sewage treatment, electrical distribution - A larger number is a better score. Land fill--A smaller cost is a better score.

For main model: A higher value results in a higher ranking.

INSTALLATION AND BASE OPERATING EXPENSE (IBOE)

1. **DEFINITION:** IBOE is a measure of the BASOPS support required for execution of an installation's base support mission.

2. **PURPOSE:** To measure the overall economic indicator concerning the long-term BASOPS operational cost to retain an installation. This is one of a series of factors used to assess the relative cost of operation of an installation.

3. **METHODOLOGY:** Under the Defense Business Operations Fund (DBOF), cost accrual accounting systems are required to produce the actual cost of the product to the customer. This factor is an identifiable cost associated with the production/maintenance facility DBOF stabilized rate used to bill costs to DBOF customers.

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Dollars per Direct Labor Hour.

6. **EQUATION:** Summation of all installation and base operations expense divided by the Direct Labor Hours at 85% capacity utilization.

7. **CRITERION SCORING:** A smaller value is a better score.

LOCALITY PAY FACTOR

1. **DEFINITION:** The relative differences in cost of civilian work force at each installation.

2. **PURPOSE:** To measure the relative cost of labor -- not cost of living -- from one geographical area to another. This is a measure of the relative cost of labor to the Army at the installation.

3. **METHODOLOGY:** Used the Locality-Based Comparability Payments for General Schedule employees. In high cost areas (NYC, San Francisco, Los Angeles) the index used will be 1.08 as established by the Federal Employees Pay Comparability Act of 1990. 1.08 index will also be used for Hawaii and Alaska since these areas receive COLA and not a locality pay amount.

4. **REFERENCES:** Locality-Based Comparability Payments Tables

5. **UNIT OF MEASURE:** Locality-Based Comparability Payment Index expressed as a percentage.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** Index from source tables -- lower index results in a higher ranking.

MAINTENANCE FACILITIES

1. **DEFINITION:** Maintenance facilities are defined as the total permanent square footage of maintenance (aviation and vehicle) facilities on the installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent maintenance facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of maintenance facilities for ~~the Essential Elements of Analysis (EEA) and~~ Facility Category Groups (FCG) shown below:

~~EEA~~	~~EEA DESCRIPTION~~	FCG	FCG DESCRIPTION
~~210~~	~~AVIATION MAINT~~	21110	MNT HANGAR AVUM
	21111 MNT HANGAR AVIM		
~~214~~	~~VEHICLE MAINT~~	21407	NG MAINT FAC
	21409 AR MAINT FAC		
	21410 VEH MNT SH ORG		
	21420 VEH MNT SHOP DS		
	21800 SP PURP MNT SHP		
	21900 MNT INST O&R		

~~New~~Planned ~~FY92-96~~ construction projects are counted as existing ~~assets~~projects in ~~the FY 91 - FY 95 Military Construction Program~~ HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Square Feet - higher number results in a better ranking.

MAINTENANCE FLEXIBILITY

1. **DEFINITION:** Maintenance flexibility is the ability to perform maintenance on a variety of different commodities.

2. **PURPOSE:** To measure a plant's maintenance flexibility which enables maintenance capabilities to be changed as demands change for different products and the ability to absorb varied workloads.

3. **METHODOLOGY:** Maintenance capabilities considered range from a single commodity to the full range of maintenance for all items of Army equipment. Inflexible capability refers to the inability to convert from one product line to another without a major conversion effort. This attribute will be measured by assigning points to each of the 13 Commodity areas categorized in the Depot Maintenance Requirements database (OP-29). Points will be assigned to each commodity and weighted based on a subjective evaluation of the relative facilitization required to repair each commodity. Depots will receive a corresponding value for each of the commodities that are included in their current workload and for commodities that could be repaired with no additional facilitization (except DMPE).

4. **REFERENCES:** DOD 4251-15H, AR 750-2, AMC-R 750-28, FY96-FY01 POM "OP-29" Database.

5. **UNIT OF MEASURE:** Number of commodities that can be repaired with no additional facililitization (except DMPE).

6. **EQUATION:** A weighted matrix of 13 commodities.

7. **CRITERION SCORING:** A larger number gives a better score.

MANEUVER ACRES

1. **DEFINITION:** The net total acreage of the installation available for maneuver and training.

2. **PURPOSE:** To measure the overall land size of the installation available for maneuver and field training which is an important element in stationing and training land forces. This is one of several factors used to assess the relative size of installations.

3. **METHODOLOGY:** Summation of the total maneuver acreage identified in HQRPLANS (FCG 17986) as verified by MACOMs and validated by installations. Maneuver acreage will include only land used as maneuver and training area. Impact areas, cantonment areas, ranges, off limits areas, and environmentally sensitive areas that are considered unusable will not be included. Maneuver rights areas will be included in computations at a value of one half of the value of Army-Owned Acres.

4. **REFERENCES:** April 1994 HQRPLANS, MACOM input with installation validation. A current (FY94) Memorandum of Agreement (MOA) that allows maneuver and field training is required to claim maneuver rights acres.

5. **UNIT OF MEASURE:** Thousands of acres.

6. **EQUATION:** Army-Owned Maneuver Acres + 1/2 * (Maneuver Rights Area Acres).

7. **ATTRIBUTE SCORING:** Larger number of acres results in a better score.

MCA COST FACTOR

1. **DEFINITION:** Measure of the relative cost factor for construction at an installation.

2. **PURPOSE:** Indicates the relative difference between installations for construction of the same facility. Provides relative index on cost of capital investment for modernization or expansion of facilities. This is one of a series of factors used to access the relative cost of operations of an installation.

3. **METHODOLOGY:** Continental United States (CONUS) Installation Area Cost Factor (ACF) Index values from the Area Cost Factors and Unit Prices for FY 1996-1997.

4. **REFERENCES:** Area Cost Factors and Unit Prices for FY 1996-1997, Department of Defense Facility Construction, 20 August 1993.

5. **UNIT OF MEASURE:** ACF Index Value.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** ACF Index - lower value results in a better ranking.

MECHANIZED MANEUVER ACRES

1. **DEFINITION:** Measures the largest contiguous acreage of the installation available for maneuver and training of mechanized formations.

2. **PURPOSE:** To measure the largest parcel of land available to the installation for training maneuvers of mechanized forces. This measure places added weight to the maneuver acres that can be used to train mechanized forces.

3. **METHODOLOGY:** Calculate the acreage of the installation's largest contiguous maneuver area as noted on the current training area regulations. A maneuver rights area could be counted when the area is easily accessible to the installation and commonly used for training large mechanized formations. Maneuver acreage will include only land used as maneuver and training area. Impact areas, cantonment areas, ranges, off limits areas, and environmentally sensitive areas that are considered unusable will not be included.

4. **REFERENCES:** Installation data call, Installation Range regulations~~, March 1994 HQRPLANS~~.

5. **UNIT OF MEASURE:** Thousands of acres.

6. **EQUATION:** Not Applicable.

7. **ATTRIBUTE SCORING:** Acres - higher value results in a better ranking.

MEDICAL RESEARCH FACILITIES

1. DEFINITION: Laboratory activities, Research Facilities. Research facilities must have suitably equipped facilities to operate efficiently.

2. PURPOSE: To measure laboratories and other research facilities used in support of Medical Centers.

3. METHODOLOGY: Assets are determined by summing the square footage from the FCG ~~3900~~31010 series and installation validation.
Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. REFERENCES: ~~March~~April 1994 HQRPLANS.

5. UNIT OF MEASURE: Thousands of Square ~~footage~~feet.

6. EQUATION: Summation.

7. CRITERION SCORING: A larger number is a better score.

MISSION OVERHEAD

1. **DEFINITION:** Mission Overhead is a measure of the relative cost of providing production/maintenance capacity. Mission overhead includes, as an example, Production Support Functions, Indirect Labor, Materiel Adjustments, Equipment Management, and Depreciation/Amortization of production equipment and facilities.

2. **PURPOSE:** To measure the overall economic indicator concerning the efficiency of production/maintenance operations of the facility. This is one of a series of factors used to assess the relative cost of operation of an installation.

3. **METHODOLOGY:** Under the Defense Business Operations Fund (DBOF), cost accrual accounting systems are required to produce the actual cost of the product to the customer. This factor is an identifiable cost associated with the production/maintenance facility DBOF stabilized rate used to bill costs to DBOF customers.

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Dollars per Direct Labor Hour.

6. **EQUATION:** Summation of all indirect mission expenses divided by the Direct Labor Hours at 85% capacity utilization.

7. **CRITERION SCORING:** A smaller value is a better score.

MOBILIZATION CAPABILITY

1. **DEFINITION:** Capability of an installation to support the reconstitution of forces through the ability to billet, train, and deploy soldiers.

2. **PURPOSE:** To measure an installation's capacity to train, equip and deploy units in a time of national emergency. The Army's "Mobilization Stationing Strategy and Requirements Study" identified five critical mobilization attributes that an installation should possess: (1) billeting; (2) deployment network; (3) maintenance facilities; (4) ranges and training; and (5) geographic dispersion.

3. **METHODOLOGY:** A Decision Pad submodel is used with the following weights given to each sub-element:

MEASURE	Points
Mobilization billets	10
Deployment Network	10
Ranges	10
Net Maneuver Acres	10
Contiguous Maneuver Acres	10
Work Space	10
Total	60

4. **REFERENCES:**

a. DA PAM 210-7 for housing criteria; AMOPS Annex N. MACOM Reports (TRADOC-ATEN-24 Report, FORSCOM J-3 Installation Capability Spreadsheet).

b. Mobilization data will be obtained from MACOM mobilization planners using Army Mobilization Operations Planning System (AMOPS) data as of 1 AUG 92 and will be verified at the installation level.

5. **UNIT OF MEASURE:** Mobilization Billets are measured in spaces. Other IA attributes are measured as defined.

6. **EQUATION: NA**

7. **ATTRIBUTE SCORING:** A higher value is a better score.

MOBILIZATION THROUGHPUT

1. **DEFINITION:** Capability of a port installation to expand its support during mobilization or a contingency.

2. **PURPOSE:** Measure ability to load and unload equipment during mobilization or a contingency.

3. **METHODOLOGY:** Measurement of the maximum daily throughput capacity.

4. **REFERENCES:** MTMCTEA Report SE 89-3d-31, Ports for National Defense.

5. **UNIT OF MEASURE:** Measurement Tons per day.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** A higher value results in a higher rating.

NORMAL THROUGHPUT

1. **DEFINITION:** Normal throughput capacity is the average material, cargo and equipment that can be loaded and unloaded a daily basis.

2. **PURPOSE:** Measure a ports capability to load and unload material and equipment.

3. **METHODOLOGY:** Use the Average measurement tons per day throughput capacity as given by the referenced report.

4. **REFERENCES:** MTMCTEA Report SE 89-3d-31, Ports for National Defense.

5. **UNIT OF MEASURE:** Measurement Tons per day.

6. **EQUATION:** None.

7. **ATTRIBUTE SCORE:** A larger number is a better score.

OPS/ADMIN FACILITIES

1. **DEFINITION:** Total square footage of permanent facilities used for operational/administrative functions.

2. **PURPOSE:** To measure the installation capacity for providing permanent general purpose administrative and operational facilities. This is one of several factors used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total square feet of an installation's permanent operations/administrative facilities for the ~~Essential Elements of Analysis (EEA) and~~ Facility Category Groups (FCG) shown below:

~~EEA~~	~~EEA DESCRIPTION~~	FCG	FCG DESCRIPTION
~~141~~	~~UNIT OPS BLDGS~~	14112	AV UNIT OPS BLDG
~~140~~	~~OPERATIONS~~	14110	AF OPS BLDG
~~650~~	~~ADMINISTRATION~~	14182	BDE HQ BLDG
		14183	BN HQ BLDG
		14185	CO HQ BLDG
		61050	GEN PURPOSE ADMIN

~~New~~Planned FY92-96 construction projects~~, funded~~ are counted as existing ~~assets~~projects in ~~the FY 91 - FY 95 Military Construction Program~~HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS and installation validation.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** Square Feet - higher value results in a better ranking.

PATIENT CARE FACILITIES

1. **DEFINITION:** The total space used for patient care at a medical treatment facility.

2. **PURPOSE:** To measure an MTFs ability to treat and care for patients.

3. **METHODOLOGY:** Summation of all space used for patient treatment (EKA 510). ~~EEAs~~Planned ~~include~~FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** A larger number is a better score.

PERCENT PERMANENT FACILITIES

1. **DEFINITION:** Total square footage of all existing permanent buildings divided by total installation facilities square footage. This is a quality measure to reflect construction investment and WWII Wood elimination.

2. **PURPOSE:** To indicate the overall quality of the installation's facilities. The age of facilities is an indirect measurement of the quality of the installation's facility structure. Newer buildings are more comfortable, economical and safer than old buildings.

3. **METHODOLOGY:** Used total square footage of all existing permanent buildings divided by total installation facilities square footage. ~~Projects~~Planned FY92-96 ~~Construction~~construction ~~Program~~projects are counted as existing ~~permanent~~projects ~~assets~~in ~~the FY 91 - FY 95 Military~~HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Percent.

6. **EQUATION:** As above.

7. **CRITERION SCORING:** Percent number - higher number results in a better ranking.

PIERS AND WHARVES

1. **DEFINITION:** Deep water accessibility and sufficient water at pier side at mean low tide to permit loading of vessels.

2. **PURPOSE:** To determine the capacity of the terminal to perform its mission.

3. **METHODOLOGY:** Developed three factors to describe the pier structure of a Port facility:

Measurement of water depth: Water depth measured in feet Actual water depth data maintained by HQMTMC Engineer.

Type vessels Accommodated:		
	RORO	yes = 5 pts
	LOLO	yes = 5 pts
	Container	yes = 5 pts
	Heavy Lift	yes = 5 pts

Length of Pier in feet: Data maintained by HQMTMC Engineer.

4. REFERENCES: Stated in methodology, plus installation data call.

5. **UNITS OF MEASURE:** Feet, yes/no.

6. **EQUATION:** D-pad sub-model is used with the following weights.

WATER DEPTH	40 points
TYPE VESSELS	20 points
LENGTH OF PIER	40 points

7. **ATTRIBUTE SCORING:** Higher value results in a higher rank.

PRODUCTION FLEXIBILITY

1. **DEFINITION:** Production flexibility is the ability to produce a variety of different commodities.

2. **PURPOSE:** To measure a plant's production flexibility which enables maintenance capabilities to be changed as demands change for different products and the ability to absorb varied workloads.

3. **METHODOLOGY:** Production capabilities considered range from a single commodity to the full range of maintenance for all items of Army equipment. Inflexible capability refers to the inability to convert from one product line to another without a major conversion effort. This attribute will be measured by assigning points to each of 12 Commodity areas (Aircraft, Automotive, Combat Vehicles, Construction, Communications/Electronics, Missiles, Watercraft, Munitions, Weapons, Rail, General Equipment, and Other). Points will be assigned to each commodity and weighted based on a subjective evaluation of the relative facilitization required to produce each commodity. Industrial facilities will receive a corresponding value for each of the commodities that are included in their current workload and for commodities that could be repaired with no additional facilitization (except DMPE).

4. **REFERENCES:** Data Call.

5. **UNIT OF MEASURE:** Number of commodities that can be produced with no additional facililitization (except DMPE).

6. **EQUATION:** A weighted matrix of 12 commodities.

7. **CRITERION SCORING:** A larger number gives a better score.

QUANTITY - DISTANCE

1. **DEFINITION:** The quantity of explosives material and distance separation relationships provide defined types of protection. These relationships are based on levels of risk considered acceptable for the stipulated exposures and are tabulated in the appropriate Quantity Distance tables.

2. **PURPOSE:** To determine whether an installation requires waivers due to inadequate buffer zones.

3. **METHODOLOGY:** Specified Quantity-Distance Tables determine whether waivers are required for storage of ammunition. The preferred situation is an installation that can store ammunition without waivers.

4. **REFERENCES:** MSC input based on TM 9-1300-206, DOD 4145.26-M, DOD 6055.9-STD.

5. **UNIT OF MEASURE:** Waivers.

6. **EQUATION:** NA

7. **ATTRIBUTE SCORING:** A no waiver determination indicates that the installation does not require waivers and results in a higher score.

RANGES

1. **DEFINITION:** The total number of firing points equipped with the Remote Target System (RETS), the number of Multi-Purpose Range Complexes (MPRC) and the availability of a standard design MOUT range and total number of ranges are weighted and combined to provide a measure of the overall capability of the installation's range structure.

2. **PURPOSE:** To evaluate the capability of the installation to support range operations such as qualification and live fire exercises.

3. **METHODOLOGY:** A Decision Pad submodel is used with the following weights given to each sub-element:

NUMBER OF MPRC RANGES		45 points
NUMBER OF RETS EQUIPPED FIRING POINTS		45 points
STANDARD MOUT RANGE AVAILABLE?	YES =	5 POINTS
TOTAL NUMBER OF RANGES		5 points
Total		100 points

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS, validated TRAINLOAD data and installation data call as applicable.

5. **UNIT OF MEASURE:** All ranges, MPRC, and RETS equipped ranges are measures in eaches. All ranges counted must be in operational condition and used for weapons firing. The total number of ranges displayed in HQRPLANS (EEA 179&17R) include planned FY92-96 construction projects.

6. **EQUATION:** NA

7. **ATTRIBUTE SCORING:**

For submodel: A higher number is a better score.

For main model: The submodel rating is the input and a higher value results in a higher ranking.

RESEARCH AND DEVELOPMENT FACILITIES

1. **DEFINITION:** Laboratory activities, environmental control chamber facilities, Research and Development Facilities. R & D facilities must have suitably equipped facilities to operate efficiently.

2. **PURPOSE:** To measure laboratories and other research facilities used in support of material development.

3. **METHODOLOGY:** Assets are determined by summing the permanent square footage from ~~the~~EEA 300~~ and 200 series EEAs~~. ~~This sum is only for~~ Planned ~~the~~FY92-96 ~~FCGs~~construction ~~that~~projects are ~~measured~~counted as existing projects in ~~square feet~~HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** Higher number is a better score.

RESERVE TRAINING

1. **DEFINITION:** A measure of support provided by an installation to the Reserve Components, including individual and unit training.

2. **PURPOSE:** To evaluate an installation on available capacity to support Reserve Component units and individuals during peacetime.

3. **METHODOLOGY:** Reserve Component support is evaluated using a Decision Pad submodel measuring and ranking the Annual Training (AT), Inactive Duty Training (IDT). Each of the above factors is measured for each installation. The raw data is used in the model and a weighted average score is calculated for each installation. This score will be calculated by taking a three-year average (FY 91-93).

4. **REFERENCES:** Training data, documented by the installation Director of Reserve Component Support (or its equivalent), and validated at installation level, will be used.

5. **UNIT OF MEASURE:**

   a. Annual Training is measured in number of personnel.
   b. Inactive Duty Training is measured in Mandays.

6. **EQUATION:** A Decision Pad submodel is used with the following weights given to each sub-element:

		WEIGHT
Annual Training (Number of People)		25
Inactive Duty Training (Mandays)		75
	Total	100

7. **ATTRIBUTE SCORING:**

Raw data/number: A higher number is a better score.
For main model: A higher number is a better score.

SPECIAL AIRSPACE

1. **DEFINITION:** The total cubic area of special use airspace operated by the installation.

2. **PURPOSE:** To measure the overall special use air space of the installation under military control. This is one of several factors used to assess the relative size of the training area(s) controlled by installations.

3. **METHODOLOGY:** The airspace dimensions (longitude, latitude and altitude) identified in the us Army Airspace Master Plan is converted to cubic miles. The result is provided for MACOM and installation verification.

4. **REFERENCES:** US Army Airspace Master Plan and installation validation.

5. **UNIT OF MEASURE:** Cubic miles.

6. **EQUATION:** USMA Math Department Model.

7. **ATTRIBUTE SCORING:** Higher value results in a better ranking.

SPECIAL CARGO CAPABILITY

1. **DEFINITION:** Adequacy of the port facility to handle special cargo requirements.

2. **PURPOSE:** To indicate the terminal's ability to provide responsive and timely support to customers during peacetime, mobilization, and wartime.

3. **METHODOLOGY:** Assessment of the capability of the port to handle special cargo.

   a. Hazardous material yes = 50 points

   b. Ammunition yes = 50 points

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Yes/No

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** Higher value is a better score.

STAGING AREAS

1. **DEFINITION:** Total Square feet of hard surface area at the terminal used for staging cargo prior to loading on the ship.

2. **PURPOSE:** To determine the terminal's capacity to perform its mission.

3. **METHODOLOGY:** Measurement of hard surface staging square feet.

4. **REFERENCES:** Department of the Army Facilities Engineering and Housing Annual Summary of Operations, Volume III, Installations Performance, FY 92.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** Number. Higher value results in a higher score.

SUPPLY AND STORAGE FACILITIES

1. **DEFINITION:** Total permanent square footage of Supply and Storage facilities on an installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent storage facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of supply and storage facilities for the following Facility Category Groups (FCG) shown below:

FCG	FCG DESCRIPTION
43200	Cold Storage - Inst
44100	Gen Purp Whse - Dep
44200	Gen Purp Whse - Inst
44230	Cont Hum Whse
44240	Infl Matls Whse
44260	Veh Stor Shed

~~New~~Planned ~~FY92-96~~ construction projects are counted as existing ~~assets~~projects in ~~the FY 91 - FY 95 Military Construction Program~~ HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Higher number results in a better ranking.

SUPPORT FACILITIES

1. **DEFINITION:** Facilities providing logistical support for the primary mission.

2. **PURPOSE:** To indicate the capacity of the terminal to provide logistical support.

3. **METHODOLOGY:** Measurement of logistical facilities square footage in ERAs (143,210,212,213,214,215,216,218,400). Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** ~~1993~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Square feet in thousands.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORE:** Higher value results in a higher score.

TEST AND EVALUATION FACILITIES

1. **DEFINITION:** Square feet of all test and evaluation facilities and value of all installed test equipment.

2. **PURPOSE:** To measure the ability of an installation to conduct test and evaluation missions.

3. **METHODOLOGY:** A D-Pad submodel is used giving equal weight to facilities and equipment. Facilities assets are determined by summing the square footage from ~~the~~EEA ~~category code groups listed in 39010 series of HQRPLANS~~300. Equipment assets are determined by summing all equipment (over $100,000 in value) from the TESTFACTS database. Each type of asset is given equal weight.
Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS, Current TESTFACTS data w/installation validation.

5. **UNIT OF MEASURE:** Thousands of square feet - Facilities.
Thousands of dollars - Equipment

6. **EQUATION:** Summation

7. **ATTRIBUTE SCORING:** A larger number = a better score.

TEST AND EVALUATION MISSION DIVERSITY

1. **DEFINITION:** Test and evaluation diversity is the capability to conduct test and evaluation missions for a wide variety of different equipment commodity groups and customers.

2. **PURPOSE:** To measure the ability of an installation to conduct test and evaluation missions for a wide range of different equipment commodity groups.

Test and Evalyuation Commodity Groups:

Air Defense
Air Delivery
Aircraft/Aviation Systems/UAVs
C3/IEW
Chemical/Biological
Clothing/Personnel Equipment
Direct Fire
Directed Energy
Electric Gun
Electromagnetic Environments
General Support Equipment
Indirect Fire
Lethality/Vulnerability
Mines
Missiles
Natural Environment
Nuclear Fires
Robotics
Sea Vehicles
Smart Weapons
Space Systems
Tracked Vehicles
Transportability
Wheeled vehicles

3. **METHODOLOGY:** Summation of commodities supported by testing during the FY92/94 time period.

4. References: Installation data call.

5. Unit of Measure: Eaches.

6. Equation: Summation.

7. CRITERIA SCORING: Alager number is a better score.

TEST AND EVALUATION RANGES

1. **DEFINITION:** The total number of test and evaluation ranges on the installation and the total impact acres available on an installation.

2. **PURPOSE:** To measure the number and size of test and evaluation ranges on an installation.

3. **METHODOLOGY:** A D-Pad submodel is used giving equal weight to Number and Size of ranges. Number of ranges are determined by summing the total number of individual ranges from the series 371 category code group from HQRPLANS (FCG 37110). Size of ranges is determined by the total number of impact acres available on the installation. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS and installation data call.

5. **UNIT OF MEASURE:** Number of ranges - Eaches.
   Size of ranges - Acres.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** A larger number gives a better score.

VARIABLE HOUSING ALLOWANCE (VHA) FACTOR

1. **DEFINITION:** Measure of the cost of variable housing allowance for military personnel living off-post.

2. **PURPOSE:** To measure cost of housing military personnel in communities surrounding the installation. This is an indicator of the location cost to the Army for assignment of military personnel to the installation.

3. **METHODOLOGY:** Used the information from the VHA Zip Code Microfiche, distributed to Finance Offices by ASA(FM), for January 1993. Summation of the "with dependents" rate for E5, W3 and 03 as representative of the grades at these installations.

4. **REFERENCES:** 1994 VHA Tables.

5. **UNIT OF MEASURE:** Dollars.

6. **EQUATION:**

E-5 w/dependents
+ W-3 w/dependents
+ O-3 w/dependents
BRAC 95 VHA FACTOR

7. **CRITERION SCORING:** Dollars - the lower value results in a higher rank.

WORK SPACE

1. **DEFINITION:** Work space is defined as the total permanent square footage of maintenance (aviation and vehicle) facilities and operational/administrative facilities on the installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent maintenance, general purpose administrative and operational facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of operations/administrative and maintenance facilities for the ~~Essential Elements of Analysis (EEA) and~~ Facility Category Groups (FCG) shown below:

~~EEA~~	~~EEA DESCRIPTION~~	FCG	FCG DESCRIPTION
~~210~~	~~AVIATION MAINT~~	21110	MNT HANGAR AVUM
21111	MNT HANGAR AVIM		
~~214~~	~~VEHICLE MAINT~~	21407	NG MAINT FAC
21409	AR MAINT FAC		
21410	VEH MNT SH ORG		
21420	VEH MNT SHOP DS		
21800	SP PURP MNT SHP		
21900	MNT INST O&R		
~~141~~	~~UNIT OPS BLDGS~~	14112	AV UNIT OPS BLDG
~~140~~	~~OPERATIONS~~	14110	AF OPS BLDG
~~650~~	~~ADMINISTRATION~~	14182	BDE HQ BLDG
14183	BN HQ BLDG		
14185	CO HQ BLDG		
61050	GEN PURPOSE ADMIN		

~~New construction projects in the FY 91 - FY 95 Military Construction Program are counted as existing assets.~~

Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** ~~March~~April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** NA

7. **CRITERION SCORING:** Higher number is a better score.

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ACCESSIBILITY

1. **DEFINITION**: The accessibility of an installation as measured by calculating the number of miles to the four most "travelled to" destinations from that installation, one of which must be the installation's next higher headquarters.

2. **PURPOSE**: To assess how well located an installation is to perform its command, control, and management functions in terms of its physical distance from major subordinate units and higher headquarters.

3. **METHODOLOGY**: The average distance in miles from the installation to its four most "travelled to" locations, one of which must be the installation's higher headquarters, will be calculated using actual travel data for FY 93. Each installation will report the four most "travelled to" locations and the distance they use to calculate travel costs to those locations.

4. **REFERENCES**: Installation travel records for FY 93.

5. **UNIT OF MEASURE**: Average distance in miles.

6. **EQUATION**:

$$\frac{DHQ + DLOC1 + DLOC2 + DLOC3}{4} = \text{Avg Distance}$$

Where:

DHQ = Distance to Higher HQ

DLOC1 = Distance to most travelled to location

DLOC2 = Distance to second most travelled to location

DLOC3 = Distance to third most travelled to location

7. **ATTRIBUTE SCORING**: A low number is best.

AMMUNITION STORAGE

1. **DEFINITION:** Ammunition storage capability measured square feet.

2. **PURPOSE:** A measure of an installation's capability to store and handle and ammunition.

3. **METHODOLOGY:** Assets are determined by summing the permanent square footage from FCGs 42100 and 42200. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCE:** April 94 update of HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** A larger number = a better score.

APPLIED INSTRUCTIONAL FACILITIES

1. **DEFINITION:** Total square footage of permanent, specialized training and instructional facilities on the installation.

2. **PURPOSE:** Indicates special purpose facilities used for applied training and instruction. Special purpose facilities represent a significant cost investment to the military. Relocation of elements requiring special purpose facilities would cause significant expenditure of MCA funds and would require more time to complete realignment.

3. **METHODOLOGY:** Summation of the square footage of permanent applied instructional facilities. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

Facility Category Group: 17130 (Applied Instructional Building).

4. **REFERENCES:** April 1994 HQRPLANS. Engineer review.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** As above.

7. **ATTRIBUTE SCORING:** Total square footage--higher number results in a better score.

AVAILABLE WORK FORCE

1. **DEFINITION:** Available workforce density of the surrounding area around the installation.

2. **PURPOSE:** This is an indirect measure of availability of an adequate workforce in the surrounding community. Representative area is the area identified as the Region of Influence by the BRAC Economic Impact model (This area is generally the county or counties surrounding the installation or the Metropolitan Statistical Area (MSA)).

3. **METHODOLOGY:** This is an indirect measure of the availability of an adequate civilian workforce.

4. **REFERENCES:** Department of Defense Economic Impact model. Office of Economic Adjustment (OEA) workforce populations.

5. **UNIT OF MEASURE:** Available Work Force population.

6. **EQUATION:** NA

7. **CRITERION SCORING:** A larger number is a better score.

AVERAGE AGE OF FACILITIES

1. **DEFINITION:** Average age of all existing facilities on the installation.

2. **PURPOSE:** Average facility age is an indicator of the overall quality and condition of the facilities on the installation.

3. **METHODOLOGY:** Use the building Age Distribution report, PART #3, in HQRPLANS, in the facility Revitalization Analysis section to construct a weighted average of the facilities age. SELECY ALL FCG AND YEAR 1994. Note that the April 94 HQRPLANS includes FY 92 planned construction in the first column percentage. For each base:

   a. Multiply the percent in the first column by 5
   the percent in the second column by 15
   the percent in the third column by 25
   the percent in the fourth column by 35
   the percent in the fith column by 45
   and the percent in the sixth column by 55

   b. Sum the products from above and divide by 100.

4. **REFERENCES:** April 1994 HQRPLANS pending special update in June 1994 HQRPLANS. ***NOTE: The June 94 HQRPLANS is expected to have a more accurate algorithm (based on the actual year vs 10 year increments). HQDA will provide the updated average age calculations for substitution in the IA when available. The new algorithm will NOT include planned construction or leased housing in the calculation.***

5. **UNIT OF MEASURE:** Average (mean) age per square foot.

6. **EQUATION:** As above.

7. **ATTRIBUTE SCORING:** Lower number (ie. lower age) results in a better score.

BARRACKS
(Unaccompanied Personnel Housing)

1. **DEFINITION:** Total number of permanent on post spaces available for unaccompanied officers and enlisted personnel.

2. **PURPOSE:** To determine the availability of adequate UOPH and UEPH at the installation. Measures the total unaccompanied officer personnel housing (UOPH) and unaccompanied enlisted personnel housing (UEPH) spaces available on the installation.

3. **METHODOLOGY:** Summation of the total number of permanent unaccompanied officer housing spaces available on the installation. The FCG is 7240P.

Unaccompanied Enlisted Personnel Housing (UEPH) is measured by the total number of permanent enlisted member housing spaces on the installation. On-post available spaces are measured at no more than two persons per room at 90 NET square feet per person. The FCG is 7210S. UEPH also includes trainee assets. The FCG is 7218P. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Permanent spaces.

6. **EQUATION:** UOPH spaces + UEPH spaces.

7. **ATTRIBUTE SCORING:** Number of spaces - higher number results in a better ranking.

BARRACKS(UPH) AND FAMILY HOUSING

1. **DEFINITION:** Number of permanent, adequate barracks and family dwelling units (on and off-post).

2. **PURPOSE:** To measure the total availability of living quarters for unaccompanied officer, permanent party enlisted personnel, married/single parent soldiers and their families.

3. **METHODOLOGY:** Army Family Housing (AFH) information is obtained from the installations' segmented housing market analysis and adjusted with FY 90 Census and local installation data, DD Form 1523, Military Family Housing Justification, and DD 1410 Family Housing Inventory and Occupancy Report (validated by DAIM-FDH-M) by using HQRPLANS. Family housing assets in HQRPLANS include both government controlled assets and the installation's expected share of local economy assets. FCGs for family dwelling units are 7110F for on-post and 7110P for off-post.

Unaccompanied Officer Personnel Housing (UOPH) is measured by the total number of permanent unaccompanied officer housing spaces available on the installation. The FCG is 7240P.

Unaccompanied Enlisted Personnel Housing (UEPH) is measured by the total number of permanent enlisted member housing spaces on the installation. On-post available spaces are measured at no more than two persons per room at 90 NET square feet per person . The FCG is 7210S. UEPH also includes trainee assets. The FCG is 7218P. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** AR 415-15, AR 210-50, April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Family housing in dwelling units.
UOPH and UEPH in spaces.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Higher number results in a better ranking.

BASOPS/MISSION POPULATION

1. **DEFINITION:** Measure of the base operations (BASOPS) cost required to support the mission population.

2. **PURPOSE:** To measure the relative cost of operating an installation in support of the mission requirements. This provides a relative cost factor used to assess the relative cost of operations of an installation.

3. **METHODOLOGY:** Used Total Base Support cost data (RPMA, Base Communication Costs, BASOPS Payroll/Non-payroll) for each installation. These data elements are derived by capturing the expenditures in **FY 93** by installation:

Base support (O&MA, RDT&E):

a. BASPOS(-), Account (xxxx96)
   - A. Real Estate Leases
   - B. Suply Operations
   - C. Maintenance of Material
   - D. Transportation Services
   - E. Laundry and Dry Cleaning
   - F. Army Food Services
   - G. Personnel Support
   - H. Unaccompanied Pers Housing Ops
   - J. Utilities
   - M. Other Engineering Support
   - N. Administration
   - P. Automation Activities
   - Q. Reserve Component Support
   - S. Community & Morale Support
   - T. Preservation of Order
   - U. Dir of Resource Management
   - W. Dir of Contracting
   - X. Security and Counterintel Ops
   - Y. Records Management, Pubs

b. Real Property Maintenance, Accounts (xxxx76 & xxxx78)
   - K. Maint & Repair of Real Property
   - L. Minor Construction

c. Environmental Programs, Account (xxxx56)

d. Audio-Visual, Account (xxxx90)

e. Base Commo, Account (xxxx95)

f. Family Programs, Accounts (878708,878719,878720)

In cases where a single fiscal station provides data for more than one installation, a breakout will be provided. Data provided should include all known costs paid for operation and support including reimbursable and RDTE. Additionally, any government workspace provided to contractors will be included. This not include contractors providing base support functions. ***The mission population supported will be provided by HQDA.***

4. **REFERENCES:** Installation STANFINS 218 report data validated by MACOMS for Total Base Support costs.

5. **UNIT OF MEASURE:** Dollars per person per year.

6. **EQUATION:** Total Base Support Costs/Total Mission Population.

7. **CRITERION SCORING:** The lower value results in a better ranking.

BUILDABLE ACRES

1. **DEFINITION:** This measures the ability of the installation to expand within its current property line in accordance with accepted master planning policy and guidance as reflected on the long range component of the approved installation master plan. The result is the total acreage available for construction of additional facilities on the installation.

2. **PURPOSE:** Measure the installation's capacity to support additional permanent structures.

3. **METHODOLOGY:**

a. In accordance with the long range component of the installation master plan, identify areas compatible with new development, such as areas zoned for Administration, housing, industrial, maintenance, supply or storage, or community facilities, that are not currently filled with permanent facilities. Areas such as maneuver/training ranges, impact areas, safety fan areas, required buffer areas, and environmentally sensitive acres will not be considered for expansion construction under this methodology.

b. Measure the total number of available acres which then could be used for locating permanent new mission structures. Areas lacking current utility support or where there are under-utilized or un-utilized wood facilities should be considered for expansion construction. Exclude acreage to be used for construction through FY95.

4. **REFERENCES:** Installation analysis of MACOM approved master plan.

5. **UNIT OF MEASURE:** Acres.

6. **EQUATION:** Not Applicable.

CAPACITY - MAINTENANCE

1. **DEFINITION:** The amount of workload, expressed in direct labor hours, that a facility can accommodate with all work positions manned on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

2. **PURPOSE:** To measure the available maintenance capacity at the installation.

3. **METHODOLOGY:** See Equation below.

4. **REFERENCES:** Depot Maintenance Capacity Utilization Report. Computed IAW Revised DOD 4151.15H.

5. **UNIT OF MEASURE:** Direct Labor Manhours.

6. **EQUATION:** Production\maintenance capacity.

Maximum Number of Available Production Line Workstations
X 1615 Productive Hours
X 95 percent of the Total Hours (Availability Factor)
Total Direct Labor Hours Available

7. **CRITERION SCORING:** A larger number is a better score.

CAPACITY - PRODUCTION

1. **DEFINITION:** The amount of workload, expressed in actual direct labor hours, that a facility can accommodate with all work positions manned on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

2. **PURPOSE:** To measure the available production capacity at the installation.

3. **METHODOLOGY:** See equation below.

4. **REFERENCES:** Computed IAW Revised DOD 4151.15H.

5. **UNIT OF MEASURE:** Direct Labor Manhours.

6. **EQUATION:** Production capacity.

$$\frac{\text{Maximum Number of Available Production Line Workstations} \times 1615 \text{ Productive Hours} \times 95 \text{ percent of the Total Hours (Availability Factor)}}{\text{Total Direct Labor Hours Available}}$$

7. **CRITERION SCORING:** A larger number is a better score.

CAPACITY - SUPPLY

1. **DEFINITION:** The square footage of warehouse space for the storage of items other than ammunition and bulk fuel.

2. **PURPOSE:** To measure the warehouse storage capacity of the installation.

3. **METHODOLOGY:** Rating is based on data obtained from referenced management report for general purpose warehouses, both heated and unheated. The extracted data is listed as warehouse total, net space total.

4. **REFERENCES:** AMC Storage Space Management Report, (RCS DRCMM-328), dated 30 Sep 90.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Gross storage space - (Aisles & Structural Loss & Support) equals net available storage space.

7. **CRITERION SCORING:** A larger number is a better score.

COST OF LIVING INDEX

1. **DEFINITION:** Measure the relative cost of living at each installation.

2. **PURPOSE:** To measure the relative cost of living for military and civilian personnel in communities surrounding the installation. This is an indicator of location costs to the Army to live and conduct business at the installation.

3. **METHODOLOGY:** Used the information from the American Chamber of Commerce Research Association (ACCRA) Cost of Living Index for 1993. The index measures the relative price levels for consumer goods and services based on local community input. The cost index is selected directly from the table if installation is located within a 50 mile radius of the Metropolitan Statistical Areas (MSAs), Primary Metropolitan Statistical Areas (PMSAs) or Non-metropolitan Areas as defined by the Office of Management and Budget on December 28, 1992. In cases were the installation is not included in the ACCRA report, a linear relationship will be used to predict the COL Index using the VHA factor.

4. **REFERENCES:** ACCRA Cost of Living Index, 1993.

5. **UNIT OF MEASURE:** Each community index is read as a percentage of the average for all places surveyed with the average equal to 100.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** Lower index results in a higher ranking.

DEPLOYMENT NETWORK

1. **DEFINITION:** The distance from installation to its critical deployment structure: airfields, ports, railheads and interstate highways.

2. **PURPOSE:** To evaluate installation's capability to support deployments, which is an important element in projecting land forces to locations outside the United States.

3. **METHODOLOGY:** The distances (in miles) from installation to interstate highway, railhead, C-141/747 capable airport and Ocean vessel capable seaport. A Decision Pad submodel is used giving each factor the following weights:

Distance to Facility	Points
Railhead	30
Airport	30
Seaport	30
Highway	10
Total	100

4. **REFERENCES:** FORSCOM Mobilization Expansion Capability Worksheet, TRADOC Pam 210-2, and MACOM validation. Air field distance will be validated by the installations USAF (Air Combat Command) Liaison Officer.

5. **UNIT OF MEASURE:** Miles.

6. **EQUATION:** This rating is determined by using a Decision Pad submodel.

7. **ATTRIBUTE SCORING:**

For submodel: A lower number (for distance) is a higher score.

For main model: A higher value results is a better score.

ENCROACHMENT

1. **DEFINITION:** Population density of the surrounding area to the installation.

2. **PURPOSE:** This is a measure of encroachment on the installation as a function of population density (population/square mile).

3. **METHODOLOGY:** Weighted Average of population density of the Region of Influence as identified by the BRAC Economic Impact model (This area is generally the county or counties surrounding the installation or the Metropolitan Statistical Area (MSA)). The rationale is the lower the population density around the post, the easier it will be to expand mission activity without impacting the surrounding community.

4. **REFERENCES:** 1990 Summary of Population and Housing Statistics, U.S. Department of Commerce, Bureau of the Census.

5. **UNIT OF MEASURE:** Population per square mile.

6. **EQUATION:** None.

7. **ATTRIBUTE SCORING:** Number - lower value results in better ranking.

ENVIRONMENTAL CARRYING CAPACITY

1. **DEFINITION:** Composite consideration of various environmental factors.

2. **PURPOSE:** Measure the ability of the Army to conduct current missions, receive additional units and expand operations in light of environmental constraints.

3. **METHODOLOGY:** This is a measure of the following aspects of environmental carrying capacity:

FACTOR	WEIGHT
Archaeology & Historic Buildings	10
Endangered Species	15
Wetlands	15
Air Quality	15
Water Quality	15
Noise Quality:	
Zone II off post	10
Zone III off post	15
Contaminated Sites	5
Total	100

4. **REFERENCES:** The most recent reference as identified for each factor.

5. **UNIT OF MEASURE:** Composite index. A sub-model is used with the factors defined as:

Archeology/Historic Buildings Factor = A/B

A = (Number of sites/structures listed on the National Register(NR)) + (Number of sites determined eligible or potentially eligible for the NR)
B = Total installation acres.
DATA Sources: Installation Cultural Surveys, Installation environmental office, National Register (NR), Installation Historic Preservation Plan, Installation EIS, SHPO.

Endangered Species Factor = Number of FEDERAL endangered and threatened species (plant or animal) present on the installation.
DATA Sources: Installation biological surveys, Installation Master Plan NEPA document or equivalent, Installation Environmental Office.

Wetlands Factor = A/Total Installation Acres

A = Total wetlands acreage.
DATA Source: Installation wetlands inventory, National wetlands inventory, Installation master plan NEPA document or equivalent.

Air Quality Factor =
1 if air quality region is in attainment.
10 if air quality region is not in attainment.
DATA Source: AEHA surveys, Installation master plan NEPA document or equivalent, Installation Air Quality inventory.

Water Quality Factor = Number times the installation has exceeded the parameters of the NPDES permits during FY 1992.
DATA Source: Installation Environmental office, Installation Master plan NEPA document or equivalent.

Noise Quality Factor = Total area (acres) of AICUZ/ICUZ zones II and/or III that extend offpost.
DATA Sources: Installation Master plan NEPA document or equivalent, Installation ICUZ/AICUZ.

Contaminated Sites Factor = A+B

A = Total number of IRP sites
B = Total number of NPL sites
DATA Sources: USATHAMA surveys, Installation environmental office.

6. **ATTRIBUTE SCORING:** Composite number larger value is a better score.

EXCESS CAPACITY - MAINTENANCE

1. **DEFINITION:** Maintenance plant capacity that is excess to utilized and surge requirements expressed in thousands of square feet.

2. **PURPOSE:** To measure the maintenance capacity in square feet that is currently available for expansion at an installation. Excess Capacity is a direct measurement of the expandability of the installation. It provides value for mobilization as well as the capability to receive additional missions.

3. **METHODOLOGY:** Total maintenance square feet minus utilized square feet (EEA 210,212,214,215,216,and 218) at an installation. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** DOD 4151.15H, AR 750-2, AMC-R 750-28, April 1994 HQRPLANS and Installation data.

5. **UNIT OF MEASURE:** Thousands of gross Square feet.

6. **EQUATION:** NA

7. **CRITERION SCORING:** A higher value is a better score.

EXCESS CAPACITY - PRODUCTION

1. **DEFINITION:** Industrial Production plant capacity that is excess to utilized and surge requirements expressed in production facility square feet.

2. **PURPOSE:** To measure the production capacity in square feet that is currently unused at an installation.

3. **METHODOLOGY:** Excess Capacity is a direct measurement of the expandability of the installation. It provides value for mobilization as well as the capability to receive additional missions. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 94 HQRPLANS and installation data call.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Total production square feet minus utilized square feet (EEA 220) at an installation.

7. **CRITERION SCORING:** A higher value is a better score.

EXCESS CAPACITY - STORAGE

DEFINITION: Total unused square footage of warehouse space for the storage of items other than ammunition and bulk fuel.

2. **PURPOSE:** To measure the warehouse capacity that is currently unused at an installation. Indicates the capability of an installation to expand supply support in support of surge/mobilization.

3. **METHODOLOGY:** Summation of the square footage for FCG 44100 and 44200 from HQRPLANS, both heated and unheated. Utilized storage space is subtracted from the total to provide a vacant bulk, warehouse total. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS and installations utilized storage data.

5. **UNIT OF MEASURE:** Thousands of gross Square feet.

6. **EQUATION:** Total Warehouse space minus the utilized warehouse space.

7. **CRITERION SCORING:** A larger number is a better score.

FAMILY HOUSING

1. **DEFINITION:** Number of permanent, adequate family dwelling units (on and off-post).

2. **PURPOSE:** To measure the total availability of living quarters for married/single parent soldiers and their families.

3. **METHODOLOGY:** Family Housing (AFH) information is obtained from the installations' segmented housing market analysis and adjusted with FY 90 Census and local installation data, DD Form 1523, Military Family Housing Justification, and DD 1410 Family Housing Inventory and Occupancy Report (validated by DAIM-FDH-M) by using HQRPLANS. Family housing assets in HQRPLANS include both government controlled assets and the installation's expected share of local economy assets. FCGs for family dwelling units are 7110F for on-post and 7110P for off-post. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** AR 415-15, AR 210-50, April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Total number of family dwelling units.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Higher number is a better ranking.

FAMILY HOUSING COST PER DWELLING UNIT (DU)

1. **DEFINITION:** Measure of the cost to maintain one set of family quarters at each installation.

2. **PURPOSE:** This attribute compliments the VHA Attribute. Together they provide an assessment of relative cost for housing a family at the installation.

3. **METHODOLOGY:** Number of permanent on-post housing units as reported in the April 1994 HQRPLANS, NOT including leased assets. Cost information provided by the STANFINS 218 Report. Values generated by dividing an installation's average AFH Operations (AFHO) costs for three fiscal years (91,92,93) by the number of AFH units. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS and annual cost data from Resource Directorate for FY 91,92,93.

5. **UNIT OF MEASURE:** Dollars per AFH unit.

6. **EQUATION:** (AFHO obligations FY 91 + AFHO obligations FY 92 + AFHO obligations FY 93)/3 = average AFHO costs/AFH units = Dollar cost per AFH unit.

7. **CRITERION SCORING:** Lower number results in better ranking.

GENERAL INSTRUCTIONAL FACILITIES

1. **DEFINITION:** Total square footage of permanent general training and instructional facilities on the installation.

2. **PURPOSE:** Measure the in-place capability of the installation to conduct training by considering general purpose training facilities available.

3. **METHODOLOGY:** Summation of the square footage of all permanent general purpose training facilities. Facility Category Group: 17120 (General Instructional Building). Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** As above.

7. **ATTRIBUTE SCORING:** Total square footage--higher number results in a better score.

HEALTH CARE INDEX

1. **DEFINITION:** Capitation Cost per Beneficiary (CCB) is the per capita funding a medical treatment facility (MTF) requires to provide all necessary medical care to the beneficiary population served by the MTF. This is not a measure of quantity of services delivered or MTF capacity.

2. **PURPOSE:** This is a measure of the effective use of health care dollars on a capitation basis. All future MTF funding will be capitation based.

3. **METHODOLOGY:** The following is a general methodology. For each MTF: Compute total direct and reimbursable health care cost then divide by the Total Beneficiary Population. The calculated score for each facility is assigned a rank order.

4. **REFERENCES:**
a. Operations and Maintenance, Defense (OMD) data obtained from the baseline FY93 Resource Summary.
b. Military pay (MP) is computed from the MED 87 Strength Report costed at the civilian replacement value.
c. CHAMPUS Cost (CC) is provided in the CHAMPUS Catchment Area Billing Report.
d. Total Beneficiary Population (TBP) is the beneficiary population within a 40 mile catchment area; Army Stationing and Installaton plan and Defense Medical Information System (DMIS) data for FY 93.

5. **UNIT OF MEASURE:** Dollars per eligible beneficiary translated into rank order.

6. **EQUATION:** (OMD + MPE + CC) / TBP = FY 93 CAPITATION RATE

7. **CRITERION SCORING:** Rank order value. A lower rank is a better score.

IMPACT ACRES

1. **DEFINITION:** Measures the size and capability of the land used for range impact area by the installation.

2. **PURPOSE:** This is an indication of the installation's range capacity to support the conduct of weapons familiarization, qualification, crew gunnery, and combined arms live fire training. The larger and more capable impact areas provide more range capacity on the installation.

3. **METHODOLOGY:** Impact areas are evaluated using a D-Pad submodel measuring and ranking the following for each post: number of impact acres, ability to conduct a Joint Air Attack Team exercise, and the ability of the installation's ranges to support firing the MLRS with training munitions.

4. **REFERENCES:** MACOM/installation data call. Installation Range Regulations.

5. **UNIT OF MEASURE:** Composite Number. A Decision Pad submodel is used with the following weights given to each sub-element:

Impact Acres (total acres)			60 points
If:			
Air Force Bombing Capable	(Y/N)	yes =	5 points
Attack Helicopter Capable	(Y/N)	yes =	5 points
Tube Artillery Capable	(Y/N)	yes =	5 points
ALL=YES			15 points
MLRS Capable	(Y/N)		10 points
	Total		100 points

6. **EQUATION:** This rating is determined by using a Decision Pad submodel.

7. **ATTRIBUTE SCORING:**

For submodel: Impact Acres--A larger number is a better score. Other measures--Yes is better.

For main model: A higher value results in a better ranking.

INFORMATION MISSION AREA (IMA)

1. **DEFINITION:** Evaluation of existing IMA systems. The IMA systems to be evaluated are common user Telephone Switching System, Outside Cable Plant, Computers, Telecommunications Center (TCC), Local Area Network (LAN), Defense Data Network (DDN) Node, Video Teleconference (VTC).

2. **PURPOSE:** Evaluate IMA systems on the basis of available capacity, capability for expansion, and technology utilized.

3. **METHODOLOGY:** Utilized a questionnaire completed by the Installation Director of Information Management. Include programmed, funded equipment as installed and on hand.

4. **REFERENCES:** Installation data Call. MACOM DCSIM staff validation of installation input.

5. **UNIT OF MEASURE:** As given in the table below.

6. **EQUATION:** A Decision Pad submodel is used.

A. TELEPHONE SWITCHING	
1. Is Main DCOs digital switch? (if analog, go to Category B)	Yes = 5
2. Percentage of Fill (Entire digital switch system)	<70% = 5
	70-90%= 3
	>90% = 1
3. Lines (Equipped)	>5,000 = 5
	2,500-5,000 = 3
	<2,500 = 1
4. Lines (Expandable To)	>10,000 = 5
	5,000-10,000= 3
	< 5,000 = 1

CATEGORY WEIGHT: 25 POINTS X TOTAL_____

B. OUTSIDE CABLE PLANT (IF LEASED, CATEGORY SCORE IS ZERO, GO TO CATEGORY C)

1. OSCAR Implementation Phase
(Choose only 1)
Phase 3 Complete = 5
Phase 2 Complete = 3
Phase 1 Complete = 1

2. Cable Type
(Choose only 1)
Fiber Backbone (DS3 MUX Rate) = 5
Mixed = 3
Copper = 1

3. Percentage of Fill
<50% = 5
50-75% = 3
76-100% = 1

CATEGORY WEIGHT: 20 POINTS X TOTAL_____

C. COMMON USER SUPPORT

1. Common User Mainframe/Client Server-Architecture
(Choose 1 only, the highest available technology - equivalent to IBM Model)
IBM 3090 or Client Server= 5
IBM 4381 = 4
IBM 4341 = 3
IBM 4361 = 2
IBM 4331 = 1

2. Total MIPS in Mainframe Environment:
> 10 MIPS = 5
7-10 MIPS = 4
4-6 MIPS = 3
1-3 MIPS = 2

OR

Server Speed (MEGAHERTZ) in Client-Server environment (choose speed related to majority of servers)
31+ MH = 5
16-30 MH = 3
1-15 MH = 1
<1 MH = 0

3. ASIMS
RDC = 5
DPC = 3

4. E-Mail
(Choose 1)
Sperry/MMDF = 5
Other E-Mail = 3
No E-Mail Host = 0

5. Front End Processor (FEP) Yes = 5

6. Super Computer Yes = 5

7. Common User DASD (GIGABYTES)
6+ GB = 5
4-6 GB = 3
1-3 GB = 1
<1 GB = 0

CATEGORY WEIGHT 15 POINTS X TOTAL_____

D. DSN/DDN Node (Choose ALL THAT APPLY)

DSN	Yes = 5
MILNET	Yes = 5
DISNET	Yes = 5
SCINET	Yes = 5

CATEGORY WEIGHT: 5 POINTS X TOTAL _____

E. Post Wide WAN/LAN

Fiber Optic	Yes = 5
Other	Yes = 3

CATEGORY WEIGHT: 15 POINTS X TOTAL _____

F. TCC

1. GENSER (Choose only 1)

AMS,DINAH,MDT,FAST	= 5
SRT	= 3
DCT9000 or Mod 40	= 2
Courier Svc/Other	= 1
None	= 0

2. DSSCS (Choose only 1)

Assist	= 5
DCT9000 or Mod 40	= 3
Courier Svc/Other	= 1
None	= 0

3. AMME or ASC Yes = 5

4. Comm. Secure Processor (CSP) Yes = 5

CATEGORY WEIGHT: 5 POINTS X TOTAL _____

G. VTC

VTC facility Yes = 3

CATEGORY WEIGHT: 15 POINTS X TOTAL _____

TOTAL Score : Summation of category scores _____

7. ATTRIBUTE SCORING: A Higher number is a better score.

INFRASTRUCTURE

1. **DEFINITION:** Capacity of water, sewage treatment, electrical distribution and cost of land fill.

2. **PURPOSE:** To measure the infrastructure capacity of the installation.

3. **METHODOLOGY:** Four aspects are considered:

a. Water: Capacity in terms of million gallons per day.
b. Sewage treatment: Capacity in terms of million gallons per day.
c. Electrical distribution: Capacity in terms of Kilovolt Amps (KVA), HQRPLANS FCG 81100.
d. Land fill: Cost of land fill used by the installation in dollars per short ton (on or off post), determined based upon historical records.

Measures a,b,c should incorporate any new infrastructure capacity resulting from projects included in the FY 91 - FY 95 military construction program.

4. **REFERENCES:** Installation and MACOM engineer analysis based on the installation master plan (utilities analysis report). Lacking the installation master plan, the DEH utilities division will provide the information. APRIL 1994 HQRPLANS.

5. **UNIT OF MEASURE:** As described in methodology above.

7. **ATTRIBUTE SCORING:**

For submodel: Water, Sewage treatment, electrical distribution - A larger number is a better score. Land fill--A smaller cost is a better score.

For main model: A higher value results in a higher ranking.

INSTALLATION AND BASE OPERATING EXPENSE (IBOE)

1. **DEFINITION:** IBOE is a measure of the BASOPS support required for execution of an installation's base support mission.

2. **PURPOSE:** To measure the overall economic indicator concerning the long-term BASOPS operational cost to retain an installation. This is one of a series of factors used to assess the relative cost of operation of an installation.

3. **METHODOLOGY:** Under the Defense Business Operations Fund (DBOF), cost accrual accounting systems are required to produce the actual cost of the product to the customer. This factor is an identifiable cost associated with the production/maintenance facility DBOF stabilized rate used to bill costs to DBOF customers.

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Dollars per Direct Labor Hour.

6. **EQUATION:** Summation of all installation and base operations expense divided by the Direct Labor Hours at 85% capacity utilization.

7. **CRITERION SCORING:** A smaller value is a better score.

LOCALITY PAY FACTOR

1. **DEFINITION:** The relative differences in cost of civilian work force at each installation.

2. **PURPOSE:** To measure the relative cost of labor -- not cost of living -- from one geographical area to another. This is a measure of the relative cost of labor to the Army at the installation.

3. **METHODOLOGY:** Used the Locality-Based Comparability Payments for General Schedule employees. In high cost areas (NYC, San Francisco, Los Angeles) the index used will be 1.08 as established by the Federal Employees Pay Comparability Act of 1990. 1.08 index will also be used for Hawaii and Alaska since these areas receive COLA and not a locality pay amount.

4. **REFERENCES:** Locality-Based Comparability Payments Tables

5. **UNIT OF MEASURE:** Locality-Based Comparability Payment Index expressed as a percentage.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** Index from source tables -- lower index results in a higher ranking.

MAINTENANCE FACILITIES

1. **DEFINITION:** Maintenance facilities are defined as the total permanent square footage of maintenance (aviation and vehicle) facilities on the installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent maintenance facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of maintenance facilities for Facility Category Groups (FCG) shown below:

FCG	FCG DESCRIPTION
21110	MNT HANGAR AVUM
21111	MNT HANGAR AVIM
21407	NG MAINT FAC
21409	AR MAINT FAC
21410	VEH MNT SH ORG
21420	VEH MNT SHOP DS
21800	SP PURP MNT SHP
21900	MNT INST O&R

Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Square Feet - higher number results in a better ranking.

MAINTENANCE FLEXIBILITY

1. **DEFINITION:** Maintenance flexibility is the ability to perform maintenance on a variety of different commodities.

2. **PURPOSE:** To measure a plant's maintenance flexibility which enables maintenance capabilities to be changed as demands change for different products and the ability to absorb varied workloads.

3. **METHODOLOGY:** Maintenance capabilities considered range from a single commodity to the full range of maintenance for all items of Army equipment. Inflexible capability refers to the inability to convert from one product line to another without a major conversion effort. This attribute will be measured by assigning points to each of the 13 Commodity areas categorized in the Depot Maintenance Requirements database (OP-29). Points will be assigned to each commodity and weighted based on a subjective evaluation of the relative facilitization required to repair each commodity. Depots will receive a corresponding value for each of the commodities that are included in their current workload and for commodities that could be repaired with no additional facilitization (except DMPE).

4. **REFERENCES:** DOD 4251-15H, AR 750-2, AMC-R 750-28, FY96-FY01 POM "OP-29" Database.

5. **UNIT OF MEASURE:** Number of commodities that can be repaired with no additional facililitization (except DMPE).

6. **EQUATION:** A weighted matrix of 13 commodities.

7. **CRITERION SCORING:** A larger number gives a better score.

MANEUVER ACRES

1. **DEFINITION:** The net total acreage of the installation available for maneuver and training.

2. **PURPOSE:** To measure the overall land size of the installation available for maneuver and field training which is an important element in stationing and training land forces. This is one of several factors used to assess the relative size of installations.

3. **METHODOLOGY:** Summation of the total maneuver acreage identified in HQRPLANS (FCG 17986) as verified by MACOMs and validated by installations. Maneuver acreage will include only land used as maneuver and training area. Impact areas, cantonment areas, ranges, off limits areas, and environmentally sensitive areas that are considered unusable will not be included. Maneuver rights areas will be included in computations at a value of one half of the value of Army-Owned Acres.

4. **REFERENCES:** April 1994 HQRPLANS, MACOM input with installation validation. A current (FY94) Memorandum of Agreement (MOA) that allows maneuver and field training is required to claim maneuver rights acres.

5. **UNIT OF MEASURE:** Thousands of acres.

6. **EQUATION:** Army-Owned Maneuver Acres + 1/2 * (Maneuver Rights Area Acres).

7. **ATTRIBUTE SCORING:** Larger number of acres results in a better score.

MCA COST FACTOR

1. **DEFINITION:** Measure of the relative cost factor for construction at an installation.

2. **PURPOSE:** Indicates the relative difference between installations for construction of the same facility. Provides relative index on cost of capital investment for modernization or expansion of facilities. This is one of a series of factors used to access the relative cost of operations of an installation.

3. **METHODOLOGY:** Continental United States (CONUS) Installation Area Cost Factor (ACF) Index values from the Area Cost Factors and Unit Prices for FY 1996-1997.

4. **REFERENCES:** Area Cost Factors and Unit Prices for FY 1996-1997, Department of Defense Facility Construction, 20 August 1993.

5. **UNIT OF MEASURE:** ACF Index Value.

6. **EQUATION:** N/A.

7. **CRITERION SCORING:** ACF Index - lower value results in a better ranking.

MECHANIZED MANEUVER ACRES

1. **DEFINITION:** Measures the largest contiguous acreage of the installation available for maneuver and training of mechanized formations.

2. **PURPOSE:** To measure the largest parcel of land available to the installation for training maneuvers of mechanized forces. This measure places added weight to the maneuver acres that can be used to train mechanized forces.

3. **METHODOLOGY:** Calculate the acreage of the installation's largest contiguous maneuver area as noted on the current training area regulations. A maneuver rights area could be counted when the area is easily accessible to the installation and commonly used for training large mechanized formations. Maneuver acreage will include only land used as maneuver and training area. Impact areas, cantonment areas, ranges, off limits areas, and environmentally sensitive areas that are considered unusable will not be included.

4. **REFERENCES:** Installation data call, Installation Range regulations.

5. **UNIT OF MEASURE:** Thousands of acres.

6. **EQUATION:** Not Applicable.

7. **ATTRIBUTE SCORING:** Acres - higher value results in a better ranking.

MEDICAL RESEARCH FACILITIES

1. DEFINITION: Laboratory activities, Research Facilities. Research facilities must have suitably equipped facilities to operate efficiently.

2. PURPOSE: To measure laboratories and other research facilities used in support of Medical Centers.

3. METHODOLOGY: Assets are determined by summing the square footage from the FCG 31010 series and installation validation. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. REFERENCES: April 1994 HQRPLANS.

5. UNIT OF MEASURE: Thousands of Square feet.

6. EQUATION: Summation.

7. CRITERION SCORING: A larger number is a better score.

MISSION OVERHEAD

1. **DEFINITION:** Mission Overhead is a measure of the relative cost of providing production/maintenance capacity. Mission overhead includes, as an example, Production Support Functions, Indirect Labor, Materiel Adjustments, Equipment Management, and Depreciation/Amortization of production equipment and facilities.

2. **PURPOSE:** To measure the overall economic indicator concerning the efficiency of production/maintenance operations of the facility. This is one of a series of factors used to assess the relative cost of operation of an installation.

3. **METHODOLOGY:** Under the Defense Business Operations Fund (DBOF), cost accrual accounting systems are required to produce the actual cost of the product to the customer. This factor is an identifiable cost associated with the production/maintenance facility DBOF stabilized rate used to bill costs to DBOF customers.

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Dollars per Direct Labor Hour.

6. **EQUATION:** Summation of all indirect mission expenses divided by the Direct Labor Hours at 85% capacity utilization.

7. **CRITERION SCORING:** A smaller value is a better score.

MOBILIZATION CAPABILITY

1. **DEFINITION:** Capability of an installation to support the reconstitution of forces through the ability to billet, train, and deploy soldiers.

2. **PURPOSE:** To measure an installation's capacity to train, equip and deploy units in a time of national emergency. The Army's "Mobilization Stationing Strategy and Requirements Study" identified five critical mobilization attributes that an installation should possess: (1) billeting; (2) deployment network; (3) maintenance facilities; (4) ranges and training; and (5) geographic dispersion.

3. **METHODOLOGY:** A Decision Pad submodel is used with the following weights given to each sub-element:

MEASURE	Points
Mobilization billets	10
Deployment Network	10
Ranges	10
Net Maneuver Acres	10
Contiguous Maneuver Acres	10
Work Space	10
Total	60

4. **REFERENCES:**

a. DA PAM 210-7 for housing criteria; AMOPS Annex N. MACOM Reports (TRADOC-ATEN-24 Report, FORSCOM J-3 Installation Capability Spreadsheet).

b. Mobilization data will be obtained from MACOM mobilization planners using Army Mobilization Operations Planning System (AMOPS) data as of 1 AUG 92 and will be verified at the installation level.

5. **UNIT OF MEASURE:** Mobilization Billets are measured in spaces. Other IA attributes are measured as defined.

6. **EQUATION: NA**

7. **ATTRIBUTE SCORING:** A higher value is a better score.

MOBILIZATION THROUGHPUT

1. **DEFINITION:** Capability of a port installation to expand its support during mobilization or a contingency.

2. **PURPOSE:** Measure ability to load and unload equipment during mobilization or a contingency.

3. **METHODOLOGY:** Measurement of the maximum daily throughput capacity.

4. **REFERENCES:** MTMCTEA Report SE 89-3d-31, Ports for National Defense.

5. **UNIT OF MEASURE:** Measurement Tons per day.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** A higher value results in a higher rating.

NORMAL THROUGHPUT

1. **DEFINITION:** Normal throughput capacity is the average material, cargo and equipment that can be loaded and unloaded a daily basis.

2. **PURPOSE:** Measure a ports capability to load and unload material and equipment.

3. **METHODOLOGY:** Use the Average measurement tons per day throughput capacity as given by the referenced report.

4. **REFERENCES:** MTMCTEA Report SE 89-3d-31, Ports for National Defense.

5. **UNIT OF MEASURE:** Measurement Tons per day.

6. **EQUATION:** None.

7. **ATTRIBUTE SCORE:** A larger number is a better score.

OPS/ADMIN FACILITIES

1. **DEFINITION:** Total square footage of permanent facilities used for operational/administrative functions.

2. **PURPOSE:** To measure the installation capacity for providing permanent general purpose administrative and operational facilities. This is one of several factors used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total square feet of an installation's permanent operations/administrative facilities for the Facility Category Groups (FCG) shown below:

FCG	FCG DESCRIPTION
14112	AV UNIT OPS BLDG
14110	AF OPS BLDG
14182	BDE HQ BLDG
14183	BN HQ BLDG
14185	CO HQ BLDG
61050	GEN PURPOSE ADMIN

Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS and installation validation.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** Square Feet - higher value results in a better ranking.

PATIENT CARE FACILITIES

1. **DEFINITION:** The total space used for patient care at a medical treatment facility.

2. **PURPOSE:** To measure an MTFs ability to treat and care for patients.

3. **METHODOLOGY:** Summation of all space used for patient treatment (EEA 510). Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross Square Feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** A larger number is a better score.

PERCENT PERMANENT FACILITIES

1. **DEFINITION:** Total square footage of all existing permanent buildings divided by total installation facilities square footage. This is a quality measure to reflect construction investment and WWII Wood elimination.

2. **PURPOSE:** To indicate the overall quality of the installation's facilities. The age of facilities is an indirect measurement of the quality of the installation's facility structure. Newer buildings are more comfortable, economical and safer than old buildings.

3. **METHODOLOGY:** Used total square footage of all existing permanent buildings divided by total installation facilities square footage. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Percent.

6. **EQUATION:** As above.

7. **CRITERION SCORING:** Percent number - higher number results in a better ranking.

PIERS AND WHARVES

1. **DEFINITION:** Deep water accessibility and sufficient water at pier side at mean low tide to permit loading of vessels.

2. **PURPOSE:** To determine the capacity of the terminal to perform its mission.

3. **METHODOLOGY:** Developed three factors to describe the pier structure of a Port facility:

Measurement of water depth: Water depth measured in feet Actual water depth data maintained by HQMTMC Engineer.

Type vessels Accommodated:		
	RORO	yes = 5 pts
	LOLO	yes = 5 pts
	Container	yes = 5 pts
	Heavy Lift	yes = 5 pts

Length of Pier in feet: Data maintained by HQMTMC Engineer.

4. REFERENCES: Stated in methodology, plus installation data call.

5. **UNITS OF MEASURE:** Feet, yes/no.

6. **EQUATION:** D-pad sub-model is used with the following weights.

WATER DEPTH	40 points
TYPE VESSELS	20 points
LENGTH OF PIER	40 points

7. **ATTRIBUTE SCORING:** Higher value results in a higher rank.

PRODUCTION FLEXIBILITY

1. **DEFINITION:** Production flexibility is the ability to produce a variety of different commodities.

2. **PURPOSE:** To measure a plant's production flexibility which enables maintenance capabilities to be changed as demands change for different products and the ability to absorb varied workloads.

3. **METHODOLOGY:** Production capabilities considered range from a single commodity to the full range of maintenance for all items of Army equipment. Inflexible capability refers to the inability to convert from one product line to another without a major conversion effort. This attribute will be measured by assigning points to each of 12 Commodity areas (Aircraft, Automotive, Combat Vehicles, Construction, Communications/Electronics, Missiles, Watercraft, Munitions, Weapons, Rail, General Equipment, and Other). Points will be assigned to each commodity and weighted based on a subjective evaluation of the relative facilitization required to produce each commodity. Industrial facilities will receive a corresponding value for each of the commodities that are included in their current workload and for commodities that could be repaired with no additional facilitization (except DMPE).

4. **REFERENCES:** Data Call.

5. **UNIT OF MEASURE:** Number of commodities that can be produced with no additional facililitization (except DMPE).

6. **EQUATION:** A weighted matrix of 12 commodities.

7. **CRITERION SCORING:** A larger number gives a better score.

QUANTITY - DISTANCE

1. **DEFINITION:** The quantity of explosives material and distance separation relationships provide defined types of protection. These relationships are based on levels of risk considered acceptable for the stipulated exposures and are tabulated in the appropriate Quantity Distance tables.

2. **PURPOSE:** To determine whether an installation requires waivers due to inadequate buffer zones.

3. **METHODOLOGY:** Specified Quantity-Distance Tables determine whether waivers are required for storage of ammunition. The preferred situation is an installation that can store ammunition without waivers.

4. **REFERENCES:** MSC input based on TM 9-1300-206, DOD 4145.26-M, DOD 6055.9-STD.

5. **UNIT OF MEASURE:** Waivers.

6. **EQUATION:** NA

7. **ATTRIBUTE SCORING:** A no waiver determination indicates that the installation does not require waivers and results in a higher score.

RANGES

1. **DEFINITION:** The total number of firing points equipped with the Remote Target System (RETS), the number of Multi-Purpose Range Complexes (MPRC) and the availability of a standard design MOUT range and total number of ranges are weighted and combined to provide a measure of the overall capability of the installation's range structure.

2. **PURPOSE:** To evaluate the capability of the installation to support range operations such as qualification and live fire exercises.

3. **METHODOLOGY:** A Decision Pad submodel is used with the following weights given to each sub-element:

NUMBER OF MPRC RANGES		45 points
NUMBER OF RETS EQUIPPED FIRING POINTS		45 points
STANDARD MOUT RANGE AVAILABLE?	YES =	5 POINTS
TOTAL NUMBER OF RANGES		5 points
Total		100 points

4. **REFERENCES:** April 1994 HQRPLANS, validated TRAINLOAD data and installation data call as applicable.

5. **UNIT OF MEASURE:** All ranges, MPRC, and RETS equipped ranges are measures in eaches. All ranges counted must be in operational condition and used for weapons firing. The total number of ranges displayed in HQRPLANS (EEA 179&17R) include planned FY92-96 construction projects.

6. **EQUATION:** NA

7. **ATTRIBUTE SCORING:**

For submodel: A higher number is a better score.

For main model: The submodel rating is the input and a higher value results in a higher ranking.

RESEARCH AND DEVELOPMENT FACILITIES

1. **DEFINITION:** Laboratory activities, environmental control chamber facilities, Research and Development Facilities. R & D facilities must have suitably equipped facilities to operate efficiently.

2. **PURPOSE:** To measure laboratories and other research facilities used in support of material development.

3. **METHODOLOGY:** Assets are determined by summing the permanent square footage from EEA 300. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** Higher number is a better score.

RESERVE TRAINING

1. **DEFINITION:** A measure of support provided by an installation to the Reserve Components, including individual and unit training.

2. **PURPOSE:** To evaluate an installation on available capacity to support Reserve Component units and individuals during peacetime.

3. **METHODOLOGY:** Reserve Component support is evaluated using a Decision Pad submodel measuring and ranking the Annual Training (AT), Inactive Duty Training (IDT). Each of the above factors is measured for each installation. The raw data is used in the model and a weighted average score is calculated for each installation. This score will be calculated by taking a three-year average (FY 91-93).

4. **REFERENCES:** Training data, documented by the installation Director of Reserve Component Support (or its equivalent), and validated at installation level, will be used.

5. **UNIT OF MEASURE:**

   a. Annual Training is measured in number of personnel.
   b. Inactive Duty Training is measured in Mandays.

6. **EQUATION:** A Decision Pad submodel is used with the following weights given to each sub-element:

		WEIGHT
Annual Training (Number of People)		25
Inactive Duty Training (Mandays)		75
	Total	100

7. **ATTRIBUTE SCORING:**

Raw data/number: A higher number is a better score.
For main model: A higher number is a better score.

CLOSE HOLD

SPECIAL AIRSPACE

1. **DEFINITION:** The total cubic area of special use airspace operated by the installation.

2. **PURPOSE:** To measure the overall special use air space of the installation under military control. This is one of several factors used to assess the relative size of the training area(s) controlled by installations.

3. **METHODOLOGY:** The airspace dimensions (longitude, latitude and altitude) identified in the us Army Airspace Master Plan is converted to cubic miles. The result is provided for MACOM and installation verification.

4. **REFERENCES:** US Army Airspace Master Plan and installation validation.

5. **UNIT OF MEASURE:** Cubic miles.

6. **EQUATION:** USMA Math Department Model.

7. **ATTRIBUTE SCORING:** Higher value results in a better ranking.

SPECIAL CARGO CAPABILITY

1. **DEFINITION:** Adequacy of the port facility to handle special cargo requirements.

2. **PURPOSE:** To indicate the terminal's ability to provide responsive and timely support to customers during peacetime, mobilization, and wartime.

3. **METHODOLOGY:** Assessment of the capability of the port to handle special cargo.

   a. Hazardous material yes = 50 points

   b. Ammunition yes = 50 points

4. **REFERENCES:** Installation Data call.

5. **UNIT OF MEASURE:** Yes/No

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORING:** Higher value is a better score.

CLOSE HOLD

STAGING AREAS

1. **DEFINITION:** Total Square feet of hard surface area at the terminal used for staging cargo prior to loading on the ship.

2. **PURPOSE:** To determine the terminal's capacity to perform its mission.

3. **METHODOLOGY:** Measurement of hard surface staging square feet.

4. **REFERENCES:** Department of the Army Facilities Engineering and Housing Annual Summary of Operations, Volume III, Installations Performance, FY 92.

5. **UNIT OF MEASURE:** Thousands of Square feet.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** Number. Higher value results in a higher score.

SUPPLY AND STORAGE FACILITIES

1. **DEFINITION:** Total permanent square footage of Supply and Storage facilities on an installation.

2. **PURPOSE:** To measure the installation capacity for providing permanent storage facilities. This is a measure used to assess the relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of supply and storage facilities for the following Facility Category Groups (FCG) shown below:

FCG	FCG DESCRIPTION
43200	Cold Storage - Inst
44100	Gen Purp Whse - Dep
44200	Gen Purp Whse - Inst
44230	Cont Hum Whse
44240	Infl Matls Whse
44260	Veh Stor Shed

Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** Summation.

7. **CRITERION SCORING:** Higher number results in a better ranking.

SUPPORT FACILITIES

1. **DEFINITION:** Facilities providing logistical support for the primary mission.

2. **PURPOSE:** To indicate the capacity of the terminal to provide logistical support.

3. **METHODOLOGY:** Measurement of logistical facilities square footage in EEAs (143,210,212,213,214,215,216,218,400). Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Square feet in thousands.

6. **EQUATION:** Not applicable.

7. **ATTRIBUTE SCORE:** Higher value results in a higher score.

TEST AND EVALUATION FACILITIES

1. **DEFINITION:** Square feet of all test and evaluation facilities and value of all installed test equipment.

2. **PURPOSE:** To measure the ability of an installation to conduct test and evaluation missions.

3. **METHODOLOGY:** A D-Pad submodel is used giving equal weight to facilities and equipment. Facilities assets are determined by summing the square footage from EEA 300. Equipment assets are determined by summing all equipment (over $100,000 in value) from the TESTFACTS database. Each type of asset is given equal weight. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS, Current TESTFACTS data w/installation validation.

5. **UNIT OF MEASURE:** Thousands of square feet - Facilities.
Thousands of dollars - Equipment

6. **EQUATION:** Summation

7. **ATTRIBUTE SCORING:** A larger number = a better score.

TEST AND EVALUATION MISSION DIVERSITY

1. **DEFINITION:** Test and evaluation diversity is the capability to conduct test and evaluation missions for a wide variety of different equipment commodity groups and customers.

2. **PURPOSE:** To measure the ability of an installation to conduct test and evaluation missions for a wide range of different equipment commodity groups.

Test and Evalyuation Commodity Groups:

Air Defense
Air Delivery
Aircraft/Aviation Systems/UAVs
C3/IEW
Chemical/Biological
Clothing/Personnel Equipment
Direct Fire
Directed Energy
Electric Gun
Electromagnetic Environments
General Support Equipment
Indirect Fire
Lethality/Vulnerability
Mines
Missiles
Natural Environment
Nuclear Fires
Robotics
Sea Vehicles
Smart Weapons
Space Systems
Tracked Vehicles
Transportability
Wheeled vehicles

3. **METHODOLOGY:** Summation of commodities supported by testing during the FY92/94 time period.

4. References: Installation data call.

5. Unit of Measure: Eaches.

6. Equation: Summation.

7. CRITERIA SCORING: Alager number is a better score.

TEST AND EVALUATION RANGES

1. **DEFINITION:** The total number of test and evaluation ranges on the installation and the total impact acres available on an installation.

2. **PURPOSE:** To measure the number and size of test and evaluation ranges on an installation.

3. **METHODOLOGY:** A D-Pad submodel is used giving equal weight to Number and Size of ranges. Number of ranges are determined by summing the total number of individual ranges from the series 371 category code group from HQRPLANS (FCG 37110). Size of ranges is determined by the total number of impact acres available on the installation. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS and installation data call.

5. **UNIT OF MEASURE:** Number of ranges - Eaches.
   Size of ranges - Acres.

6. **EQUATION:** Summation.

7. **ATTRIBUTE SCORING:** A larger number gives a better score.

VARIABLE HOUSING ALLOWANCE (VHA) FACTOR

1. **DEFINITION:** Measure of the cost of variable housing allowance for military personnel living off-post.

2. **PURPOSE:** To measure cost of housing military personnel in communities surrounding the installation. This is an indicator of the location cost to the Army for assignment of military personnel to the installation.

3. **METHODOLOGY:** Used the information from the VHA Zip Code Microfiche, distributed to Finance Offices by ASA(FM), for January 1993. Summation of the "with dependents" rate for E5, W3 and 03 as representative of the grades at these installations.

4. **REFERENCES:** 1994 VHA Tables.

5. **UNIT OF MEASURE:** Dollars.

6. **EQUATION:**

E-5 w/dependents
+ W-3 w/dependents
+ O-3 w/dependents
BRAC 95 VHA FACTOR

7. **CRITERION SCORING:** Dollars - the lower value results in a higher rank.

WORK SPACE

1. **DEFINITION:** Work space is defined as the total perman square footage of maintenance (aviation and vehicle) facil and operational/administrative facilities on the installat

2. **PURPOSE:** To measure the installation capacity for prov permanent maintenance, general purpose administrative and operational facilities. This is a measure used to assess t relative capability and suitability of the installation's facilities to support forces.

3. **METHODOLOGY:** Summation of the total number of permanent square feet of operations/administrative and maintenance facilities for the Facility Category Groups (FCG) shown belc

FCG	FCG DESCRIPTION
21110	MNT HANGAR AVUM
21111	MNT HANGAR AVIM
21407	NG MAINT FAC
21409	AR MAINT FAC
21410	VEH MNT SH ORG
21420	VEH MNT SHOP DS
21800	SP PURP MNT SHP
21900	MNT INST O&R
14112	AV UNIT OPS BLDG
14110	AF OPS BLDG
14182	BDE HQ BLDG
14183	BN HQ BLDG
14185	CO HQ BLDG
61050	GEN PURPOSE ADMIN

Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS.

5. **UNIT OF MEASURE:** Thousands of gross square feet.

6. **EQUATION:** NA

7. **CRITERION SCORING:** Higher number is a better score.

ANNEX D

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

ATTRIBUTE DEFINITIONS

ANNEX C - DATA ELEMENT RESPONSIBILITIES

1. This Annex will describe the responsibilities for data elements required by the BRAC 95 Installation Assessment program.

a. Source Agency. The organization designated to supply the data element will:

- Refer to Annex D for the attribute definition.
- Locate the data source.
- Record the data element.
- Forward the data and supporting source documents to the verifying agency.

b. Verifying Agency. The organization designated to verify the data element will:

- Refer to Annex D for the attribute definition.
- Receive the data element and documentation from the supplying agency.
- Check the data element to insure it has been provided IAW the attribute definitions.

c. Certifying Agency. The organization designated to certify the data element will:

- Maintain the formal documentation for the data element(s) source and audit trail.
- Maintain a signed certification statement for the data element(s).

2. Questions concerning this process should be addressed to MAJ Chuck Fletcher, The Army Basing Study, (703) 697-1765/6.

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
1	ACCESSIBILITY		C,V	S
2	AMMUNITION STORAGE		V,C	S
3	APPLIED INSTRUCTIONAL FACILITIES	V	C	S
4	AVAILABLE WORK FORCE	C,S	V	
5	AVERAGE AGE OF FACILITIES	V	C	S
6	BARRACKS (UPH)	V	C	S
7	BARRACKS (UPH) AND FAMILY HOUSING	V	C	S
8	BASOPS/MISSION POPULATION	V	C,S	
9	BUILDABLE ACRES		C,V	S
10	CAPACITY - PRODUCTION		C,V	S
11	CAPACITY - MAINTENANCE		C,V	S
12	CAPACITY - SUPPLY		C,V	S
13	COST OF LIVING INDEX	C,S	V	
14	DEPLOYMENT NETWORK		C,V	S
15	ENCROACHMENT	C,S	V	
16	ENVIRONMENTAL CARRYING CAPACITY		C,V	S
17	EXCESS CAPACITY - MAINTENANCE	V	C	S
18	EXCESS CAPACITY - PRODUCTION	V	C	S
19	EXCESS CAPACITY - STORAGE	V	C	S
20	FAMILY HOUSING	V	C	S
21	FAMILY HOUSING COST PER DWELLING UNIT		C,V	S
22	GENERAL INSTRUCTIONAL FACILITIES	V	C	S
23	HEALTH CARE SUPPORT INDEX		C,S	
24	IMPACT ACRES		C,V	S
25	INFORMATION MISSION AREA (IMA)		C,V	S

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
26	INFRASTRUCTURE		C,V	S
27	INSTALLATION AND BASE OPERATING EXPENSE		C,V	S
28	LOCALITY PAY FACTOR	C,S	V	
29	MAINTENANCE FACILITIES	V	C	S
30	MAINTENANCE FLEXIBILITY		C,V	S
31	MANEUVER ACRES		C,V	S
32	MCA COST FACTOR	C,S	V	
33	MECHANIZED MANEUVER ACRES		C,V	S
34	MEDICAL RESEARCH FACILITIES	V	C	S
35	MISSION OVERHEAD		C,V	S
36	MOBILIZATION CAPABILIY		C,V	S
37	MOBILIZATION THROUGHPUT		C,V	S
38	NORMAL THROUGHPUT		C,V	S
39	OPS/ADMIN FACILITIES		C,V	S
40	PATIENT CARE FACILITIES		C,V	S
41	PERCENT PERMANENT FACILITIES	V	C	S
42	PIERS AND WHARVES		C,V	S
43	PRODUCTION FLEXIBILITY		C,V	S
44	QUANTITY - DISTANCE		C,V	S
45	RANGES		C,V	S
46	RESEARCH AND DEVELOPMENT FACILITIES		C,V	S
47	RESERVE TRAINING		C,V	S
48	SPECIAL AIRSPACE	C,S	V	
49	SPECIAL CARGO CAPABILITY		C,V	S
50	STAGING ARES		C,V	S

ANNEX C - DATA ELEMENT RESPONSIBILITIES

	S = DATA SOURCE C = CERTIFICATION STATEMENT V = VERIFY	DA	MACOM	INSTALLATION
51	SUPPLY AND STORAGE FACILITIES	V	C	S
52	SUPPORT FACILITIES		C,V	S
53	TEST AND EVALUATION FACILITIES		C,V	S
54	TEST AND EVALUATION MISSION DIVERSITY		C,V	S
55	TEST AND EVALUATION RANGES		C,V	S
56	VHA FACTOR	C,S	V	
57	WORK SPACE	V	C	S

ANNEX C

BRAC 95 INSTALLATION ASSESSMENT

DATA ELEMENT RESPONSIBILITIES

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Maneuver Acres	80
Ranges	70
Deployment Network	60
Reserve Training	60
Impact Area	70
Mechanized Maneuver Acres	70
Special Airspace	40
Total	450

LAND AND FACILITIES

Attribute	Points
Barracks and Family Housing	60
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	55
Buildable Acres	35
IMA	10
Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
Housing Cost per DU	15
VHA Factor	15
Locality Pay Factor	30
BASOPS/Mission Population	60
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization and Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR MANEUVER INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Reserve Training	50
Ops/Admin Facilities	140
Information Mission Area	70
Accessibility	50
Barracks and Family Housing	140
Total	

LAND AND FACILITIES

Attribute	Points
Percent Permanent Facilities	40
Average Age of Facilities	40
Infrastructure	40
Maintenance Facilities	40
Supply and Storage	40
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	40
Buildable Acres	60
Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
VHA factor	15
Housing Cost per DU	15
Locality Pay Factor	30
BASOPS/Mission Population	60
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR COMMAND AND CONTROL/ ADMINISTRATIVE SUPPORT INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS	
Attribute	Points
Maneuver Acres	120
Ranges	70
Reserve Training	70
Impact Area	70
Mechanized Maneuver Acres	80
Special Airspace	40
Total	450

LAND AND FACILITIES	
Attribute	Points
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Barracks	60
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS	
Attribute	Points
Mobilization Capability	30
Buildable Acres	35
Encroachment	20
IMA	10
Deployment Network	30
Total	125

COST AND MANPOWER	
Attribute	Points
Cost of Living Index	60
Locality Pay Factor	35
BASOPS/Mission Population	75
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR TRAINING AREAS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Maneuver Acres	65
Ranges	45
Deployment Network	35
Reserve Training	30
Impact Area	40
Mechanized Maneuver Acres	20
General Instructional Facilities	60
Applied Instructional Facilities	60
IMA	30
Special Airspace	65
Total	450

LAND AND FACILITIES

Attribute	Points
Barracks	40
Family Housing	20
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	65
Buildable Acres	35
Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
Housing Cost per DU	15
VHA Factor	15
Locality Pay Factor	30
BASOPS/Mission Population	60
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR TRAINING SCHOOLS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Reserve Training	50
IMA	30
General Instructional Facilities	235
Applied Instructional Facilities	135
Total	450

LAND AND FACILITIES

Attribute	Points
Barracks	20
Family Housing	40
Work Space	60
Percent Permanent Facilities	30
Average Age of Facilities	25
Infrastructure	25
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Mobilization Capability	65
Buildable Acres	35
Encroachment	25
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
Housing Cost per DU	15
VHA Factor	15
Locality Pay Factor	30
BASOPS/Mission Population	60
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR PROFESSIONAL EDUCATION INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Capacity-Maintenance	150
Capacity-Supply	150
Reserve Training	30
Deployment Network	50
Available Workforce	30
Maintenance Flexibility	40
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Excess Capacity-Maintenance	40
Excess Capacity-Storage	40
Buildable Acres	20
Encroachment	15
Information Mission Area	10
Total	125

COST AND MANPOWER

Attribute	Points
IBOE	100
MCA Cost Factor	50
Mission Overhead	50
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR MAINTENANCE DEPOTS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Production Capacity	230
Deployment Network	50
Available Workforce	30
Storage Capacity	80
Production Flexibility	60
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Excess Capacity-Production	50
Buildable Acres	25
Encroachment	20
IMA	10
Excess Capacity-Storage	20
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR INDUSTRIAL FACILITIES.

MISSION REQUIREMENTS AND OPERATIONAL READINESS		LAND AND FACILITIES	
Attribute	Points	Attribute	Points
Available Workforce	50	Average Age of Facilities	75
Ops/Admin Facilities	200	Infrastructure	50
Research and Development Fac	200	Percent Permanent Facilities	75
		Environmental Capacity	25
Total	450	Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS		COST AND MANPOWER	
Attribute	Points	Attribute	Points
Buildable Acres	90	Cost of Living Index	50
Information Mission Area	35	MCA Cost Factor	50
		BASOPS/Mission Population	100
Total	125	Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR COMMODITY INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Reserve Training	30
Deployment Network	50
Available Workforce	30
Production Flexibility	80
Ammunition Storage	130
Production Capacity	130
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	50
Infrastructure	35
Percent Permanent Facilities	45
Quantity-Distance	70
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Buildable Acres	35
Encroachment	15
Information Mission Area	10
Excess Capacity-Production	65
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR AMMUNITION PRODUCTION (ACTIVE) INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Ammunition Storage	240
Reserve Training	40
Deployment Network	80
Available Workforce	40
Maintenance Flexibility	50
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	50
Infrastructure	25
Percent Permanent Facilities	50
Quantity-Distance	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Excess Capacity-Storage	50
Buildable Acres	35
IMA	10
Encroachment	30
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR AMMUNITION STORAGE INSTALLATIONS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Test and Evaluation Mission Diversity	200
Test and Evaluation Ranges	100
Test and Evaluation Facilities	150
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	75
Infrastructure	50
Percent Permanent Facilities	75
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Buildable Acres	25
Encroachment	65
IMA	10
Available Workforce	20
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR PROVING GROUNDS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Special Cargo Capacity	100
Support Facilities	75
Normal Throughput	100
Piers and Wharves	100
Staging Areas	75
Total	450

LAND AND FACILITIES

Attribute	Points
Average Age of Facilities	85
Infrastructure	50
Percent Permanent Facilities	65
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Buildable Acres	50
Available Workforce	20
Mobilization Throughput	45
IMA	10
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	50
MCA Cost Factor	50
BASOPS/Mission Population	100
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR PORTS.

MISSION REQUIREMENTS AND OPERATIONAL READINESS

Attribute	Points
Patient Care Facilities	150
Applied Instruction Facils	100
Medical Research Facilities	50
Deployment Network	75
Reserve Training	75
Total	450

LAND AND FACILITIES

Attribute	Points
Percent Permanent Facilities	75
Average Age of Facilities	85
Infrastructure	40
Environmental Capacity	25
Total	225

CONTINGENCY, MOBILIZATION AND FUTURE REQUIREMENTS

Attribute	Points
Encroachment	20
Mobilization Capability	50
IMA	20
Buildable Acres	35
Total	125

COST AND MANPOWER

Attribute	Points
Cost of Living Index	40
Housing Cost	30
Health Care Support Index	100
MCA Cost Factor	30
Total	200

TOTAL ATTRIBUTE SCORE

	Points
Mission Requirements & Operational Readiness	450
Land & Facilities	225
Contingency, Mobilization & Future Requirements	125
Cost & Manpower	200
Total	1,000

ATTRIBUTES AND WEIGHTS FOR MEDICAL CENTERS

ANNEX B

BRAC 95 INSTALLATION ASSESSMENT PROGRAM

ATTRIBUTES AND WEIGHTS

ANNEX A - INSTALLATION CATEGORIES

DEPOTS	MACOM	ECONOMIC AREA
ANNISTON DEPOT,AL	AMC	ANNISTON, AL MSA
LETTERKENNY DEPOT,PA	AMC	FRANKLIN COUNTY, PA
RED RIVER DEPOT,TX	AMC	TEXARKANK TX-AR MSA
TOBYHANNA DEPOT,PA	AMC	MONROE COUNTY, PA

MEDICAL CENTERS	MACOM	ECONOMIC AREA
FITSIMONS MEDICAL CENTER, CO	MEDCOM	DENVER, CO PMSA
TRIPLER MEDICAL CENTER,HI	USARPAC	HONOLULU, HI MSA
WALTER REED MEDICAL CENTER,DC	MEDCOM	WASHINGTON, DC-VA-MD MSA

INDUSTRIAL FACILITIES	MACOM	ECONOMIC AREA
LIMA TANK PLANT,OH	AMC	ALLEN COUNTY, OH
STRATFORD ENG PLNT,CT	AMC	NEWHAVEN-BRIDGEPORT-STAMFORD-DANBURY-WATERBURY,CT MSA
WATERVLIET ARSENAL,NY	AMC	ALBANY-SCHENECTADY-TROY, NY MSA

MAJOR TRAINING AREAS	MACOM	ECONOMIC AREA
FORT A.P. HILL,VA	MDW	CAROLINE COUNTY, VA
FORT CHAFFEE,AR	TRADOC	FORT SMITH, AR-OK MSA
FORT DIX,NJ	FORSCOM	PHILADELPHIA PA-NJ, PMSA
FORT GREELY,AK	USARPAC	SOUTHEAST FAIRBANKS CENSUS AREA
FORT HUNTER-LIGGETT,CA	FORSCOM	SALINAS-SEASIDE-MONTEREY MSA
FORT INDIANTOWN GAP,PA	FORSCOM	HARRISBURG-LEBANON-CARLISLE, PAMSA
FORT IRWIN, CA	FORSCOM	RIVERSIDE-SAN BERNADINO, CA MSA
FORT McCOY,WI	FORSCOM	MONROE COUNTY, WI
FORT PICKETT,VA	FORSCOM	BRUNSWICK COUNTY, VA
FORT POLK,LA	FORSCOM	VERNON PARISH, LA

MANEUVER INSTALLATIONS	MACOM	ECONOMIC AREA
FORT BRAGG,NC	FORSCOM	FAYETTVILLE, NC MSA
FORT CAMPBELL,KY	FORSCOM	CLARKSVILLE-HOPKINSVILLE,TN-KY MSA
FORT CARSON,CO	FORSCOM	COLORADO SPRINGS, CO MSA
FORT DRUM,NY	FORSCOM	JEFFERSON COUNTY, NY
FORT HOOD,TX	FORSCOM	KILEEN-TEMPLE, TX MSA
FORT LEWIS,WA	FORSCOM	TACOMA, WA MSA
FORT RICHARDSON,AK	USARPAC	ANKORAGE, AK MSA
FORT RILEY,KS	FORSCOM	RILEY COUNTY, KS
FORT STEWART,GA	FORSCOM	LIBERTY COUNTY, GA
FORT WAINWRIGHT,AK	USARPAC	FAIRBANKS NORTHSTAR BOROUGH
SCHOFIELD BARRACKS,HI	USARPAC	HONOLULU, HI MSA

PORTS / OCEAN TERMINALS	MACOM	ECONOMIC AREA
BAYONNE OCEAN TERMINAL,NJ	MTMC	NEWARK, NJ MSA
OAKLAND ARMY BASE,CA	MTMC	OAKLAND, CA MSA
SUNNY POINT OCEAN TERMINAL,NC	MTMC	WILMINGTON, NC MSA

ANNEX A - INSTALLATION CATEGORIES

PROFESSIONAN EDUCATION	MACOM	ECONOMIC AREA
CARLISLE BARRACKS,PA	TRADOC	HARRISBURG-LEBANON-CARLISLE, PAMSA
FORT LEAVENWORTH,KS	TRADOC	KANSAS CITY MO-IL, MSA
FORT LESLEY J. McNAIR,DC	MDW	WASHINGTON, DC-MD-VA MSA
WEST POINT,NY	USMA	NEWBURG, NY PMSA

PROVING GROUNDS	MACOM	ECONOMIC AREA
ABERDEEN PROVING GROUNDS,MD	AMC	BALTIMORE, MD MSA
DUGWAY PROVING GROUNDS ,UT	AMC	TOOELE COUNTY, UT
WHITE SANDS MISSLE RANGE,NM	AMC	LAS CRUCES, NM MSA
YUMA PROVING GROUNDS,AZ	AMC	YUMA, AZ MSA

ANNEX A - INSTALLATION CATEGORIES.

1. This Annex lists the installations to be studied under the BRAC 95 Installation Assessment program. Each installation is assigned to a category of like installations for comparison.

2. A Major Command (MACOM) is designated for each installation. The designated MACOM is responsible for managing the IA program for the installation (tasking the installation for data, collecting the data, etc).

3. Each installation is assigned to an Economic Area (EA). The EA is a county(s) or Metropolitan Statistical Area (MSA) which is the primary area of economic impact for the installation. The EA will be used to develop the potential economic impact to the community of a realignment or closure of the installation. The EA is also referenced in the attributes as the representative area for encroachment and available workforce.

4. Designated MACOMs should review the assignment of installations to EAs for accuracy. The initial assignment was done based on past BRAC assignments and subjective judgement. Comments on the EAs for each installation should be directed to Mr. Joe Vallone, The Army Basing Study, (703) 69-0077/8.

ANNEX A - INSTALLATION CATEGORIES

ADMIN SUPPORT INSTALLATIONS	MACOM	ECONOMIC AREA
C. KELLY SUPPORT CENTER,PA	FORSCOM	ALLEGHENY, PA MSA
C. M. PRICE SUPPORT CENTER,IL	AMC	ST LOUIS, MO MSA
FORT BELVOIR,VA	MDW	WASHINGTON, DC-MD-VA MSA
FORT BUCHANAN,PR	FORSCOM	SAN JUAN, PR MSA
FORT GILLEM,GA	FORSCOM	ATLANTA, GA MSA
FORT HAMILTON,NY	FORSCOM	NEW YORK, NY PMSA
FORT McPHERSON,GA	FORSCOM	ATLANTA, GA MSA
FORT MEADE, MD	MDW	ANNE ARUNDEL&HOWARD COUNTIES, MD
FORT MONROE,VA	TRADOC	NORFOLK-VA BEACH-NEWPORT NEWS MSA
FORT MYER,VA	MDW	WASHINGTON, DC-MD-VA MSA
FORT RITCHIE,MD	MDW	HAGERSTOWN, MD MSA
FORT SHAFTER,HI	USARPAC	HONOLULU, HI MSA
FORT TOTTEN,NY	FORSCOM	NEW YORK, NY PMSA
PRESIDIO OF SAN FRANCISCO,CA	FORSCOM	SAN FRANSISCO, CA MSA
TACOM SUPPORT CENTER, SELFRIDGE	AMC	DETROIT, MI MSA

AMMO PROD INSTALLATIONS	MACOM	ECONOMIC AREA
HOLSTON ARMY AMMO PLANT,TN	AMC	JOHNSON CITY-KINGSPORT-BRISTOL MSA
IOWA ARMY AMMO PLANT,IA	AMC	DE MOINES COUNTY, IA
LAKE CITY ARMY AMMO PLANT,MO	AMC	KANSAS CITY KS-MO MSA
LONE STAR ARMY AMMO PLANT,TX	AMC	TEXARKANA, TX-AR MSA
McALESTER ARMY AMMO PLANT,OK	AMC	PITTSBURG COUNTY, OK
MILAN ARMY AMMO PLANT,TN	AMC	GIBSON COUNTY, TN
PINE BLUFF ARSENAL,AR	AMC	PINE BLUFF, AR MSA
RADFORD ARMY AMMO PLANT,VA	AMC	RADFORD CITY, VA

AMMUNITION STORAGE	MACOM	ECONOMIC AREA
BLUE GRASS ARMY DEPOT,KY	AMC	LEXINGTON, KY MSA
CAMP STANLEY STORAGE FACILITY ,TX	AMC	MASON COUNTY, TX
HAWTHORNE ARMY AMMO PLAT,NV	AMC	MINERAL COUNTY, NV
PUEBLO DEPOT,CO	AMC	PUEBLO, CO MSA
SAVANNA DEPOT,IL	AMC	CARROLL COUNTY, IL
SENECA DEPOT,NY	AMC	SENECA COUNTY, NY
SIERRA DEPOT,CA	AMC	LASSEN COUNTY, CA
TOOELE DEPOT,UT	AMC	TOOELE COUNTY, UT
UMATILLA DEPOT,OR	AMC	UMATILLA COUNTY, OR

COMMODITY INSTALLATIONS	MACOM	ECONOMIC AREA
ARMY RESEARCH LABORATORY,MD	AMC	PRINCE GEORGE&CHARLES COUNTIES, MD
COLD REGION RESEARCH LAB,NH	USACE	GRAFTON COUNTY, NH
DETROIT ARSENAL,I L	AMC	DETROIT, MI MSA
FORT DETRICK,MD	MEDCOM	WASHINGTON, DC-MD-VA MSA
FORT MONMOUTH,NJ	AMC	MONMOUTH-OCEAN, NJ PMSA
NATICK RESEARCH,ENGR CTR,MA	AMC	BOSTON-LAWRENCE-SALEM MA-NH NECMA
PICATINNY ARSENAL,NJ	AMC	NEWARK, NJ PMSA
REDSTONE ARSENAL ,AL	AMC	HUNSTVILLE, AL MSA
ROCK ISLAND ARSENAL,IL	AMC	DAVENPORT-ROCK ISLAND-MOLINE, IA-IL MSA

ANNEX A - INSTALLATION CATEGORIES

TRAINING SCHOOLS	MACOM	ECONOMIC AREA
FORT BENNING,GA	TRADOC	COLUMBUS, GA-AL MSA
FORT BLISS, TX	TRADOC	EL PASO, TX MSA
FORT EUSTIS ,VA	TRADOC	NORFOLK-VA BEACH-NEWPORT NEWS MSA
FORT GORDON ,GA	TRADOC	AUGUSTA, GA-SC MSA
FORT HUACHUCA,AZ	TRADOC	COCHISE COUNTY, AZ
FORT JACKSON,SC	TRADOC	COLUMBIA, SC MSA
FORT KNOX,KY	TRADOC	HARDIN COUNTY, KY
FORT LEE,VA	TRADOC	RICHMOND-PETERSBURG, VA MSA
FORT LEONARD WOOD,MO	TRADOC	LACLEDE, PHELPS, AND PULASKI COUNTIES, MO
FORT McCLELLAN,AL	TRADOC	ANNISTON, AL MSA
FORT RUCKER ,AL	TRADOC	DOTHAN, AL MSA
FORT SAM HOUSTON,TX	FORSCOM	SAN ANTONIO, TX MSA
FORT SILL,OK	TRADOC	LAWTON, OK MSA
PRESIDIO OF MONTEREY,CA	TRADOC	SALINAS-SEASIDE-MONTEREY, CA MSA

ANNEX A

BRAC 95 INSTALLATION ASSESSMENTS

INSTALLATION CATEGORIES

BRAC IS AN OPPORTUNITY

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF

THE ARMY BASING STUDY

TO:

HQ FORSCOM, ATTN: MS NETA ADAMS
FAX- (404) 669-7040

HQ TRADOC, ATTN: LTC JOHN FRANKS
FAX - (804) 727-4374

HQ AMC, ATTN: MR DARYL POWELL
FAX- (703) 614-0476

HQ USARPAC, ATTN: MR ED WADA
FAX- (808) 438-9234

HQ MTMC, ATTN: MS DIANE LUNA
FAX (703) 756-1921

HQ MDW, ATTN: MS RODRIGUEZ
FAX- (202) 475-7574

SUPERINTENDENT, USMA
ATTN: MR MADISON
FAX- (914) 938 5328

HQ USACE, ATTN: MR DAWSON MAY
FAX- (202) 272-0907

HQ MEDCOM, ATTN: MAJ CHUCK DEVRIES
FAX- (210) 221-6039

HQDA, DACS-TABS
THE PENTAGON, ROOM 2A684
WASHINGTON, DC 20310-0200

POC: MAJOR CHUCK FLETCHER

VOICE TELEPHONE :
DSN 227-1765COM (703) 697-1765/6
TABS FAX TELEPHONE:
(703) 614-6518 / DSN 224-6518

DATE-TIME-GROUP	NUMBER OF PAGES
16 MAY 1600 HRS	4 + HEADER

A FEW CLARIFICATIONS TO THE BRAC IA DATA CALL

DATA CALL #1:

ATTRIBUTES IMPACTED -
RANGES - FOR THE #RETS EQUIPED FIRING POINTS, COUNT ONLY M-16 QUALIFICATION FIRING POINTS

BASOPS FACTOR - PLEASE REPORT DOD RPMA

ARMY FAMILY HOUSING- INCLUDE $S FOR ACCOUNTS 1910, 1920, 1930 & 1940 AS AFO "OPERATIONS" COST.

MAJ CHUCK FLETCHER

CLOSE HOLD

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, DC 20310-0200

REPLY TO
ATTENTION OF

DACS-TABS

26 APR 1994

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: BRAC 95 Installation Assessment (IA) Program
- BRAC 95 Data Call #1

1. References:

a. Memorandum, Chief of Staff United States Army, 21 March 1994, Subject: Base Realignment and Closure (BRAC) 95.

b. Memorandum, Director of Management, 21 March 1994, Subject: Army Preparation for BRAC 95.

2. The Defense Base Closure and Realignment Act of 1990, as amended, provides the Army a means to make needed adjustments to our installation structure. Although the next round of BRAC recommendations is not due to the Defense Base Closure and Realignment Commission (Commission) until March 1995, we must begin the extensive preparation now. The BRAC 95 IA Program is designed to provide the senior Army leadership a measure of the relative value of installations and facilities used by Army organizations. The proponent office for the IA process is the Management Directorate of the Office of the Chief of Staff, Army.

3. This memorandum provides instructions to action addressees concerning the Army's initial BRAC 95 data call. Annex A lists installation categories and the installations included in this request. Annex B identifies the data attributes requested for each installation category. Annex C designates the responsibility for supplying, verifing and certifing each data element. Annex D provides the attribute definitions. Annex E provides a sample format.

4. Request that action addressees provide the required data for each assigned installation listed in Annex A. Data will be submitted in three printed copies and on wordprocessing disk. The suspense date for this data call is **23 May 1994.**

CLOSE HOLD

4. The BRAC 95 IA Program requires the development of quantitative data as well as narrative assessments. This memorandum addresses the Army's primary quantitative installation evaluation (formerly called the "Military Value Assessment"). Instructions concerning Installation Narrative and Environmental Assessments will be published NLT 1 May 1994. Additional data calls in support of OSD BRAC 95 study efforts will be addressed separately.

5. All documentation concerning the BRAC 95 IA is considered pre-decisional to the BRAC 95 process and is to be marked and handled as CLOSE HOLD.

6. The Defense Base Closure and Realignment Act of 1990, as amended, requires certification of the accuracy and completeness of all information provided to the Commission and Secretary of Defense. The IA process requires action addressees to provide products to HQDA that will be published in the Army's BRAC recommendations or as reference materials to the Army's BRAC recommendations. Accordingly, the documentation of all IA products must be thorough, accurate and detailed. The following guidelines will be used to ensure that results are supportable and that the certification requirements are met:

a. Consistency in data sources. Standard data sources for the attributes are provided in Annex D - BRAC 95 Attributes. The reference listed as the April 1994 HQRPLANS is the Army corporate HQRPLANS database, version 4.00 dated 4 April 1994, containing the 31 December 1993 HQIFS asset data submitted by the installations and the January 1994 ASIP data based on the SAMAS as of 22 November 1993. When the June 1994 HQRPLANS update (31 March 1994 HQIFS assets data) is available, HQDA will pull the BRAC attribute data required in Annex D for all installations listed in Annex A and will provide the data to installations through the MACOM headquarters.

b. Accuracy of the data. Corporate Army data bases will be used as directed by Annex D. Any deviation from Army corporate data bases must be documented by the addressees, validated by the HQDA functional proponent and approved by TABS.

c. Completeness of records. Record keeping, although cumbersome and time-consuming, is nonetheless critical to demonstrate a sufficient decision trail. Records of the source data for values used as attributes are required to be maintained. All quantitative assessments will be forwarded with a documentation section which describes, in detail:

(1) actions taken by addressees and/or installations to assure data accuracy in compliance with guidance in above reference and this memorandum;

(2) any specific data limitations;

(3) record keeping procedures used by the action addressees to maintain an audit trail of the IA data.

d. Certification: Data submitted as a result of this or subsequent DA requests must include an accompanying memorandum signed by the reporting Chief of Staff (or equivalent) with the following statement: "The information contained in this report is accurate and complete to the best of my knowledge and belief."

7. To help implement the Army's BRAC 95 management plan and ensure the Army is prepared for potential GAO audits, the Army Audit Agency will visit the action addressees and representative installations to validate the accuracy of the data and adequacy of the decision trail.

DACS-TABS
SUBJECT: BRAC 95 Installation Assessment (IA) Program

8. Point of contact is MAJ Chuck Fletcher, DACS-TAB, (703) 697-1765/6, AV 225-8921.

5 Encls

MICHAEL G. JONES
COL, GS
Director, The Army Basing Study

ACTION:

COMMANDING GENERAL, U.S. ARMY FORCES COMMAND
COMMANDING GENERAL, U.S. ARMY TRAINING AND DOCTRINE COMMAND
COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND
COMMANDING GENERAL, U.S. ARMY PACIFIC
COMMANDING GENERAL, U.S. ARMY HEALTH SERVICES COMMAND
COMMANDING GENERAL, U.S. ARMY MILITARY DISTRICT OF WASHINGTON
COMMANDING GENERAL, MILITARY TRAFFIC MANAGEMENT COMMAND
CHIEF OF ENGINEERS
COMMANDANT, UNITED STATES MILITARY ACADEMY

CF:
ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS
ASSISTANT SECRETARY OF THE ARMY FOR FINANCIAL MANAGEMENT
ASSISTANT SECRETARY OF THE ARMY FOR INSTALLATIONS, LOGISTICS AND ENVIRONMENT
ASSISTANT SECRETARY OF THE ARMY FOR MANPOWER AND RESERVE AFFAIRS
ASSISTANT SECRETARY OF THE ARMY FOR RESEARCH, DEVELOPMENT AND ACQUISITION
DIRECTOR OF INFORMATION SYSTEMS FOR COMMAND, CONTROL, COMMUNICATIONS AND COMPUTERS
GENERAL COUNSEL
THE AUDITOR GENERAL
CHIEF OF LEGISLATIVE LIAISON
CHIEF OF PUBLIC AFFAIRS
COMMANDING GENERAL, U.S. ARMY INFORMATION SYSTEMS COMMAND
DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS

DACS-TABS
SUBJECT: BRAC 95 Installation Assessment (IA) Program

DEPUTY CHIEF OF STAFF FOR INTELLIGENCE
DEPUTY CHIEF OF STAFF FOR PERSONNEL
COMMANDING GENERAL, U.S. ARMY INTELLIGENCE AND SECURITY COMMAND
COMMANDING GENERAL, U.S. ARMY SPECIAL OPERATIONS COMMANDDEPUTY
CHIEF OF STAFF FOR LOGISTICS
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
THE SURGEON GENERAL
CHIEF OF CHAPLAINS
THE JUDGE ADVOCATE GENERAL
OFFICE OF THE CHIEF ARMY RESERVE
CHIEF, NATIONAL GUARD BUREAU
DIRECTOR, PROGRAM ANALYSIS AND EVALUATION

CHANGE 2 TO BRAC 95 IA PROGRAM

BASOPS/MISSION POPULATION

1. **DEFINITION:** Measure of the base operations (BASOPS) cost required to support the mission population.

2. **PURPOSE:** To measure the relative cost of operating an installation in support of the mission requirements. This provides a relative cost factor used to assess the relative cost of operations of an installation.

3. **METHODOLOGY:** Used Total Base Support cost data (RPMA, Base Communication Costs, BASOPS Payroll/Non-payroll) for each installation. These data elements are derived by capturing the expenditures in **FY 93** by installation:

Base support (O&MA, RDT&E):

a. BASPOS(-), Account (xxxx96)
   - A. Real Estate Leases
   - B. Suply Operations
   - C. Maintenance of Material
   - D. Transportation Services
   - E. Laundry and Dry Cleaning
   - F. Army Food Services
   - G. Personnel Support
   - H. Unaccompanied Pers Housing Ops
   - J. Utilities
   - M. Other Engineering Support
   - N. Administration
   - P. Automation Activities
   - Q. Reserve Component Support
   - S. Community & Morale Support
   - T. Preservation of Order
   - U. Dir of Resource Management
   - W. Dir of Contracting
   - X. Security and Counterintel Ops
   - Y. Records Management, Pubs

b. Real Property Maintenance, Accounts (xxxx76 & xxxx78)
   K. Maint & Repair of Real Property
   L. Minor Construction

c. Environmental Programs, Account (xxxx56)

d. Audio-Visual, Account (xxxx90)

e. Base Commo, Account (xxxx95)

f. Family Programs, Accounts (878708,878719,878720)

In cases where a single fiscal station provides data for more than one installation, a breakout will be provided. Data provided should include **all known costs paid for operation and support including reimbursable, RDTE, AND DoD RPMA.** *The mission population supported will be provided by HQDA.*

4. **REFERENCES:** Installation STANFINS 218 report data validated by MACOMS for Total Base Support costs.

5. **UNIT OF MEASURE:** Dollars per person per year.

6. **EQUATION:** Total Base Support Costs/Total Mission Population.

7. **CRITERION SCORING:** The lower value results in a better ranking.

CLOSE HOLD

CHANGE 2 TO BRAC 95 IA PROGRAM

FAMILY HOUSING COST PER DWELLING UNIT (DU)

1. **DEFINITION:** Measure of the cost to maintain one set of family quarters at each installation.

2. **PURPOSE:** This attribute compliments the VHA Attribute. Together they provide an assessment of relative cost for housing a family at the installation.

3. **METHODOLOGY:** Number of permanent on-post housing units as reported in the April 1994 HQRPLANS, NOT including leased assets. Cost information provided by the STANFINS 218 Report. Values generated by dividing an installation's average AFH Operations (AFHO: **INCLDING ACCOUNTS 1910, 1920, 1930, AND 1940**) costs for three fiscal years (91,92,93) by the number of AFH units. Planned FY92-96 construction projects are counted as existing projects in HQRPLANS.

4. **REFERENCES:** April 1994 HQRPLANS and annual cost data from Resource Directorate for FY 91,92,93.

5. **UNIT OF MEASURE:** Dollars per AFH unit.

6. **EQUATION:** (AFHO obligations FY 91 + AFHO obligations FY 92 + AFHO obligations FY 93)/3 = average AFHO costs/AFH units = Dollar cost per AFH unit.

7. **CRITERION SCORING:** Lower number results in better ranking.

CLOSE HOLD

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, DC 20310-0200

REPLY TO
ATTENTION OF

DACS-TABS

7 JUL 1994

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model (BRAC 95 Data Call # 9)

1. As in previous BRAC rounds, the The Army Basing Study (TABS) will use the Cost of Base Realignment Actions (COBRA) model to develop cost estimates for analysis of closure and realignment options. The COBRA model uses a number of standard factors to calculate the various costs of closure and realignment options.

2. The table at enclosure 1 identifies the standard factors used in the COBRA model, as well as a proponent for each standard factor. A further description of the standard factor with a brief explanation of its use in COBRA is provided in enclosure 2. An example of the documentation format is at enclosure 3.

3. Request action addressees examine the standard factors for which you have proponency. Complete and return the required documentation for each factor by 1 AUG 1994.

4. The validity of the standard factors used in the COBRA model directly affects the accuracy of the model output. These standard factors must be completely documented. Certification of the accuracy and completeness of all information is required by Base Closure Law.

5. Point of contact is MAJ Charles Fletcher, 697-1765/6.

3 Encl
as

MICHAEL G. JONES
COL, GS
Director, The Army Basing Study

DISTRIBUTION:

DIRECTOR OF INFORMATION SYSTEMS FOR COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTERS
DEPUTY CHIEF OF STAFF FOR LOGISTICS
DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS
DEPUTY CHIEF OF STAFF FOR PERSONNEL
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
THE JUDGE ADVOCATE GENERAL

CF:

ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS AND ENVIRONMENT)
ARMY AUDIT AGENCY

ENCLOSURE 1 TO BRAC 95 COBRA STANDARD FACTORS DATA CALL

STANDARD FACTORS TABLE				
A.	STANDARD FACTOR	B. UNITS	C. DATA PROPONENT	D. 1993 DATA
1.	Officers Married	%	DCSPER	71.00%
2.	Enlisted Married	%	DCSPER	54.00%
3.	Enlisted Housing Milcon	%	ACSIM	98.50%
4.	Officer Salary	$/YEAR	DCSPER	$75,421.00
5.	Officer BAQ w/Dependents	$/MONTH	DCSPER	$7,877.00
6.	Enlisted Salary	$/YEAR	DCSPER	$34,875.00
7.	Enlisted BAQw/Dependents	$/MONTH	DCSPER	$5,313.00
8.	Average unemployment costs	$/WEEK	DCSPER	$200.00
9.	Unemployment Eligible	WEEKS	DCSPER	16
10.	Civilian Salary	$/YEAR	DCSPER	$44,221.00
11.	Civilian Turnover	%	DOD	15.00%
12.	Civilian Early Retirement	%	DOD	10.00%
13.	Civilians Quitting	%	DOD	3.00%
14.	Civilian RIF Pay Factor	%	DOD	11.22%
15.	Civilian Retirement Pay factor	%	DOD	8.80%
16.	Priority Placement	%	DOD	30.00%
17.	PPS Involving PCS	%	DOD	40.00%
18.	Civilian PCS Cost	$/FAMILY	DCSPER	$25,789.00
19.	New Hire Cost	$/PERSON	DCSPER	$0.00
20.	National Median Home Price	$/HOME	TABS	$109,010.00
21.	Home Sale Reimburse Rate	%	TABS	10.00%
22.	Max Home Sale Reimbursement	$	TABS	$22,193.00
23.	Home Purchase Reimburse Rate	%	TABS	5.00%
24.	Max Home Purc Reimburse Rate	$	TABS	$11,096.00
25.	Civilian Homeowning Rate	%	ACSIM	64.00%
26.	Homeown Asst Prog Factor(s)	NONE	DOD	37.5%/20%
27.	Relocation Svcs Ent	NONE	DOD	23%/12%

ENCLOSURE 1 TO BRAC 95 COBRA STANDARD FACTORS DATA CALL

STANDARD FACTORS TABLE				
A.	STANDARD FACTOR	B. UNITS	C. DATA PROPONENT	D. 1993 DATA
	Factor(s)			
28.	RPMA Buildings Index(SQ FT)	NONE	TABS	0.56
29.	BOS Index (Population)	NONE	TABS/IMD	0.64
30.	Support for Move Factor	%	TABS	10.00%
31.	Caretaker Admin Space	SQFT	ACSIM	162 SQFT
32.	Caretaker RPMA Costs	% ORIGINAL RPMA	ACSIM	23.6%
33.	Mothball Cost	$/SQFT	ACSIM	$0.00
34.	Material Per Assigned Person	LBS/PERSON	TABS	710
35.	Officer HHG Weight	LBS/FAMILY	DCSLOG	15,284 LBS
36.	Enlisted HHG Weight	LBS/FAMILY	DCSLOG	9,230 LBS
37.	Military HHG Weight	LBS/PERSON	DCSLOG	4,927 LBS
38.	Civilian HHG Weight	LBS/FAMILY	DCSLOG	18,000 LBS
39.	HHG Cost	$/100LBS	DCSLOG	$31.10 PER 100LBS
40.	Equipment Packing and Crating	$/TON	DCSLOG	$344 PER TON
41.	Military Lt Vehicle Cost	$/MILE	DCSOPS	0.09 $/MILE
42.	Heavy/Special Vehicle Cost	$/MILE	DCSLOG	0.09 $/MILE
43.	POV Reimbursement Cost	$/MILE	DCSLOG	0.18 $/MILE
44.	Air Transport Cost	$/MILE	DCSLOG	0.18 $/MILE
45.	Miscellaneous Expenses	$/PERSON	TABS	$ 700
46.	Average Military tour length	YEARS	DCSPER	2.20 YEARS
47.	Routine PCS Costs	$/PERSON	DCSPER	$4,231.00
48.	One-time PCS Costs- Off	$/PERSON	DCSPER	0.0
49.	One-time PCS Costs- Enl	$/PERSON	DCSPER	0.0
	CONSTRUCTION FACTORS:			
50.	Horizontal	$/sq yd	ACSIM	$36.72
51.	Waterfront	$/ln ft	ACSIM	$90.85

ENCLOSURE 1 TO BRAC 95 COBRA STANDARD FACTORS DATA CALL

STANDARD FACTORS TABLE				
A.	STANDARD FACTOR	B. UNITS	C. DATA PROPONENT	D. 1993 DATA
52.	Air Operations	$/sq ft	ACSIM	$125.42
53.	Operational	$/sq ft	ACSIM	$114.70
54.	Administrative	$/sq ft	ACSIM	$101.84
55.	School Buildings	$/sq ft	ACSIM	$104.52
56.	Maintenance Shops	$/sq ft	ACSIM	$107.20
57.	Unaccompanied Enlisted Housing	$/sq ft	ACSIM	$78.04
58.	Family Quarters	$/sq ft	ACSIM	$63.25
59.	Covered Storage	$/sq ft	ACSIM	$57.89
60.	Recreation	$/sq ft	ACSIM	$123.88
61.	UEH Average size	sq ft	ACSIM	250
62.	Family Quarters Avg Size	sq ft	ACSIM	1819
63.	IMA Costs	%	DISC4	15.00%
	ADDITIONAL CONST FACTORS:			
64.	Design	%	ACSIM	10.00%
65.	SOIA	%	ACSIM	6.00%
66.	Contingency	%	ACSIM	7.00%
67.	Site Prep	%	ACSIM	21.00%
68.	Rehab Cost	% OF NEW	ACSIM	75.00%

ENCLOSURE 2 TO COBRA STANDARD FACTORS DATA CALL

STANDARD FACTOR DESCRIPTIONS

1. Officers Married: The percent of total officers who are married. Married officer couples, assigned to the same base should be counted as one married officer (i.e. Do not double-count two officers who are married to each other). This is used to calculate demand for Family Housing. (Allowed entries 0.00 to 100.00 percent)

2. Enlisted Married: The percent of total enlisted personnel who are married. Married enlisted couples, assigned to the same base should be counted as one married member (i.e. Do not double-count two enlisted members who are married to each other). This is used to calculate demand for Family Housing. (Allowed entries 0.00 to 100.00 percent)

3. Enlisted Housing MILCON: The percent of new Family Housing and Bachelor Quarters construction to be assigned to enlisted personnel. This is used to determine the allocation of newly constructed on-post housing. (Allowed entries 0.00 to 100.00 percent)

4. Officer Salary: The average officer annual salary. This is used to calculate the savings of elimination of officer positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

5. Officer BAQ - With Dependents: The average Basic Allowance for Quarters for officers, with dependents. This is used to calculate costs/savings of changes in the officer population living off-post. (Allowed entries 0.00 to 20,000.00 $/month)

6. Enlisted Salary: The average enlisted annual salary. This is used to calculate the savings of elimination of enlisted positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

7. Enlisted BAQ - With Dependents: The average Basic Allowance for Quarters for enlisted, with dependents. This is used to calculate costs/savings of changes in the enlisted population living off-post. (Allowed entries 0.00 to 20,000.00

$/month)

8. Average Unemployment Costs: The average unemployment cost. This is used to calculate unemployment costs over the period of unemployment eligibility. (Allowed entries 0.00 to 2,000.00 $/week)

9. Unemployment Eligibility: The period of time over which unemployment payments are paid. Used in conjunction with Average Unemployment Costs and personnel positions lost to calculate unemployment costs. (Allowed entries 0 to 52 weeks)

10. Civilian Salary: The average annual salary, for government civilian employees. This is used to calculate costs/savings of changes in the size of the civilian workforce. (Allowed entries 0.00 to 99,999.99 $/Yr)

11. Civilian Turnover: The average percent of government civilian employees who normally leave their positions for reasons **not related to closure/realignment actions**. This is used to adjust the size of the civilian workforce for normal turnovers. (Allowed entries 0.00 to 100.00 percent/Yr)

12. Civilian Early Retirement: The average percent of government civilian employees who retire early **as a result of closure/realignment actions**. This is used to adjust the size of the civilian workforce for early retirements, and to calculate early retirement costs. (Allowed entries 0.00 to 100.00 percent)

13. Civilians Quitting: The average percent of government civilian employees expected to quit their jobs, and therefore forego severance pay, unemployment pay, and other benefits (except for terminal leave) **as a result of closure/realignment actions**. This is used to adjust the size of the civilian workforce for personnel who quit their jobs. (Allowed entries 0.00 to 100.00 percent)

14. Civilian RIF Pay Factor: The average percent of government civilian employee annual pay that will be paid as severance pay to those losing their jobs **as a result of Reduction**

ENCLOSURE 2 TO COBRA STANDARD FACTORS DATA CALL

In Force associated with the closure/realignment action. (Allowed entries 0.00 to 100.00 percent)

15. Civilian Retired Pay Factor: The average percent of increase in government civilian retirement pay as a result of early retirements. This is used to calculate the costs of early retirements. (Allowed entries 0.00 to 100.00 percent)

16. Priority Placement: The average percent of government civilian employees who receive other government jobs as a result of the Priority Placement System. (Allowed entries 0.00 to 100.00 percent)

17. PPS Placements Involving PCS: The percent of personnel who receive jobs through the Priority Placement System who must move more that 50 miles. This is used to calculate moving costs. (Allowed entries 0.00 to 100.00 percent)

18. Civilian PCS Cost: The average cost of relocating a government civilian employee to a new location, who has received a job through the Priority Placement System (if the move is over 50 miles). An average Permanent Change of Station cost is used since PPS placements will result in relocations to undetermined locations. (Allowed entries 0.00 to 99,999.99 $)

19. New Hire Cost: The average cost to hire a new civilian employee. (Allowed entries 0.00 to 10,000.00 $)

20. National Median Home Price: The median home cost over the entire United States. This is adjusted by the base Area Cost Factor, and then used to calculate HAP and DARSE costs. (Allowed entries 0.00 to 2,500.00 $K)

21. Home Sale Reimbursement Rate: The average percent of home sales reimbursement. (Allowed entries 0.00 to 100.00 percent)

22. Maximum Home Sale Reimbursement: The maximum reimbursement for home sales. (Allowed entries 0.00 to 25,000.00 $)

23. Home Purchase Reimbursement Rate: The average percent of home purchase reimbursement. (Allowed entries 0.00 to 100.00 percent)

24. Maximum Home Purchase Reimbursement: The maximum reimbursement for home purchase. (Allowed entries 0.00 to 25,000.00 $)

25. Civilian Homeowning Rate: The average percent of government civilian employees who own their homes. (Allowed entries 0.00 to 100.00 percent)

26. Homeowners Assistance Program Factor(s): This is the percent of house value that HAP will pay, and the percent of homeowners who will sell their homes. HAP costs will be reported on the HAP/DARSE line of the output Reports. (Allowed entries 0.00 to 100.00 percent)

27. Department of Army Relocation Service Entitlement (DARSE) Factor(s): Similar to the HAP Factor, this is the percent of house value that DARSE will pay, and the percent of DA Civilian homeowners who will be provided with this service. DARSE will only be costed at a base when HAP is not applied, and it will be reported on the HAP/DARSE line of output Reports. (Allowed entries 0.00 to 100.00 percent)

28. RPMA Buildings Index: The exponent of base building square footage, used in Real Property Maintenance Activity cost calculations. This represents the nonlinearity of the relationship between change in base building area and the change in RPMA costs; normal value of this index is $\leq$ 1.0. (Allowed entries 0.00 to 5.00)

29. BOS Population Index: The exponent of base population, used in Base Operations and Support cost calculations. This represents the nonlinearity of the relationship between change in base population and the change in BOS costs; normal value of this index is $\leq$ 1.0. (Allowed entries 0.00 to 10.00)

30. Support for Move Factor: Coefficient that the base operations budget is multiplied by to calculate the costs of

administrative support for movements of personnel and equipment. (Allowed entries 0.0 to 100.0)

31. Caretaker Admin Space Needs: The average administrative space required for each caretaker. (Allowed entries 0.0 to 1,000,000.0 SF)

32. Caretaker Percent of Original RPMA: The average percent of original Real Property Maintenance Activity costs which apply to facilities under caretaker status. (Allowed entries 0.0 to 100.0 percent)

33. Mothball Cost: The average cost to mothball facilities. (Allowed entries 0.00 to 100.00 $/square foot)

34. Material Per Assigned Person: The average weight of material per person assigned, other than mission and support equipment which is included on Screen 3. (Allowed entries 0.0 to 10,000.00 pounds per person)

35. Officer HHG: The average pounds of household goods per officer family. (Allowed entries 0 to 100,000 pounds/family)

36. Enlisted HHG: The average pounds of household goods per enlisted family. (Allowed entries 0 to 100,000 pounds/family)

37. Military HHG: The average pounds of household goods per single military member. (Allowed entries 0 to 10,000 pounds/military)

38. Civilian HHG: The average pounds of household goods per government civilian employee. (Allowed entries 0 to 100,000 pounds/employee)

39. HHG Cost: The average cost of packing, unpacking, and storing 100 pounds of household goods. (Allowed entries 0.00 to 100.00 $/100lb.)

40. Equipment Packing and Crating: The cost for packing and crating of material to be moved. (Allowed entries 0.0 to 100,000.00 $/ton)

41. Military Light Vehicle: The average cost per mile of transporting military light vehicles. (Allowed entries 0.00 to 1,000.00 $/ton)

42. Heavy/Special Vehicle: The average cost per mile of transporting (not driving) heavy or special military vehicles. (Allowed entries 0.00 to 1,000.00 $/ton)

43. POV Reimbursement: The average reimbursement rate for driving Personally Owned Vehicles. (Allowed entries 0.00 to 100,000.00 $/mile)

44. Air Transport: The average cost of air transporting a passenger. (Allowed entries 0.00 to 100,000.00 $/mile)

45. Miscellaneous Expenses: The average moving cost per direct employee, not covered by other moving costs. (Allowed entries 0.00 to 100,000.00 $/employee)

46. Average Military Tour Length: The average length of military assignments. This is used to adjust the moving population to account for those personnel who would move each year, independent of the closure/realignment action. (Allowed entries 1 to 20 years)

47. Routine PCS Costs: The average routine PCS costs per military position, per move. This is used in conjunction with the Average Military Tour Length to offset PCS costs to account for personnel who would move each year, independent of the closure/realignment action. (Allowed entries 0.00 to 100,000.00 $/person/move)

48. One-Time Officer PCS Costs: The average one-time costs of officer PCSs, per person. This is used in conjunction with the number of officer positions eliminated to estimate costs of moving officers to their "final" locations. (Allowed entries 0.00 to 100,000.00 $/person)

49. One-Time Enlisted PCS Costs: The average one-time costs of enlisted PCSs, per person. This is used in conjunction with the number of enlisted positions eliminated to estimate costs of

moving enlisted personnel to their "final" locations. (Allowed entries 0.00 to 100,000.00 $/person)

50.-60. Construction Factors:

The average cost per unit of measure for new construction of each of the military construction categories listed. (Allowed entries 0.00 to 99,999.99 $/UM)

61. Average Bachelor Quarters Size: The average square feet of bachelor quarters. This is used to calculate the number of bachelor quarters that a construction project will produce. (Allowed entries 0 to 500 square feet)

62. Average Family Quarters Size: The average square feet of family quarters. This is used to calculate the number of family quarters that a construction project will produce. (Allowed entries 0 to 2,000 square feet)

63. Information Management Account Percentage: The average percent of project cost required to provide communications; only used for projects measured in square feet. (Allowed entries 0.0 to 100.0 percent)

64. Design Percentage: The average percent of construction cost which must be added to project cost to accomplish planning and design. (Allowed entries 0.0 to 100.0 percent)

65. SIOH Percentage: The average percent of construction cost which must be added to project cost to cover project supervision, inspection, and overhead. (Allowed entries 0.0 to 100.0 percent)

66. Contingency Percentage: The average percent of construction cost which must be added to project cost to cover unforseen (contingency) requirements. (Allowed entries 0.0 to 100.0 percent)

67. Site Preparation Percentage: The average percent of construction cost which must be added to project cost to cover site preparation of the construction area. (Allowed entries 0.0 to 100.0 percent)

ENCLOSURE 2 TO COBRA STANDARD FACTORS DATA CALL

68. Rehabilitation vs New Construction Costs: The average percent of new construction costs required to rehabilitate a space of equal size. This is used to adjust project costs for rehabilitation rather than new construction. (Allowed entries 0.0 to 100.0 percent)

ENCLOSURE 3 TO COBRA STANDARD FACTORS DATA CALL

DATA ELEMENT TITLE

1. DESCRIPTION: (from Incl 2)

2. VALIDATED VALUE:

3. DATA SOURCE: (List data base, tables, regulations or other references that specify information about the data element.)

a. DATE LAST UPDATED:

b. DATE OF NEXT UPDATE:

4. METHODOLOGY: (Describe any methodology used to derive the value of the data element. For any data element described as an average, list the costs used in developing the value.)

5. VALIDATION PROCEDURE: (Describe the steps taken to verify the value of the data element.)

STATEMENT OF CERTIFICATION:

The information supplied is accurate and complete to the best of my knowledge and belief.

SIGNATURE BLOCK

DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR PERSONNEL
WASHINGTON, DC 20310-0300

REPLY TO ATTENTION OF

DAPE-MBB-P

08 AUG 1994

MEMORANDUM FOR Major Charles Fletcher, The Army Basing Study

SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model (BRAC 95 Data call #9)

1. We have examined the standard factors for which we have proponency. These factors have been completely documented and certified.

2. ODCSPER POC for this action is the undersigned at x56775, Rm 2D683.

FOR THE DEPUTY CHIEF OF STAFF FOR PERSONNEL:

Carrie M Johnson-Clark
CARRIE M. JOHNSON-CLARK
CPT, GS
DCSPER Engineer

Encls

ENCL #2

Extra Cost of Early Retirement

These figures for the cost of early retirement are based on the population of all employees who retired under voluntary early outs between 1975 and 1989. This population was projected over their expected future lifetime assuming both normal and early retirement under CSRS.

The average age at time of early retirement was 53.2. Voluntary retirement was projected to occur, on the average, at age 58.8 although first eligibility for normal retirement was attained at age 57.0.

The present value of early retirement benefits was divided by the payroll at the time of early retirement to get an average cost of early retirement of $9.262 per dollar of final salary.

The present value of the normal retirement benefits, determined as of the date of early retirement, resulted in a cost factor of $9.517 per dollar of final salary.

Thus the present value of early retirement benefits were less than the present value of normal retirement benefits by a factor of .255 (.255 = 9.517 - 9.262), or about 25 percent of final salary.

In determining the cost of early retirement, the present value of benefits under normal retirement should also be reduced by the present value of the 7 percent employee contributions payable from early to normal retirement. This present value was .343, and so the extra cost of early retirement is .088 (.088 = 9.262 - (9.517-.343)), or about 9 percent of final salary.

These cost estimates assume no replacement of the employees who retire early.

The Extra Cost of Early Retirement

The extra cost of early retirement is equal to the difference in the present value of benefits for early vs. normal retirement plus the value of the missing employee contributions.

The difference in the present value of benefits primarily depends on whether or not the increase in the amount of the annuity due to the extra service credit is offset by the reduction in the number of years the annuity is payable. Although the amount of the annuity under normal retirement is also increased by the general schedule increases during the period from early to normal retirement, the annuity under early retirement is increased by COLAs, so there is no net effect, since both increases are assumed to be 5 percent. The annuity under normal retirement is also increased by merit and longevity pay increases but these are relatively small at the applicable ages. In addition, the present value of benefits for early retirement is reduced because of the 2 percent reduction for each year under age 55.

The relative impact of receiving an annuity for a shorter period of time is greater for older ages at commencement, because the remaining lifespan is less, i.e., a reduction of 1 year in annuity payments has a greater relative impact for a 15-year expected payout than for a 20 year expected payout. Similarly 1 year of additional service is worth more, proportionately, if the total service is less. Thus, ignoring the age reduction, the cost of retiring 1 year early would be greater for older ages at retirement with higher amounts of service, and less for younger ages at retirement with lesser amounts of total service.

To illustrate this, the following table shows the present value of benefits as of the beginning of 1992 for a group of employees who are all age 50 with 20 years service in 1992. In the first case, they are assumed to retire immediately.* This is compared to cases where they all retire in 1 year at age 51 with 21 years service, and in 2 years, at age 52 with 22 years service, etc. The present values were determined as of age 50, using the valuation program and so they take into account such things as withdrawal rates, survivor benefits, disability benefits, merit and longevity pay increases, etc.

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*Retirement is actually assumed to occur in the middle of the year, so even in the case of immediate retirement, employees continue to work for one-half year.

Retirement At		Present Value of Benefits Expressed as a Multiple of Final Salary	
Age	Service	Assuming No Age Reduction	With the Age Reduction
50	20	7.751	7.062
51	21	7.923	7.380
52	22	8.066	7.673
53	23	8.182	7.945
54	24	8.275	8.196
55	25	8.365	8.365
56	26	8.394	8.394
57	27	8.388	8.388
58	28	8.357	8.357
59	29	8.310	8.310
60	30	8.282	8.282
61	31	8.239	8.239
62	32	8.179	8.179

This table shows that, even assuming no age reduction, the present values of benefits are actually less for earlier retirement, up to age 56, and then become greater for older ages.

The actual cost of early retirement, taking the present value of the missing employee contributions into account, is shown in the following table:

Retirement At		Present Value of Retirement Benefits Reduced by the Value of the Missing Employee Contributions, Expressed as a Multiple of Final Salary	
Age	Service	Assuming No Age Reduction	With the Age Reduction
50	20	7.717	7.028
51	21	7.820	7.277
52	22	7.896	7.503
53	23	7.946	7.709
54	24	7.975	7.896
55	25	8.002	8.002
56	26	7.969	7.969
57	27	7.903	7.903
58	28	7.814	7.814
59	29	7.711	7.711
60	30	7.629	7.629
61	31	7.533	7.533
62	32	7.420	7.420

This table shows that, even taking the missing employee contributions into account, it still costs less to retire a 50 year old employee with 20 years service early, up to age 55. There is even a small reduction in the present value of benefits in the case where no age reduction is assumed.

The following example shows a simplified calculation of the present value of retirement benefits for an employee who retirees at age 50 with 20 years service vs. age 51 with 21 years service using the present value factors for the alternative form of annuities. This calculation uses the present value factors that are used in the alternative annuity calculation. Although this methodology ignores survivor benefits and is not as precise as that done by the valuation program, it does show that the cost of early retirement is less at age 50.

Retirement at Age 50 with 20 Years Service

$40,000	High Three
x .3625	Factor for 20 Years Service
x .9	Age Reduction for Age 50
/12	Conversion to Monthly Annuity
x 257.6	Present Value of Annuity Factor
= $280,140	Present Value of Annuity for Age 50

Retirement at Age 51 with 21 Years Service

$40,000 x 1.059	High Three Increased by 5 Percent General Schedule Increase Plus .9 Percent Individual Merit and Longevity Increase
x .3825	Factor for 21 Years Service
x .92	Age Reduction for Age 51
/12	Conversion to Monthly Annuity
x 251.2	Present Value Factor for Age 51
/1.07	Discount for 1 Year's Interest
= $291,628	Present Value of Annuity Starting in 1 Year at Age 51

The present value of the 7 percent employee contributions payable from age 50 to age 51 would be about $3,036.

Present value of benefits minus present value of employee contributions.

= $291,628 - $3,036 = $288,592

AVERAGE MILITARY TOUR LENGTH

1. DESCRIPTION: The average length of military assignments. This is used to adjust the moving population to account for those personnel who would move each year, independent of the closure/realignment action. (Allowed entries 1 to 20 years)

2. VALIDATED VALUE: As of May 1994, the aggregate Time On Station (TOS) is approximately 2.9 years. Current OCONUS tour length is approximately 2.5 years and the CONUS TOS is 3.1 years.

3. DATA SOURCE: The calculations used data from the following databases (DB) within PERSCOM; The Personnel DB (PERDB), the Requisition DB (REQDB), and the 905-ORG-COR (a data table extract for the PMAD).

a. DATE LAST UPDATED: May 1994

b. DATE OF NEXT UPDATE: October 1994

4. METHODOLOGY: The overall TOS was calculated by weighing the OCONUS tour length and the CONUS TOS by their respective number of authorizations (auths) and dividing by the total number of auths in the Army. The average OCONUS tour length algorithm accounts for the distribution of auths in various OCONUS geographic locations, weights the auths by the tour length for the geographic location and then derives the overall OCONUS tour length by adding the weighted auths together and dividing by the total number of auths. The OCONUS TOS is a snapshot of TOS for a group of soldiers on orders in May 94. The algorithm considered soldiers on orders, excluded first termers, MSG(P), SGM and soldiers with blank date last PCS on the database. The algorithm simply took the difference from the date last PCS and the scheduled date of arrival at the next duty station for each soldier and calculated an average TOS for the group. Efforts are under way to establish a more robust algorithm for calculating the TOS. In the future, an in-house program will be used to derive the most current TOS for the Army population as a whole.

5. VALIDATION PROCEDURE: Validation doesn't apply. The element is a mathematical calculation, based on data from established databases, resulting in a deterministic solution. No probabilities, simulations or predictive modelling were incorporated.

STATEMENT OF CERTIFICATION: The information supplied is accurate and complete to the best of my knowledge and belief.

MICHAEL J. SHANE
Colonel, GS
Chief, Enlisted Division

DEPARTMENT OF THE ARMY
UNITED STATES ARMY INFORMATION SYSTEMS COMMAND
BASE REALIGNMENT AND CLOSURE OFFICE
312 ARGONNE AVENUE
FORT RITCHIE, MARYLAND 21719-3100

REPLY TO ATTENTION OF

27 JUL 1994

ASSD-SS-R (5-10c)

MEMORANDUM THRU Commander, HQ, USAISC, ATTN: ASSD-SS, Fort Huachuca, Arizona 85613-5000

FOR Headquarters, Department of the Army, ATTN: SAIS-PPG, Washington, DC 20310-0107

SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model (BRAC 95 Data Call #9)

1. References.

a. Memorandum, DACS-TABS, 7 Jul 94, Subject as above.

b. Memorandum, HQDA, SAIS-PPG, undated, Subject as above.

2. In response to references, we have analyzed planning data and actual data, where available, from the BRAC Construction Army program for the BRAC 1, 91 and 93 programs. Based on this analysis, we have concluded that the Information Mission Area (IMA) standard factor (#63) of 15% is a fair average, if no other considerations can be evaluated.

3. However, an average standard factor of 13% is more accurate for new construction, and an average of 17% is more accurate for renovation. Typically, the absolute cost of IMA will be the same for new construction or renovation because the IMA cabling and systems upgrades are newly installed to bring the facility to IMA standards. However, because the cost of renovation work is less per square foot than new construction, the ratio of IMA to renovation is a higher percentage of the total project cost. It follows then that, since the cost of new construction is higher, the ratio of IMA to new construction is a lower percentage of the total project cost.

4. The type of facility and the condition and capacity of the existing information systems infrastructure will also impact on the actual IMA percentage. If this criteria is known, the IMA factor should be adjusted, as recommended in the enclosed certification. These percentages are averages, based on our experience with the BRAC construction program, to date. We can

ASSD-SS-R (5-10c)
SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model (BRAC 95 Data Call #9)

provide the detailed documentation which was used to derive these percentages, if required. Our certification statement is enclosed.

5. We are anticipating your need for our support associated with a particular COBRA scenario. Therefore, we are prepared to do detailed IMA cost estimates to support your analysis, if funding can be provided to support this requirement.

6. USAISC - Voice of America's Army.

Catherine A. Michalka

CATHERINE A. MICHALKA
Chief
USAISC BRAC Office-
Fort Ritchie

Encl

CT:
HQDA, ATTN: DAIM-BO
HQDA, ATTN: DAEN-ZCI-A

INFORMATION MANAGEMENT ACCOUNT PERCENTAGE

1. DESCRIPTION: The average percent of project cost required to provide communications; only used for projects measured in square feet.

2. VALIDATED VALUE: 15% on the average; 13% for new construction and 17% for renovation work

3. DATA SOURCE: BRAC 1, 91, and 93 planning estimates and actual costs, where available.

a. DATE LAST UPDATED: 30 Jul 94

b. DATE OF NEXT UPDATE: As Required

4. METHODOLOGY: For analysis purposes, the average cost of information systems associated with military construction or renovation projects is estimated to be an additional 15% of the total project cost. A more precise percentage depends upon the type of facility to be constructed, whether the project is new work or renovation work, and the communications infrastructure that is in place to support the finished facility. However, 15% is reasonable when viewed across the entire spectrum.

The cost of information systems associated with a project to construct an Information Systems Facility (ISF) could be as high as 50% of the total project cost. In such an example, the information systems costs would be severely underestimated using 15%. A barracks or warehouse would be significantly over estimated using 15%. To refine the analysis, the IMA factor should be applied in accordance with the type of facility being considered and whether it is new construction or renovation, as suggested below.

Also, when considering a renovation project, versus a new construction, the IMA percentage factor should be increased by 30%. [The ratio of IMA cost to the lower renovation cost per SF of space is a higher percentage than for new construction.]

a. Instructional Facilities: 10% new
13% renovation

b. Administrative Facilities: 20% new
26% renovation

Note: This assumes state-of-the-art technology, high volume of personal computers, local area networks, provision for fiber optic distribution systems, and expansion or placement of Local Switching Nodes.

c. Troop Facilities (barracks/dining): 6% new
8% renovation

d. Industrial Facilities:

Laboratory: 12% new
16% renovation

Note: This assumes a high tech facility with computer based research/analysis type equipment requiring high speed data transfer.

Non-Lab (Warehouse/storage facilities, vehicle maintenance, etc.): 2%

5. VALIDATION PROCEDURE: Actual experience with BRAC projects and analysis of historical data.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Catherine A. Michaliga
CATHERINE A. MICHALIGA
Chief
USAISC BRAC Office-
Fort Ritchie

DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON DC 20310-0600

REPLY TO
ATTENTION OF

3 August 1994

DAIM-FDP-A

MEMORANDUM FOR DIRECTOR, THE ARMY BASING STUDY

SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model (BRAC 95 Data Call #9)

1. Reference: DACS-TABS Memorandum dated 7 July 1994, SAB.

2. The COBRA Standard Factor Certificates for the factors for which this division has proponency are forwarded IAW reference.

3. The following factors require additional staffing outside this organization and will be forwarded as soon as possible:

Enlisted Housing MILCON
Civilian Homeowning Rate
Caretaker Admin Space
Caretaker RPMA Costs
Mothball Costs

4. POCs are Ms. Maureen Wylie at X44313 or Mr. Chip Larouche @ 43988.

FOR THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT

Attachment

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 33 Mothball Cost

1. Description.

The average cost to mothball facilities.(Allowed entries 0.00 to 100.00 $/SF)

2. Validated Value. $1.00/SF

3. Data Sources.

a. USACERL Tech Report M-91/23, Layaway Procedures for U.S. Army Facilities, Volume 1: Decision Criteria and Economics, dated July 1991.

b. Memorandum for Record, dated 1 October 1992, Subject: TABS 93 -- Data for COBRA, PSF Input.

c. DAIM-FDP-A study dated 13 October 1993, that estimates the mothballing costs for a notional heavy brigade.

a. Date last updated: As Stated

b. Date of next update: N/A

4. Methodology.

Reference 3a. is a study performed by the Construction Engineering Research Laboratory which described the facility layaway procedures for U.S. Army facilities, with an emphasis on Fort Dix, New Jersey. This reference uses a mothball cost of $.58/SF factor, but 70% of the 3.6MSF in the study is WWII Wood.

Reference 3b. documents the factors used by the Presidio of San Francisco to layaway permanent buildings, maintaining outer envelope heat and fire protection (water, alarms) to protect the interior. The factor used for this level of mothballing was $2.62.

Reference 3c. documents a DAIM-FDP-A study to determine mothball costs for a notional heavy brigade. This study cites references 3a. and 3b. and also documents the Fort Hood 2d AD mothball experience with a factor of $.20/SF and the Fort Sheridan AFH deactivating costs factor of $.35/SF. This study selected $1.00/SF as a professionally sound estimate.

5. Validation Procedures.

BRAC 93 mothballing costs were left at $0.00. Professional judgement and the references suggest that the correct number is somewhere between the low of $.20 and the high of $2.62. The low numbers were based on either very short term mothballing or the

mothballing of temporary wood structures. The high of $2.62 were based on maintaining heat and water in buildings which may not be necessary for the mothballing that will be required in BRAC 95. A cost of $1.00 /SF seems to be a logical breakpoint between the high and low estimates contained in the references.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 31 Caretaker Admin Space

1. Description.

The average administrative space required for each caretaker. (Allowed entries 0 to 1MSF)

2. Validated Value. 162 SF

3. Data Source. July 1994 HQRPLANS space planning criteria. R&K Engineering uses the most recent Corps of Engineers publications, based upon DOD guidance, for unit space planning criteria. Caretaker admin space requirement is the same factor used for HQRPLANS space planning for typical US Army space requirements.

a. Date last updated: July 1994

b. Date of next update: September 1994

4. Methodology.

Caretaker Admin requirement is equal to Army Standard used in HQRPLANS.

5. Validation Procedures.

BRAC 93 caretaker admin space need was also 162 SF. Army Standard has not changed since BRAC 93.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 32 Caretaker RPMA Costs

1. Description.

The average percent of original RPMA costs which apply to facilities under caretaker status. (Allowed entries 0.0 to 100.0 percent)

2. Validated Value. 33.3%

3. Data Sources.

a. USACERL Tech Report M-91/23, Layaway Procedures for U.S. Army Facilities, Volume 1: Decision Criteria and Economics, dated July 1991.

b. Memorandum for Record, dated 1 October 1992, Subject: TABS 93 -- Data for COBRA, PSF Input.

c. DAIM-FDP-A study dated 13 October 1993, that estimates the mothballing costs for a notional heavy brigade.

a. Date last updated: As Stated

b. Date of next update: N/A

4. Methodology.

Reference 3a. documents the factors used by the Presidio of San Francisco to layaway permanent buildings, maintaining outer envelope heat and fire protection (water, alarms) to protect the interior. The factor used for caretaker RPMA is 1/3 of full RPMA.

Reference 3b. documents a DAIM-FDP-A study to determine mothball costs for a notional heavy brigade. This study cites references 3a. and also used 1/3 full RPMA for Fort Riley to determine the notional brigade costs.

5. Validation Procedures.

BRAC 93 caretaker RPMA costs were 23.6%. Red Book Analysis for Fort Dix and Fort Sheridan supports the argument that RPMA costs approach 1/3 of full RPMA as the majority of the facility assumes caretaker status.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 64 Planning and Design

1. Description.

The average percentage of construction project cost that must be allowed to accomplish planning and design.

2. Validated Value. 10 percent

3. Data Sources.

1) MCA Planning and Design briefing to ACE 30 Jan 92 CEMP-MA Mr. Phil Hunt, (202) 272-1995

2) LMI MCA Planning and Design Funding Requirements, Nov 90

a. Date last updated: FY 94/97 P&D programmed on the basis of the formula in source 1 and was accepted by OSD.

b. Date of next update: unknown

4. Methodology.

Army MCA uses an assumption that P&D is 9 percent of project cost. This assumption is based upon historical Army, Navy, and AF costs as analyzed by Logistics Management Institute. Based on professional judgement, an additional one percent is added to that figure to fund a compressed design schedule.

5. Validation Procedures.

Planning and Design factor has not changed from the AAA validated factor used in BRAC 91 & BRAC 93. BRAC design and construction schedules are often compressed due to the need to complete an action within a statutory time limit or to quickly generate savings. An additional one percent of planning and design gives the decision maker flexibility to choose to pay a premium for speed.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 65 SIOH.

1. Description.

The average percentage of construction cost which must be added to project cost to cover project Supervision, Inspection, and Overhead (SIOH). (Allowed entries 0.0 to 100.0 percent)

2. Validated Value. 6.0 percent

3. Data Sources.

All CONUS FY 94/97 projects have SIOH of 6.0 percent. This cost is standard in the 1391 processor. Only projects built OCONUS have a different value.

a. Date last updated: Projects are updated continuously. Cost is governed by AR 415-15, dated 1 December 1983.

b. Date of next update: N/A

4. Methodology.

All current FY 94/97 projects were reviewed for the SIOH percentage. All CONUS projects had a SIOH value of 6.0 percent.

5. Validation Procedures.

HQUSACE confirms that SIOH is a standard factor used in the DD1391 processor, with limited opportunity for change. This is the same percentage used for BRAC 91 & BRAC 93, validated by AAA at that time.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 66 Contingency

1. Description.

Percentage added to the estimated contract cost, to cover unforeseen construction problems which could increase the cost of a project.

2. Validated Value.

New Construction	5%
Renovation	10%
COBRA Value	7%

3. Data Sources.

All CONUS FY 94/97 projects have a contingency of either 5 or 10 percent. These are standard factors in the 1391 processor.

a. Date last updated: Projects are updated continuously. Cost is governed by AR 415-15, dated 1 December 1983.

b. Date of next update: N/A

4. Methodology.

Current FY94/97 projects were reviewed for the Contingency percentages. All CONUS projects had a contingency percentage of either 5 percent for new construction or 10 percent for renovation. Renovation is higher since once demolition occurs, the contractor may find more significant and costly problems than when building new. An average of the two factors, rounding down to allow for preponderance of new construction over renovation results in the validated value.

5. Validation Procedures.

HQUSACE confirms that contingency is a standard factor used in the DD1391 processor, with limited opportunity for change. This is the same percentage used for BRAC 91 & BRAC 93, validated by AAA at that time. An average is used since the standard factor must apply to both new construction and to renovations.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor # 67 "Site Prep/Supporting Facilities"

1. Definition. The average percent of construction cost which must be added to to project cost to cover site preparation of the construction area and supporting facilities. Allowed entries 0.0 to 100.0 percent.

2. Validated Value: 24 percent

3. Data Source. HQRPLANS Construction Cost Factor Report.

   a. Date last updated: July 1994

   b. Date of next update: December 1994

4. Methodology.

The methodology to determine this factor is to take the average project cost factor found in HQRPLANS for all FCG with unit measure (UM) of SF, subtract 11% for SIOH and contingency, then add in 6% for MCA support to IMA. The result is a 24% Site Prep/Support Facilities factor.

The MCA unit cost factors for FCGs with a UM of SF include $10/SF to account for the costs of demolition generally required before a new building may be constructed. The $10/SF includes costs of physical demolition as well as an average level of asbestos/lead paint removal. FCG project cost factors include supervision, inspection and overhead (SIOH), Contingency and Support Facilities factors. Pre-construction planning and design is not included.

The FCG that follow were included in the above calculations:

HQRPLANS FCG CONSTRUCTION COST FACTORS Database
FY 1994 Ver 4.10

FCG	FCG DESCRIPTION	UM	MCA UNIT COST FACTOR	PROJECT COST FACTOR
14110	AF OPS BLDG	SF	135.67	1.33
14112	AV UNIT OPS BLD	SF	129.35	1.33
14182	BDE HQ BLDG	SF	112.53	1.33
14183	BN HQ BLDG	SF	112.53	1.33
14185	CO HQ BLDG	SF	112.53	1.33
+14310	MISC SHIP OPS	SF	97.80	1.33
+17112	FLIGT SIM BLGD	SF	121.99	1.28
17115	BAND TRAIN FAC	SF	107.27	1.28
17120	GEN INST BLDGS	SF	97.80	1.28
17121	INDOOR FIRE RG	SF	99.91	1.28
17130	APPL INST BLDG	SF	107.27	1.28
+17140	AR CENTER	SF	91.50	1.28
+17142	NG CENTER	SF	91.50	1.28

17160	TASC	SF	106.21	1.28
+17182	TRGT MOV SIM BD	SF	107.27	1.28
21110	MNT HANGAR AVUM	SF	106.21	1.28
21111	MNT HANGAR AVIM	SF	139.87	1.28
+21120	MISC ACFT MAINT	SF	139.87	1.28
+21210	GM MAINT BLDG	SF	152.49	1.28
+21407	NG MAINT FAC	SF	100.95	1.28
+21409	AR MAINT FAC	SF	100.95	1.28
21410	VEH MNT SH ORG	SF	108.32	1.28
21420	VEH MNT SH DS	SF	102.01	1.28
+21435	VEH REBUILD FAC	SF	106.21	1.28
+21510	GUN/WPN REPAIR	SF	102.01	1.28
+21610	AMMO MAINT FAC	SF	97.80	1.28
21800	SP PURP MNT SHP	SF	94.65	1.28
+21810	PAR/ABN EQP REP	SF	123.04	1.28
+21830	MISC MAINT BLDG	SF	94.65	1.28
21900	MNT INST O&R	SF	97.80	1.28
+22110	AC PROD BLDG	SF	94.65	1.28
+22210	GM PROD BLDG	SF	94.65	1.28
+22310	SHIP PROD BLDG	SF	94.65	1.28
+22410	TANK/AUTO PROD	SF	94.65	1.28
+22510	WEAPON PROD BLD	SF	94.65	1.28
+22610	EXPLOSIVE PROD	SF	94.65	1.28
+22710	COMMO PROD BLDG	SF	94.65	1.28
+22810	LTHR & TEX PLNT	SF	94.65	1.28
+22820	CONST EQP PLANT	SF	94.65	1.28
+22830	RR EQP PLANT	SF	94.65	1.28
+22840	PRINT PLANT	SF	94.65	1.28
+22890	MISC PROD BLDG	SF	94.65	1.28
+31010	RDT&E LABS	SF	165.11	1.33
+31110	AC RDT&E	SF	131.46	1.33
+31210	MSL SPACE RDT&E	SF	131.46	1.33
+31310	MAR RDT&E	SF	131.46	1.33
+31410	TANK/AUTO RDT&E	SF	131.46	1.33
+31510	WEAPON RDT&E	SF	131.46	1.33
+31610	EXPLOSIVE RDT&E	SF	131.46	1.33
+31710	ELEC RDT&E	SF	131.46	1.33
+31810	PROP RDT&E	SF	131.46	1.33
+31910	NON-METAL RDT&E	SF	131.46	1.33
+32010	UND-WAT EQU RDT	SF	131.46	1.33
+32110	TECH SERVICE	SF	131.46	1.33
+42100	AMMO STOR-DEP	SF	148.28	1.17
42200	AMMO STOR-INST	SF	148.28	1.17
43200	COLD STOR-INST	SF	103.06	1.17
+44100	GEN P WH-DEP	SF	67.31	1.28
44200	GEN P WH-INST	SF	57.84	1.28
44230	CONT HUM WH	SF	59.95	1.28
44240	INFL MATLS WH	SF	102.01	1.28
44260	VEH STOR SHED	SF	42.07	1.17
51010	HOSPITAL	SF	158.79	1.33
+53040	VET FACILITY	SF	133.56	1.28
54010	DENTAL CLINIC	SF	167.22	1.28
55010	HEALTH CLINIC	SF	145.13	1.28
61050	GEN PURP ADMIN	SF	99.91	1.33
72200	UPH DINE FAC	SF	170.37	1.33
+73010	FIRE STATION	SF	126.20	1.28
+73015	CONFINEMENT FAC	SF	92.54	1.33
73020	CHAPEL CTR FAC	SF	136.71	1.28
+73028	DRUG ABUSE CTR	SF	99.91	1.28
+73030	LNDRY/DRYCL FAC	SF	167.22	1.28
+73048	DEPN GR SCH	SF	89.39	1.33

+73049	DEPN HIGH SCH	SF	99.91	1.33
+73073	POST OFFICE	SF	99.91	1.28
74006	BANK	SF	115.68	1.28
74010	AUDTM GEN PURP	SF	117.79	1.28
74011	BOWLING CTR	SF	136.71	1.28
74014	CHILD SPT CTR	SF	113.58	1.33
74021	COMMISSARY	SF	102.01	1.33
74022	SKILL DEV CTR	SF	102.01	1.28
74024	SKILL CTR AUTO	SF	102.01	1.28
74025	ACES FACILITY	SF	115.68	1.28
74028	PHYS FIT CTR	SF	120.94	1.33
74032	TRANS HSG FAC	SF	96.75	1.33
74033	COMMUNITY CTR	SF	97.80	1.28
74041	LIBRARY CTR	SF	102.01	1.28
74046	OPEN DINING FAC	SF	147.23	1.33
74052	EXCH SVC STA	SF	184.04	1.28
74053	EXCH MAIN RETL	SF	90.44	1.33
74064	REST/CAFE	SF	147.23	1.33
74066	YOUTH CENTER	SF	108.32	1.28
74069	RECREATION BLDG	SF	100.95	1.28
+76010	MUSEUM	SF	148.28	1.22
	AVERAGE		113.79	1.29(-11+6=1.24)

+ = HQRPLANS/RPLANS Allowances = Total Installation Assets.

5. Validation Procedures.

The factors are modified to delete SIOH and Contingency, since these are separate factors in COBRA. A six percent MCA factor in support of Info Systems has been added, since HQRPLANS does not calculate that cost. The 6% factor was used by TABS in BRAC 91 & BRAC 93. This requirement differs from OPA in support of IMA, which is a separate factor provided by the DISC4.

Costs for demolition vary widely depending upon region, environmental regulations, whether troop, contract, or in house labor is used. $10 per SF was deemed by the SME to be the best factor for all costs associated with demolition for use in planning/decision support analysis such as HQRPLANS or COBRA. This planning factor is not intended for use in budget formulation or execution. Specific requirements must be analyzed on a by-installation basis.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 68 Rehab Cost

1. Description.

The average percent of new construction costs required to rehabilitate a space of equal size. This factor is used to adjust project costs for rehabilitation rather than new construction. (Allowed entries 0.0 to 100.0 percent)

2. Validated Value 59%

3. Data Sources. July 1994 BRAC Construction Database (DAIM-FDP-A)

a. Date last updated: July 1994

b. Date of next update: Monthly

4. Methodology.

BRAC 91 used a rehab factor of 60%. The AAA audit of BRAC 91 specified that 60% was too low and that 75% should be used. For BRAC 93, 75% was used based on the AAA comments during BRAC 91. However, during BRAC 93, the Army was cited by the AAA for using 75% without adequate documentation in a draft finding that was not published. In an effort to improve the documentation of this factor more research was done.

Ms Beth Baden and Mr Bob Long from HQUSACE were contacted as subject matter experts. The reference HQUSACE uses to determine renovation costs is TM 5-800-4, Programming Cost Estimates for Military Construction. This is a complex cost estimating Technical Manual that is not conducive for use with the COBRA Standard Factor process.

Mr Robert Suchan of the U.S. Army Cost & Economic Analysis Center was also called as a subject matter expert. He is managing the cost factors that are being used for the Installation Status Report (ISR). Among those factors is a factor by FCG that represents the percent of new construction cost to upgrade a facility from "RED" status to "GREEN" status. The listing of those percentages for facilities measured in square feet is attached.

Review of these factors shows that rehabilitation costs vary by FCG from a low of 18% for FCG 43200, Cold Storage-Installation, to a high of 85% for FCG 17120, General Instructional Buildings.

Since the COBRA model is not currently designed to handle multiple percentages based on FCG, a strategy was developed to use the average of the existing BRAC renovation projects by FCG weighted by total project square footage.

The table titled BRAC RENOVATION PROJECTS attached shows the summation of the 25 BRAC projects by FCG & BRAC round. The weighted average of the ISR FCG Cost Factors is calculated to be 59%.

5. Validation Procedures.

The factors used in ISR have good credibility, are easy to audit and, according to Mr Bob Conte, Project Manger for the ISR project, these factors were validated twice against actual DD Form 1483 (Work Orders) at 25 Installations with an "error" rate of only 15%, which would be covered by the "contingency" factor normally included in the COBRA model.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

05/05/94

RENOVATION COSTS BY FCG

FCG	DESCRIPTION	% OF NEW CONSTRUCTION
14110	AF OPS BLDG	0.71
14112	AV UNIT OPS BLD	0.65
14182	BDE HQ BLDG	0.71
14183	BN HQ BLDG	0.40
14185	CO HQ BLDG	0.41
14310	MISC SHIP OPS	0.71
17112	FLIGT SIM BLGD	0.58
17115	BAND TRAIN FAC	0.72
17120	GEN INST BLDGS	0.85
17121	INDOOR FIRE RG	0.72
17130	APPL INST BLDG	0.58
17140	AR CENTER	0.72
17142	NG CENTER	0.72
17160	TASC	0.72
17182	TRGT MOV SIM BD	0.58
21110	MT HNGR AVUM	0.68
21111	MT HNGR AVIM	0.71
21120	MISC ACFT MAINT	0.71
21210	GM MAINT BLDG	0.71
21407	NG MAINT FAC	0.67
21409	AR MAINT FAC	0.67
21410	VEH MNT SH ORG	0.54
21420	VEH MNT SH DS	0.50
21435	VEH REBUILD FAC	0.71
21510	GUN/WPN REPAIR	0.71
21610	AMMO MAINT FAC	0.71
21800	SP PURP MNT SHP	0.71
21810	PAR/ABN EQP REP	0.71
21830	MISC MAINT BLDG	0.55
21900	MNT INST O&R	0.71
22110	AC PROD BLDG	0.76
22210	GM PROD BLDG	0.76
22310	SHIP PROD BLDG	0.76
22410	TANK/AUTO PROD	0.76
22510	WEAPON PROD BLD	0.76
22610	EXPLOSIVE PROD	0.76
22710	COMMO PROD BLDG	0.76
22810	LTHR & TEX PLNT	0.76
22820	CONST EQP PLANT	0.76
22830	RR EQP PLANT	0.69
22840	PRINT PLANT	0.76
22890	MISC PROD BLDG	0.76
31010	RDT&E LABS	0.71
31110	AC RDT&E	0.71
31210	MSL SPACE RDT&E	0.71
31310	MAR RDT&E	0.71
31410	TANK/AUTO RDT&E	0.71
31510	WEAPON RDT&E	0.71
31610	EXPLOSIVE RDT&E	0.71
31710	ELEC RDT&E	0.71
31810	PROP RDT&E	0.71
31910	NON-METAL RDT&E	0.55
32010	UND-WAT EQU RDT	0.71
32110	TECH SERVICE	0.71
42100	AMMO STOR-DEP	0.36
42200	AMMO STOR-INST	0.36
43200	COLD STOR-INST	0.18
44100	GEN P WH-DEP	0.52
44200	GEN P WH-INST	0.38
44230	CONT HUM WH	0.52
44240	INFL MATLS WH	0.35
44260	VEH STOR SHED	0.52
51010	HOSPITAL	0.82
53040	VET FACILITY	0.40
54010	DENTAL CLINIC	0.83
55010	HEALTH CLINIC	0.83
61050	GEN PURP ADMIN	0.47
72100	ENL UPH	0.41
72114	EN BKS AT/MOB	0.64
72170	SR ENL QTRS	0.55
72181	ENL BKS TRAINEE	0.39
72200	UPH DINE FAC	0.38
72400	OFF UPH	0.28
73010	FIRE STATION	0.76
73015	CONFINEMENT FAC	0.37
73020	CHAPEL CTR FAC	0.29
73028	DRUG ABUSE CTR	0.49
73030	LNDRY/DRYCL FAC	0.39
73048	DEPN GR SCH	0.54
73049	DEPN HIGH SCH	0.54
73073	POST OFFICE	0.39
74006	BANK	0.39
74010	AUDTM GEN PURP	0.48
74011	BOWLING CTR	0.68
74014	CHILD SPT CTR	0.61
74021	COMMISSARY	0.25
74022	SKILL DEV CTR	0.50
74024	SKILL CTR AUTO	0.50
74025	ACES FACILITY	0.50
74028	PHYS FIT CTR	0.39
74032	TRANS HSG FAC	0.33
74033	COMMUNITY CTR	0.43
74041	LIBRARY CTR	0.43
74046	OPEN DINING FAC	0.64
74052	EXCH SVC STA	0.60
74053	EXCH MAIN RETL	0.71
74064	REST/CAFE	0.69
74066	YOUTH CENTER	0.48
74069	RECREATION BLDG	0.43
76010	MUSEUM	0.75

BRAC RENOVATION PROJECTS

	BRAC	Data									
	BRAC 1		BRAC 91		BRAC93		Total SF SUM	Total PROJ CNT	FCG	ISR FCG	SF*FACTOR
CATCD	SF SUM	PROJ CNT	SF SUM	PROJ CNT	SF SUM	PROJ CNT				COST FACTOR	PRODUCT
14184	16365	1	0	0	0	0	16365	1	14182	0.71	11619.15
17120	0	0	44295	1	0	0	44295	1	17120	0.85	37650.75
17130	31613	1	141486	2	0	0	173099	3	17130	0.58	100397.42
17140	28160	1	388504	1	0	0	416664	2	17140	0.72	299998.08
21210	0	0	0	0	150188	2	150188	2	21210	0.71	106633.48
31220	0	0	4794	1	0	0	4794	1	31210	0.71	3403.74
31740	0	0	118292	1	0	0	118292	1	31710	0.71	83987.32
51010	34589	2	0	0	0	0	34589	2	51010	0.82	28362.98
51090	0	0	12980	1	0	0	12980	1	51010	0.82	10643.6
61018	0	0	280000	2	0	0	280000	2	61050	0.47	131600
61031	14185	1	0	0	0	0	14185	1	61050	0.47	6666.95
61041	6136	1	0	0	0	0	6136	1	61050	0.47	2883.92
61050	238789	4	125071	2	0	0	363860	6	61050	0.47	171014.2
72111	0	0	192855	1	0	0	192855	1	72100	0.41	79070.55
Grand Total	369837	11	1308277	12	150188	2	1828302	25			1073932.1
ISR-FCG COST FACTOR WEIGHTED AVERAGED BASED ON TOTAL SF=										0.59	

Source: July 94 BRAC Construction Database

Cobra Standard Factor 61 EUH Average Size Factor.
Cobra Standard Factor 62 Family Housing Average Unit Size Factor.

1. Description.

61. The average square feet of unaccompanied enlisted housing (UEH). This is used to calculate the number of UEH spaces a construction project will produce. (Allowed entries 0 to 500 SF)

62. The average square feet of family quarters. This is used to calculate the number of family quarters a construction project will produce. (Allowed entries 0 to 2000 SF)

2. Validated Values. UEH: 388 SF
Family Housing : 1819 SF

3. Data Sources.

July 1994 HQRPLANS Cost Factor and Escalation tables, US Army Corps of Engineers Architectural and Engineering Instructions (AEI), and Jun 1994 Personnel Management Authorization Document (PMAD). R&K Engineering uses most recent Corps of Engineers publications, based upon DOD guidance, for unit cost and inflation factors use in HQRPLANS.

a. Date last updated:
HQRPLANS: July 1994
AEI: December 1991
PMAD June 1994

b. Date of next update:
HQRPLANS: December 1994
AEI: unknown
PMAD: September 1994

4. Methodology.

61. UEH Average size GSF 388 SF based upon new 1 plus 1 standard design for Grades E-1 to E-4.

62. Family Quarters Avg size GSF 1819. NSF from 10 USC 2826

total	13100
average	1456

5. Validation Procedures.

Gross Square Footage for UEPH is based on a 388 GSF standard for the 1 plus 1 design for E1-E4.

Gross Square Footage for Army Family Housing is based upon the Net Square Feet allowances in 10 USC. sec. 2826. The highest and lowest NSF allowances (General Officer and two bedroom units) were eliminated as unlikely to be built. The remaining by grade allowances were averaged to derive 1456 NSF. This figure was then inflated by 25 percent to reflect gross square feet. OSD Housing recommended reference to sec. 2826 to get an average; Army housing stated that they did not use averages, but rather programmed by bedroom requirements. Local housing markets are DODs first source of housing, and are likely to best respond to small unit (2-3 bedrooms) demands quickly. On-post requirements tend to be in the 4-5 bedroom range.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factors 50-60 Construction Factors

1. Description.

The average cost per unit of measure ($/UM) for new construction of each of the military construction categories listed. (Allowed entries 0.00 to 99,999.99 $/UM)

2. Validated Value. See Below.

3. Data Sources.

July 1994 2 HQRPLANS Cost Factor and Escalation tables. R&K Engineering uses most recent Corps of Engineers publications, based upon DOD guidance, for unit cost and inflation factors.

a. Date last updated: July 1994

b. Date of next update: December 1994

4. Methodology.

FCG Construction Cost factors from the July 1994 HQRPLANS database are listed in the column labeled FY94 FACTOR. The escalation factor for FY1996 is 1.0588. The product of the FCG Construction Cost factor with the escalation factor is the result in the column labeled FY 96 FACTOR. The average of the FY96 FACTOR for the listed FCGs is the standard factor used in COBRA, labeled COBRA FACTOR.

MCA unit cost factors for FCGs with a UM of SF include $10/SF to account for the costs of demolition generally required before a new building may be constructed. Costs reflected are FY 94 dollars, then inflated to FY 96. Specific factors shown in the following table:

##	Construction Factor FCG	Description	UM	FY94 FACTOR	FY96 FACTOR	COBRA FACTOR
50.	Horizontal					
	45200	VEH HARDSTAND	SY	36.02	38.14	38.14
51.	Waterfront		SY	(not used)		
52.	Air Ops					130.28
	21110	MT HNGR AVUM	SF	106.21	112.46	
	21111	MT HNGR AVIM	SF	139.87	148.09	

##	Construction Factor FCG	Description	UM	FY94 FACTOR	FY96 FACTOR	COBRA FACTOR
53.	Operations					119.15
	14182	BDE HQ BLDG	SF	112.53	119.15	
	14183	BN HQ BLDG	SF	112.53	119.15	
	14185	CO HQ BLDG	SF	112.53	119.15	
54.	Administrative					
	61050	GEN PURP ADMIN	SF	99.91	105.78	105.78
55.	School Buildings					
55a	17120	GEN INST BLDGS	SF	97.80	103.55	103.55
55b	17130	APPL INST BLDG	SF	107.27	113.58	113.58
56.	Maintenance Shops					107.64
	21410	VEH MNT SH ORG	SF	108.32	114.69	
	21420	VEH MNT SH DS	SF	102.01	108.01	
	21800	SPEC PURP MT	SF	94.65	100.22	
57.	UEPH					
	7210S	ENL UPH (PLNG)	PN	43660*	46227*	46227*
	* Source:	SEP 94 HQRPLANS				
58.	Family Housing					
	71100	FAMILY HOUSING	SF	83764	88689	88689
59.	Covered Storage					60.13
	44200	GEN P WH-INST	SF	57.84	61.24	
	44230	CONT HUM WH	SF	59.95	63.47	
	44100	GEN P WH-DEP	SF	67.31	71.27	
	44260	VEH STOR SHED	SF	42.07	44.54	
60.	Recreation					
	74028	Phys Fit Ctr	SF	120.94	128.05	128.05

The follwing items are not in Standard Factors datacall but should be added:

74014	Child Spt Ctr	SF	113.58	120.26	120.26
72200	Dinning Fac	SF	170.37	180.39	180.39
31010	RDTE Labs	SF	165.11	174.82	174.82
31X10	RDTE non-lab	SF	131.46	139.19	139.19
22X10	Production Fac	SF	94.65	100.22	100.22

5. Validation Procedures.

MCA unit cost factors are based upon the most recent USACE publication on Area and Unit Cost Factors. Inflation factor was extracted from HQRPLANS Escalation Factor table.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON DC 20310-0600

REPLY TO
ATTENTION OF
DAIM-FDP-A

25 August 1994

MEMORANDUM FOR DIRECTOR, THE ARMY BASING STUDY

SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model (BRAC 95 Data Call #9)

1. References

a. DACS-TABS Memorandum dated 7 July 1994, SAB.

b. DAIM-FDP-A Memorandum dated 3 August 1994, SAB.

2. The COBRA standard factors described in para 3 of reference b. are attached.

3. POCs are Ms. Maureen Wylie at X44313 or Mr. Chip Larouche @ 43988.

FOR THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT

Attachment

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 32 Caretaker RPMA Costs

1. Description.

The average percent of original RPMA costs which apply to facilities under caretaker status. (Allowed entries 0.0 to 100.0 percent)

2. Validated Value. 23.7%

3. Data Sources.

Department of the Army Facilities Engineering & Housing Annual Summary of Operations, Volume III - Installation Performance, Fiscal Year 1993 ("Red Book")

a. Date last updated: As Stated

b. Date of next update: Annual

4. Methodology.

FY93 Technical Data Statistics

Total RMPA CONUS

Total SF	785,965,000	Total $	3,285,411,641
Inactive SF	10,015,000	Inactive $	10,008,655
Active SF	775,950,000	Active $	3,275,402,986

Active $/SF	4.22
Inactive $/SF	1.00
Ratio	23.7%

5. Validation Procedures.

BRAC 93 caretaker RPMA costs were 23.6% using FY91 Red Book data. The same methodology using the FY93 Red Book for CONUS shown above shows current ratio is 23.7%. It should be noted, however, that a number of factors such as climate, labor rates, age of facilities, etc., may show a significant variance at a specific installation from this average.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

mothballing of temporary wood structures. The high of $2.62 were based on maintaining heat and water in buildings which may not be necessary for the mothballing that will be required in BRAC 95. A cost of $1.00 /SF seems to be a logical breakpoint between the high and low estimates contained in the references.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

Cobra Standard Factor 33 Mothball Cost

1. Description.

The average cost to mothball facilities.(Allowed entries 0.00 to 100.00 $/SF)

2. Validated Value. $1.00/SF

3. Data Sources.

a. USACERL Tech Report M-91/23, Layaway Procedures for U.S. Army Facilities, Volume 1: Decision Criteria and Economics, dated July 1991.

b. Memorandum for Record, dated 1 October 1992, Subject: TABS 93 -- Data for COBRA, PSF Input.

c. DAIM-FDP-A study dated 13 October 1993, that estimates the mothballing costs for a notional heavy brigade.

a. Date last updated: As Stated

b. Date of next update: N/A

4. Methodology.

Reference 3a. is a study performed by the Construction Engineering Research Laboratory which described the facility layaway procedures for U.S. Army facilities, with an emphasis on Fort Dix, New Jersey. This reference uses a mothball cost of $.58/SF factor, but 70% of the 3.6MSF in the study is WWII Wood.

Reference 3b. documents the factors used by the Presidio of San Francisco to layaway permanent buildings, maintaining outer envelope heat and fire protection (water, alarms) to protect the interior. The factor used for this level of mothballing was $2.62.

Reference 3c. documents a DAIM-FDP-A study to determine mothball costs for a notional heavy brigade. This study cites references 3a. and 3b. and also documents the Fort Hood 2d AD mothball experience with a factor of $.20/SF and the Fort Sheridan AFH deactivating costs factor of $.35/SF. This study selected $1.00/SF as a professionally sound estimate.

5. Validation Procedures.

BRAC 93 mothballing costs were left at $0.00. Professional judgement and the references suggest that the correct number is somewhere between the low of $.20 and the high of $2.62. The low numbers were based on either very short term mothballing or the

Cobra Standard Factor 31 Caretaker Admin Space

1. Description.

The average administrative space required for each caretaker. (Allowed entries 0 to 1MSF)

2. Validated Value. 162 SF

3. Data Source. July 1994 HQRPLANS space planning criteria. R&K Engineering uses the most recent Corps of Engineers publications, based upon DOD guidance, for unit space planning criteria. Caretaker admin space requirement is the same factor used for HQRPLANS space planning for typical US Army space requirements, as outlined in AR 405-70, Utilization of Real Property, dated 15 September 1993.

a. Date last updated: July 1994

b. Date of next update: September 1994

4. Methodology.

Caretaker Admin requirement is equal to Army Standard used in HQRPLANS.

5. Validation Procedures.

BRAC 93 caretaker admin space need was also 162 SF. Army Standard has not changed since BRAC 93.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

DACS-TABS 26 Sep 1994

MEMORANDUM FOR THE RECORD

SUBJECT: COBRA Inflation Assumptions for BRAC 95.

1. This document describes the assumptions made by The Army Basing Study regarding inflation of monetary factors used in the Cost of Base Realignment Actions (COBRA) model.

2. References:

a. National Defence Budget Estimates for FY 1995, Office of the Comptroller of the Department of Defense, March 1994.

b. Inflation and Real Growth Overview, Office, Director of the Army Budget, Assistant Secretary of the Army (Financial Management), June 1989.

c. Circular No. A-94, SUBJECT: 1994 Discount Rates for benefit-cost Analysis of Federal Programs, Executive Office of the President, Office of Management and Budget, dated February 10, 1994.

d. Memorandum, SUBJECT: Base Closure Policy Memorandum One, Under Secretary of Defense, dated 31 May 1994.

e. Memorandum, SUBJECT: Base Closure Policy Memorandum Two, TBP.

3. Data dollar elements required by the COBRA model are listed at enclosure 1.

4. Base closure policy memorandum one requires all dollar inputs to the COBRA model to be in FY 1996 constant dollars. The Army Basing Study (TABS) has designated the National Defense Estimates for FY 1995 as the source document for all escalation factors used to produce FY 1996 constant dollars.

DACS-TABS
Subject: COBRA Assumptions

5. The standard methodology for establishing correct escalation factors for each category of dollar input to COBRA is as follows:

a. Determine the current year dollars of all COBRA inputs. Document the current year with the data element.

1) Historic Data. The current year is the year that the dollars were **SPENT**.

2) Policy Data (Professional Judgement). This data is obtained from current regulations as applicable, and is not generally subject to increase at the rate of current inflation. Policy data will be analyzed on a case by case basis with the proponent source to determine unique escalation factors. The establishment of these unique escalation factors will be documented inn enclosure 1.

b. Categorize the data using Tables 5-4 (Department of Defense Deflators - TOA) from the National Defense Budget Estimates for FY 1995.

c. Apply the escalation factors derived from the National Defense Budget estimates by category (enclosure 2) to the current year dollars.

d. Document the FY 1996 constant year dollars for use in the COBRA model.

2 encl

Charles V. Fletcher
MAJ, GS
OPERATIONS ANALYST

DACS-TABS
Subject: COBRA Assumptions

ENCLOSURE 1.

COBRA STANDARD FACTORS ESCALATION TABLE

SF #STANDARD FACTOR	UNITS	TYPE ESCALATION
FACTOR		
4 Officer Salary	$/YEAR	Table 5-4 TOA - MIL PER
5 Officer BAQ w/Dependents	$/MONTH	Table 5-4 TOA - MIL PER
6 Enlisted Salary	$/YEAR	Table 5-4 TOA - MIL PER
7 Enlisted BAQw/Dependents	$/MONTH	Table 5-4 TOA - MIL PER
8 Average unemployment cost	$/WEEK	Table 5-5 TOA - GRAND TOTAL
10 Civilian Salary	$/YEAR	Table 5-5 TOA - GRAND TOTAL
18 Civilian PCS Cost	$/FAMILY	Table 5-5 TOA - GRAND TOTAL
19 New Hire Cost	$/PERSON	Table 5-5 TOA - GRAND TOTAL
20 National Median Home Price	$/HOME	Table 5-5 TOA - GRAND TOTAL
22 Max Home Sale Reimbursement	$	Table 5-5 TOA - GRAND TOTAL
24 Max Home Purc Reimburse	$	Table 5-5 TOA - GRAND TOTAL
34 Mothball Cost	$/SQFT	UNIQUE*
51 Total HHG Packing Cost	$/100LBS	Table 5-5 TOA - GRAND TOTAL
52 Equipment Packing and Crating	$/TON	Table 5-5 TOA - GRAND TOTAL
53 Military Lt Vehicle Cost	$/MILE	Table 5-5 TOA - GRAND TOTAL
53 Heavy/Special Vehicle Cost	$/TON-MILE	Table 5-5 TOA - GRAND TOTAL
55 POV Reimbursement Cost	$/MILE	UNIQUE*
56 Air Transport Cost	$/MILE	Table 5-5 TOA - GRAND TOTAL
57 Miscellaneous Expenses	$/PERSON	UNIQUE**
59 Routine PCS Costs	$/PERSON	Table 5-5 TOA - GRAND TOTAL
60 One-time PCS Costs- Off	$/PERSON	Table 5-5 TOA - GRAND TOTAL
61 One-time PCS Costs- Enl	$/PERSON	Table 5-5 TOA - GRAND TOTAL
62 CONSTRUCTION FACTORS:	$/UM	UNIQUE MILCON FACTOR-1.0588***

NOTES:

* Unique escalation based on the professional judgement used when interpreting data from several distinct studies.

** NO ESCALATION EXPECTED - These factors have remained constant for several years and are not expected to increase with the rate of inflation.

** UNIQUE MILCON FACTOR PROVIDED BY THE ACSIM.

DACS-TABS
Subject: COBRA Assumptions

ENCLOSURE 2.

TABLE 5-4 **ESCALATION FACTORS**

	YEAR	DEFLATOR	FACTOR
MILPERS	1990	86.53	1.1805
	1991	90.33	1.1309
	1992	93.06	1.0977
	1993	97.08	1.0522
	1994	98.14	1.0409
	1995	100	1.0215
	1996	102.15	1.0

	YEAR	DEFLATOR	FACTOR
MILCON	1994		1.0588

	YEAR	DEFLATOR	FACTOR
GRAND TOTAL	1990	86.40	1.1878
	1991	90.60	1.1328
	1992	92.56	1.1088
	1993	95.64	1.0731
	1994	97.84	1.0490
	1995	100	1.0216
	1996	102.63	1.0

STANDARD FACTOR #1
OFFICERS MARRIED
Change 1 - 26 Sep 1994

1. DESCRIPTION: The percent of total officers who are married. Dual military officers should each be counted as one married officer. This is used to calculate HAP, HHG and demand for Family Housing. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 74%

3. DATA SOURCE: Family Demographic System (Factors). See attached documentation.

   a. DATE LAST UPDATED: Mar 1994

   b. DATE OF NEXT UPDATE: Oct 1994

4. METHODOLOGY: 74% was derived from the total married officer (80.19%) minus the Percent Dual Military (6.31%).

PERCENT MARRIED OFFICERS = 80.19%
PERCENT OFFICERS MARRIED TO ANOTHER SERVICE MEMBER = 6.31%

80.19% - 6.31% = 73.88% round up to ~~74~~ 77

5. VALIDATION PROCEDURE: ATTACHED

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #1
OFFICERS MARRIED

1. DESCRIPTION: The percent of total officers who are married. Married officer couples, assigned to the same base should each be counted as one married officer (i.e. Do not double-count two officers who are married to each other). This is used to calculate demand for Family Housing. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 74%

3. DATA SOURCE: Family Demographic System (Factors). See attached documentation.

   a. DATE LAST UPDATED: Mar 1994

   b. DATE OF NEXT UPDATE: Oct 1994

4. METHODOLOGY: 74% was derived from the total married officer (80.19%) minus the Percent Dual Military (6.31%).

PERCENT MARRIED OFFICERS = 80.19%
PERCENT OFFICERS MARRIED TO ANOTHER SERVICE MEMBER = 6.31%

80.19% - 6.31% = 73.88% round up to 74%

5. VALIDATION PROCEDURE: ATTACHED

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

a. Effective with the end of the second quarter Fy 88, this data is the official reportable data for use by the Army Personnel community.

The responsible agency is U.S.Army Community and Family Support Center (CFSC), action office CFSC-PNA, telephone Autovon 221-4353, Civilian (703) 325-4353. Address: 2461 EISENHOWER AVE., ALEXANDRIA, VA. 22331-0507 and the POC is MR. TIM WHYTE (ID WHYTE).

c. The primary source of data is the Defense Enrollment Eligibility Reporting System(DEERS) data base, DEFENSE MANPOWER DATA CENTER (DMDC) MONTEREY, CA.

d. Prior to using any data, users must review the users manual to understand the composition, content, and use of this file. A current users manual can be obtained by contacting CFSC-PNA, (userid WHYTE).

Press ENTER To Proceed

PF: 1/13 Help 2/14 HQDA Menu 3/15 Return

4/16 Printer Selection

ALL SOLDIERS
Location: CONUS

Data from 9403

Service ACTIVE ARMY
Total ALL Soldiers 424966

Rank	Pcnt	Pcnt Marr	Pcnt Marr W/C	Pcnt Singl	Pcnt Singl W/C	Pcnt Du Mil	Pcnt Du Mil W/C
PV1	6.79	29.20	52.78	70.79	3.53	.74	17.20
PV2	5.95	22.49	46.17	77.50	2.23	1.32	7.44
PFC	10.99	32.55	46.52	67.44	4.05	2.61	17.86
CPL	21.79	53.25	57.95	46.74	9.36	6.37	36.52
SGT	14.99	80.61	74.39	19.38	23.43	9.37	50.25
SSG	12.36	88.97	82.83	11.02	41.69	8.73	57.54
SFC	8.21	91.02	86.34	8.97	51.13	7.58	62.00
MSG	2.11	93.33	86.70	6.66	48.57	5.74	62.13
SGM	.61	94.02	80.19	5.97	45.16	3.81	63.63
WO1	.34	79.80	72.69	20.19	12.02	4.85	48.57
CW2	.93	87.29	79.44	12.70	27.59	4.37	51.74
CW3	.60	93.52	85.65	6.47	56.09	3.94	52.00
CW4	.33	94.72	77.10	5.27	47.29	2.28	56.25
2LT	1.35	45.95	37.41	54.04	3.22	5.36	15.25
1LT	1.74	60.26	45.65	39.73	6.47	6.98	15.8[illegible]
CPT	5.22	79.77	66.70	20.22	10.01	7.62	30.2[illegible]
MAJ	2.91	89.91	82.02	10.08	21.23	7.51	41.[illegible]
LTC	1.87	92.83	84.23	7.16	25.52	5.56	44.[illegible]
[illegible]	.79	94.65	77.49	5.34	27.22	2.16	52.[illegible]
BG	.03	96.99	58.13	3.00		1.50	
MG	.02	97.00	37.11	3.00			
LTG	.01	100.00	38.23				
GEN	.05	100.00	42.85				
ENLST	83.80	61.58	71.27	38.42	10.06	6.03	
OFFCR	16.20	80.19	72.87	19.81	11.06	6.31	
TOTAL	100.00	64.59	71.59	35.41	10.15	6.08	

PF: 1/13 Help 2/14 HQDA Menu 3/15 Rtn to prev 4/16 Rtn to A
7/19 Page Bak 8/20 Page Fwd ENTER To Select Sum Indx

STANDARD FACTOR #2
ENLISTED MARRIED
Change 1 - 26 Sep 1994

1. DESCRIPTION: The percent of total enlisted personnel who are married. Dual military officers should each be counted as one married officer. This is used to calculate HAP, HHG and demand for Family Housing. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 55.5%

3. DATA SOURCE: Family Demographics System (Factors) database. Documentation attached.

a. DATE LAST UPDATED: Mar 1994

b. DATE OF NEXT UPDATE: Oct 1994

4. METHODOLOGY: 55.5% was derived from total enlisted married (61.58%) minus the percent dual Military (6.03%).

PERCENT MARRIED ENLISTED = 61.58%
PERCENT ENLISTED MARRIED TO ANOTHER SERVICE MEMBER = 6.03%

$61.58\% - \frac{6.03\%}{2} = 55.55\%$, round to ~~55.5%~~ 59%

6. VALIDATION PROCEDURE: ATTACHED

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #2
ENLISTED MARRIED

1. DESCRIPTION: The percent of total enlisted personnel who are married. Married enlisted couples, assigned to the same base should be each counted as one married member (i.e. Do not double-count two enlisted members who are married to each other). This is used to calculate demand for Family Housing. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 55.5%

3. DATA SOURCE: Family Demographics System (Factors) database. Documentation attached.

a. DATE LAST UPDATED: Mar 1994

b. DATE OF NEXT UPDATE: Oct 1994

4. METHODOLOGY: 55.5% was derived from total enlisted married (61.58%) minus the percent dual Military (6.03%).

PERCENT MARRIED ENLISTED = 61.58%
PERCENT ENLISTED MARRIED TO ANOTHER SERVICE MEMBER = 6.03%

61.58% - 6.03% = 55.55% , round to 55.5%

6. VALIDATION PROCEDURE: ATTACHED

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

a. Effective with the end of the second quarter Fy 88, this data is the official reportable data for use by the Army Personnel community.

The responsible agency is U.S.Army Community and Family Support Center (CFSC), action office CFSC-PNA, telephone Autovon 221-4353, Civilian (703) 325-4353. Address: 2461 EISENHOWER AVE., ALEXANDRIA, VA. 22331-0507 and the POC is MR. TIM WHYTE (ID WHYTE).

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Press ENTER To Proceed

PF: 1/13 Help 2/14 HQDA Menu 3/15 Return

4/16 Printer Selection

ALL SOLDIERS

Service ACTIVE ARMY Location: CONUS Data from 9403

Total ALL Soldiers 424966

Rank	Pcnt	Pcnt Marr	Pcnt Marr W/C	Pcnt Singl	Pcnt Singl W/C	Pcnt Du Mil	Pcnt Du Mil W/C
PV1	6.79	29.20	52.78	70.79	3.53	.74	17.20
PV2	5.95	22.49	46.17	77.50	2.23	1.32	7.44
PFC	10.99	32.55	46.52	67.44	4.05	2.61	17.86
CPL	21.79	53.25	57.95	46.74	9.36	6.37	36.52
SGT	14.99	80.61	74.39	19.38	23.43	9.37	50.25
SSG	12.36	88.97	82.83	11.02	41.69	8.73	57.54
SFC	8.21	91.02	86.34	8.97	51.13	7.58	62.00
MSG	2.11	93.33	86.70	6.66	48.57	5.74	62.13
SGM	.61	94.02	80.19	5.97	45.16	3.81	63.63
WO1	.34	79.80	72.69	20.19	12.02	4.85	48.57
CW2	.93	87.29	79.44	12.70	27.59	4.37	51.74
CW3	.60	93.52	85.65	6.47	56.09	3.94	52.00
CW4	.33	94.72	77.10	5.27	47.29	2.28	56.25
2LT	1.35	45.95	37.41	54.04	3.22	5.36	15.25
1LT	1.74	60.26	45.65	39.73	6.47	6.98	15.89
CPT	5.22	79.77	66.70	20.22	10.01	7.62	30.27
MAJ	2.91	89.91	82.02	10.08	21.23	7.51	41.01
[illegible]C	1.87	92.83	84.23	7.16	25.52	5.56	44.89
[illegible]OL	.79	94.65	77.49	5.34	27.22	2.16	52.05
BG	.03	96.99	58.13	3.00		1.50	
MG	.02	97.00	37.11	3.00			
LTG	.01	100.00	38.23				
GEN	.05	100.00	42.85				
ENLST	83.80	61.58	71.27	38.42	10.06	6.03	47.00
OFFCR	16.20	80.19	72.87	19.81	11.06	6.31	33.49
TOTAL	100.00	64.59	71.59	35.41	10.15	6.08	44.73

ENLISTED HOUSING MILCON

15 AUG 1994

1. DESCRIPTION: The percent of new family housing quarters construction to be assigned to enlisted soldiers.

2. VALIDATED VALUE: 82%

3. DATA SOURCE: FY 96/97 AFH Construction Program

a. DATE LAST UPDATED: July 1994

b. DATE OF NEXT UPDATE: July 1995

4. METHODOLOGY: Divide the number of units to be designated as enlisted by the total number of units in the program.

5. VALIDATION PROCEDURE: See 4 above.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DEAN STEFANIDES
Chief, Army Housing Division

STANDARD FACTOR #4
OFFICER SALARY
Change 3 - 14 Oct 94

1. DESCRIPTION: The average officer annual salary. This is used to calculate the savings of elimination of officer positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: $67,948. FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the estimated average salary for FY 96.

5. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #4
OFFICER SALARY
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average officer annual salary. This is used to calculate the savings of elimination of officer positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: ~~$77,068~~. 67,948 FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the submitted salary ($74,104) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 95 = 100, FY 96 = 102.15, escalation factor =

102.15/98.14 = 1.0409 round to 1.04

74104 * 1.04 = $77,068.

5. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #4
OFFICER SALARY

1. DESCRIPTION: The average officer annual salary. This is used to calculate the savings of elimination of officer positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: $77,152. FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the submitted salary ($74,104) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4, National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor =
102.15/98.14 = ~~1.0410~~ 1.0409 & R TO 1.04

74104 * 1.04~~11~~ = $77,152. 77,068

5. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

OFFICER SALARY

1. DESCRIPTION: Represents the average annual cost of military pay and allowances for an officer. It is used to calculate cost avoidance in the Military Personnel, Army appropriation.

2. VALIDATED VALUE: $74,104

3. DATA SOURCE: Ultimately the data source is the joint service military pay system (JSS) for cost data and the Enlisted Loss Inventory Model/Computer Linear Program(ELIM COMPLIP) for manpower data. This data is used to develop individual factors incorporated into the Military Personnel, Army appropriation justification book. The factor provided is an aggregate developed from the justification book.

a. DATE LAST UPDATED: FEBRUARY 1994

b. DATE OF NEXT UPDATE: SEPTEMBER 1994

4. METHODOLOGY: Factors are developed by grade, by type of pay, and knowledge of future events that affect rates such as pay raises, inflation, and trends in average years of service for military personnel.

5. VALIDATION PROCEDURE: This office is accountable for all funds spent in this appropriation world wide. It is a centrally managed open allotment. For this reason rates are checked and updated monthly by comparison to actual performance.

6. STATEMENT OF CERTIFICATION: I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

EDGAR E. STANTON, III
Colonel, GS
Chief, Program, Budget and
Compensation Policy Division

STANDARD FACTOR #5
OFFICER BAQ W/DEPENDENTS
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average Basic Allowance for Quarters for officers, with dependents. This is used to calculate costs/savings of changes in the officer population living off-post. (Allowed entries 0.00 to 20,000.00 $/month)

2. VALIDATED VALUE: $7,717. FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the submitted BAQ ($7,566) as the baseline for 1995 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor =

102.15/100 = 1.0215. round to 1.02

7566 * 1.02 = 7,717.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #5
OFFICER BAQ W/DEPENDENTS

1. DESCRIPTION: The average Basic Allowance for Quarters for officers, with dependents. This is used to calculate costs/savings of changes in the officer population living off-post. (Allowed entries 0.00 to 20,000.00 $/month)

2. VALIDATED VALUE: $7,520. FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

7566 95

4. METHODOLOGY: Used the submitted BAQ ($7,223) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4, National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor =

102.15/98.14 = 1.0411.

7223 * 1.0411 = 7,520.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

OFFICER BAQ W/DEPENDENTS

1. DESCRIPTION: Represents the average annual cost of Officer BAQ with dependents payments for an officer. It is used to calculate cost avoidance in the Military Personnel, Army appropriation.

2. VALIDATED VALUE: $7,223

3. DATA SOURCE: The data source is rates provided by Office, Secretary of Defense (C) for cost data and the Enlisted Loss Inventory Model/Computer Linear Program (ELIM COMPLIP) for manpower data. This data is used to develop individual factors incorporated into the Military Personnel, Army appropriation justification book. The factor provided is an aggregate developed from the justification book.

   a. DATE LAST UPDATED: FEBRUARY 1994

   b. DATE OF NEXT UPDATE: SEPTEMBER 1994

4. METHODOLOGY: Factors are developed by grade, by type of pay, and knowledge of future events that affect rates such as pay raises, inflation, and availability of family housing.

5. VALIDATION PROCEDURES: This office is accountable for all funds spent in this appropriation world wide. It is a centrally managed open allotment. For this reason rates are checked and updated monthly by comparison to actual performance.

6. STATEMENT OF CERTIFICATION: I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

EDGAR E. STANTON, III
Colonel, GS
Chief, Program, Budget and
Compensation Policy Division

STANDARD FACTOR #6
ENLISTED SALARY
Change 3 - 14 Oct 1994

1. DESCRIPTION: The average enlisted annual salary. This is used to calculate the savings of elimination of enlisted positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: $30,860. FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the estimated average salary for FY 96.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #6
ENLISTED SALARY
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average enlisted annual salary. This is used to calculate the savings of elimination of enlisted positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: $34,120. FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the submitted salary ($32,808) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4, National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor =

102.15/98.14 = 1.0409. round to 1.04

32808 * 1.04 = 34,120.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #6
ENLISTED SALARY

1. DESCRIPTION: The average enlisted annual salary. This is used to calculate the savings of elimination of enlisted positions. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: ~~$34,156.~~ FY 96 dollars.
$30,860 FY 96

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the submitted salary ($32,808) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor =

102.15/98.14 = 1.0411.

32808 * 1.0411 = 34,156.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

ENLISTED SALARY

1. DESCRIPTION: Represents the average annual cost of military pay and allowances for an officer. It is used to calculate cost avoidance in the Military Personnel, Army appropriation.

2. VALIDATED VALUE: $32,808

3. DATA SOURCE: Ultimately the data source is the joint service military pay system (JSS) for cost data and the Enlisted Loss Inventory Model/Computer Linear Program (ELIM COMPLIP) for manpower data. The factor provided is an aggregate developed from the justification book.

a. DATE LAST UPDATED: FEBRUARY 1994

b. DATE OF NEXT UPDATE: SEPTEMBER 1994

4. METHODOLOGY: Factors are developed by grade, by type of pay, and knowledge of future events that affect rates such as pay raises, inflation, and trends in average years of service for military personnel.

5. VALIDATION PROCEDURE: This office is accountable for all funds spent in this appropriation world wide. It is a centrally managed open allotment. For this reason rates are checked and updated monthly by comparison to actual performance.

6. STATEMENT OF CERTIFICATION: I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

EDGAR E. STANTON, III
Colonel, GS
Chief, Program, Budget and
Compensation Policy Division

STANDARD FACTOR #7
ENLISTED BAQ W/DEPENDENTS
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average Basic Allowance for Quarters for enlisted, with dependents. This is used to calculate costs/savings of changes in the enlisted population living off-post. (Allowed entries 0.00 to 20,000.00 $/month)

2. VALIDATED VALUE: $5,223 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Program, Budget and Compensation Policy Division, PCC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the submitted BAQ ($5,121) as the baseline for 1995 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 95 = 100, FY 96 = 102.15, escalation factor =

102.15/100 = 1.0215. Round to 1.02

5121 * 1.02 = 5,223

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #7
ENLISTED BAQ W/DEPENDENTS

1. DESCRIPTION: The average Basic Allowance for Quarters for enlisted, with dependents. This is used to calculate costs/savings of changes in the enlisted population living off-post. (Allowed entries 0.00 to 20,000.00 $/month)

2. VALIDATED VALUE: $5,092 FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Program, Budget and Compensation Policy Division, POC: COL Edgar E. Stanton.

a. DATE LAST UPDATED: February 1994.

b. DATE OF NEXT UPDATE: September 1994.

4. METHODOLOGY: Used the submitted BAQ ($4,891) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4, National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor =

102.15/98.14 = 1.0411.

5121 FY95

4891 * 1.0411 = 5,092.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

ENLISTED BAQ W/DEPENDENTS

1. DESCRIPTION: Represents the average annual cost of Enlisted BAQ with dependents payments for an enlisted soldier. It is used to calculate cost avoidance in the Military Personnel, Army appropriation.

2. VALIDATED VALUE: $4,891

3. DATA SOURCE: The data source is rates provided by Office, Secretary of Defense (C) for cost data and the Enlisted Loss Inventory Model/Computer Linear Program (ELIM COMPLIP) for manpower data. This data is used to develop factors incorporated into the Military Personnel, Army appropriation justification book. The factor provided is an aggregate developed from the justification book.

a. DATE LAST UPDATED: FEBRUARY 1994

b. DATE OF NEXT UPDATE: SEPTEMBER 1994

4. METHODOLOGY: Factors are developed by trade by grade, by type of pay, and knowledge of future events that affect rates such as pay raises, inflation, and availability of family housing.

5. VALIDATION PROCEDURE: This office is accountable for all funds spent in this appropriation world wide. It is a centrally managed open allotment. For this reason rates are check and updated monthly by comparison to actual performance.

6. STATEMENT OF CERTIFICATION: I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

EDGAR E. STANTON, III
Colonel, GS
Chief, Program, Budget and
Compensation Policy Division

STANDARD FACTOR #8
AVERAGE UNEMPLOYMENT COSTS

1. DESCRIPTION: The average unemployment cost. This is used to calculate unemployment costs over the period of unemployment eligibility. (Allowed entries 0.00 to 2,000.00 $/week)

2. VALIDATED VALUE: $174. FY 96 dollars.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Technical Services Branch. POC: Mr Remer W. Griner.

a. DATE LAST UPDATED: 31 March 1994.

b. DATE OF NEXT UPDATE: 30 June 1994.

4. METHODOLOGY: Used the submitted number ($167.20) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor =

102.15/98.14 = 1.0411.

167.20 * 1.0411 = $174.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

AVERAGE UNEMPLOYMENT COSTS

1. DESCRIPTION: The average unemployment cost. This is used to calculate unemployment costs over the period of unemployment eligibility.

2. VALIDATED VALUE: Average weekly benefit $167.20

3. DATA SOURCE: Department of Labor

   a. DATE LAST UPDATED: 31 March 1994

   b. DATE OF NEXT UPDATE: 30 June 1994

4. METHODOLOGY: Formula: Total Benefits Paid divided by Total Number of Weeks Paid for 12 months ending 31 March 1994.

5. VALIDATION PROCEDURE: In accordance with accepted accounting procedures.

STATEMENT OF CERTIFICATION:

The information supplied is accurate and complete to the best of my knowledge and belief.

REMER W. GRINER
Chief, Technical Services
Branch

STANDARD FACTOR #9
UNEMPLOYMENT ELIGIBLE

1. DESCRIPTION: The period of time over which unemployment payments are paid. Used in conjunction with Average Unemployment Costs and personnel positions lost to calculate unemployment costs. (Allowed entries 0 to 52 weeks)

2. VALIDATED VALUE: 18 WEEKS.

3. DATA SOURCE: See attached documentation. Office of the Deputy Chief of Staff for Personnel. Chief, Technical Services Branch. POC: Mr Remer W. Griner.

   a. DATE LAST UPDATED: 31 March 1994.

   b. DATE OF NEXT UPDATE: 30 June 1994.

4. METHODOLOGY: See attached documentation.

5. VALIDATION PROCEDURE: See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

UNEMPLOYMENT ELIGIBILITY

1. DESCRIPTION: The period to time over which unemployment payments are paid.

2. VALIDATED VALUE: Average number of weeks paid: 18.2.

3. DATA SOURCE: Department of Labor

a. DATE LAST UPDATED: 31 March 1994

b. DATE OF NEXT UPDATE: 30 June 1994

4. METHODOLOGY: Formula: Total Number of Weeks Paid divided by Number of First Week Payments for 12 months ending 31 March 1994.

5. VALIDATION PROCEDURE: The charges are (should be) validated by the components and payment made to the DOL within 30 days of billings. Unless the bills are challenged the DOL accepts the payments as billed.

STATEMENT OF CERTIFICATION:

The information supplied is accurate and complete to the best of my knowledge and belief.

REMER W. GRINER
Chief, Technical Services
Branch

STANDARD FACTOR #10
CIVILIAN SALARY
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average annual salary, for government civilian employees. This is used to calculate costs/savings of changes in the size of the civilian workforce. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: $45,998. FY 96 dollars.

3. DATA SOURCE: See attached documentation. BRAC 93 Standard Factors. Average civilian salary from the FY 94 appropriations accounts, Direct U.S. Hire - subtotal U.S. Rate, This factor includes costs under the heading 'Total Military Function'. Included costs: Total Compensation
Basic Pay
Annualized Overtime Pay
Holiday Pay
Other Pay
Total Benefits

a. DATE LAST UPDATED: September 1992

b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: Used the submitted number ($44,229) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor = 102.15/98.14 = 1.0409. Round to 1.04

44,229 * 1.04 = $45,998.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #10
CIVILIAN SALARY

1. DESCRIPTION: The average annual salary, for government civilian employees. This is used to calculate costs/savings of changes in the size of the civilian workforce. (Allowed entries 0.00 to 99,999.99 $/Yr)

2. VALIDATED VALUE: $46,047. FY 96 dollars.

3. DATA SOURCE: See attached documentation. BRAC 93 Standard Factors. Average civilian salary from the FY 94 appropriations accounts, Direct U.S. Hire - subtotal U.S. Rate, This factor includes costs under the heading 'Total Military Function'. Included costs: Total Compensation
Basic Pay
Annualized Overtime Pay
Holiday Pay
Other Pay
Total Benefits

a. DATE LAST UPDATED: September 1992

b. DATE OF NEXT UPDATE: Unk

1.0409

4. METHODOLOGY: Used the submitted number ($44,229) as the baseline for 1994 dollars, then inflated to 1996 using the MIL PER escalation factor from Table 5-4, National Defense Budget Estimates for FY 1995. FY 94 = 98.14, FY 96 = 102.15, escalation factor = 102.15/98.14 = 1.0411.

44,229 * 1.0411 = $46,047.

45,998

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

-HQDADSS/CMOA S
CIVILIAN PERSONNEL COSTS
FY94-95 BUDGET ESTIMATE SUBMSN
(DOLLARS IN THOUSANDS)

OTAL MILITARY FUNCTION

All Appns

RUN DATE: 09/26/92
Version: 7

FY 1994

	***** STRENGTH ***** FTE BEGIN	FTE END	FTP	* WORKYEARS * TOTAL	FTP	BASIC COMP OC 11	OTIME PAY OC 11	HOLID PAY OC 11	OTHER OC 11	TOTAL VARIABLE	TOTAL COMP OC 11	TOTAL BENEFITS OC 12	TOTAL COMP + BENEFITS
. DIRECT HIRE CIVILIAN:													
A. U.S. EMPLOYEES:													
(1) CLASSIFIED & ADMIN													
(A) SENIOR EXECUTIVE	356	356	353	350	347	36600	0	0	1185	1185	37785	4812	42597
(B) GENERAL MERIT	12895	12989	12937	13062	13015	867361	4483	180	19452	24115	885476	136689	1022165
(C) GENERAL SCHEDULE	206047	201788	194279	202985	196008	6826671	189989	10472	144162	344623	7171294	1579327	8750621
(D) SPECIAL SCHEDULE	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	219298	215133	207569	216397	209370	7724632	194472	10652	164799	369923	8094555	1720828	9815383
(RATE)						35.69656				0.04788	37.40603	0.22277	45.35821
(2) WAGE BOARD	49434	50190	49803	50829	50478	1540830	118741	3686	17507	139934	1680764	323111	2003875
(RATE)						30.31398				0.09081	33.06701	0.20969	39.42384
(3) OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0
(RATE)						0.00000				0.00000	0.00000	0.00000	0.00000
SUBTOTAL U.S.	268732	265323	257372	267226	259848	9265462	313213	14338	182306	509857	9775319	2043939	11819258
(RATE)						34.67274				0.05502	36.58070	0.22059	44.22943
B. DH FOREIGN NATL	11807	11223	1232	11023	1183	187752	9240	1829	54934	66003	253755	59139	312894
(RATE)						17.03274				0.35154	23.02049	0.31498	28.38554
C. TOTAL DIRECT HIRE	280539	276546	258604	278249	261031	9453214	322453	16167	237240	575860	10029074	2103078	12132152
(RATE)						33.97392				0.06091	36.04351	0.22247	43.60177
D. DISADVANTAGED EMPL	0	0	0	0	0	0	0	0	0	0	0	0	0
(RATE)						0.00000				0.00000	0.00000	0.00000	0.00000
INDH FOREIGN NATIONAL	27490	22649	0	22362	0	797983	0	0	0	0	797983	0	797983
(RATE)						35.68476				0.00000	35.68476	0.00000	35.68476
FOR NAT SEP LIAB ACCU	0	0	0	0	0	0	0	0	0	0	0	47924	47924
A. DH FOREIGN NATIONAL	0	0	0	0	0	0	0	0	0	0	0	34457	34457
B. INDH FOREIGN NATIONA	0	0	0	0	0	0	0	0	0	0	0	13467	13467
BENE FORM EMPL(OC-13)	0	0	0	0	0	0	0	0	0	0	0	53736	53736
A. U.S. DIRECT HIRE	0	0	0	0	0	0	0	0	0	0	0	53736	53736
B. FOREIGN NATIONAL DH	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CIVILIANS	308029	299195	258604	300611	261031	10251197	322453	16167	237240	575860	10827057	2204738	13031795
(RATE)						34.10119				0.05617	36.01683	0.21507	43.35101
REIMBURSABLE FUNDING													
A. US DIRECT HIRES	104330	102825	101557	104182	102957	3720151	183846	9718	85763	279327	3999478	747890	4747368
(HOST NATION CONTRIB)	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
B. FOREIGN NATIONAL DH	3990	4604	88	4485	84	68495	3423	814	25456	29693	98188	37719	135907
(HOST NATION CONTRIB)	(2131)	(2603)	( )	(2603)	( )	(32575)	(1299)	(380)	( )	(1679)	(34254)	(15321)	(49575)
C. TOTAL DIRECT HIRES	108320	107429	101645	108667	103041	3788646	187269	10532	111219	309020	4097666	785609	4883275
(HOST NATION CONTRIB)	(2617)	(3248)	( )	(3220)	( )	(61911)	(2468)	(724)	( )	(3192)	(65103)	(29118)	(94221)
D. FOREIGN NATLS INDH	6265	6787	0	6748	0	212401	0	0	0	0	212401	6471	218872
(HOST NATION CONTRIB)	(3008)	(4361)	( )	(4255)	( )	(85824)	( )	( )	( )	( )	(85824)	(5927)	(91751)
E. TOTAL REIMB FUNDING	114585	114216	101645	115415	103041	4001047	187269	10532	111219	309020	4310067	792080	5102147
CIV PERS DIR FUNDING	193444	184979	156959	185196	157990	6250150	135184	5635	126021	266840	6516990	1412658	7929648
(RATE)						33.74882				0.04269	35.18968	0.22601	42.81759

EXHIBIT OP-8

STANDARD FACTOR #11
CIVILIAN TURNOVER

1. DESCRIPTION: The average percent of government civilian employees who normally leave their positions for reasons **not related to closure/realignment actions**. This is used to adjust the size of the civilian workforce for normal turnovers. (Allowed entries 0.00 to 100.00 percent/Yr)

2. VALIDATED VALUE: 15 Percent

3. DATA SOURCE: See attached documentation. BRAC 95 Policy Memo #1.

a. DATE LAST UPDATED: 31 May 1994.

b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: BRAC 95 DoD Standard Factor used for all Military Departments.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #12
CIVILIAN EARLY RETIREMENT

1. DESCRIPTION: The average percent of government civilian employees who retire early **as a result of closure/realignment actions**. This is used to adjust the size of the civilian workforce for early retirements, and to calculate early retirement costs. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 10%

3. DATA SOURCE: See attached documentation. BRAC 95 Policy Memo #1.

a. DATE LAST UPDATED: 31 May 1994

b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: BRAC 95 DoD Standard Factor used for all Military Departments.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION AND TECHNOLOGY

MAY 31 1994

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
COMPTROLLER
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL
INSPECTOR GENERAL
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR OF ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: 1995 Base Realignments and Closures (BRAC 95) -- Policy Memorandum One

Background

Deputy Secretary of Defense memorandum of January 7, 1994, (attached) established policy, procedures, authorities, and responsibilities for selecting bases for realignment or closure under Public Law (P.L.) 101-510, as amended, for the 1995 base closure process (BRAC 95). This memorandum is the first in a series of Under Secretary of Defense for Acquisition and Technology (USD(A&T)) policy memoranda implementing the Deputy Secretary's BRAC 95 guidance.

Application of P.L. 101-510 Thresholds

This guidline amplifies the DepSecDef January 7, 1994, policy guidance on P.L. 101-510 numerical thresholds.

In determining whether the Act's numerical closure or realignment thresholds are met, independent actions that result in closures or realignments shall be considered separately. In other words, independent actions affecting an individual installation need not be aggregated to apply the numerical thresholds of the Act. However, closure or realignment actions shall not be broken into smaller increments for the purpose of avoiding application of the Act. Subject to the foregoing, independent closure or realignment actions that do not exceed the numerical thresholds set forth in the Act may proceed outside the established BRAC 95 process. Questions regarding whether or not proposed actions are independent should be referred to DoD Components' General Counsel.

Conversely, as the DoD Components review their base structure or conduct functional studies with base closure or realignment impacts, a determination must be made as to whether a comprehensive review or study impacting more than one installation should be considered a single action under P.L. 101-510. To be considered a single action, the review or study must:

(1) Result in the closure or realignment of at least one installation which would trigger the numerical thresholds of P.L. 101-510; and

(2) Involve inextricably linked elements, in that failure to proceed with any one element of the action would require reevaluation of the entire action.

Capacity/Military Value Analyses

An early step in BRAC 95 evaluations is determining whether a category/subcategory has potential excess capacity for the end state force levels contained in the Force Structure Plan. Should no excess capacity be found in a category/subcategory, there is no need to continue analyzing that portion of the base structure, unless there is a military value or other reason to continue the analysis (such as a cross-category opportunity to look at installations with similar capabilities, but in different categories). Bases in such categories/subcategories shall remain subject to joint cross-service review and remain available as potential receivers of missions or functions.

Conversely, if a DoD Component recommends a base for closure or realignment, the supporting analysis must have considered all bases within that category/subcategory, as well as cross-category opportunities. If, in applying the military value criteria, you find bases that are militarily/geographically unique or mission-essential (such that no other base could substitute for them) you may justify that fact and exclude these bases from further analysis. Bases so excluded shall remain subject to joint cross-service review and remain available as potential receivers of missions or functions.

Return on Investment (ROI)

Return on investment must be calculated, considered and reported with DoD Components' justifications for each recommended installation closure or realignment package. All costs and savings attributable over time to a closure or realignment package, subject to the below guidance, should be calculated, including costs or savings at receiving locations. Costs or savings elements that are identified, but determined to be insignificant, need not be calculated. However, DoD Component records should indicate that determination.

The Cost of Base Realignment Actions (COBRA) model calculates return on investment. DepSecDef's January 7, 1994, policy memorandum requires the DoD Components to use the most current COBRA version, in order to ensure consistency in methodology. Although the model does not produce budget quality data, it uses standard cost factors and algorithms to estimate costs and savings over time which permit a consistent comparison of bases in a functional or installation category.

We recognize that DoD Component planning and accounting mechanisms are sufficiently different to warrant some Department/Agency specific standard cost factors in the COBRA model. DoD Component documentation must justify the use of such cost factors, particularly when performing cross-service analysis.

Specific instructions follow for the calculation of discount and inflation rates, health care costs, Homeowners Assistance Program, and savings for input to the COBRA model.

o Discount and Inflation Rates OMB Circular A-94 specifies the discount and inflation rates to be used in ROI calculations.

o Health Care Costs

oo CHAMPUS Costs Base closures and realignments can have an impact on CHAMPUS costs DoD-wide. These net cost impacts must be included in analysis of closures or realignments involving Military Treatment Facilities.

o Homeowners Assistance Program (HAP) The Secretary of the Army will provide each DoD Component with a list of installations that have a reasonable probability of having a HAP program approved, should the installations be selected for closure or realignment. HAP costs will be included for each of the installations so identified by the Secretary of the Army.

o Land Value Given existing law and practice regarding the disposal of real property, especially public benefit and economic development transfers, proceeds from the sale of land and facilities generally may not be realized. In cases where some proceeds can be expected, DoD Components must estimate the amount to be received for such real property. Estimated land and facility proceeds will generally be based on the anticipated reuse of the land and facilities, assuming appropriate zoning. Also, where an installation has unique contamination problems, a portion of the installation may have to be segregated from disposal so that community reuse may proceed on the balance. Estimated proceeds should be adjusted: for any such parceling, including discounting proceeds when sale of contaminated property is possible only after the cleanup remedy has been installed and

approved; for reduced prices where property is likely to be sold for restricted uses; or, when significant public benefit or economic development transfers are anticipated.

o Force Structure Savings The savings associated with force structure drawdowns shall not be included in the return on investment calculations. While declining force structure, as depicted in the required Force Structure Plan, will often be the underlying reason for recommending base closures or realignments, the savings associated with closing bases should generally be founded on the elimination of base operating support (BOS), infrastructure and related costs.

o Military Construction DoD Components will describe anticipated construction requirements (barracks square feet, etc.) to implement a BRAC recommendation and not actual projects. These requirements only become projects during the implementation phase after the 1995 Commission reports to the President and after installation site surveys are conducted and formal project documents (DD 1391s) are prepared.

o Construction Cost Avoidances Closing and realigning bases can result in construction cost avoidances. Cost avoidances should include FY96-01 programmed military and family housing construction that can be avoided at the closing or realigning bases, other than new-mission construction.

COBRA Model Assumptions

The following statements clarify certain cost assumptions written into the COBRA model:

o Local Moves Moves of less than 50 miles will not incur PCS moving costs.

o Priority Placement System Costs. Sixty percent of all employees will be placed in other jobs through the DoD Priority Placement Program. Fifty percent of all employees placed in other jobs through the Program will be relocated at government expense. These percentages are based on historical data.

o Employee Attrition and Turnover. Fifteen Percent of all employees will not need to be placed or severed due to normal attrition and turnover.

o Retirement Factors. Fifteen percent of all employees are eligible for retirement. Five percent of those are eligible for normal retirement and ten percent are eligible for early retirement.

o Homeowner's Assistance Program (HAP). The HAP home value rate is 22.9 percent. The HAP receiving rate is 5 percent.

o Students For the purposes of return on investment calculations, relocation of students will only impact the COBRA model's calculation of overhead costs, and as appropriate, estimates of military construction requirements.

Receiving Bases

DoD Components must identify receiving bases for large units or activities, including tenants, which are to be relocated from closing or realigning bases. Such relocations must be included in DoD Component's recommendations to the Secretary of Defense. The COBRA model will calculate the costs for relocating such units or activities. DoD Components do not need to identify specific receiving bases for units or tenants with less than 100 civilian/military employees. Finding homes for these activities can be left to execution. However, DoD Components should establish a generic "base x" within the COBRA model to act as the surrogate receiving base for the aggregation of these smaller units or activities, in order to ensure completeness of cost and savings calculations.

Reserve Enclaves

This expands on the DepSecDef January 7, 1994, policy guidance on Reserve Component impacts.

On each base designated for closure or realignment, the future of guard and reserve units of all Military Departments residing on or receiving support from that base must be considered. Once a decision has been made to include an enclave or to relocate guard and reserve units, the affected unit identifications must be included in the DoD Components' recommendations to the Secretary of Defense. Military construction and repair costs of fitting out an enclave for reserve component or guard use will be estimated and included as part of the return on investment calculations.

Noel Longuemare

R. Noel Longuemare
Principal Deputy Under Secretary of
Defense (Acquisition & Technology)

STANDARD FACTOR #13
CIVILIANS REGULAR RETIRE

1. DESCRIPTION: The average percent of government civilian employees expected to retire **as a result of closure/realignment actions**. This is used to adjust the size of the civilian workforce for personnel who take regular retirement. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 5 Percent

3. DATA SOURCE: See attached documentation. BRAC 95 Policy Memo #1.

a. DATE LAST UPDATED: 31 May 1994

b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: BRAC 95 DoD Standard Factor used for all Military Departments.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION AND TECHNOLOGY

MAY 31 1994

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
COMPTROLLER
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL
INSPECTOR GENERAL
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR OF ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: 1995 Base Realignments and Closures (BRAC 95) -- Policy Memorandum One

Background

Deputy Secretary of Defense memorandum of January 7, 1994, (attached) established policy, procedures, authorities, and responsibilities for selecting bases for realignment or closure under Public Law (P.L.) 101-510, as amended, for the 1995 base closure process (BRAC 95). This memorandum is the first in a series of Under Secretary of Defense for Acquisition and Technology (USD(A&T)) policy memoranda implementing the Deputy Secretary's BRAC 95 guidance.

Application of P.L. 101-510 Thresholds

This guidline amplifies the DepSecDef January 7, 1994, policy guidance on P.L. 101-510 numerical thresholds.

In determining whether the Act's numerical closure or realignment thresholds are met, independent actions that result in closures or realignments shall be considered separately. In other words, independent actions affecting an individual installation need not be aggregated to apply the numerical thresholds of the Act. However, closure or realignment actions shall not be broken into smaller increments for the purpose of avoiding application of the Act. Subject to the foregoing, independent closure or realignment actions that do not exceed the numerical thresholds set forth in the Act may proceed outside the established BRAC 95 process. Questions regarding whether or not proposed actions are independent should be referred to DoD Components' General Counsel.

Conversely, as the DoD Components review their base structure or conduct functional studies with base closure or realignment impacts, a determination must be made as to whether a comprehensive review or study impacting more than one installation should be considered a single action under P.L. 101-510. To be considered a single action, the review or study must:

(1) Result in the closure or realignment of at least one installation which would trigger the numerical thresholds of P.L. 101-510; and

(2) Involve inextricably linked elements, in that failure to proceed with any one element of the action would require reevaluation of the entire action.

Capacity/Military Value Analyses

An early step in BRAC 95 evaluations is determining whether a category/subcategory has potential excess capacity for the end state force levels contained in the Force Structure Plan. Should no excess capacity be found in a category/subcategory, there is no need to continue analyzing that portion of the base structure, unless there is a military value or other reason to continue the analysis (such as a cross-category opportunity to look at installations with similar capabilities, but in different categories). Bases in such categories/subcategories shall remain subject to joint cross-service review and remain available as potential receivers of missions or functions.

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Noel Longuemare

R. Noel Longuemare
Principal Deputy Under Secretary of
Defense (Acquisition & Technology)

STANDARD FACTOR #14
CIVILIAN RIF PAY FACTOR

1. DESCRIPTION: The average percent of government civilian employee annual pay that will be paid as severance pay to those losing their jobs **as a result of Reduction In Force associated with the closure/realignment action**. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 34%

3. DATA SOURCE: See attached documentation. Air Force analysis of Department of Defense Manpower Data Center information. Civilian separation pay regulations as per Federal Personnel Guide. POC: Mr Steve Scovel, Air Force Cost Analysis Agency - 697-9406.

FACTORS GIVEN: Average Age of Population = 44 years.
Average Time of Service = 16 years.

a. DATE LAST UPDATED: June 1994.

b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

Civilian RIF pay factor:

Only those not eligible for regular or discontinued service retirement (DSR) can be RIF'ed. RIF pay is capped at 52 weeks. The first step in calculation should be to eliminate all of the retirement eligibles in the population, 15-20%. If the total population average is 44, and the 20% who are eligible for some type of retirement average 52 years of age, the remaining population would average only 42.25. If the total population averages 16 years of service and the retirement eligibles average 24, the remaining population averages 14 years. Figuring a RIF percentage based on the remaining population will yeild:

Credit for first ten years, one week per year	10
additional service, two weeks per year, times 4	8
Basic Allowance (subtotal)	18
Times age adjustment (10% for every year after 40)	1.2
Total	21.6 weeks
Reduction (no benefits)	/1.206
Total RIF pay	34%

We should look at some actual demographics to determine the factors, but they will be much less than 50%. The above doesn't consider that those in the first three years of federal service have no eligiblility, or that the higher graded personnel with the greatest longevity are most likely to relocate, if given the opportunity.

STANDARD FACTOR #15
CIVILIAN RETIREMENT PAY

1. DESCRIPTION: The average percent of increase in government civilian retirement pay as a result of early retirements. This is used to calculate the costs of early retirements. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 9%

3. DATA SOURCE: See attached documentation. U.S. Office of Personnel Management, Office of the Actuaries (202) 606-2922.

   a. DATE LAST UPDATED: 22 July 1992.

   b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: See attached documentation.

5. VALIDATION PROCEDURE. None Taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
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MAJ, GS
OPERATIONS ANALYST

[redacted]

[redacted]

[redacted]

The Extra Cost of Early Retirement

The extra cost of early retirement is equal to the difference in the present value of benefits for early vs. normal retirement plus the value of the missing employee contributions.

The difference in the present value of benefits primarily depends on whether or not the increase in the amount of the annuity due to the extra service credit is offset by the reduction in the number of years the annuity is payable. Although the amount of the annuity under normal retirement is also increased by the general schedule increases during the period from early to normal retirement, the annuity under early retirement is increased by COLAs, so there is no net effect, since both increases are assumed to be 5 percent. The annuity under normal retirement is also increased by merit and longevity pay increases but these are relatively small at the applicable ages. In addition, the present value of benefits for early retirement is reduced because of the 2 percent reduction for each year under age 55.

The relative impact of receiving an annuity for a shorter period of time is greater for older ages at commencement, because the remaining lifespan is less, i.e., a reduction of 1 year in annuity payments has a greater relative impact for a 15-year expected payout than for a 20 year expected payout. Similarly 1 year of additional service is worth more, proportionately, if the total service is less. Thus, ignoring the age reduction, the cost of retiring 1 year early would be greater for older ages at retirement with higher amounts of service, and less for younger ages at retirement with lesser amounts of total service.

To illustrate this, the following table shows the present value of benefits as of the beginning of 1992 for a group of employees who are all age 50 with 20 years service in 1992. In the first case, they are assumed to retire immediately.* This is compared to cases where they all retire in 1 year at age 51 with 21 years service, and in 2 years, at age 52 with 22 years service, etc. The present values were determined as of age 50, using the valuation program and so they take into account such things as withdrawal rates, survivor benefits, disability benefits, merit and longevity pay increases, etc.

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*Retirement is actually assumed to occur in the middle of the year, so even in the case of immediate retirement, employees continue to work for one-half year.

Retirement At		Present Value of Benefits Expressed as a Multiple of Final Salary	
Age	Service	Assuming No Age Reduction	With the Age Reduction
50	20	7.751	7.062
51	21	7.923	7.380
52	22	8.066	7.673
53	23	8.182	7.945
54	24	8.275	8.196
55	25	8.365	8.365
56	26	8.394	8.394
57	27	8.388	8.388
58	28	8.357	8.357
59	29	8.310	8.310
60	30	8.282	8.282
61	31	8.239	8.239
62	32	8.179	8.179

This table shows that, even assuming no age reduction, the present values of benefits are actually less for earlier retirement, up to age 56, and then become greater for older ages.

The actual cost of early retirement, taking the present value of the missing employee contributions into account, is shown in the following table:

Retirement At		Present Value of Retirement Benefits Reduced by the Value of the Missing Employee Contributions, Expressed as a Multiple of Final Salary	
Age	Service	Assuming No Age Reduction	With the Age Reduction
50	20	7.717	7.028
51	21	7.820	7.277
52	22	7.896	7.503
53	23	7.946	7.709
54	24	7.975	7.896
55	25	8.002	8.002
56	26	7.969	7.969
57	27	7.903	7.903
58	28	7.814	7.814
59	29	7.711	7.711
60	30	7.629	7.629
61	31	7.533	7.533
62	32	7.420	7.420

[redacted]

[redacted]

[redacted]

STANDARD FACTOR #16
PRIORITY PLACEMENT

1. DESCRIPTION: The average percent of government civilian employees who receive other government jobs as a result of the Priority Placement System. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 60%

3. DATA SOURCE: See attached documentation. BRAC 95 Policy Memo #1.

   a. DATE LAST UPDATED: 31 May 1994

   b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: BRAC 95 DoD Standard Factor used for all Military Departments.

5. VALIDATION PROCEDURE: See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #17
PPS INVOLVING PCS

1. DESCRIPTION: The percent of personnel who receive jobs through the Priority Placement System who must move more that 50 miles. This is used to calculate moving costs. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 50%

3. DATA SOURCE: See attached documentation. BRAC 95 Policy Memo #1.

   a. DATE LAST UPDATED: 31 May 1994

   b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: BRAC 95 DoD Standard Factor used for all Military Departments.

5. VALIDATION PROCEDURE: See attached documentation.

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THE UNDER SECRETARY OF DEFENSE

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ACQUISITION AND TECHNOLOGY

MAY 31 1994

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
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SUBJECT: 1995 Base Realignments and Closures (BRAC 95) -- Policy Memorandum One

Background

Deputy Secretary of Defense memorandum of January 7, 1994, (attached) established policy, procedures, authorities, and responsibilities for selecting bases for realignment or closure under Public Law (P.L.) 101-510, as amended, for the 1995 base closure process (BRAC 95). This memorandum is the first in a series of Under Secretary of Defense for Acquisition and Technology (USD(A&T)) policy memoranda implementing the Deputy Secretary's BRAC 95 guidance.

Application of P.L. 101-510 Thresholds

This guidline amplifies the DepSecDef January 7, 1994, policy guidance on P.L. 101-510 numerical thresholds.

In determining whether the Act's numerical closure or realignment thresholds are met, independent actions that result in closures or realignments shall be considered separately. In other words, independent actions affecting an individual installation need not be aggregated to apply the numerical thresholds of the Act. However, closure or realignment actions shall not be broken into smaller increments for the purpose of avoiding application of the Act. Subject to the foregoing, independent closure or realignment actions that do not exceed the numerical thresholds set forth in the Act may proceed outside the established BRAC 95 process. Questions regarding whether or not proposed actions are independent should be referred to DoD Components' General Counsel.

Conversely, as the DoD Components review their base structure or conduct functional studies with base closure or realignment impacts, a determination must be made as to whether a comprehensive review or study impacting more than one installation should be considered a single action under P.L. 101-510. To be considered a single action, the review or study must:

(1) Result in the closure or realignment of at least one installation which would trigger the numerical thresholds of P.L. 101-510; and

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Capacity/Military Value Analyses

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o Construction Cost Avoidances Closing and realigning bases can result in construction cost avoidances. Cost avoidances should include FY96-01 programmed military and family housing construction that can be avoided at the closing or realigning bases, other than new-mission construction.

COBRA Model Assumptions

The following statements clarify certain cost assumptions written into the COBRA model:

o Local Moves Moves of less than 50 miles will not incur PCS moving costs.

o Priority Placement System Costs. Sixty percent of all employees will be placed in other jobs through the DoD Priority Placement Program. Fifty percent of all employees placed in other jobs through the Program will be relocated at government expense. These percentages are based on historical data.

o Employee Attrition and Turnover. Fifteen Percent of all employees will not need to be placed or severed due to normal attrition and turnover.

o Retirement Factors. Fifteen percent of all employees are eligible for retirement. Five percent of those are eligible for normal retirement and ten percent are eligible for early retirement.

o Homeowner's Assistance Program (HAP). The HAP home value rate is 22.9 percent. The HAP receiving rate is 5 percent.

o Students For the purposes of return on investment calculations, relocation of students will only impact the COBRA model's calculation of overhead costs, and as appropriate, estimates of military construction requirements.

Receiving Bases

DoD Components must identify receiving bases for large units or activities, including tenants, which are to be relocated from closing or realigning bases. Such relocations must be included in DoD Component's recommendations to the Secretary of Defense. The COBRA model will calculate the costs for relocating such units or activities. DoD Components do not need to identify specific receiving bases for units or tenants with less than 100 civilian/military employees. Finding homes for these activities can be left to execution. However, DoD Components should establish a generic "base x" within the COBRA model to act as the surrogate receiving base for the aggregation of these smaller units or activities, in order to ensure completeness of cost and savings calculations.

Reserve Enclaves

This expands on the DepSecDef January 7, 1994, policy guidance on Reserve Component impacts.

On each base designated for closure or realignment, the future of guard and reserve units of all Military Departments residing on or receiving support from that base must be considered. Once a decision has been made to include an enclave or to relocate guard and reserve units, the affected unit identifications must be included in the DoD Components' recommendations to the Secretary of Defense. Military construction and repair costs of fitting out an enclave for reserve component or guard use will be estimated and included as part of the return on investment calculations.

Noel Longuemare

R. Noel Longuemare
Principal Deputy Under Secretary of
Defense (Acquisition & Technology)

STANDARD FACTOR #18
CIVILIAN PCS COST

1. DESCRIPTION: The average cost of relocating a government civilian employee to a new location, who has received a job through the Priority Placement System (if the move is over 50 miles). An average Permanent Change of Station cost is used since PPS placements will result in relocations to undetermined locations. (Allowed entries 0.00 to 99,999.99 $).

2. VALIDATED VALUE: $28,576 FY 96 dollars.

3. DATA SOURCE :

   a. DATE LAST UPDATED : 28 July 1994.

   b. DATE OF NEXT UPDATE : Unk

4. METHODOLOGY : Used the submitted DARSE total expenses ($25,226.02)as the baseline for 1991 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 9 = 90.60, FY 96 = 102.63, escalation factor =

102.63/90.60 = 1.1328.

25,226.02 * 1.1328 = $28,576.

5. VALIDATION PROCEDURE : See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #18
CIVILIAN PCS COST
Change 3 - 14 Oct 1994

1. DESCRIPTION: The average cost of relocating a government civilian employee to a new location, who has received a job through the Priority Placement System (if the move is over 50 miles). An average Permanent Change of Station cost is used since PPS placements will result in relocations to undetermined locations. (Allowed entries 0.00 to 99,999.99 $).

2. VALIDATED VALUE: $28,800 96 dollars.

3. DATA SOURCE: BRAC 95 COBRA RUN

   a. DATE LAST UPDATED: 26 SEP 1994

   b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: SEE ATTACHED DOCUMENTATION.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

$28,800

COBRA REALIGNMENT SUMMARY (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : Never

NPV in 2015($K): 51,133
1-Time Cost($K): 28,880

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
Moving	27,295	0	0	0	0	0	27,295	0
Missio	0	0	0	0	0	0	0	0
Other	1,584	0	0	0	0	0	1,584	0
TOTAL	30,347	1,467	1,467	1,467	1,467	1,467	37,681	1,467

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilians	1,000	0	0	0	0	0	1,000
TOTAL	1,000	0	0	0	0	0	1,000

Summary:

CALCULATION OF PCS EXPENSES FOR CIVILIANS MOVING TO BASE X.

COBRA REALIGNMENT SUMMARY (COBRA v5.0A*P) - Page 2
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
Moving	27,295	0	0	0	0	0	27,295	0
Missio	0	0	0	0	0	0	0	0
Other	1,584	0	0	0	0	0	1,584	0
TOTAL	30,347	1,467	1,467	1,467	1,467	1,467	37,681	1,467

Savings ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

PERSONNEL YEARLY PERCENTAGES (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Base: NOTIONAL BASE #1, US

	Moving In		MilCon	Move Out/Elim		ShutDn
Year	Total	Percent	TimPhas	Total	Percent	TimPhas
1996	0	0.00%	33.33%	1,000	100.00%	100.00%
1997	0	0.00%	16.67%	0	0.00%	0.00%
1998	0	0.00%	16.67%	0	0.00%	0.00%
1999	0	0.00%	16.67%	0	0.00%	0.00%
2000	0	0.00%	16.67%	0	0.00%	0.00%
2001	0	0.00%	0.00%	0	0.00%	0.00%
TOTALS	0	0.00%	100.00%	1000	100.00%	100.00%

Base: BASE X, US

	Moving In		MilCon	Move Out/Elim		ShutDn
Year	Total	Percent	TimPhas	Total	Percent	TimPhas
1996	1,000	100.00%	100.00%	0	0.00%	16.67%
1997	0	0.00%	0.00%	0	0.00%	16.67%
1998	0	0.00%	0.00%	0	0.00%	16.67%
1999	0	0.00%	0.00%	0	0.00%	16.67%
2000	0	0.00%	0.00%	0	0.00%	16.67%
2001	0	0.00%	0.00%	0	0.00%	16.67%
TOTALS	1000	100.00%	100.00%	0	0.00%	100.00%

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIF	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	2,398	0	0	0	0	0	2,398
POV Miles	180	0	0	0	0	0	180
Home Purch	10,195	0	0	0	0	0	10,195
HHG	7,110	0	0	0	0	0	7,110
Misc	700	0	0	0	0	0	700
House Hunt	2,077	0	0	0	0	0	2,077
PPS	0	0	0	0	0	0	0
RITA	4,354	0	0	0	0	0	4,354
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	32	0	0	0	0	0	32
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hire	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	1,584	0	0	0	0	0	1,584
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	28,880	0	0	0	0	0	28,880

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.0A*P) - Page 2
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
TOTAL COST	30,347	1,467	1,467	1,467	1,467	1,467	37,681	1,467

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.0A*P) - Page 3
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	27,295	0	0	0	0	0	27,295
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
HAP / RSE	1,584	0	0	0	0	0	1,584
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	28,880	0	0	0	0	0	28,880

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
TOTAL NET COST	30,347	1,467	1,467	1,467	1,467	1,467	37,681	1,467

APPROPRIATIONS DETAIL REPORT (COBRA v5.0A*F) - Page 4
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	2,398	0	0	0	0	0	2,398
POV Miles	180	0	0	0	0	0	180
Home Purch	10,195	0	0	0	0	0	10,195
HHG	7,110	0	0	0	0	0	7,110
Misc	700	0	0	0	0	0	700
House Hunt	2,077	0	0	0	0	0	2,077
PPS	0	0	0	0	0	0	0
RITA	4,354	0	0	0	0	0	4,354
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	32	0	0	0	0	0	32
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hires	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	1,584	0	0	0	0	0	1,584
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	28,880	0	0	0	0	0	28,880

Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Base: NOTIONAL BASE #1, US

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	28,880	0	0	0	0	0	28,880	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	27,295	0	0	0	0	0	27,295
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
HAP / RSE	1,584	0	0	0	0	0	1,584
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	28,880	0	0	0	0	0	28,880

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	28,880	0	0	0	0	0	28,880	0

Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Base: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Base: BASE X, US

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
TOTAL COSTS	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

Base: BASE X, US

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

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M	0	0	0	0	0	0	0	0
RPMA	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL	0	0	0	0	0	0	0	0
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467
TOTAL NET COST	1,467	1,467	1,467	1,467	1,467	1,467	8,802	1,467

INPUT DATA REPORT (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

Base Name	Strategy:
NOTIONAL BASE #1, US	Realignment
BASE X, US	Realignment

Summary:

CALCULATION OF PCS EXPENSES FOR CIVILIANS MOVING TO BASE X.

INPUT SCREEN TWO - DISTANCE TABLE

From Base:	To Base:	Distance:
NOTIONAL BASE #1, US	BASE X, US	1,000 mi

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NOTIONAL BASE #1, US to BASE X, US

	1996	1997	1998	1999	2000	2001
Officer Positions:	0	0	0	0	0	0
Enlisted Positions:	0	0	0	0	0	0
Civilian Positions:	1,000	0	0	0	0	0
Student Positions:	0	0	0	0	0	0
Missn Eqpt (tons):	0	0	0	0	0	0
Suppt Eqpt (tons):	0	0	0	0	0	0
Mil Light Vehic (tons):	0	0	0	0	0	0
Heavy/Spec Vehic (tons):	0	0	0	0	0	0

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

Total Officer Employees:	0	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	0	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	1,000	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.00
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	20.9%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	0	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: BASE X, US

Total Officer Employees:	892	RPMA Non-Payroll ($K/Year):	4,653
Total Enlisted Employees:	5,166	Communications ($K/Year):	1,080
Total Student Employees:	1,169	BOS Non-Payroll ($K/Year):	13,943
Total Civilian Employees:	3,014	BOS Payroll ($K/Year):	16,252
Mil Families Living On Base:	36.0%	Family Housing ($K/Year):	6,670
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.02
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	7,276	CHAMPUS Shift to Medicare:	0.0%
Officer VHA ($/Month):	108	Activity Code:	
Enlisted VHA ($/Month):	89		
Per Diem Rate ($/Day):	73	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.09	Unique Activity Information:	No

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

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

Name: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 10:05 10/03/1994

Department : ARMY
Option Package : CIV PCS
Scenario File : C:\COBRA\CIVMOV.CBR
Std Fctrs File : C:\COBRA\CIVMOV.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

Percent Officers Married:	74.00%	Civ Early Retire Pay Factor:	0.00%
Percent Enlisted Married:	55.50%	Priority Placement Service:	0.00%
Enlisted Housing MilCon:	82.00%	PPS Actions Involving PCS:	0.00%
Officer Salary($/Year):	77,068.00	Civilian PCS Costs ($):	0.00
Off BAQ with Dependents($):	7,717.00	Civilian New Hire Cost($):	1,109.00
Enlisted Salary($/Year):	34,120.00	Nat Median Home Price($):	114,600.00
Enl BAQ with Dependents($):	5,223.00	Home Sale Reimburse Rate:	5.00%
Avg Unemploy Cost($/Week):	174.00	Max Home Sale Reimburs($):	22,385.00
Unemployment Eligibility(Weeks):	18	Home Purch Reimburse Rate:	5.00%
Civilian Salary($/Year):	45,998.00	Max Home Purch Reimburs($):	11,919.00
Civilian Turnover Rate:	0.00%	Civilian Homeowning Rate:	64.00%
Civilian Early Retire Rate:	0.00%	HAP Home Value Reimburse Rate:	22.90%
Civilian Regular Retire Rate:	0.00%	HAP Homeowner Receiving Rate:	5.00%
Civilian RIF Pay Factor:	0.00%	RSE Home Value Reimburse Rate:	18.00%
SF File Desc:	brac95.sff	RSE Homeowner Receiving Rate:	12.00%

STANDARD FACTORS SCREEN TWO - FACILITIES

RPMA Building SF Cost Index:	1.00	Rehab vs. New MilCon Cost:	59.00%
BOS Index (RPMA vs population):	1.00	Info Management Account:	15.00%
(Indices are used as exponents)		MilCon Design Rate:	10.00%
Program Management Factor:	10.00%	MilCon SIOH Rate:	6.00%
Caretaker Admin(SF/Care):	162.00	MilCon Contingency Plan Rate:	7.00%
Mothball Cost ($/SF):	1.25	MilCon Site Preparation Rate:	24.00%
Avg Bachelor Quarters(SF):	388.00	Discount Rate for NPV.RPT/ROI:	2.75%
Avg Family Quarters(SF):	1,819.00	Inflation Rate for NPV.RPT/ROI:	0.00%

APPDET.RPT Inflation Rates:
1996: 2.90% 1997: 3.00% 1998: 3.00% 1999: 3.00% 2000: 3.00% 2001: 3.00%

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

Material/Assigned Person(Lb):	710	Equip Pack & Crate($/Ton):	284.00
HHG Per Off Family (Lb):	14,500.00	Mil Light Vehicle($/Mile):	0.10
HHG Per Enl Family (Lb):	9,000.00	Heavy/Spec Vehicle($/Mile):	0.10
HHG Per Mil Single (Lb):	6,400.00	POV Reimbursement($/Mile):	0.18
HHG Per Civilian (Lb):	18,000.00	Avg Mil Tour Length (Years):	3.10
Total HHG Cost ($/100Lb):	35.00	Routine PCS($/Pers/Tour):	4,503.00
Air Transport ($/Pass Mile):	0.20	One-Time Off PCS Cost($):	6,202.00
Misc Exp ($/Direct Employ):	700.00	One-Time Enl PCS Cost($):	4,174.00

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

Category	UM	$/UM	Category	UM	$/UM
Horizontal	(SY)	38	APPLIED INSTR	(SF)	114
Waterfront	(LF)	0	LABS (RDT&E)	(SF)	175
Air Operations	(SF)	130	CHILD CARE CENTER	(SF)	120
Operational	(SF)	119	PRODUCTION FAC	(SF)	100
Administrative	(SF)	106	PHYSICAL FITNESS FAC	(SF)	128
School Buildings	(SF)	104	Optional Category F	( )	0
Maintenance Shops	(SF)	108	Optional Category G	( )	0
Bachelor Quarters	(EA)	46,227	Optional Category H	( )	0
Family Quarters	(EA)	88,689	Optional Category I	( )	0
Covered Storage	(SF)	60	Optional Category J	( )	0
Dining Facilities	(SF)	180	Optional Category K	( )	0
Recreation Facilities	(SF)	0	Optional Category L	( )	0
Communications Facil	(SF)	0	Optional Category M	( )	0
Shipyard Maintenance	(SF)	0	Optional Category N	( )	0
RDT & E Facilities	(SF)	139	Optional Category O	( )	0
POL Storage	(BL)	0	Optional Category P	( )	0
Ammunition Storage	(SF)	0	Optional Category Q	( )	0
Medical Facilities	(SF)	0	Optional Category R	( )	0
Environmental	( )	0			

STANDARD FACTOR #18
CIVILIAN PCS COST
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average cost of relocating a government civilian employee to a new location, who has received a job through the Priority Placement System (if the move is over 50 miles). An average Permanent Change of Station cost is used since PPS placements will result in relocations to undetermined locations. (Allowed entries 0.00 to 99,999.99 $).

2. VALIDATED VALUE: $20,947 96 dollars.

3. DATA SOURCE : BRAC 95 COBRA RUN

   a. DATE LAST UPDATED : 26 SEP 1994

   b. DATE OF NEXT UPDATE : Unk

4. METHODOLOGY : SEE ATTACHED DOCUMENTATION.

5. VALIDATION PROCEDURE : See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

CIVILIAN FACTOR # 18
CIVILIAN PCS COST

1. DESCRIPTION: The average cost of relocating a government civilian employee to a new location, who has received a job through the Priority Placement System (if the move is over 50 miles). An average Permanent Change of Station cost is used since PPS placements will result in relocations to undetermined locations. (Allowed entries 0.00 to 99,999.99)

2. VALIDATED VALUE : $25,000 TO $26,000 Precise information on the average cost to move a civilian employee is not available.

3. DATA SOURCE : The validated value presented here is an estimate based on information derived from a Relocation Services Cost Model provided by the National Relocations Program Office in the Baltimore District of the Corps of Engineers. That office is responsible for management of the Relocation Services Program for all of the Department of Defense.

a. DATE LAST UPDATED : 1991

b. DATE OF NEXT UPDATE : 1996

4. METHODOLOGY : See attached.

5. VALIDATION PROCEDURE : See attached.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

REMER W. GRINER
CHIEF, TECHNICAL SERVICES
BRANCH TAPC-CPF-O

DARSE COST MODEL

AVERAGE DARSE APPRAISED VALUE: $88,396.00
AVERAGE DARSE SALE PRICE: $91,487.00

AVERAGE PCS SALE PRICE: $87,297.79

EXPENSE	DARSE PROGRAM: CONTRACTOR EXPENSES	DARSE PROGRAM: GOV'T EXPENSES	PCS REIMBURSEMENT: GOV'T EXPENSES	PCS REIMBURSEMENT: EMPLOYEE EXPENSES [F]
SALES EXPENSES:				
APPRAISALS	included		included	
INSPECTIONS	included		included	
TITLE	included		included	
COMMISSION	included		included	
CLOSING	included		included	
BUYER CONCESSIONS	included			$300.00
POINTS	included			$1,746.00
MORTGAGE PAYMENT	included			$800.00
UTILITIES/MAINTENANCE	included			$200.00
PROPERTY TAX	included			$200.00
INSURANCE	included			$150.00
REPAIRS/IMPROVEMENTS	included			$200.00
LOSS ON SALE:	included [A]			$4,108.00
OVERHEAD/PROFIT:	included [B]			
REAL ESTATE SALE COST:	$16,601.06 [C]	$16,601.06	$7,061.01 [D]	$7,704.00
CANCELED/DELETED ORDERS:		$466.04		
NRPO ADMINISTRATIVE FEE:		$800.00	[E]	
TOTAL:		$17,867.10	$7,061.01	$7,704.00
TQ		$5,195.47	$6,426.92	
SIT		$787.68	$2,370.05	
RITA		$1,375.77	$2,077.63	
TOTAL COST:		**$25,226.02**	**$17,935.61**	**$7,704.00**

[A]Loss on sale is the average difference between appraised value and sale price.
[B]Overhead/Profit is specified by contract for each price range.
[C]"Contractor Expenses" is average of random sample which results in a rate for this sample of 17.74% ($16,601.06)
[D]Average of expenses paid ($7,061.01) based on sample cases.
[E]PCS Reimbursement Administrative Cost unknown.
[F]Employee expenses using PCS reimbursement method are estimated.

SUBJECT: DARSE Cost Model

The Cost Comparison Model examines the difference between the cost of moving an employee with PCS entitlement and the cost of moving an employee with DARSE.

In the initial year of Relocation Services' Contract No. DACA31-91-D-0038, 83 Corps of Engineers employees relocated using DARSE. The breakdown of these employees is on the enclosed Chart 1. The NRPO selected 19 employees to use in the comparison; they were from various parts of the country and correspond to the percentages represented in Chart 1.

A copy of the DARSE Move Information Form completed with the employee name, appraised value, days in inventory, and payment to the contractor was sent to the CPO. We also sent a blank copy of the PCS Move Information Form to the CPO and asked them to select a PCS move comparable to the DARSE move in house sale price, location and date. After selecting the PCS employee the CPO sent both forms to FAO for the amount paid the employee for real estate expenses, temporary quarters/subsistence, storage in transit and relocation income tax allowance.

To determine the average DARSE Sale Price we divided the sum of the sale price of each of the 19 sample orders to get $91,487.00. Five houses were amended sales and did not have appraisals, therefore, we discarded them and determined the average DARSE Appraised Value by dividing the sum of the appraised value of each of the remaining 14 sample DARSE houses to get $93,596.00.

To determine the Loss on Sale of each house in inventory we subtracted the sale price from the appraised value, then divided this by the number of houses in the sample. This gave us an average Loss on Sale of $4,108.00.

The Overhead/Profit was determined by the contract. The results were as follows:

5	amended	3.31%
8	less than 90 days	5.41%
3	91 to 120 days	6.32%
1	121 to 150 days	7.52%
1	151 to 180 days	6.99%
1	more than 180 days	6.77%

The total Overhead/Profit is $4,932.51 (5.27% of the average appraised value of $93,596.00).

During the initial year of the contract there were twenty-two canceled, deleted, or expired orders. The total amount invoiced for these orders was $27,081.43. We then added $17,600 for the $800 administrative fee for each of the 22 orders. The total amount spent on

	rate	number	% of total	# in sample
Amended	12.5%	= 17	20%	5
0-90 days	19%	= 35	42%	8
91-120 days	23%	= 15	18%	3
121-150 days	27%	= 5	6%	1
151-180 days	28.75%	= 2	2%	1
180+ days	39%	= 9	11%	1
		83		19

(22 cancellations, deletions, or expirations)

PCS MOVE INFORMATION

	Sale Price	Real Estate Sale Expenses 1	Temporary Quarters/ Subsistence 2	Storage in Transit 3	RITA 4
1. ADAMS, P.	$68,500	$5,258.50	$2,000	0	$760
2. IRWIN, W.	$68,500	$4,806.05	$8,006.35	0	$1,460.06
3. HARRINGTON, J	$69,500	$5,168.40	$3,788.88	$106.00	$916.00
4. KELLY, M.	$65,000	$5.132.00	$3,654.81	$5,457.10	239.42
5. PARRY, V.	$90,000	$7,108.75	$4,770.32	$6,183.15	$1,596.81
6. BRIDGESTOCK,G	$185,000	$12,162.75	$6,580.13	$155.00	$2,621.48
7. MOLINA, T.	$140,000	$11,083.14	$949.91	0	$143.00
8. WEATHERBY, S	$69,000	$5,427.38	$6,425.87	0	$3.137.09
9. STELTS, C.	$68,500	$5,258.50	$11,618.67	$3,781.10	$3,973.48
10. MCNULTY, J.	$66,950	$10,953.50	$3,423.75	$7,066.09	$3,736.08
11. STOKES, D.	$65,000	$4,804.30	$3,028.65	$2,072.46	$4,080.68
12. COPPERTHITE,P	$100,000	$12,187.50	$6,418.57	0	$2,988.69
13. BRETT, D.	$67,900	$7,288.08	$6,435.00	$3,923.44	$1,312.95
14. CONNER, J.	$160,000	$10,180	$7,537	$4,886	$2,172
15. SILLIVANT, S	$65,000	$6,487.48	$4,895.00	0	$3,247.11
16. PEARCE, K.	$64,000	$4,474	$8,595.46	$150	$2,186.31
17. LEKSON, D.	$53,508	$5,411.48	$1,701.48	$110	$1,905.04
18. NOLAN, J.	$72,000	$5,824.00	$34,201.28	$8,719.78	$6,543.16
19. LANTZ, A.	$70,300	$5,132.25	$2,582.32	0	$1,404.03
AVERAGE	$87,297.70	$7,081.10	$6,426.92	$2,970.05	$2,077.63

PCS MOVE INFORMATION

	TOTAL	AVERAGE (of 19)
real estate sale expenses	$134,161.06	$7,061.10
temporary quarters/subsistence	122,111.50	6,426.92
storage in transit	45,030.93	2,370.05
relocation income tax allowance	39,475.04	2,077.63

17,935.70

average appraised value $87,297.79

DARSE MOVE INFORMATION

	TOTAL	AVERAGE (of 19)
Payment to contractor	$316,560.23	$16,661.06
Temporary quarters/subsistence	98,713.95	5,195.47
Storage in transit	14,966.00	787.68
Relocation income tax allowance	26,139.59	1,375.77

average appraised value $93,595.58

DARSE MOVE INFORMATION

	Appraised Value	Payment to Contractor	Temporary Quarters/ Subsistence	Storage in Transit	RITA
1. Dunleany, M.	$ 62,116	$ 7,764.50	$ 1,856.25	0	$ 521.84
2. Clark, R.	132,500	16,562.50	13,201.49	0	0
3. Moore, B.	91,000	11,418.75	426.00	0	475.68
4. Barter, M.	128,350	16,106.25	492.50	0	370.76
5. Carr, P.	80,500	11,495.00	0	0	0
6. Lane, R.	73,500	9,187.50	23,100.00	4,008	8,082.33
7. Brummel, E.	104,500	13,062.50	5,020.81	837	658.12
8. Middleton, D.	208,400	30,218.00	2,892.21	1,238	3,025.44
9. Pearson, P.	152,450	28,965.50	2,475.00	0	5,181.13
10. Bissler, D.	88,750	13,062.50	2,483.95	0	446.16
11. Kelley, T.	142,000	26,980.00	4,475.00	5,832	1,040.00
12. Figgins, S.	58,500	11,115.00	18,564.30	357	5,410.75
13. Schjodt, S.	56,750	12,682.50	0	0	0
14. Testterman, S.	84,250	19,377.50	10,725.00	0	1,264.78
15. Marshall, R.	90,000	5,975.75	3,355.71		11.78
16. Chapin, S.	89,000	20,585.00	0	0	80.92
17. Waddle, J.	80,650	16,375.50	3,000.14	0	0
18. Archer, E.	46,000	13,225.00	3,177.79	3,003	944.93
19. Wojna, M.	60,000	23,400.00	3,465.00	0	635.01
AVERAGE	$95,595.55	$16,661.06	$5,165.47	$787.06	$1,375.77

STANDARD FACTOR #19
NEW HIRE COST
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average cost to hire a new civilian employee. (Allowed entries 0.00 to 10,000.00 $)

2. VALIDATED VALUE: $1,109 FY 96 DOLLARS

3. DATA SOURCE: General Accounting Office, April 1993. MILITARY BASES: Analysis of DOD's Recommendations and Selection Process for Closures and Realignments.

a. DATE LAST UPDATED: Mar 1993

b. DATE OF NEXT UPDATE: NA

4. METHODOLOGY: The cost of hiring, training and placing new civilian employees is provided for by the current installation Civilian Personnel Offices. The Army is not able to isolate a seperate cost to hire civilians for BRAC actions or to break out a per capitia cost for hiring. In BRAC 93, the General Accounting ~~Agency~~ Office used $1,056 (in FY 94 dollars) to "check" the recommendations provided by the Services.

used $1,056 FY 94 * 1.05 (escalation factor) = $ 1,109.

5. VALIDATION PROCEDURE: See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher

CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

Table 4.3: Recalculation of Components' Savings for Major Closure Recommendations

Service	DOD estimate	GAO estimate
Army NPV	$996,393,000	$967,751,000
Air Force NPV	2,043,602,000	1,854,401,000
Navy NPV	8,214,044,000	8,122,440,000
DLA NPV	1,570,290,000	941,407,000
Total NPV	$12,824,329,000	$11,885,999,000

Note: To estimate the one-time costs of these actions, we assumed that all civilian employees would receive 50 percent of their salary if subject to a reduction in force, that none of these employees would find positions in DOD or other federal agencies, and that any civilian hired due to a realignment would cost $1,056.

CERTAIN SAVINGS ESTIMATES ARE VERY SENSITIVE TO CHANGES IN CONSTRUCTION PROJECTIONS

We also tested the sensitivity of closure and realignment costs and savings to increases in military construction by reviewing the effect on estimates if construction costs were increased 100 percent. We found that while most estimates were not sensitive to this increase, a few were. Table 4.4 lists the closure and realignment estimates that were sensitive to the cost increase.

→ PROPONENT

STANDARD FACTOR #19
NEW HIRE COST

1. DESCRIPTION: The average cost to hire a new civilian employee. (Allowed entries 0.00 to 10,000.00 $)

2. VALIDATED VALUE: 0.0

3. DATA SOURCE: NONE

   a. DATE LAST UPDATED: NA

   b. DATE OF NEXT UPDATE: NA

4. METHODOLOGY: Except under unusual conditions (when bonuses are offered as an incentive to move), the cost of hiring, training and placing new civilian employees is already provided for by the current installation Civilian Personnel Offices. No increase in personnel or funding of CPOs is expect due to BRAC actions.

5. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

?

1. DESCRIPTION: New Hire Cost: The average cost to hire a new civilian employee.

2. VALIDATED VALUE: Precise information on the average cost to hire a new civilian employee is not available. Our best estimate is that the average cost falls between $4,000 and $7,000.

3. DATA SOURCE:

a. DATE LAST UPDATED: UNKNOWN

b. DATE OF NEXT UPDATE: UNKNOWN

4. METHODOLOGY: Costs not available. We would have to gather data from all MACOMs and CPO's for a minimum of one fiscal quarter to provide an accurate figure. (1 day was not enough).

5. VALIDATION PROCEDURE: We sought better figures from a variety of sources, including the Office of Personnel Management, but discovered none.

STATEMENT OF CERTIFICATION:

The information supplied is accurate and complete to the best of my knowledge and belief.

JOHN J. FORD
Chief, Staffing Branch

STANDARD FACTOR #20
NATIONAL MEDIAN HOME PRICE

1. DESCRIPTION: The median home cost over the entire United States. This is adjusted by the base Area Cost Factor, and then used to calculate HAP and DARSE costs. (Allowed entries 0.00 to 2,500.00 $K)

2. VALIDATED VALUE: $ 114.6 (in thousands).

3. DATA SOURCE: Home Sales Prices for United States, 1993, National Association of Realtors, Research Division. POC: Glenn Crellin, phone (202) 383-1276. See attached documentation.

   a. DATE LAST UPDATED: 1 July 1994.

   b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: Used the 1993 MEDIAN UNITED STATES value ($106,800)as the baseline for 1993 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 93 = 95.64, FY 96 = 102.63, escalation factor =

   102.63/95.64 = 1.0731.

   106800 * 1.0731 = $114,607.

5. VALIDATION PROCEDURE: See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

Existing Single-Family Home Sales

r		United States	Northeast	Midwest	South	West	United States	Northeast	Midwest	South	West	# of homes available for sales	Mos supply of homes on market
1991		3,220,000	479,000	840,000	1,199,000	702,000	•	•	•	•	•	2,140,000	•
1992		3,520,000	534,000	939,000	1,292,000	755,000	•	•	•	•	•	1,760,000	•
1993		3,802,000	571,000	1,007,000	1,416,000	808,000	•	•	•	•	•	1,520,000	•
		Seasonally Adjusted Annual Rate					Not Seasonally Adjusted						
1993	Jul	3,850,000	560,000	1,020,000	1,460,000	810,000	355,000	58,000	95,000	133,000	69,000	2,020,000	6.3
	Aug	3,860,000	600,000	970,000	1,460,000	830,000	370,000	64,000	93,000	137,000	77,000	2,070,000	6.6
	Sep	3,990,000	600,000	1,050,000	1,490,000	840,000	327,000	57,000	80,000	114,000	76,000	1,890,000	5.7
	Oct	4,030,000	590,000	1,070,000	1,470,000	900,000	337,000	55,000	84,000	114,000	83,000	2,000,000	5.9
	Nov	4,120,000	620,000	1,110,000	1,510,000	880,000	320,000	43,000	74,000	139,000	65,000	1,870,000	5.4
	Dec	4,350,000	650,000	1,160,000	1,590,000	950,000	313,000	42,000	78,000	123,000	70,000	1,520,000	4.0
1994	Jan	4,250,000	650,000	1,090,000	1,570,000	940,000	235,000	38,000	59,000	92,000	46,000	1,710,000	4.8
	Feb	3,840,000	590,000	920,000	1,420,000	900,000	240,000	32,000	67,000	87,000	53,000	1,800,000	5.6
	Mar	4,070,000	580,000	1,010,000	1,560,000	920,000	360,000	43,000	98,000	136,000	82,000	1,900,000	5.6
	Apr	4,120,000	570,000	1,040,000	1,540,000	970,000	372,000	48,000	102,000	139,000	82,000	1,930,000	5.6
	May	4,110,000	650,000	1,040,000	1,570,000	850,000	396,000	61,000	103,000	147,000	84,000	1,930,000	5.6
	Jun r	3,960,000	630,000	1,040,000	1,460,000	830,000	415,000	63,000	112,000	146,000	94,000	1,830,000	5.5
	Jul p	3,950,000	600,000	1,050,000	1,450,000	850,000	354,000	60,000	94,000	129,000	71,000	1,810,000	5.5

Sales Price of Existing Single-Family Homes

(Not Seasonally Adjusted)

Year		United States	Northeast	Midwest	South	West	United States	Northeast	Midwest	South	West
		Median					Average (Mean)				
1991		$100,300	$141,900	$77,800	$88,900	$147,200	$128,400	$166,800	$90,800	$112,300	$175,000
1992		103,700	140,000	81,700	92,100	143,800	130,900	165,100	95,200	116,500	175,100
1993		106,800	139,500	85,200	95,000	142,600	133,500	165,900	100,100	119,900	174,700
1993	Jul	$108,400	$142,500	$85,000	$98,100	$142,700	$135,800	$171,700	$99,600	$124,000	$175,700
	Aug	108,800	141,500	85,400	98,000	142,400	135,400	170,100	100,900	123,700	174,000
	Sep	107,200	138,100	84,700	95,800	143,100	133,600	164,300	100,800	120,000	175,300
	Oct	106,600	138,000	84,900	95,100	143,400	133,000	164,000	98,300	120,200	175,300
	Nov	107,100	140,700	85,500	95,700	140,400	133,100	165,900	101,000	119,400	172,600
	Dec	107,400	137,000	85,700	95,700	143,700	133,700	163,100	100,000	120,400	176,800
1994	Jan	107,900	139,500	85,600	95,800	144,400	134,600	167,200	100,500	122,400	174,700
	Feb	107,200	138,200	85,200	95,400	143,100	133,300	165,500	100,400	120,000	173,500
	Mar	107,600	140,600	85,600	94,100	145,700	134,400	166,600	100,100	119,200	179,300
	Apr	108,900	139,600	87,400	96,000	145,800	135,500	166,000	103,100	120,500	178,900
	May	109,800	138,400	87,000	97,100	148,600	136,600	164,600	102,100	122,600	182,300
	Jun r	112,800	141,800	89,300	100,300	150,000	140,900	170,700	105,600	126,600	187,000
	Jul p	111,500	140,200	89,000	97,200	149,200	138,600	168,000	105,900	123,100	183,700

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STANDARD FACTOR #21
HOME SALE REIMBURSEMENT RATE

1. DESCRIPTION: The maximum percent of home value allowed as a reimbursement for sale of a home due to PCS. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 10%

3. DATA SOURCE: JTR, VOL 2, CHAPTER 14, "Department of Defense Civilian Personnel".

   a. DATE LAST UPDATED: 1 OCT 1993

   b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: See attached documentation.

5. VALIDATION PROCEDURE: None taken.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

reimbursement may not exceed 3 months' interest on the loan balance.)

8. mortgage title insurance policy paid for by the employee on a residence purchased by the employee for the protection of, and required by, the lender;
9. owner's title insurance policy, provided it is a prerequisite to financing or the transfer of property; or the cost of the owner's title insurance policy is inseparable from the cost of other insurance, which is a prerequisite to financing or the transfer of property; and
10. expenses in connection with construction of a residence, which are comparable to expenses that are reimbursable in connection with the purchase of an existing residence.

(2) Nonreimbursable Items. Except as otherwise provided in subpar. (1), the following items of expense are not reimbursable:

1. owner's title insurance policy, "record title" insurance policy, mortgage insurance or insurance against loss or damage of property, and optional insurance paid for by the employee in connection with the purchase of a residence for the protection of the employee;
2. interest on loans, points, and mortgage discounts;
3. property taxes;
4. operating or maintenance costs;
5. no fee, cost, charge or expense determined to be part of the finance charge under the Truth in Lending Act, Title I, P.L. 90-321, and Regulation Z issued in accordance with P.L. 90-321 by the Board of Governors of the Federal Reserve System, unless specifically authorized in subpar. (1);
6. expenses that result from construction of a residence; and
7. VA funding fee (64 Comp. Gen. 674 (1985)).

e. Losses Due to Prices or Market Conditions at Old and New Duty Stations. Losses due to failure to sell a residence at the old duty station at the price asked, or at its current appraised value, or at its dwelling at the new duty station at a price comparable to the selling price of the residence at the old duty station, and any similar losses, are not reimbursable.

f. Other Expenses of Sale and Purchase of Residences. Incidental charges made for required services in selling and purchasing residences are reimbursable if they are customarily paid by the seller of a residence at the old duty station or if customarily paid by the purchaser of a residence at the new duty station, to the extent that they do not exceed amounts customarily charged in the locality of the residence.

g. Procedure and Claim Requirements. For procedure and claim requirements incident to reimbursement in connection with sale and/or purchase of a residence, see par. C14004.

Effective for those employees whose effective date of transfer is on or after 1 October 1993.

★ 2. LIMITATION OF REIMBURSEMENT. The total amount of expenses that may be reimbursed is as follows:

1. In connection with the sale of the residence at the old permanent duty station, reimbursement shall not exceed 10 percent of the actual sale price or $21,340, whichever is the lesser amount.
2. In connection with the purchase of a residence at the new permanent duty station, reimbursement shall not exceed 5 percent of the purchase price or $10,669, whichever is the lesser amount.

C14003 ALLOWABLE EXPENSES FOR SETTLEMENT OF UNEXPIRED LEASE

Expenses incurred for settling an unexpired lease (including month-to-month rental) on residence quarters occupied by the employee at the old duty station may include broker's fees for obtaining a sublease or charges for advertising an unexpired lease. Such expenses are reimbursable when:

1. applicable laws or the terms of the lease provide for payment of settlement expenses.

STANDARD FACTOR #22
HOME SALE REIMBURSEMENT
Change 1 - 26 Sep 1994

1. DESCRIPTION: The maximum reimbursement for home sales. (Allowed entries 0.00 to 25,000.00 $)

2. VALIDATED VALUE: $ 22,407 FY 96 dollars

3. DATA SOURCE : JTR, VOL 2, CHAPTER 14, "Department of Defense Civilian Personnel".

a. DATE LAST UPDATED : 1 OCT 1993.

b. DATE OF NEXT UPDATE : Unk

4. METHODOLOGY : Used the 1994 JTR value ($21,340) as the baseline for 1994 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 94 = 97.84, FY 96 = 102.63, escalation factor =

102.63/97.84 = 1.0490. ~~round to 1.05~~ No Rounding CHK 2

21340 * 1.05 = $22,407.

1.049 = $22,385

6. VALIDATION PROCEDURE : See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

interest on the loan balance)

8. mortgage title insurance policy paid for by the employee on a residence purchased by the employee for the protection of, and required by, the lender;
9. owner's title insurance policy, provided it is a prerequisite to financing or the transfer of property; or the cost of the owner's title insurance policy is inseparable from the cost of other insurance, which is a prerequisite to financing or the transfer of property; and
10. expenses in connection with construction of a residence, which are comparable to expenses that are reimbursable in connection with the purchase of an existing residence.

(2) Nonreimbursable Items. Except as otherwise provided in subpar. (1), the following items of expense are not reimbursable:

1. owner's title insurance policy, "record title" insurance policy, mortgage insurance or insurance against loss or damage of property, and optional insurance paid for by the employee in connection with the purchase of a residence for the protection of the employee;
2. interest on loans, points, and mortgage discounts;
3. property taxes;
4. operating or maintenance costs;
5. no fee, cost, charge or expense determined to be part of the finance charge under the Truth in Lending Act, Title I, P.L. 90-321, and Regulation Z issued in accordance with P.L. 90-321 by the Board of Governors of the Federal Reserve System, unless specifically authorized in subpar. (1);
6. expenses that result from construction of a residence; and
7. VA funding fee (64 Comp. Gen. 674 (1985)).

e. Losses Due to Prices or Market Conditions at Old and New Duty Stations. Losses due to failure to sell a residence at the old duty station at the price asked, or at its current appraised value, or at its

to the selling price of the residence at the old duty station, and any similar losses, are not reimbursable.

f. Other Expenses of Sale and Purchase of Residences. Incidental charges made for required services in selling and purchasing residences are reimbursable if they are customarily paid by the seller of a residence at the old duty station or if customarily paid by the purchaser of a residence at the new duty station, to the extent that they do not exceed amounts customarily charged in the locality of the residence.

g. Procedure and Claim Requirements. For procedure and claim requirements incident to reimbursement in connection with sale and/or purchase of a residence, see par. C14004.

Effective for those employees whose effective date of transfer is on or after 1 October 1993.

★ 2. LIMITATION OF REIMBURSEMENT. The total amount of expenses that may be reimbursed is as follows:

1. In connection with the sale of the residence at the old permanent duty station, reimbursement shall not exceed 10 percent of the actual sale price or $21,340, whichever is the lesser amount.
2. In connection with the purchase of a residence at the new permanent duty station, reimbursement shall not exceed 5 percent of the purchase price or $10,669, whichever is the lesser amount.

C14003 ALLOWABLE EXPENSES FOR SETTLEMENT OF UNEXPIRED LEASE

Expenses incurred for settling an unexpired lease (including month-to-month rental) on residence quarters occupied by the employee at the old duty station may include broker's fees for obtaining a sublease or charges for advertising an unexpired lease. Such expenses are reimbursable when:

1. applicable laws or the terms of the lease provide for payment of settlement expenses.

STANDARD FACTOR #22
HOME SALE REIMBURSEMENT

1. DESCRIPTION: The maximum reimbursement for home sales. (Allowed entries 0.00 to 25,000.00 $)

2. VALIDATED VALUE: $ 22,900 FY 96 dollars

3. DATA SOURCE: JTR, VOL 2, CHAPTER 14, "Department of Defense Civilian Personnel".

a. DATE LAST UPDATED: 1 OCT 1993.

b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: Used the 1993 JTR value ($21,340) as the baseline for 1993 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 93 = 95.64, FY 96 = 102.63, escalation factor =

102.63/95.64 = 1.0731.

21340 * 1.0731 = $22,900.

6. VALIDATION PROCEDURE: See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #23
HOME SALE REIMBURSEMENT RATE

1. DESCRIPTION: The maximum percent of home purchase price that can be reimbursed for a PCS move. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 5%

3. DATA SOURCE: JTR, VOL 2, CHAPTER 14, "Department of Defense Civilian Personnel".

a. DATE LAST UPDATED: 1 OCT 1993

b. DATE OF NEXT UPDATE: Unk

5. METHODOLOGY: See attached documentation.

6. VALIDATION PROCEDURE: None taken.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

interest on the loan balance.)

8. mortgage title insurance policy paid for by the employee on a residence purchased by the employee for the protection of, and required by, the lender;
9. owner's title insurance policy, provided it is a prerequisite to financing or the transfer of property; or the cost of the owner's title insurance policy is inseparable from the cost of other insurance, which is a prerequisite to financing or the transfer of property; and
10. expenses in connection with construction of a residence, which are comparable to expenses that are reimbursable in connection with the purchase of an existing residence.

(2) Nonreimbursable Items. Except as otherwise provided in subpar. (1), the following items of expense are not reimbursable:

1. owner's title insurance policy, "record title" insurance policy, mortgage insurance or insurance against loss or damage of property, and optional insurance paid for by the employee in connection with the purchase of a residence for the protection of the employee;
2. interest on loans, points, and mortgage discounts;
3. property taxes;
4. operating or maintenance costs;
5. no fee, cost, charge or expense determined to be part of the finance charge under the Truth in Lending Act, Title I, P.L. 90-321, and Regulation Z issued in accordance with P.L. 90-321 by the Board of Governors of the Federal Reserve System, unless specifically authorized in subpar. (1);
6. expenses that result from construction of a residence; and
7. VA funding fee (64 Comp. Gen. 674 (1985)).

e. Losses Due to Prices or Market Conditions at Old and New Duty Stations. Losses due to failure to sell a residence at the old duty station at the price asked, or at its current appraised value, or at its to the selling price of the residence at the old duty station, and any similar losses, are not reimbursable.

f. Other Expenses of Sale and Purchase of Residences. Incidental charges made for required services in selling and purchasing residences are reimbursable if they are customarily paid by the seller of a residence at the old duty station or if customarily paid by the purchaser of a residence at the new duty station, to the extent that they do not exceed amounts customarily charged in the locality of the residence.

g. Procedure and Claim Requirements. For procedure and claim requirements incident to reimbursement in connection with sale and/or purchase of a residence, see par. C14004.

Effective for those employees whose effective date of transfer is on or after 1 October 1993.

★ 2. LIMITATION OF REIMBURSEMENT. The total amount of expenses that may be reimbursed is as follows:

1. In connection with the sale of the residence at the old permanent duty station, reimbursement shall not exceed 10 percent of the actual sale price or $21,340, whichever is the lesser amount.
2. In connection with the purchase of a residence at the new permanent duty station, reimbursement shall not exceed 5 percent of the purchase price or $10,669, whichever is the lesser amount.

C14003 ALLOWABLE EXPENSES FOR SETTLEMENT OF UNEXPIRED LEASE

Expenses incurred for settling an unexpired lease (including month-to-month rental) on residence quarters occupied by the employee at the old duty station may include broker's fees for obtaining a sublease or charges for advertising an unexpired lease. Such expenses are reimbursable when:

1. applicable laws or the terms of the lease provide for payment of settlement expenses.

STANDARD FACTOR # 24
HOME SALE REIMBURSEMENT
Change 1 - 26 Sep 1994

1. DESCRIPTION: The maximum reimbursement for home purchase. (Allowed entries 0.00 to 25,000.00 $)

2. VALIDATED VALUE: $11,202 FY 96 Dollars.

3. DATA SOURCE : JTR, VOL 2, CHAPTER 14, "Department of Defense Civilian Personnel".

a. DATE LAST UPDATED : 1 OCT 1993

b. DATE OF NEXT UPDATE : Unk

5. METHODOLOGY : Used the 1994 JTR value ($10,669) as the baseline for 1994 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 94 = 97.84, FY 96 = 102.63, escalation factor =

102.63/97.84 = 1.049, ~~Round to 1.05~~ NO ROUNDING CHG 2

I0669 * ~~1.05~~ = $11,202.
1.049 = $11,191.

6. VALIDATION PROCEDURE : See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR # 24
HOME SALE REIMBURSEMENT

1. DESCRIPTION: The maximum reimbursement for home purchase. (Allowed entries 0.00 to 25,000.00 $)

2. VALIDATED VALUE: $11,449 FY 96 Dollars.

3. DATA SOURCE : JTR, VOL 2, CHAPTER 14, "Department of Defense Civilian Personnel".

a. DATE LAST UPDATED : 1 OCT 1993

b. DATE OF NEXT UPDATE : Unk

5. METHODOLOGY : Used the 1993 JTR value ($10,669) as the baseline for 1993 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 93 = 95.64, FY 96 = 102.63, escalation factor =

102.63/95.64 = 1.0731.

10669 * 1.0731 = $11,449.

6. VALIDATION PROCEDURE : See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

reimbursement may not exceed 3 months' interest on the loan balance.)

8. mortgage title insurance policy paid for by the employee on a residence purchased by the employee for the protection of, and required by, the lender;
9. owner's title insurance policy, provided it is a prerequisite to financing or the transfer of property; or the cost of the owner's title insurance policy is inseparable from the cost of other insurance, which is a prerequisite to financing or the transfer of property; and
10. expenses in connection with construction of a residence, which are comparable to expenses that are reimbursable in connection with the purchase of an existing residence.

(2) Nonreimbursable Items. Except as otherwise provided in subpar. (1), the following items of expense are not reimbursable:

1. owner's title insurance policy, "record title" insurance policy, mortgage insurance or insurance against loss or damage of property, and optional insurance paid for by the employee in connection with the purchase of a residence for the protection of the employee;
2. interest on loans, points, and mortgage discounts;
3. property taxes;
4. operating or maintenance costs;
5. no fee, cost, charge or expense determined to be part of the finance charge under the Truth in Lending Act, Title I, P.L. 90-321, and Regulation Z issued in accordance with P.L. 90-321 by the Board of Governors of the Federal Reserve System, unless specifically authorized in subpar. (1);
6. expenses that result from construction of a residence; and
7. VA funding fee (64 Comp. Gen. 674 (1985)).

e. Losses Due to Prices or Market Conditions at Old and New Duty Stations. Losses due to failure to sell a residence at the old duty station at the price asked, or at its current appraised value, or at its dwelling at the new duty station at a price comparable to the selling price of the residence at the old duty station, and any similar losses, are not reimbursable.

f. Other Expenses of Sale and Purchase of Residences. Incidental charges made for required services in selling and purchasing residences are reimbursable if they are customarily paid by the seller of a residence at the old duty station or if customarily paid by the purchaser of a residence at the new duty station, to the extent that they do not exceed amounts customarily charged in the locality of the residence.

g. Procedure and Claim Requirements. For procedure and claim requirements incident to reimbursement in connection with sale and/or purchase of a residence, see par. C14004.

Effective for those employees whose effective date of transfer is on or after 1 October 1993.

★ 2. LIMITATION OF REIMBURSEMENT. The total amount of expenses that may be reimbursed is as follows:

1. In connection with the sale of the residence at the old permanent duty station, reimbursement shall not exceed 10 percent of the actual sale price or $21,340, whichever is the lesser amount.
2. In connection with the purchase of a residence at the new permanent duty station, reimbursement shall not exceed 5 percent of the purchase price or $10,669, whichever is the lesser amount.

C14003 ALLOWABLE EXPENSES FOR SETTLEMENT OF UNEXPIRED LEASE

Expenses incurred for settling an unexpired lease (including month-to-month rental) on residence quarters occupied by the employee at the old duty station may include broker's fees for obtaining a sublease or charges for advertising an unexpired lease. Such expenses are reimbursable when:

1. applicable laws or the terms of the lease provide for payment of settlement expenses.

STANDARD FACTOR #25
CIVILIAN HOMEOWNING RATE

1. DESCRIPTION: The average percent of government civilian employees who own their homes. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 64 %

3. DATA SOURCE: U.S. Census Bureau Report H-111, 94-Q2, Housing Vacancies and Homeownership Rates for the United States.

   a. DATE LAST UPDATED: Second Quarter 1994

   b. DATE OF NEXT UPDATE: Third Quarter 1994

4. METHODOLOGY: Used information based on second quarter 1994 statistics. See attached documentation.

5. VALIDATION PROCEDURE: See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

FAX Transmittal
The Divsion of Housing and Demographic Analysis
Office of Economic Affairs
Office of Policy Development and Research

To: MAJOR CHUCK FLETCHER

FAX No. 703 693 9322
Phone No. 703 692 6262

From: DUANE McGOUGH

FAX No. 202-619-8000
Phone No. 202-708-1060

Message: DATA FROM CENSUS BUREAU REPORT H-111, 94-Q2
HOUSING VACANCIES AND HOMEOWNERSHIP RATES
FOR THE UNITED STATES

Room 8218 451 Seventh Street, SW Washington, DC 20410

During the second quarter 1994, 63.8 percent (±0.3) of all households in the United States were owner-occupied. The homeownership rate was not significantly different from the revised rate last quarter or the revised second quarter 1993 rate.

Table 4. HOMEOWNERSHIP RATES FOR THE UNITED STATES: 1980 to 1994

Year	Homeownership Rates[1]			
	First quarter	Second quarter	Third quarter	Fourth quarter
1994	63.8	63.8		
1993[r]	63.7	63.9	64.2	64.2
1993	64.2	64.4	64.7	64.6
1992	64.0	63.9	64.3	64.4
1991	63.9	63.9	64.2	64.2
1990	64.0	63.7	64.0	64.1
1989[r]	63.9	63.8	64.1	63.8
1989	63.9	63.9	64.0	63.8
1988	63.7	63.7	64.0	63.8
1987	63.8	63.8	64.2	64.1
1986	63.6	63.8	63.8	63.9
1985	64.1	64.1	63.9	63.5
1984	64.6	64.6	64.6	64.1
1983	64.7	64.7	64.8	64.4
1982	64.8	64.9	64.9	64.5
1981	65.6	65.3	65.6	65.2
1980	65.5	65.5	65.8	65.5

[1]Standard errors for quarterly homeownership rates for the United States generally are 0.2 percent.
[r]Revised.

The data in this release are the result of a sample survey and are, therefore, subject to sampling variability. For example, the standard error on the estimated rental vacancy rate of 7.4 is 0.2 percentage points. Consequently, the 90 percent confidence interval as shown by these data is from 7.1 to 7.7; i.e., the interval 7.4 ± (1.6 x 0.2) percentage points. Thus, one can say with about 90 percent confidence that the average estimate derived from all possible samples is included in this confidence interval. The 90 percent confidence intervals are shown in the text above for selected items. The standard errors for other figures in this release are given in the tables.

Hypothesis testing may be performed at various levels of significance, where a level of significance is the probability of concluding that the parameters are different when, in fact, they are identical. All statements of comparison in the text have passed a hypothesis test at the 0.10 level of significance. This means that, for differences cited in the text, the estimated difference between characteristics is greater than 1.6 times the standard error of the difference.

In addition to sampling error, the figures in this release, both the estimates and their standard errors, are also subject to nonsampling error.

STANDARD FACTOR #26
HAP HOME VALUE RATE

1. DESCRIPTION: This is the AVAERGE percent of house value that HAP will pay. HAP costs will be reported on the HAP/DARSE line of the output Reports. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 22.9%

3. DATA SOURCE: See attached documentation. BRAC 95 Policy Memo #1.

a. DATE LAST UPDATED: 31 May 1994

b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: BRAC 95 DoD Standard Factor used for all Military Departments.

5. VALIDATION PROCEDURE: See attached documentation.

CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #27
HAP RECEIVING RATE

1. DESCRIPTION: This is the percent of homeowners who will use HAP during a PCS move.

2. VALIDATED VALUE: 5%

3. DATA SOURCE: See attached documentation. BRAC 95 Policy Memo #1.

   a. DATE LAST UPDATED: 31 May 1994

   b. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: BRAC 95 DoD Standard Factor used for all Military Departments.

5. VALIDATION PROCEDURE: See attached documentation.

CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION AND TECHNOLOGY

MAY 31 1994

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
COMPTROLLER
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL
INSPECTOR GENERAL
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR OF ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: 1995 Base Realignments and Closures (BRAC 95) -- Policy Memorandum One

Background

Deputy Secretary of Defense memorandum of January 7, 1994, (attached) established policy, procedures, authorities, and responsibilities for selecting bases for realignment or closure under Public Law (P.L.) 101-510, as amended, for the 1995 base closure process (BRAC 95). This memorandum is the first in a series of Under Secretary of Defense for Acquisition and Technology (USD(A&T)) policy memoranda implementing the Deputy Secretary's BRAC 95 guidance.

Application of P.L. 101-510 Thresholds

This guidline amplifies the DepSecDef January 7, 1994, policy guidance on P.L. 101-510 numerical thresholds.

In determining whether the Act's numerical closure or realignment thresholds are met, independent actions that result in closures or realignments shall be considered separately. In other words, independent actions affecting an individual installation need not be aggregated to apply the numerical thresholds of the Act. However, closure or realignment actions shall not be broken into smaller increments for the purpose of avoiding application of the Act. Subject to the foregoing, independent closure or realignment actions that do not exceed the numerical thresholds set forth in the Act may proceed outside the established BRAC 95 process. Questions regarding whether or not proposed actions are independent should be referred to DoD Components' General Counsel.

Conversely, as the DoD Components review their base structure or conduct functional studies with base closure or realignment impacts, a determination must be made as to whether a comprehensive review or study impacting more than one installation should be considered a single action under P.L. 101-510. To be considered a single action, the review or study must:

(1) Result in the closure or realignment of at least one installation which would trigger the numerical thresholds of P.L. 101-510; and

(2) Involve inextricably linked elements, in that failure to proceed with any one element of the action would require reevaluation of the entire action.

Capacity/Military Value Analyses

An early step in BRAC 95 evaluations is determining whether a category/subcategory has potential excess capacity for the end state force levels contained in the Force Structure Plan. Should no excess capacity be found in a category/subcategory, there is no need to continue analyzing that portion of the base structure, unless there is a military value or other reason to continue the analysis (such as a cross-category opportunity to look at installations with similar capabilities, but in different categories). Bases in such categories/subcategories shall remain subject to joint cross-service review and remain available as potential receivers of missions or functions.

Conversely, if a DoD Component recommends a base for closure or realignment, the supporting analysis must have considered all bases within that category/subcategory, as well as cross-category opportunities. If, in applying the military value criteria, you find bases that are militarily/geographically unique or mission-essential (such that no other base could substitute for them) you may justify that fact and exclude these bases from further analysis. Bases so excluded shall remain subject to joint cross-service review and remain available as potential receivers of missions or functions.

Return on Investment (ROI)

Return on investment must be calculated, considered and reported with DoD Components' justifications for each recommended installation closure or realignment package. All costs and savings attributable over time to a closure or realignment package, subject to the below guidance, should be calculated, including costs or savings at receiving locations. Costs or savings elements that are identified, but determined to be insignificant, need not be calculated. However, DoD Component records should indicate that determination.

The Cost of Base Realignment Actions (COBRA) model calculates return on investment. DepSecDef's January 7, 1994, policy memorandum requires the DoD Components to use the most current COBRA version, in order to ensure consistency in methodology. Although the model does not produce budget quality data, it uses standard cost factors and algorithms to estimate costs and savings over time which permit a consistent comparison of bases in a functional or installation category.

We recognize that DoD Component planning and accounting mechanisms are sufficiently different to warrant some Department/Agency specific standard cost factors in the COBRA model. DoD Component documentation must justify the use of such cost factors, particularly when performing cross-service analysis.

Specific instructions follow for the calculation of discount and inflation rates, health care costs, Homeowners Assistance Program, and savings for input to the COBRA model.

o Discount and Inflation Rates OMB Circular A-94 specifies the discount and inflation rates to be used in ROI calculations.

o Health Care Costs

oo CHAMPUS Costs Base closures and realignments can have an impact on CHAMPUS costs DoD-wide. These net cost impacts must be included in analysis of closures or realignments involving Military Treatment Facilities.

o Homeowners Assistance Program (HAP) The Secretary of the Army will provide each DoD Component with a list of installations that have a reasonable probability of having a HAP program approved, should the installations be selected for closure or realignment. HAP costs will be included for each of the installations so identified by the Secretary of the Army.

o Land Value Given existing law and practice regarding the disposal of real property, especially public benefit and economic development transfers, proceeds from the sale of land and facilities generally may not be realized. In cases where some proceeds can be expected, DoD Components must estimate the amount to be received for such real property. Estimated land and facility proceeds will generally be based on the anticipated reuse of the land and facilities, assuming appropriate zoning. Also, where an installation has unique contamination problems, a portion of the installation may have to be segregated from disposal so that community reuse may proceed on the balance. Estimated proceeds should be adjusted: for any such parceling, including discounting proceeds when sale of contaminated property is possible only after the cleanup remedy has been installed and

approved; for reduced prices where property is likely to be sold for restricted uses; or, when significant public benefit or economic development transfers are anticipated.

o Force Structure Savings The savings associated with force structure drawdowns shall not be included in the return on investment calculations. While declining force structure, as depicted in the required Force Structure Plan, will often be the underlying reason for recommending base closures or realignments, the savings associated with closing bases should generally be founded on the elimination of base operating support (BOS), infrastructure and related costs.

o Military Construction DoD Components will describe anticipated construction requirements (barracks square feet, etc.) to implement a BRAC recommendation and not actual projects. These requirements only become projects during the implementation phase after the 1995 Commission reports to the President and after installation site surveys are conducted and formal project documents (DD 1391s) are prepared.

o Construction Cost Avoidances Closing and realigning bases can result in construction cost avoidances. Cost avoidances should include FY96-01 programmed military and family housing construction that can be avoided at the closing or realigning bases, other than new-mission construction.

COBRA Model Assumptions

The following statements clarify certain cost assumptions written into the COBRA model:

o Local Moves Moves of less than 50 miles will not incur PCS moving costs.

o Priority Placement System Costs. Sixty percent of all employees will be placed in other jobs through the DoD Priority Placement Program. Fifty percent of all employees placed in other jobs through the Program will be relocated at government expense. These percentages are based on historical data.

o Employee Attrition and Turnover. Fifteen Percent of all employees will not need to be placed or severed due to normal attrition and turnover.

o Retirement Factors. Fifteen percent of all employees are eligible for retirement. Five percent of those are eligible for normal retirement and ten percent are eligible for early retirement.

o Homeowner's Assistance Program (HAP). The HAP home value rate is 22.9 percent. The HAP receiving rate is 5 percent.

o Students For the purposes of return on investment calculations, relocation of students will only impact the COBRA model's calculation of overhead costs, and as appropriate, estimates of military construction requirements.

Receiving Bases

DoD Components must identify receiving bases for large units or activities, including tenants, which are to be relocated from closing or realigning bases. Such relocations must be included in DoD Component's recommendations to the Secretary of Defense. The COBRA model will calculate the costs for relocating such units or activities. DoD Components do not need to identify specific receiving bases for units or tenants with less than 100 civilian/military employees. Finding homes for these activities can be left to execution. However, DoD Components should establish a generic "base x" within the COBRA model to act as the surrogate receiving base for the aggregation of these smaller units or activities, in order to ensure completeness of cost and savings calculations.

Reserve Enclaves

This expands on the DepSecDef January 7, 1994, policy guidance on Reserve Component impacts.

On each base designated for closure or realignment, the future of guard and reserve units of all Military Departments residing on or receiving support from that base must be considered. Once a decision has been made to include an enclave or to relocate guard and reserve units, the affected unit identifications must be included in the DoD Components' recommendations to the Secretary of Defense. Military construction and repair costs of fitting out an enclave for reserve component or guard use will be estimated and included as part of the return on investment calculations.

Noel Longuemare

R. Noel Longuemare
Principal Deputy Under Secretary of
Defense (Acquisition & Technology)

STANDARD FACTOR #28
RSE HOME VALUE RATE

1. DESCRIPTION: Similar to the HAP Factor, this is the of the percent of house value that DARSE will pay. DARSE will only be costed at a base when HAP is not applied, and it will be reported on the HAP/DARSE line of output Reports. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 18%

3. DATA SOURCE: See attached documentation - "DARSE move information" .

a. DATE LAST UPDATED: 1991

b. DATE OF NEXT UPDATE: 1996

4. METHODOLOGY: This table lists the actual home value and costs of DARSE payments - Payment to Contractor for 19 moves. The RSE home value rate is computed by dividing the average payment to contractor (16,601.06) by the average home value (93,595.58).

17,867.68 19.09 Round down to 19%

~~16,601~~.06/93,595.58 = 17.74 % Round up to 18%

5. VALIDATION PROCEDURE: See attached documentation. Reference data source provided by the U.S. Army Corps of Engineers, Baltimore District. Department of the Army Relocation Services Program Management Office. POC: Ms Dorine Klevinsky (410) 962-3166.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

STANDARD FACTOR #28
RSE HOME VALUE RATE

1. DESCRIPTION: Similar to the HAP Factor, this is the of the percent of house value that DARSE will pay. DARSE will only be costed at a base when HAP is not applied, and it will be reported on the HAP/DARSE line of output Reports. (Allowed entries 0.00 to 100.00 percent)

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4. METHODOLOGY: This table lists the actual home value and costs of DARSE payments - Payment to Contractor for 19 moves. The RSE home value rate is computed by dividing the average payment to contractor (16,661.06) by the average home value (93,595.58).

16,661.06/93,595.58 = 17.8 % ~~17.74~~ 17.74 Ru ↑ 18%

5. VALIDATION PROCEDURE: See attached documentation. Reference data source provided by the U.S. Army Corps of Engineers, Baltimore District. Department of the Army Relocation Services Program Management Office. POC: Ms Dorine Klevinsky (410) 962-3166.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

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MAJ, GS
OPERATIONS ANALYST

DARSE COST MODEL

AVERAGE DARSE APPRAISED VALUE: $88,396.00
AVERAGE DARSE SALE PRICE: $91,487.00

AVERAGE PCS SALE PRICE: $87,297.79

EXPENSE	DARSE PROGRAM: CONTRACTOR EXPENSES	DARSE PROGRAM: GOV'T EXPENSES	PCS REIMBURSEMENT: GOV'T EXPENSES	PCS REIMBURSEMENT: EMPLOYEE EXPENSES [F]
SALES EXPENSES:				
APPRAISALS	Included		Included	
INSPECTIONS	Included		Included	
TITLE	Included		Included	
COMMISSION	Included		Included	
CLOSING	Included		Included	
BUYER CONCESSIONS	Included			$300.00
POINTS	Included			$1,746.00
MORTGAGE PAYMENT	Included			$800.00
UTILITIES/MAINTENANCE	Included			$200.00
PROPERTY TAX	Included			$200.00
INSURANCE	Included			$150.00
REPAIRS/IMPROVEMENTS	Included			$200.00
LOSS ON SALE:	Included [A]			$4,108.00
OVERHEAD/PROFIT:	Included [B]			
REAL ESTATE SALE COST:	$16,601.06 [C]	$16,601.06	$7,061.01 [D]	$7,704.00
CANCELED/DELETED ORDERS:		$496.04		
NRPO ADMINISTRATIVE FEE:		$600.00	[E]	
TOTAL:		$17,697.10	$7,061.01	$7,704.00
TQ		$6,195.47	$6,426.02	
SIT		$787.88	$2,370.06	
RITA		$1,375.77	$2,077.69	
TOTAL COST:		$26,226.02	$17,935.81	$7,704.00

[A]Loss on sale is the average difference between appraised value and selling price.
[B]Overhead/Profit is specified by contract for each price range.
[C]"Contractor Expenses" is average of random sample which results in a rate for this sample of 17.74% ($16,601.06)
[D]Average of expenses paid ($7,061.01) based on sample cases.
[E]PCS Reimbursement Administrative Cost unknown.
[F]Emp[illegible] expenses using PCS reimbursement method are estimated.

SUBJECT: DARSE Cost Model

The Cost Comparison Model examines the difference between the cost of moving an employee with PCS entitlement and the cost of moving an employee with DARSE.

In the initial year of Relocation Services' Contract No. DACA31-91-D-0038, 83 Corps of Engineers employees relocated using DARSE. The breakdown of these employees is on the enclosed Chart 1. The NRPO selected 19 employees to use in the comparison; they were from various parts of the country and correspond to the percentages represented in Chart 1.

A copy of the DARSE Move Information Form completed with the employee name, appraised value, days in inventory, and payment to the contractor was sent to the CPO. We also sent a blank copy of the PCS Move Information Form to the CPO and asked them to select a PCS move comparable to the DARSE move in house sale price, location and date. After selecting the PCS employee the CPO sent both forms to FAO for the amount paid the employee for real estate expenses, temporary quarters/subsistence, storage in transit and relocation income tax allowance.

To determine the average DARSE Sale Price we divided the sum of the sale price of each of the 19 sample orders to get $91,487.00. Five houses were amended sales and did not have appraisals, therefore, we discarded them and determined the average DARSE Appraised Value by dividing the sum of the appraised value of each of the remaining 14 sample DARSE houses to get $93,596.00.

To determine the Loss on Sale of each house in inventory we subtracted the sale price from the appraised value, then divided this by the number of houses in the sample. This gave us an average Loss on Sale of $4,108.00.

The Overhead/Profit was determined by the contract. The results were as follows:

5	amended	3.31%
8	less than 90 days	5.41%
3	91 to 120 days	6.32%
1	121 to 150 days	7.52%
1	151 to 180 days	6.99%
1	more than 180 days	6.77%

The total Overhead/Profit is $4,932.51 (5.27% of the average appraised value of $93,596.00).

During the initial year of the contract there were twenty-two canceled, deleted, or expired orders. The total amount invoiced for these orders was $27,081.43. We then added $17,600 for the $800 administrative fee for each of the 22 orders. The total amount spent on

	rate	number	% of total	# in sample
Amended	12.5%	= 17	20%	5
0-90 days	19%	= 35	42%	8
91-120 days	23%	= 15	18%	3
121-150 days	27%	= 5	6%	1
151-180 days	28.75%	= 2	2%	1
180+ days	39%	= 9	11%	1
		83		19

(22 cancellations, deletions, or expirations)

PCS MOVE INFORMATION

	Sale Price	Real Estate Sale Expenses 1	Temporary Quarters/ Subsistence 2	Storage in Transit 3	RITA 4
1. ADAMS, P.	$68,500	$5,258.50	$2,000	0	$750
2. IRWIN, W.	$68,500	$4,806.05	$8,008.35	0	$1,460.06
3. HARRINGTON, J	$69,500	$5,168.40	$3,788.88	$108.00	$816.00
4. KELLY, M.	$65,000	$5,132.00	$3,654.51	$5,457.10	330.42
5. PARRY, V.	$80,000	$7,108.75	$4,778.32	$6,183.15	$1,806.81
6. BRIDGESTOCK,G	$185,000	$12,182.75	$6,880.13	$185.00	$2,821.48
7. MOLINA, T.	$140,000	$11,083.14	$945.81	0	$143.60
8. WEATHERBY, S	$69,000	$5,427.38	$6,428.57	0	$3,137.00
9. STELTS, C.	$68,500	$5,288.50	$11,618.67	$3,781.10	$3,973.48
10. MCNULTY, J.	$66,950	$10,353.50	$3,423.75	$7,066.00	$3,756.00
11. STOKES, D.	$65,000	$4,804.30	$3,928.05	$2,072.46	$4,000.00
12. COPPERSMITH,P	$100,000	$12,187.50	$6,418.57	0	$2,900.00
13. BRETT, D.	$67,900	$7,288.08	$6,438.00	$3,223.44	$1,312.05
14. CONNER, J.	$160,000	$10,180	$7,537	$4,886	$2,172
15. SILLIVANT, S	$65,000	$8,487.48	$4,805.00	0	$3,247.11
16. PEARCE, K.	$64,000	$4,474	$8,505.46	$180	$2,186.31
17. LEXSON, D.	$83,508	$5,411.48	$1,701.48	$110	$1,308.84
18. NOLAN, J.	$72,000	$5,824.00	$34,201.28	$8,719.78	$6,843.18
19. LANTS, A.	$70,300	$5,132.25	$2,902.22	0	$1,404.03
AVERAGE	$87,287.78	$7,081.10	$6,428.92	$2,370.05	$2,077.03

PCS MOVE INFORMATION

	TOTAL	AVERAGE (of 19)
real estate sale expenses	$134,161.06	$7,061.10
temporary quarters/subsistence	122,111.50	6,426.92
storage in transit	45,030.93	2,370.05
relocation income tax allowance	39,475.04	2,077.63
		17,935.70

average appraised value $87,297.79

DARSE MOVE INFORMATION

	TOTAL	AVERAGE (of 19)
Payment to contractor	$316,560.23	$16,661.06
Temporary quarters/subsistence	98,713.95	5,195.47
Storage in transit	14,966.00	787.68
Relocation income tax allowance	26,139.59	1,375.77

average appraised value $93,595.58

DARSE MOVE INFORMATION

	Appraised Value	Payment to Contractor	Temporary Quarters/ Subsistence	Storage in Transit	RITA
1. Dunleany, M.	$ 82,116	$ 7,784.50	$ 1,886.25	0	$ 521.84
2. Clark, R.	132,500	16,882.50	13,301.48	0	0
3. Moore, D.	91,000	11,418.75	426.00	0	475.68
4. Barter, M.	128,550	16,106.25	492.50	0	370.75
5. Carr, P.	60,500	11,495.00	0	0	0
6. Lane, R.	73,500	2,187.50	23,100.00	4,008	8,062.33
7. Brummel, E.	104,500	13,082.50	5,020.81	537	658.12
8. Middleton, D.	208,400	30,316.00	2,892.21	1,338	3,028.44
9. Pearson, P.	152,450	28,965.50	2,475.00	0	5,181.13
10. Bissler, D.	88,750	15,082.50	2,483.95	0	446.18
11. Kelley, T.	142,000	20,950.00	4,478.00	5,832	1,040.00
12. Figgins, E.	58,500	11,115.00	18,564.30	357	5,410.75
13. Schjodt, S.	68,750	12,682.50	0	0	0
14. Teetterman, S.	54,250	10,377.50	10,735.00	0	1,264.78
15. Marshall, R.	80,000	5,978.75	3,585.71		11.78
16. Chapin, S.	28,600	20,585.00	0	0	86.92
17. Waddle, J.	60,850	16,375.50	3,000.14	0	0
18. Archer, E.	46,000	13,225.00	3,177.79	3,003	844.93
19. Wojna, M.	60,000	23,400.00	3,485.00	0	638.01
AVERAGE	$85,505.55	$16,661.06	$5,185.47	$787.86	$1,375.77

STANDARD FACTOR #29
RSE RECEIVING RATE

1. DESCRIPTION: The average percent of all homeowners who will use DARSE payments. DARSE will only be costed at a base when HAP is not applied, and it will be reported on the HAP/DARSE line of output Reports. (Allowed entries 0.00 to 100.00 percent)

2. VALIDATED VALUE: 12%

3. DATA SOURCES: BRAC 93 Factor.

a. U.S. Army Corps of Engineers, Baltimore District. Department of the Army Relocation Services Program Management Office. The information was tabulated by Ms Dorine Klevinsky, relocation specialist, (410) 962-3166.

b. Defense Data Support Center, Dayton Ohio. Priority Placement Program statistics.

c. DATE LAST UPDATED: July 24, 1992.

d. DATE OF NEXT UPDATE: Unk

4. METHODOLOGY: Estimate based on the following calculations:

YEAR	PPS PLACEMENTS OUTSIDE COMMUTING DIST	TOTAL NUMBER USING DARSE	PERCENT
1990	3161	634	10.87
1991	5832	431	13.63
1992	1911(30 APRIL)	591(13 NOV)	NA
ADJ 1992 DATA TO DEC 31 (LINEAR METHOD)			
1992	5733	668	12.00

WEIGHTED AVERAGE: 11.8 % ROUND UP TO 12%

5. VALIDATION PROCEDURE: Reference data source provided by the U.S. Army Corps of Engineers, Baltimore District. Department of the Army Relocation Services Program Management Office. POC: Ms Dorine Klevinsky (410) 962-3166.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

FAX TRANSMITTAL

No. of Pages: Cover + 0 Date: 13 Nov 92

From: Ms. Lee A. Bevins, CRP
Senior Relocation Specialist

DEPARTMENT OF THE ARMY RELOCATION SERVICES
FOR EMPLOYEES (DARSE)

1-410-962-3166 or 5633
Autovon 283-3311 Ext. 3166 or 5633
FAX 1-410-962-0866 (Automatic)

To Major Fletcher

Fax No: (703)693-3322 **Phone** (703)697-6262

MEMO: DARSE (Army only)

Jan 1990 - Dec 1990 = 431
Jan 1991 - Dec 1991 = 634
Jan 1992 - Nov 12 1992 = 591

Hope this helps! One thing you need to know is if we do verify bill on area - DARSE contract calls for renegotiation of fees with the contractor - which we'll go up. For HAP budget I would suggest you contact John Downey (202) 272-8987.

Lee

EMPLOYEE
RELOCATION

National Relocations Program Office (NRPO)
U.S. Army Engineer District, Baltimore
ATTN: CENAB-RE-N
P.O. Box 1715
Baltimore, Maryland 21203-1715

PRIORITY PLACEMENT PROGRAM

Overall totals since inception of PPP

REGISTRATIONS 275,170

PLACEMENTS 102,384

These overall totals include all individuals registered in the PPP.

REGISTRATIONS/PLACEMENTS

	Registrations		Placements	TREND
1992	7407	.25	1911	25-30%
1991	18811	.31	5832	
1990	12448	.25	3101	
1989	4272	.48	2000	

PLACEMENT BREAKDOWN

	Outside Commuting Area	% of Total Placements	TREND 40-5
1992	872	40%	
1991	2327	40%	
1990	1225	39%	
1989	747	38%	

1992 Statistics are as of 30 April

... placed at a PCS

DEPARTMENT OF THE NAVY
BASE STRUCTURE ANALYSIS TEAM

FACSIMILE TRANSMISSION

From: David M. Wennergren

To:
1. Mr. Dom Miglionico, OSD, Fax: 693-7818
2. Major Chuck Fletcher, Army TABS, Fax: 693-9322
3. LTCOL John O'Neill & Mr. Steve Scovel, Air Force, Fax: 693-9707

Here are the results of the regressions on RPMA and BOS. In general, the data provided by the Army and Navy appears very consistent, yielding almost identical results. The data provided by the Air Force is somewhat less consistent. Attached pages provide details from the regressions.

Page 2 - Summary statistics for BOS and RPMA ("All" column is Army + Navy + Air Force)
Pages 3 through 7 - backup data on BOS
Pages 8 through 12 - backup data on RPMA

In summary, I recommend the following:

BOS: Recommend using the "All" value of ".54". While the statistics aren't perfect, this value appears to be a reasonably consistent index for BOS - one that takes into consideration economies of scale associated with changes in personnel-related overhead. Hypothesis testing shows that the probability of the BOS index actually being 1.0 is infinitesimally small.

RPMA: Recommend using the Army/Navy value of ".93". The extremely low Air Force value for RPMA skews the "All" value for this index. In addition, a value of .93, which is very close to 1.0, should address the Air Force's concern (as expressed by Mr. Steve Scovel) that economies of scale may be less likely to be realized for changes in RPMA costs.

12 Pages (including cover page)

Summary of Tri-Service Regression Analysis

BOS vs. Personnel

Model BOS=constant x Personnel**Index

	USN	USA	USAF	ALL
Index	0.52	0.55	0.43	0.54
St. Dev. (Index)	0.05	0.08	0.16	0.04
P(Index=1)	0.0E+00	1.9E-08	3.7E-04	0.0E+00
R-square	0.51	0.56	0.21	0.51
Commands	97	41	28	166

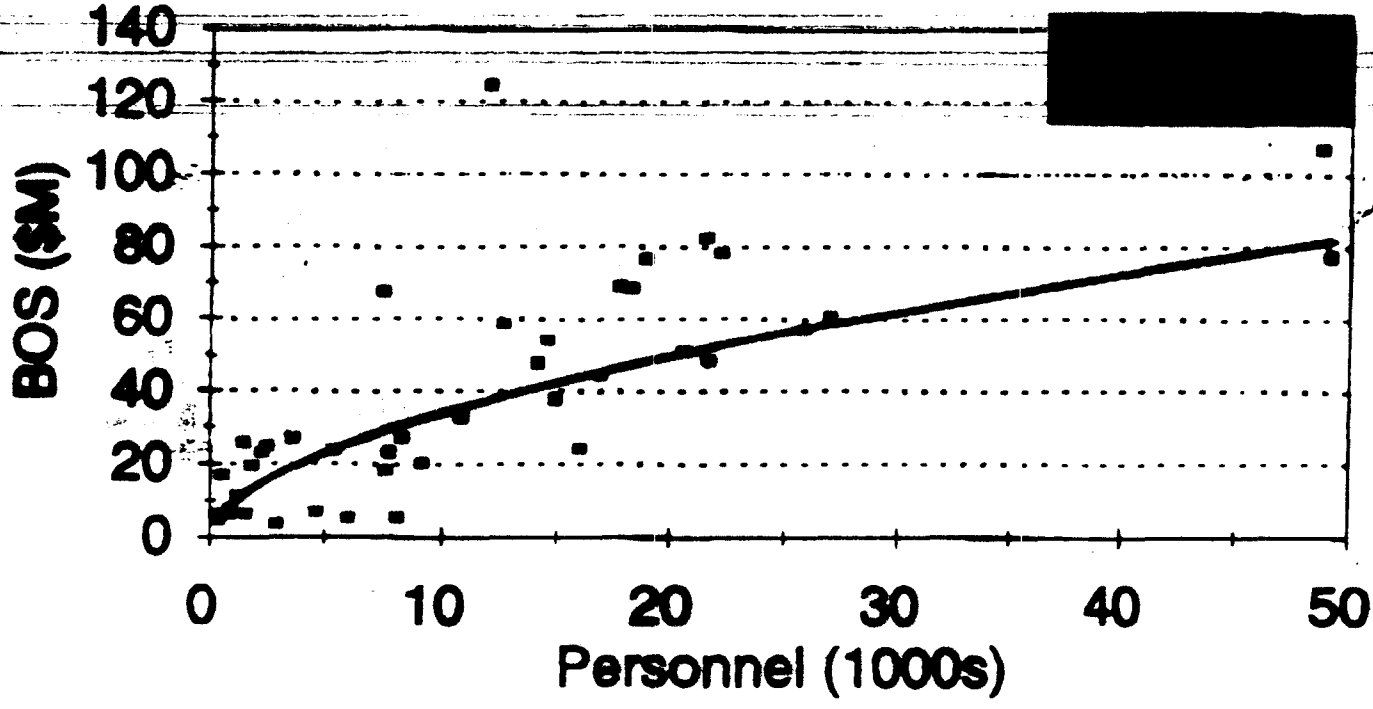
RPMA vs. SF

Model RPMA =constant x SF**Index

	USN	USA	USAF	ALL
Index	0.56	0.56	0.40	0.56
St. Dev. (Index)	0.09	0.09	0.21	0.06
P(Index=1)	0.2184	0.2184	0.0921	4.0E-08
R-square	0.54	0.74	0.12	0.48
Commands	97	41	28	166

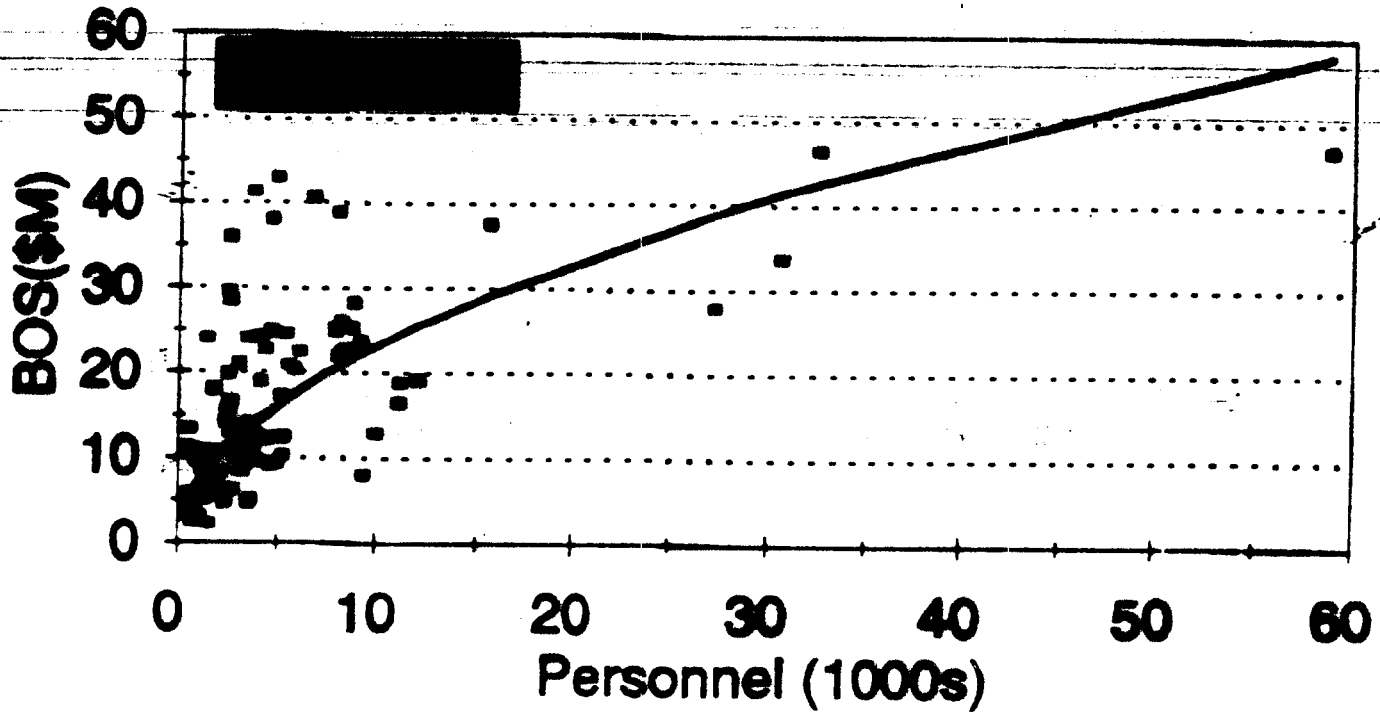
BOS vs. Personnel

Army Commands



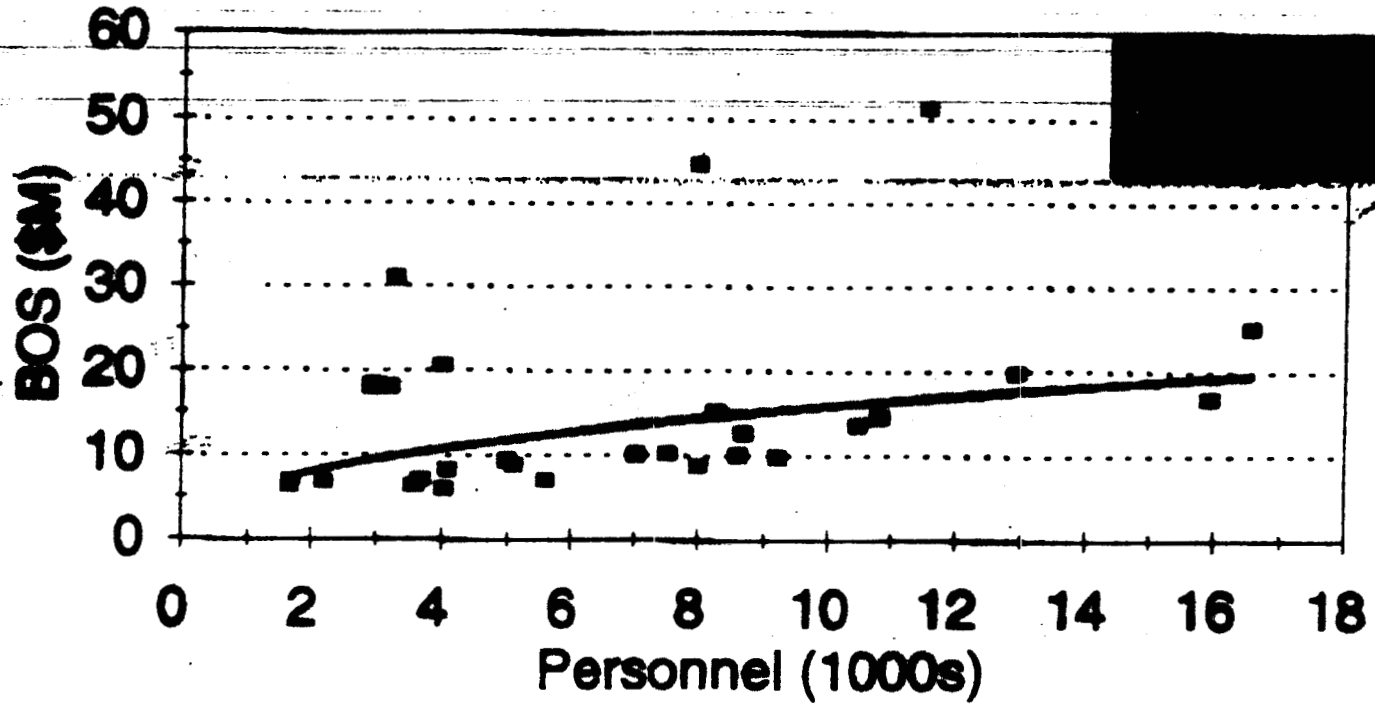
BOS vs. Personnel

Navy Commands



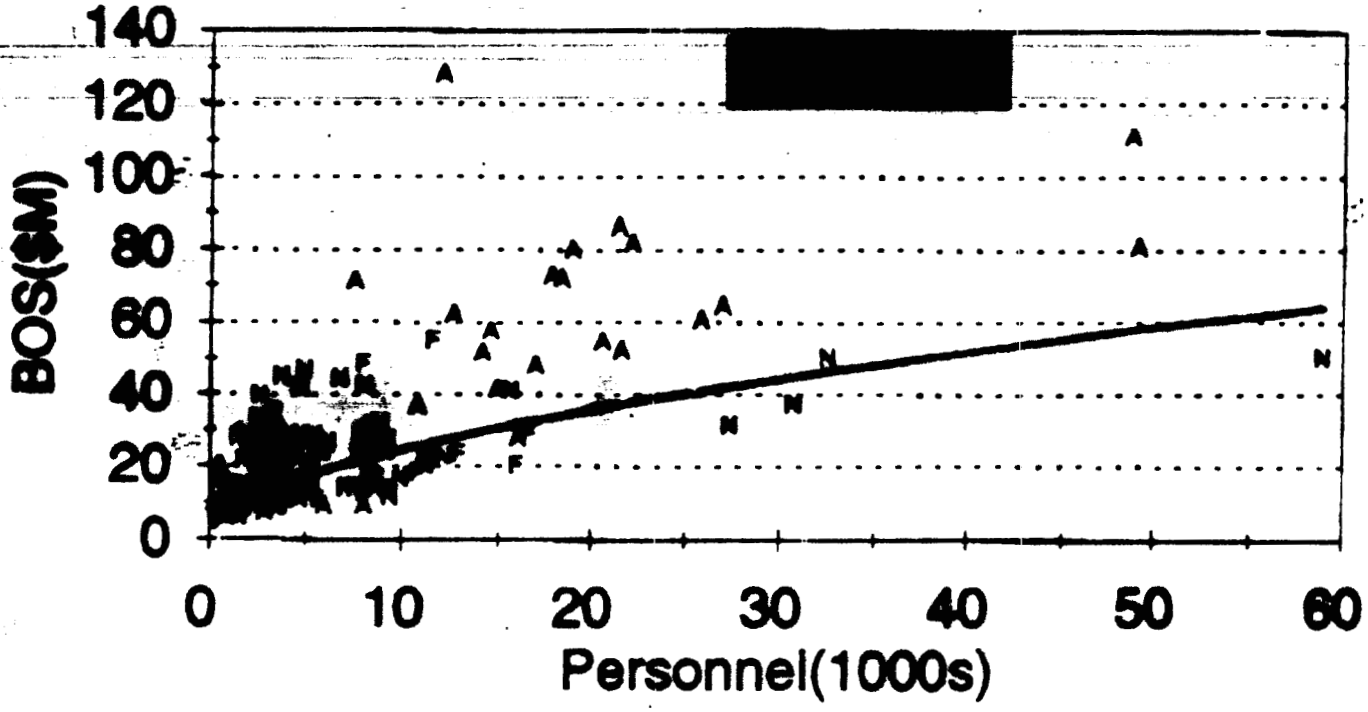
BOS vs. Personnel

USAF commands



BOS vs. Personnel

Tri-Service



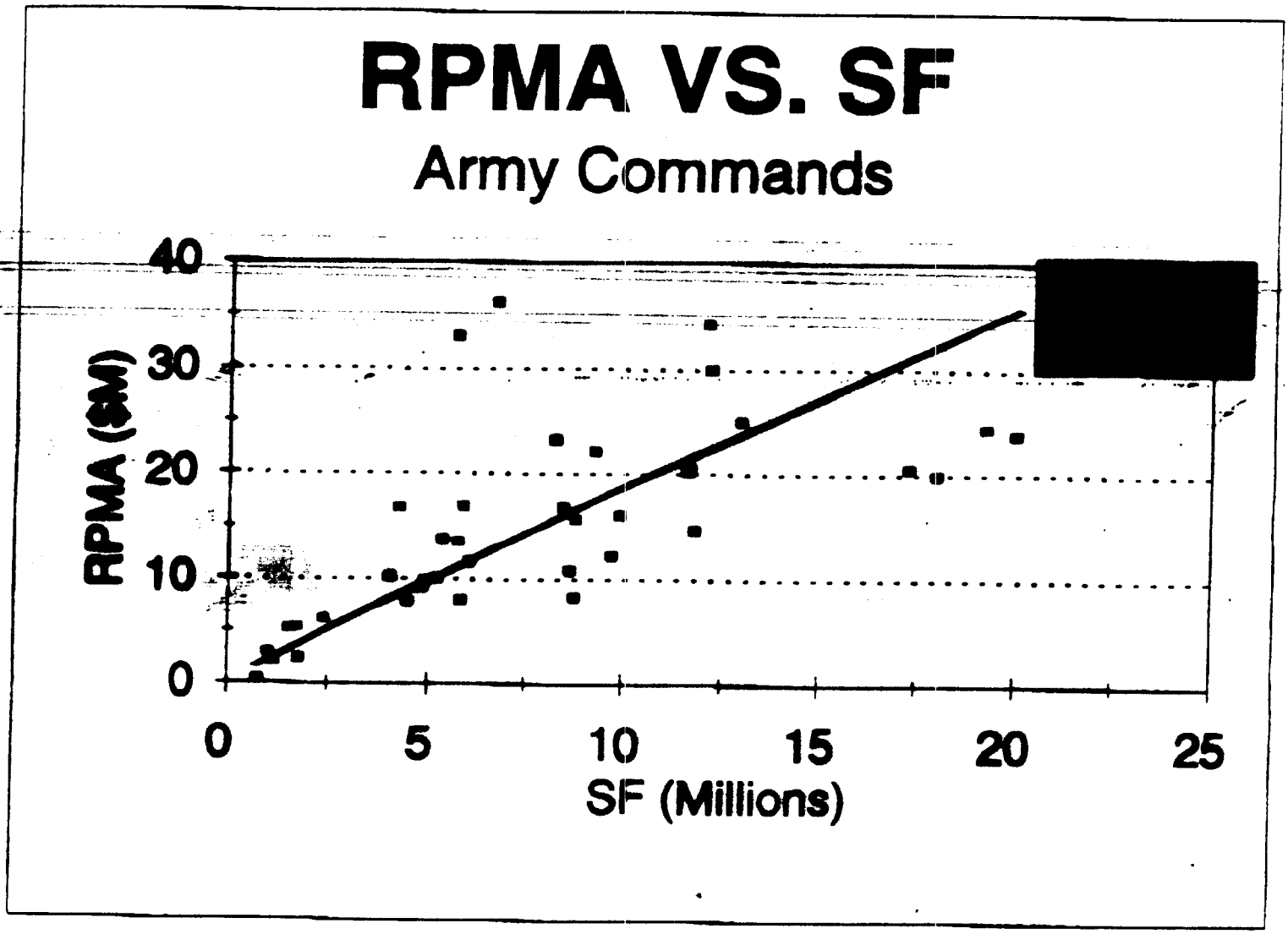
Regression Statistics

Multiple R	0.713277
R Square	0.508764
Adjusted R Square	0.505769
Standard Error	0.591101
Observations	166

Analysis of Variance

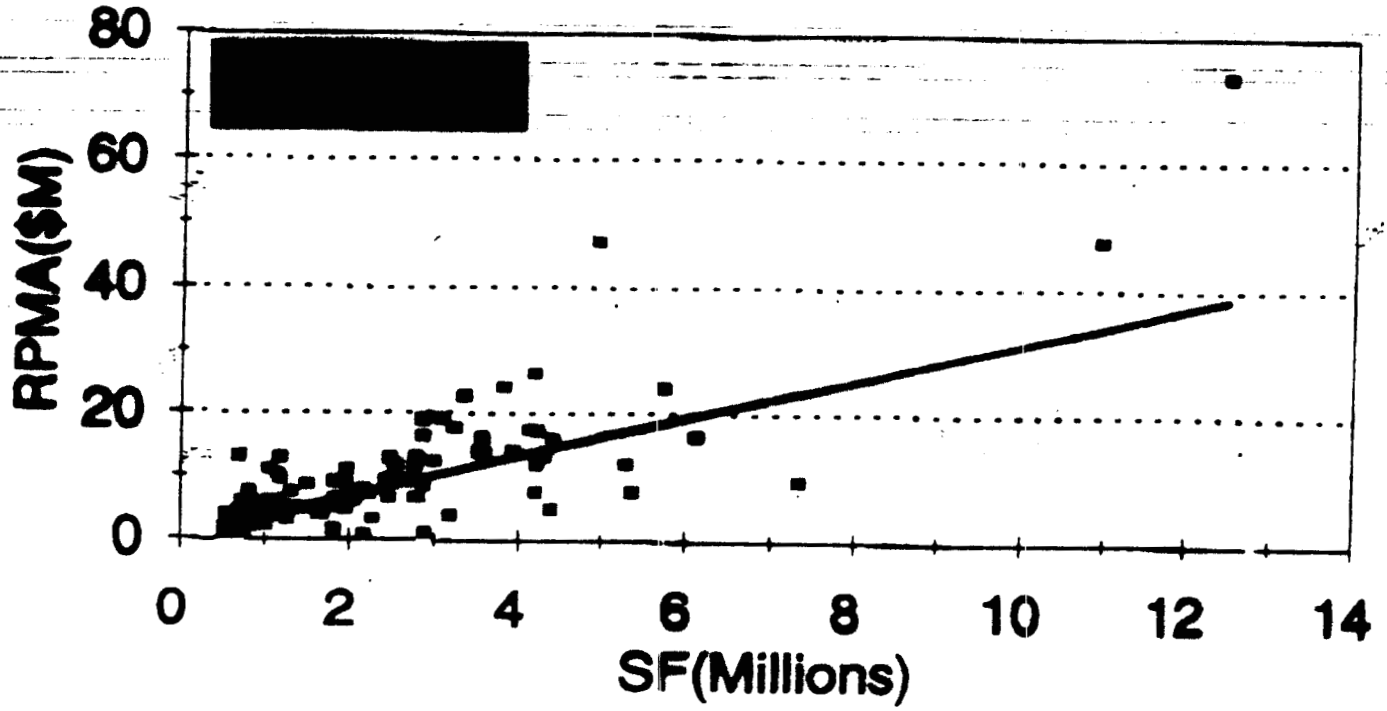
	df	Sum of Sq	Mean Sq	F	Significance F
Regression	1	59.34634	59.346	169.852	******
Residual	164	57.30163	0.349		
Total	165	116.648			

	Coefficients	Standard Error	t Statistic	P-value	Lower 95.00%
Intercept	1.945525	0.074886	25.980	0.000	1.8
x1	0.543408	0.041696	13.028	0.000	0.46


RPMA VS. SF
Army Commands
RPMA ($M)
40
30
20
10
0
0
5
10
15
20
25
SF (Millions)

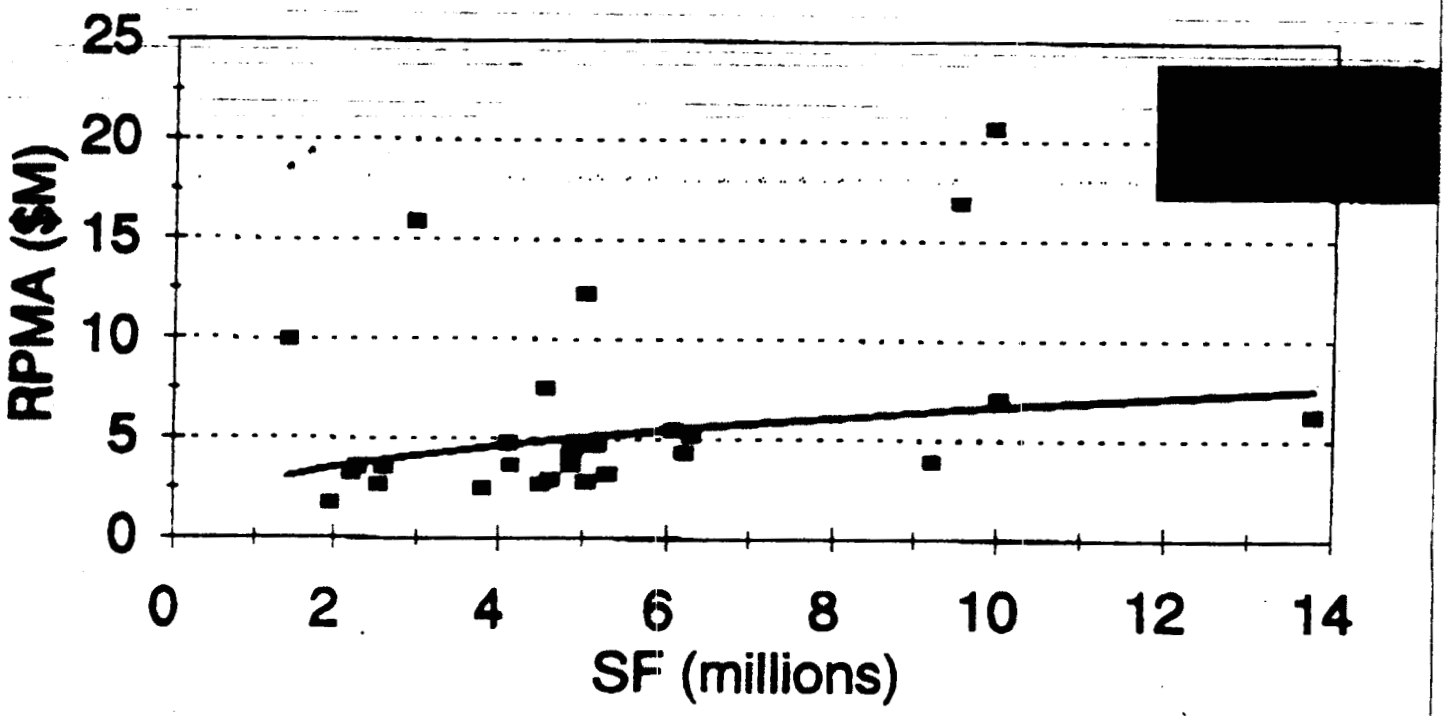
RPMA vs. SF

Navy Commands



RPMA vs. SF

USAF Commands



STANDARD FACTOR #30
RPMA BUILDINGS INDEX

1. DESCRIPTION: The exponent of base building square footage, used in Real Property Maintenance Activity cost calculations. This represents the nonlinearity of the relationship between change in base building area and the change in RPMA costs; normal value of this index is $\leq$ 1.0. (Allowed entries 0.00 to 5.00)

2. VALIDATED VALUE: 0.56

3. DATA SOURCE: BRAC 93 Standard Factors.

   a. DATE LAST UPDATED: March 1991.

   b. DATE OF NEXT UPDATE: Update with BRAC 95 RPMA data - TBA.

4. METHODOLOGY: Used an exponential distribution represented by the equation -

(TOTAL SQUARE FEET OF FACILITIES) RAISED TO THE POWER (0.56)

to describe the cost of providing Real Property Maintenance at installations. The attached graph represents the difference between actual vs. model predicted values for RPM at 50 installations.

5. VALIDATION PROCEDURE: None.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

differing per-unit costs, and a fixed-cost component that nonetheless varies somewhat with the scale of the installation.

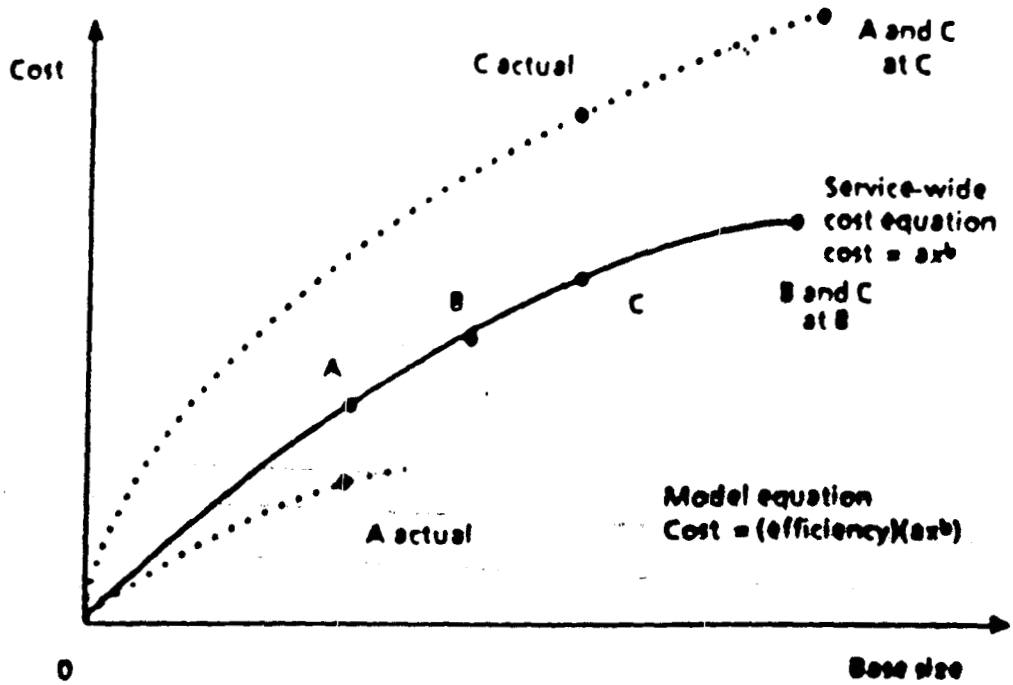


FIG. A-3. THE EXPONENTIAL MODEL

In this model, the COBRA efficiency factor has the effect of expanding or shrinking the curve to approximate the correct size for a specific base. That varies both the conceptual "fixed" cost and the slope of the curve (the per-square-foot cost). Bases A, B and C are shown as examples; notice that the large expensive base C still may allow cost savings: that is, the cost of A and C at C may be less than the combined cost of A and C operating independently. Large savings could be achieved by moving C to B.

The curve shown is notional: the exact shape of the curve for a given Service or MACOM would vary depending on the coefficients used in the cost equation.

COBRA Calculation of Overhead

COBRA includes two components of cost for RPMA: costs attributable t maintenance of buildings, based on a square foot measurement, and cost

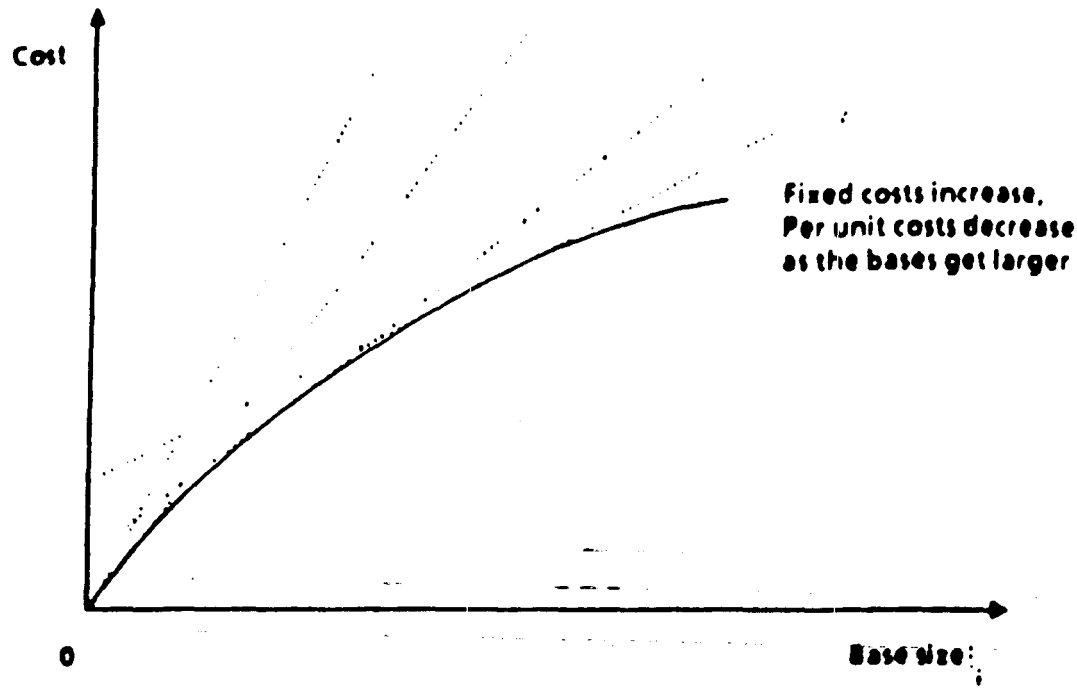


FIG. A-4. EXPONENTIAL AS SUCCESSIVE APPROXIMATIONS

attributable to grounds maintenance, based on an acreage measurement. The equations contained in COBRA for RPMA are:

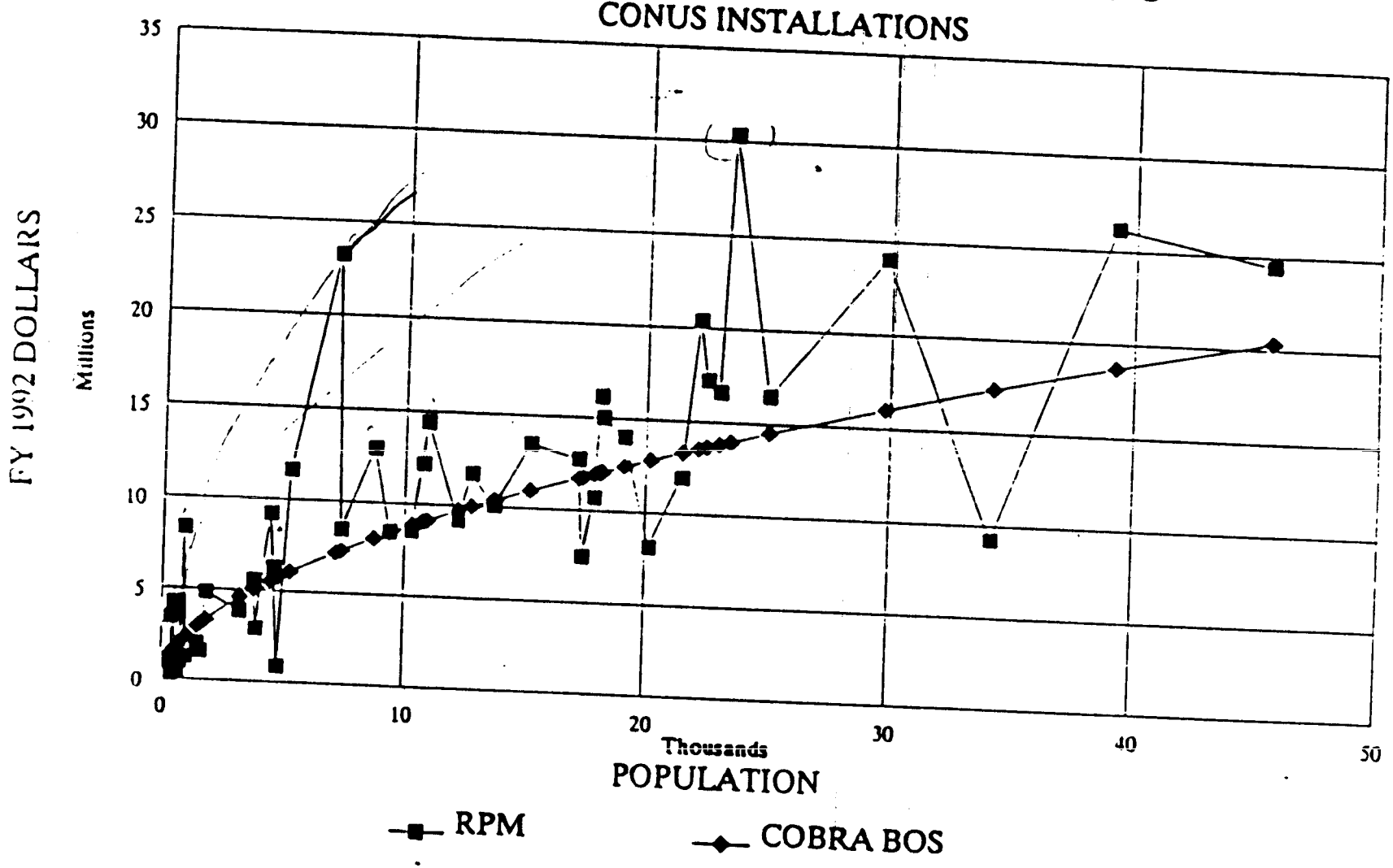
RPMA budget = efficiency x $a(X_1^b)(X_2^c)$,

where efficiency = actual budget divided by predicted budget
X_1 = square feet of facilities (data input)
X_2 = average on installation (data input)
and a, b, c are model coefficients.

The predicted budget assumes efficiency at 1 to allow the calculation of the efficiency factor. In determining new budgets, the square footage is incremented at the gaining bases by any new construction, and decremented at the losing base by the amount of facilities deactivated, if any. New construction is not assessed a maintenance fee in the first 2 years. Acreage is increased at the gaining bases starting in Year 1 by the amount of any land purchased, and decreased at the losing base beginning in the sale year by the amount of any land sold.

		FY92 DOLLARS		MARGINAL	AVERAGE
	POP	BPM	FORMULA	COST	COST
ORT A P HILL**	340	949203	1307971		3847
RT PICKETT**	366	3443955	1363074	2081	3724
OTTEN**	370	923334	1371396	2052	3706
MP BULLIS**	390	261968	1412428	1953	3622
FT CHAFFEE**	461	4242562	1551110	1822	3365
FORT HUNTER-LIGGET	536	702125	1687727	1698	3149
FORT HOLABIRD**	634	376667	1854129	1625	2924
FT DOUGLAS**	656	646845	1889888	1554	2881
CHARLES E. KELLY SPT	774	956736	2073313	1469	2679
FT HAMILTON**	851	8309999	2186405	1387	2569
FORT INDIANTOWN GAP	1002	1250538	2395830	1227	2391
CARLISLE BARRACKS	1462	2033153	2960333	1110	2025
FT STORY**	1611	1594059	3125673	1062	1940
FORT MCCOY	1788	4820953	3313567	904	1853
FORT SHERIDAN	3202	3904495	4592043	802	1434
FORT GILLEM**	3217	3825858	4604077	774	1431
FT MONROE**	3766	5579207	5028784	743	1335
HUNTER ARMY AIRFIEL	3873	2936983	5108302	717	1319
FORT MCPHERSON**	4435	9199582	5511000	690	1243
FORT IRWIN & NTC	4601	6241491	5625579	679	1223
PRESIDIO OF MONTERE	4781	878616	5747785	660	1202
PRESIDIO OF SAN FRAI	5226	11638825	6041501	604	1156
FT LEAVENWORTH	7085	23187227	7164078	562	1011
FORT DEVENS	7316	8459998	7293958	537	997
ENJAMIN HARRISO	8672	12951607	8022631	510	925
CCLELLAN	9334	8421365	8360033	486	896
ACHUCA	10278	8509898	8823458	475	858
FT RUCKER	10709	12183163	9028787	470	843
FT EUSTIS**	10891	14458116	9114397	457	837
ORT DRUM	12214	9170392	9718751	441	796
FT LEE	12803	11780234	9978484	430	779
FT DIX**	13721	10045865	10373040	414	756
FT GORDON	15133	13492824	10957917	394	724
FT JACKSON	17129	12766771	11745187	383	686
FORT ORD**	17321	7466317	11818731	380	682
FORT STEWART**	17792	10706044	11997641	377	674
FORT CARSON**	18029	16125588	12086878	375	670
FORT RILEY	18097	15021904	12112386	371	669
FORT POLK	19037	14018421	12460778	362	655
FORT SAM HOUSTON**	20145	8105294	12861857	353	638
FT LEONARD WOOD	21461	11963882	13325821	345	621
FT KNOX	22098	20383941	13545894	342	613
FT SILL**	22423	17166969	13657100	339	609
FT BLISS	22949	16590751	13835591	336	603
FORT LEWIS	23403	30318108	13988207	330	598
FORT CAMPBELL	24983	16440455	14509451	313	581
FT BENNING	29727	24042099	15993172	292	538
MEADE**	34153	9213297	17285827	275	506
HOOD	39192	26154479	18670698	258	476
FO BRAGG**	45612	24454823	20326112		446

FY90 ACTUALS vs COBRA BOS



EXPONENT FACTOR USED: 0.56

DEPARTMENT OF THE NAVY
BASE STRUCTURE ANALYSIS TEAM

FACSIMILE TRANSMISSION

From: David M. Wennergren

To:
1. Mr. Dom Miglionico, OSD, Fax: 693-7818
2. Major Chuck Fletcher, Army TAES, Fax: 693-9322
3. LTCOL John O'Neill & Mr. Steve Scovel, Air Force, Fax: 693-9707

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	USN	USA	USAF	ALL
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St. Dev. (Index)	0.05	0.08	0.16	0.04
P(Index=1)	0.0E+00	1.9E-08	3.7E-04	0.0E+00
R-square	0.51	0.58	0.21	0.51
Commands	97	41	28	166

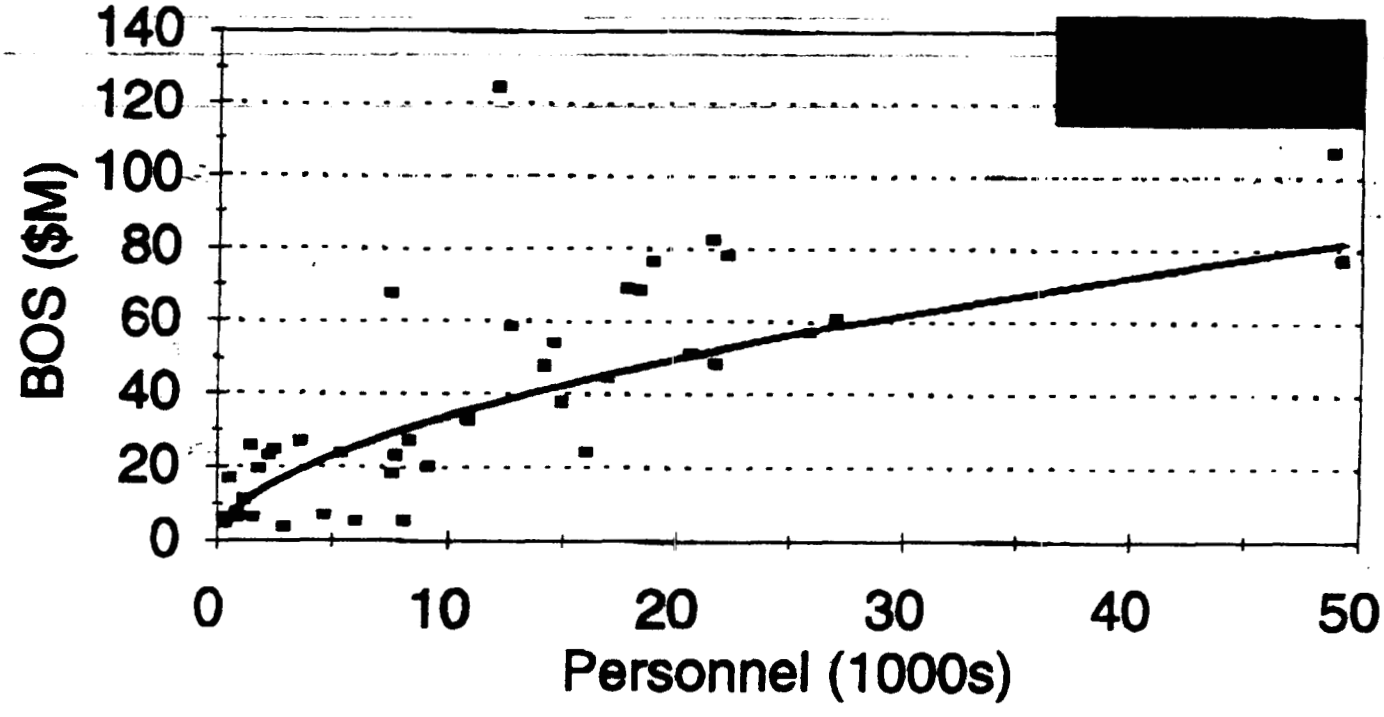
RPMA vs. SF

Model RPMA =constant x SF**Index

	USN	USA	USAF	ALL
Index	0.93	0.93	0.40	0.68
St. Dev. (Index)	0.09	0.09	0.21	0.06
P(Index=1)	0.2184	0.2184	0.0021	4.8E-08
R-square	0.54	0.74	0.12	0.43
Commands	97	41	28	166

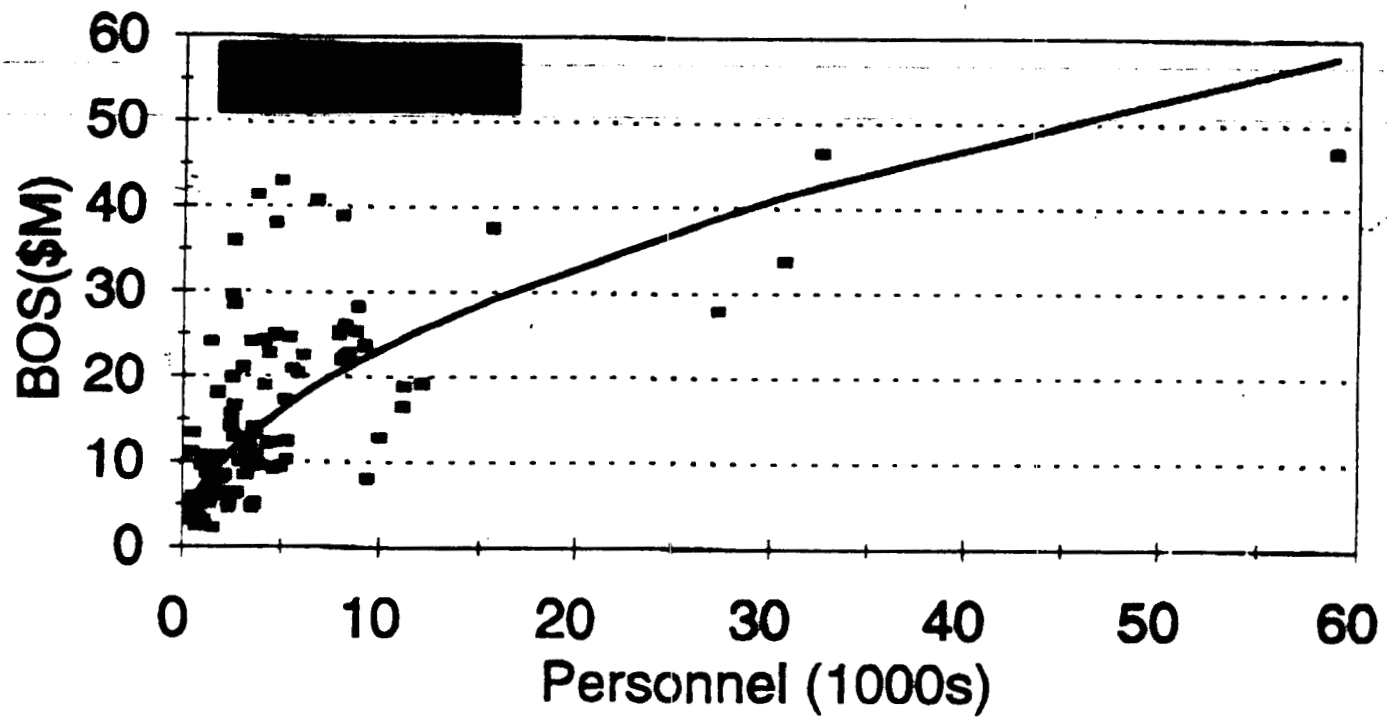
BOS vs. Personnel

Army Commands



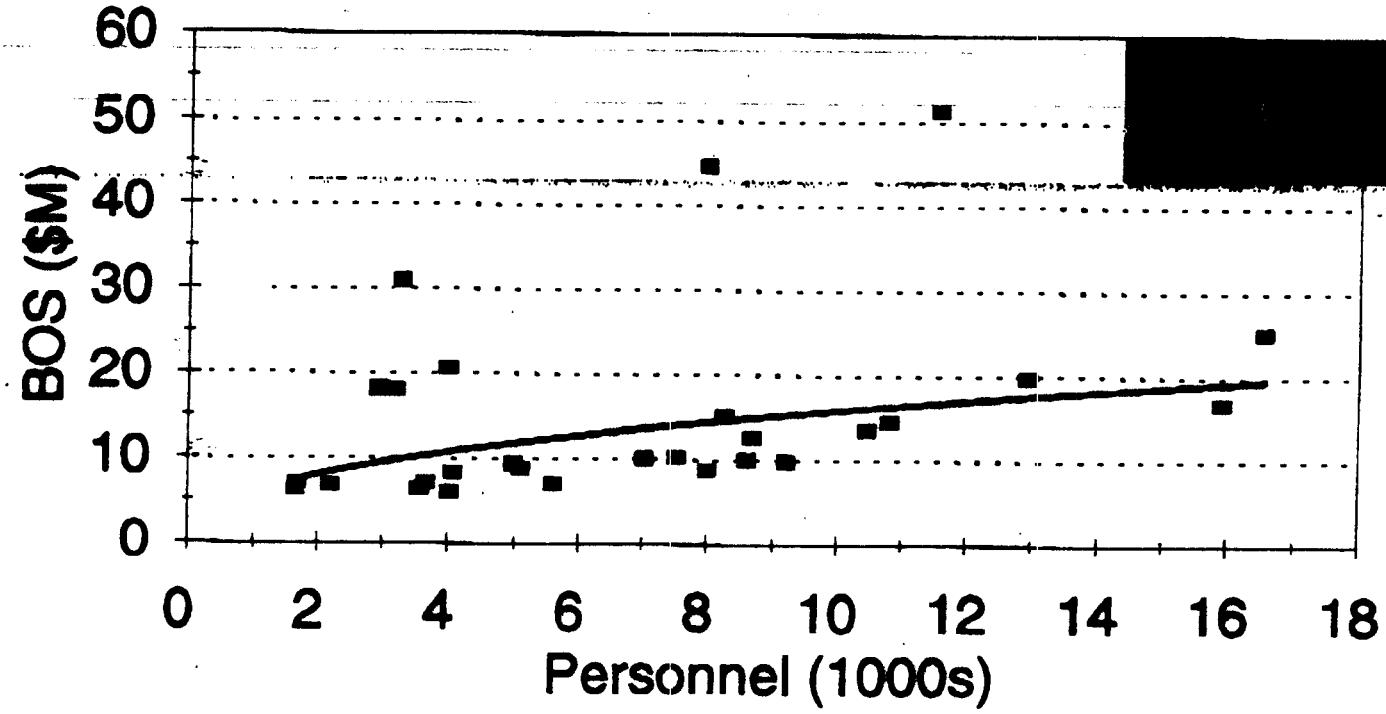
BOS vs. Personnel

Navy Commands



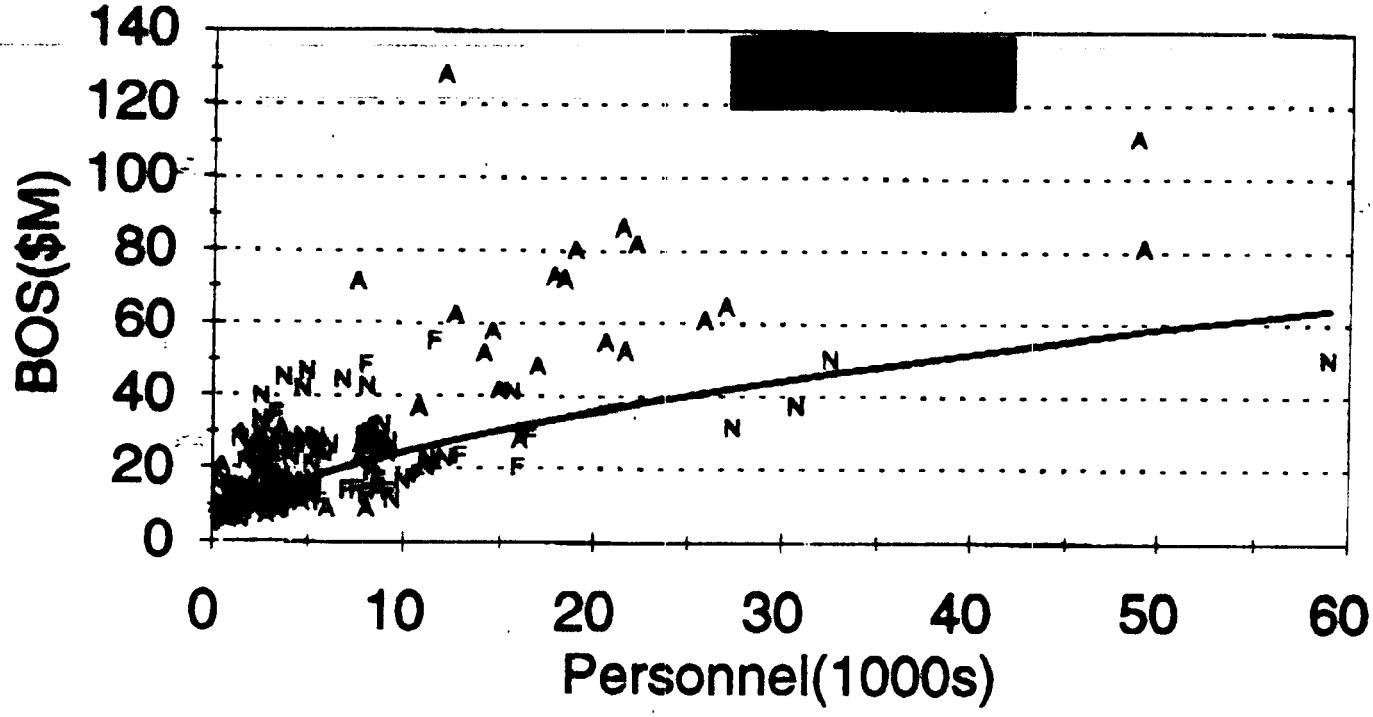
BOS vs. Personnel

USAF commands



BOS vs. Personnel

Tri-Service



Regression Statistics

Multiple R	0.713277
R Square	0.508764
Adjusted R Square	0.505769
Standard Error	0.591101
Observations	166

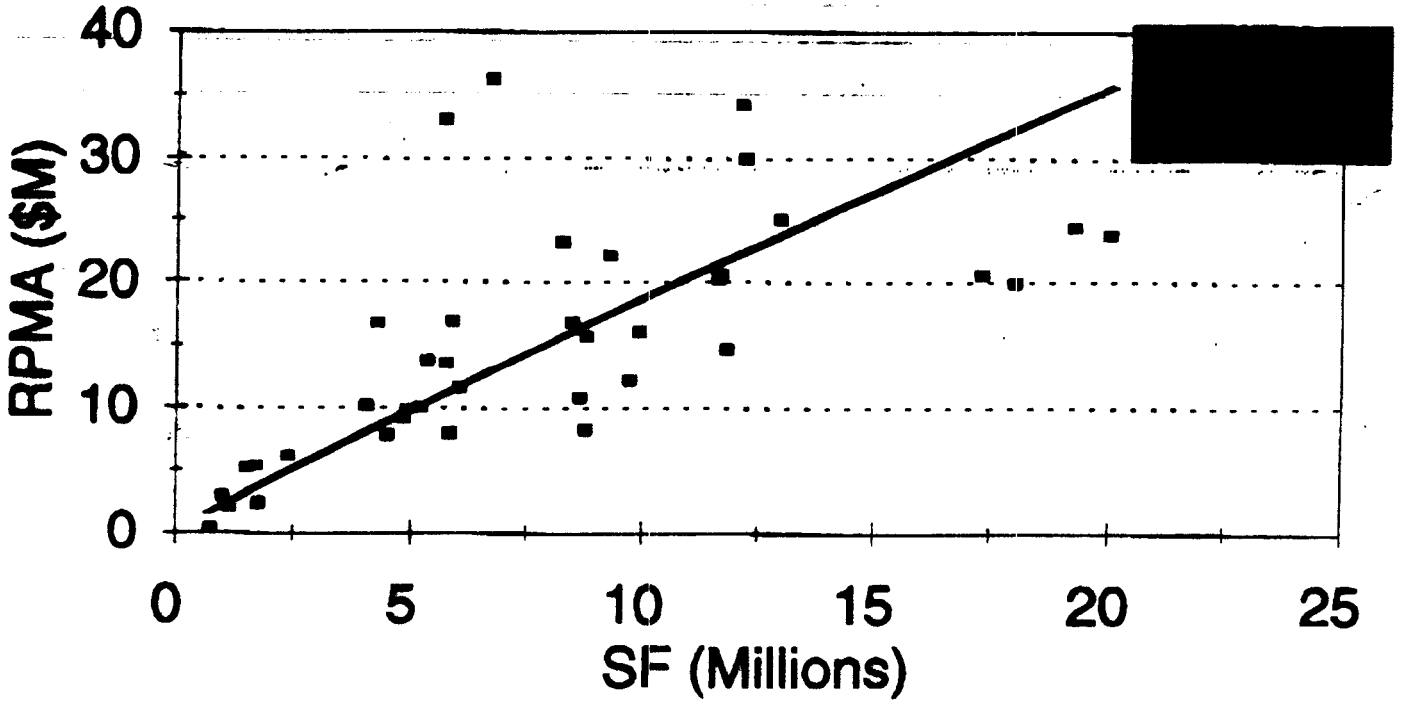
Analysis of Variance

	df	Sum of Sc	Mean Sq	F	Significance F
Regression	1	59.34634	59.346	169.852	******
Residual	164	57.30163	0.349		
Total	165	116.648			

	Coefficie	Standard	t Statistic	P-value	Lower 95.00%
Intercept	1.945525	0.074856	25.990	0.000	1.8
x1	0.543408	0.041696	13.033	0.000	0.46

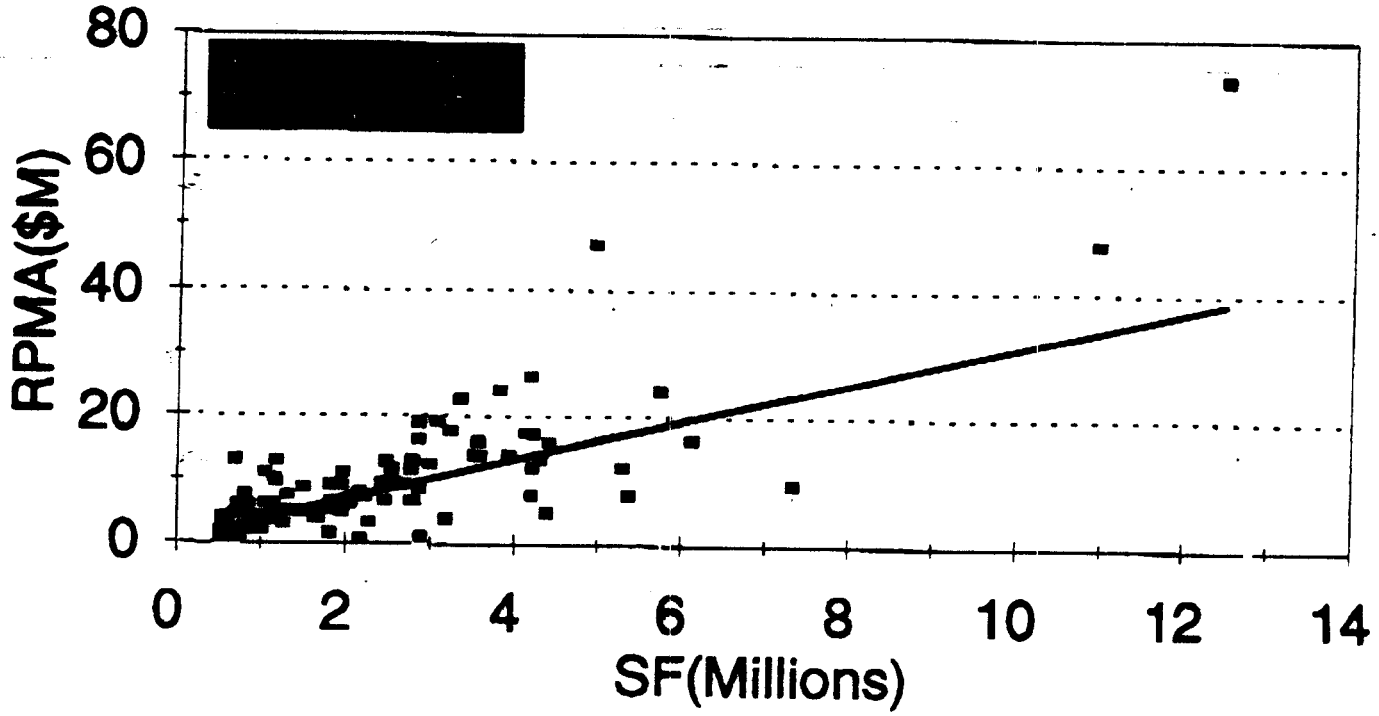
RPMA VS. SF

Army Commands



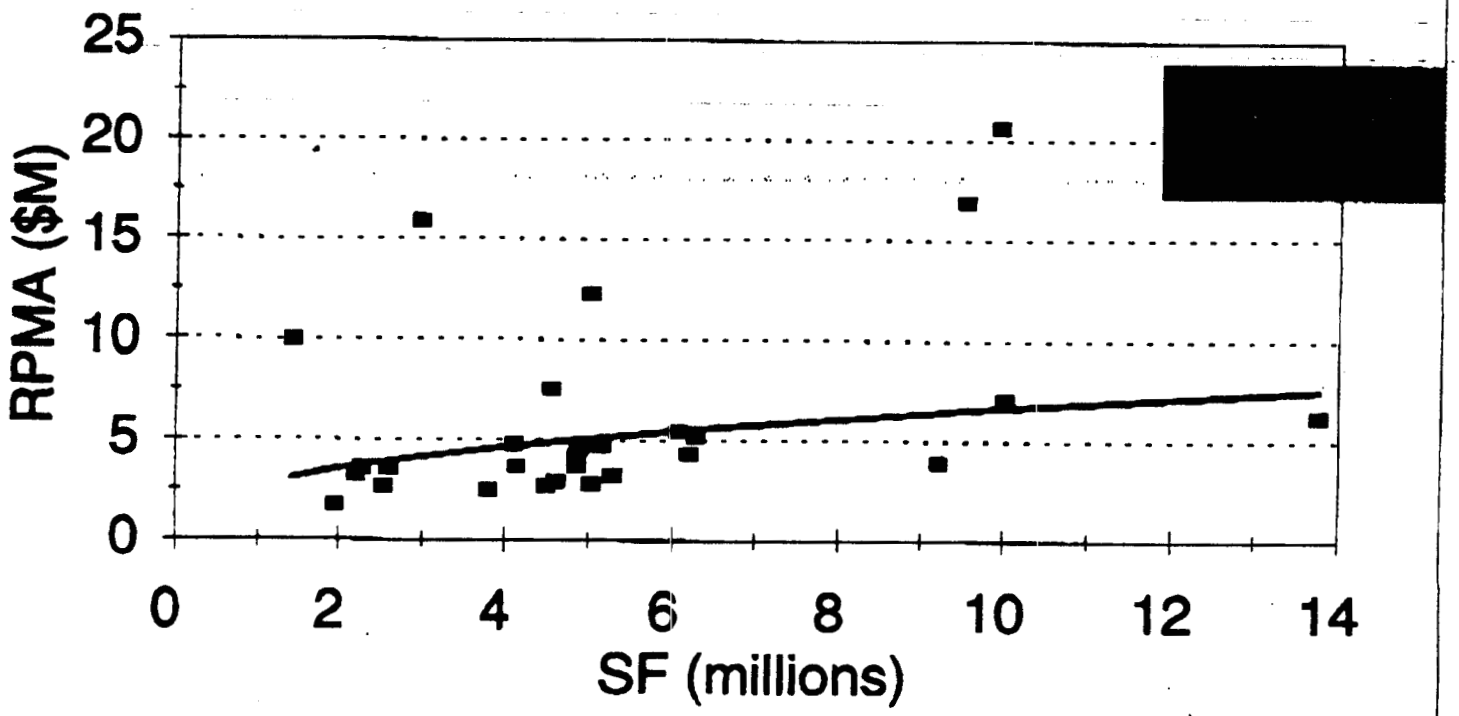
RPMA vs. SF

Navy Commands



RPMA vs. SF

USAF Commands



STANDARD FACTOR #31
BOS POPULATIONS INDEX

1. DESCRIPTION: The exponent of base population, used in Base Operations and Support cost calculations. This represents the nonlinearity of the relationship between change in base population and the change in BOS costs; normal value of this index is $\leq$ 1.0. (Allowed entries 0.00 to 10.00)

2. VALIDATED VALUE: 0.64

3. DATA SOURCE: BRAC 93 Standard Factors.

a. DATE LAST UPDATED: March 1991.

b. DATE OF NEXT UPDATE: Update with BRAC 95 BOS data-TBA.

4. METHODOLOGY: Used an exponential distribution of FY 1990 execution data represented by the equation -

(TOTAL PERSONNEL) RAISED TO THE POWER (0.64)

to describe the cost of providing Base Operating Support at installations. The attached graph represents the difference between actual vs. model predicted values for BOS at 50 installations.

5. VALIDATION PROCEDURE: None.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, GS
OPERATIONS ANALYST

differing per-unit costs, and a fixed-cost component that nonetheless varies somewhat with the scale of the installation.

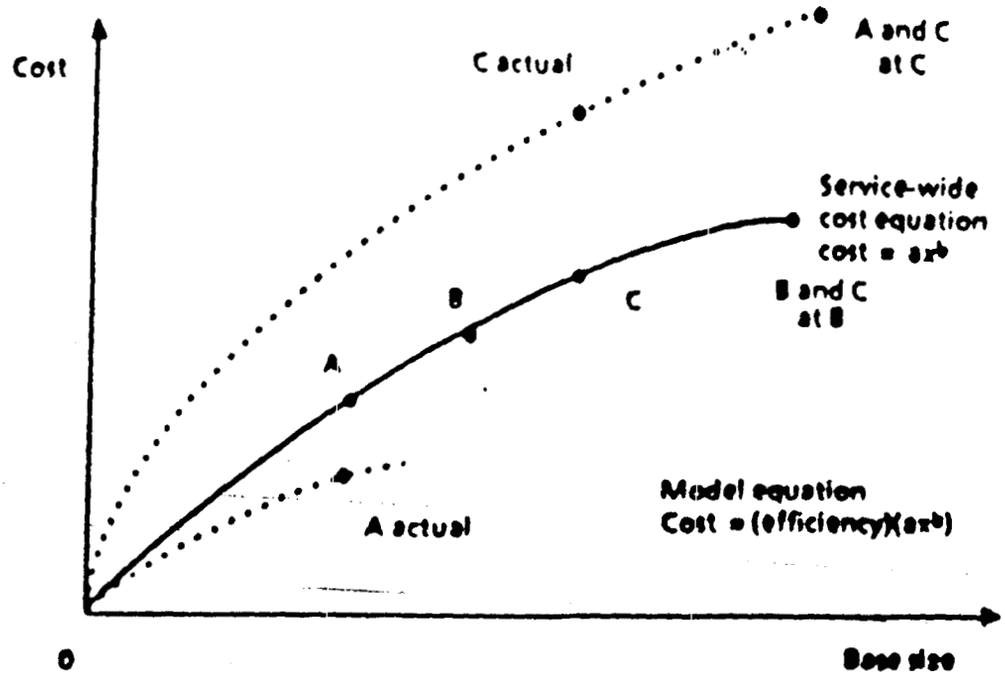


FIG. A-3. THE EXPONENTIAL MODEL

In this model, the COBRA efficiency factor has the effect of expanding or shrinking the curve to approximate the correct size for a specific base. That varies both the conceptual "fixed" cost and the slope of the curve (the per-square-foot cost). Bases A, B and C are shown as examples; notice that the large expensive base C still may allow cost savings: that is, the cost of A and C at C may be less than the combined cost of A and C operating independently. Large savings could be achieved by moving C to B.

The curve shown is notional: the exact shape of the curve for a given Service o MACOM would vary depending on the coefficients used in the cost equation.

COBRA Calculation of Overhead

COBRA includes two components of cost for RPMA: costs attributable t maintenance of buildings, based on a square foot measurement, and cos

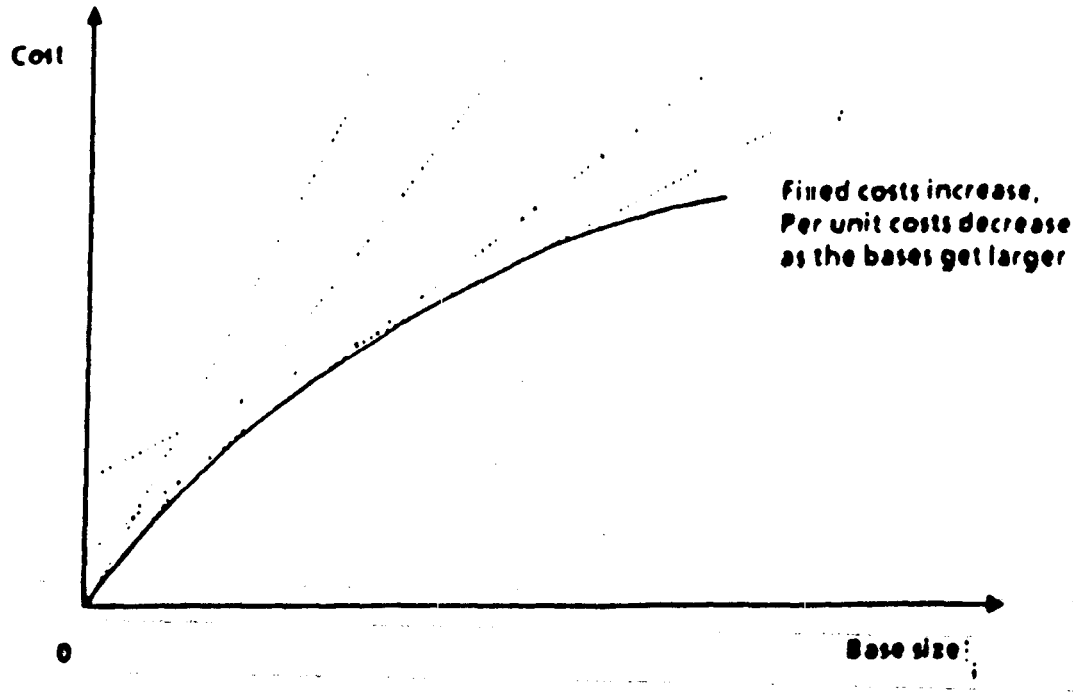


FIG. A-4. EXPONENTIAL AS SUCCESSIVE APPROXIMATIONS

attributable to grounds maintenance, based on an acreage measurement. The equations contained in COBRA for RPMA are:

RPMA budget = efficiency x $a(X_1^b)(X_2^c)$,

where efficiency = actual budget divided by predicted budget
X_1 = square feet of facilities (data input)
X_2 = average on installation (data input)
and a, b, c are model coefficients.

The predicted budget assumes efficiency at 1 to allow the calculation of the efficiency factor. In determining new budgets, the square footage is incremented at the gaining bases by any new construction, and decremented at the losing base by the amount of facilities deactivated, if any. New construction is not assessed a maintenance fee in the first 2 years. Acreage is increased at the gaining bases starting in Year 1 by the amount of any land purchased, and decreased at the losing base beginning in the sale year by the amount of any land sold.

NALAVERAGE
OST COST
3847
081 3724
052 3706
953 3622
322 3365
598 3149
525 2924
554 2881
169 2679
187 2569
27 2391
10 2025
62 1940
04 1853
02 1434
74 1431
43 1335
17 1319
90 1243
79 1223
60 1202
04 1156
52 1011
37 997
10 925
36 896
75 858
0 843
7 837
1 796
0 779
4 756
4 724
3 686
0 682
7 674
5 670
1 669
2 655
638
621
613
609
603
598
581
538
506
476
446

CARETAKER ADMIN SPACE

1. Description.

The average administrative space required for each caretaker. (Allowed entries 0 to 1MSF)

2. Validated Value. 162 SF

3. Data Source. July 1994 HQRPLANS space planning criteria. R&K Engineering uses the most recent Corps of Engineers publications, based upon DOD guidance, for unit space planning criteria. Caretaker admin space requirement is the same factor used for HQRPLANS space planning for typical US Army space requirements, as outlined in AR 405-70, Utilization of Real Property, dated 15 September 1993.

a. Date last updated: July 1994

b. Date of next update: September 1994

4. Methodology.

Caretaker Admin requirement is equal to Army Standard used in HQRPLANS.

5. Validation Procedures.

BRAC 93 caretaker admin space need was also 162 SF. Army Standard has not changed since BRAC 93.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

MEMORANDUM FOR THE RECORD 3 Oct 94

SUBJECT: DEACTIVATION OF FACILITIES - "MOTHBALL" OR "PICKLING" COST

Each of the Services' Civil Engineers have compiled data showing a wide range of costs for deactivation of facilities. The Air Force defines six discrete levels of maintenance from Level 1, Occupied/Operational; to Level VI, Vacant/Boarded/Abandoned. Level IV, Vacant/Lts-Off/HVAC-Off, represents the most likely level for a closed base. Air Force experience is that the actual cost of labor and materials for the deactivation in FY 1992 dollars was approximately $0.10 per square foot, and the cost of the first year's maintenance at this low level ranged from $0.99 down to zero. The Air Force Materiel Command Civil Engineer reported mothball costs from $1.15 to $1.55 per square foot for 1992 for a combination of industrial and warehouse space.

Army experience was that cost of stabilization was $0.88 per square foot at the Presidio, if the property was to be turned over for use within one year, also 1992 dollars.

For the purposes of COBRA analyses, a representative mid-range value must be selected, recognizing that unusual facilities or climates may result in costs higher or lower than the model factor. I chose $1.25 per square foot, FY 1996 dollars, as it is the approximate mid-point of the range of values we collected.

Sensitivity of total one-time cost of closure and return on investment (ROI) to this factor is minimal. Air Force bases can range from approximately two million square feet for an small pilot training base to more than fourteen million at the largest Air Logistics Centers, but within a category of bases the range is relatively small, generally less than two to one from the largest to the smallest. Any change in the mothball cost factor tends to affect all bases similarly. Total one-time cost of closure can range from approximatley $20-30 million to over $1 billion. Adopting a mothball cost factor at either extreme of our range changes the total cost of closure for low range bases by less than $1 million, and by about $6 million for the largest Air Force base. A change of this magnitude will not materially affect any closure or realignment decision and is unlikely to change the (ROI) year.

STEPHEN SCOVEL
Cost Analyst
SAF/FMCCA

STANDARD FACTOR #34
MOTHBALL COST

1. Description.

The average cost to mothball facilities.(Allowed entries 0.00 to 100.00 $/SF)

2. Validated Value. ~~$1.00/SF~~ – CHANGED to $1.25/SF BASED ON AF DATA. - SEE POLICY MEMO #3 cVF

3. Data Sources.

a. USACERL Tech Report M-91/23, Layaway Procedures for U.S. Army Facilities, Volume 1: Decision Criteria and Economics, dated July 1991.

b. Memorandum for Record, dated 1 October 1992, Subject: TABS 93 -- Data for COBRA, PSF Input.

c. DAIM-FDP-A study dated 13 October 1993, that estimates the mothballing costs for a notional heavy brigade.

a. Date last updated: As Stated

b. Date of next update: N/A

4. Methodology.

Reference 3a. is a study performed by the Construction Engineering Research Laboratory which described the facility layaway procedures for U.S. Army facilities, with an emphasis on Fort Dix, New Jersey. This reference uses a mothball cost of $.58/SF factor, but 70% of the 3.6MSF in the study is WWII Wood.

Reference 3b. documents the factors used by the Presidio of San Francisco to layaway permanent buildings, maintaining outer envelope heat and fire protection (water, alarms) to protect the interior. The factor used for this level of mothballing was $2.62.

Reference 3c. documents a DAIM-FDP-A study to determine mothball costs for a notional heavy brigade. This study cites references 3a. and 3b. and also documents the Fort Hood 2d AD mothball experience with a factor of $.20/SF and the Fort Sheridan AFH deactivating costs factor of $.35/SF. This study selected $1.00/SF as a professionally sound estimate.

5. Validation Procedures.

BRAC 93 mothballing costs were left at $0.00. Professional judgement and the references suggest that the correct number is somewhere between the low of $.20 and the high of $2.62. The low numbers were based on either very short term mothballing or the

mothballing of temporary wood structures. The high of $2.62 were based on maintaining heat and water in buildings which may not be necessary for the mothballing that will be required in BRAC 95. A cost of $1.00 /SF seems to be a logical breakpoint between the high and low estimates contained in the references.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

STANDARD FACTOR #35

AVG BACH QTRS (UNACCOMPANIED ENLISTED HOUSING) SIZE

1. Description.

61. The average square feet of unaccompanied enlisted housing (UEH). This is used to calculate the number of UEH spaces a construction project will produce. (Allowed entries 0 to 500 SF)

62. The average square feet of family quarters. This is used to calculate the number of family quarters a construction project will produce. (Allowed entries 0 to 2000 SF)

2. Validated Values. UEH: 388 SF
Family Housing : 1819 SF

3. Data Sources.

July 1994 HQRPLANS Cost Factor and Escalation tables, US Army Corps of Engineers Architectural and Engineering Instructions (AEI), and Jun 1994 Personnel Management Authorization Document (PMAD). R&K Engineering uses most recent Corps of Engineers publications, based upon DOD guidance, for unit cost and inflation factors use in HQRPLANS.

a. Date last updated:

HQRPLANS:	July 1994
AEI:	December 1991
PMAD	June 1994

b. Date of next update:

HQRPLANS:	December 1994
AEI:	unknown
PMAD:	September 1994

4. Methodology.

61. UEH Average size GSF 388 SF based upon new 1 plus 1 standard design for Grades E-1 to E-4.

62. Family Quarters Avg size GSF 1819. NSF from 10 USC 2826

total	13100
average	1456

5. Validation Procedures.

Gross Square Footage for UEPH is based on a 388 GSF standard for the 1 plus 1 design for E1-E4.

Gross Square Footage for Army Family Housing is based upon the Net Square Feet allowances in 10 USC. sec. 2826. The highest and lowest NSF allowances (General Officer and two bedroom units) were eliminated as unlikely to be built. The remaining by grade allowances were averaged to derive 1456 NSF. This figure was then inflated by 25 percent to reflect gross square feet. OSD Housing recommended reference to sec. 2826 to get an average; Army housing stated that they did not use averages, but rather programmed by bedroom requirements. Local housing markets are DODs first source of housing, and are likely to best respond to small unit (2-3 bedrooms) demands quickly. On-post requirements tend to be in the 4-5 bedroom range.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

STANDARD FACTOR #36
AVG FAMILY QTRS SIZE

1. Description.

61. The average square feet of unaccompanied enlisted housing (UEH). This is used to calculate the number of UEH spaces a construction project will produce. (Allowed entries 0 to 500 SF)

62. The average square feet of family quarters. This is used to calculate the number of family quarters a construction project will produce. (Allowed entries 0 to 2000 SF)

2. Validated Values. UEH: 388 SF
Family Housing : 1819 SF

3. Data Sources.

July 1994 HQRPLANS Cost Factor and Escalation tables, US Army Corps of Engineers Architectural and Engineering Instructions (AEI), and Jun 1994 Personnel Management Authorization Document (PMAD). R&K Engineering uses most recent Corps of Engineers publications, based upon DOD guidance, for unit cost and inflation factors use in HQRPLANS.

a. Date last updated:
HQRPLANS: July 1994
AEI: December 1991
PMAD June 1994

b. Date of next update:
HQRPLANS: December 1994
AEI: unknown
PMAD: September 1994

4. Methodology.

61. UEH Average size GSF 388 SF based upon new 1 plus 1 standard design for Grades E-1 to E-4.

62. Family Quarters Avg size GSF 1819. NSF from 10 USC 2826

total	13100
average	1456

5. Validation Procedures.

Gross Square Footage for UEPH is based on a 388 GSF standard for the 1 plus 1 design for E1-E4.

Gross Square Footage for Army Family Housing is based upon the Net Square Feet allowances in 10 USC. sec. 2826. The highest and lowest NSF allowances (General Officer and two bedroom units) were eliminated as unlikely to be built. The remaining by grade allowances were averaged to derive 1456 NSF. This figure was then inflated by 25 percent to reflect gross square feet. OSD Housing recommended reference to sec. 2826 to get an average; Army housing stated that they did not use averages, but rather programmed by bedroom requirements. Local housing markets are DODs first source of housing, and are likely to best respond to small unit (2-3 bedrooms) demands quickly. On-post requirements tend to be in the 4-5 bedroom range.

STATEMENT OF CERTIFICATION:

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DAVID A. YENTZER
Chief,
Installation Planning Division

STANDARD FACTOR #37
REHAB vs. NEW CONSTRUCT

1. Description.

The average percent of new construction costs required to rehabilitate a space of equal size. This factor is used to adjust project costs for rehabilitation rather than new construction. (Allowed entries 0.0 to 100.0 percent)

2. Validated Value 59%

3. Data Sources. July 1994 BRAC Construction Database (DAIM-FDP-A)

a. Date last updated: July 1994

b. Date of next update: Monthly

4. Methodology.

BRAC 91 used a rehab factor of 60%. The AAA audit of BRAC 91 specified that 60% was too low and that 75% should be used. For BRAC 93, 75% was used based on the AAA comments during BRAC 91. However, during BRAC 93, the Army was cited by the AAA for using 75% without adequate documentation in a draft finding that was not published. In an effort to improve the documentation of this factor more research was done.

Ms Beth Baden and Mr Bob Long from HQUSACE were contacted as subject matter experts. The reference HQUSACE uses to determine renovation costs is TM 5-800-4, Programming Cost Estimates for Military Construction. This is a complex cost estimating Technical Manual that is not conducive for use with the COBRA Standard Factor process.

Mr Robert Suchan of the U.S. Army Cost & Economic Analysis Center was also called as a subject matter expert. He is managing the cost factors that are being used for the Installation Status Report (ISR). Among those factors is a factor by FCG that represents the percent of new construction cost to upgrade a facility from "RED" status to "GREEN" status. The listing of those percentages for facilities measured in square feet is attached.

Review of these factors shows that rehabilitation costs vary by FCG from a low of 18% for FCG 43200, Cold Storage-Installation, to a high of 85% for FCG 17120, General Instructional Buildings.

Since the COBRA model is not currently designed to handle multiple percentages based on FCG, a strategy was developed to use the average of the existing BRAC renovation projects by FCG weighted by total project square footage.

The table titled BRAC RENOVATION PROJECTS attached shows the summation of the 25 BRAC projects by FCG & BRAC round. The weighted average of the ISR FCG Cost Factors is calculated to be 59%.

5. Validation Procedures.

The factors used in ISR have good credibility, are easy to audit and, according to Mr Bob Conte, Project Manger for the ISR project, these factors were validated twice against actual DD Form 1483 (Work Orders) at 25 Installations with an "error" rate of only 15%, which would be covered by the "contingency" factor normally included in the COBRA model.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. VENTZER
Chief,
Installation Planning Division

05 05 94

RENOVATION COSTS BY FCG

FCG	DESCRIPTION	% OF NEW CONSTRUCTION
14110	AF OPS BLDG	0.71
14112	AV UNIT OPS BLD	0.65
14182	BDE HQ BLDG	0.71
14183	BN HQ BLDG	0.40
14185	CO HQ BLDG	0.41
14310	MISC SHIP OPS	0.71
17112	FLIGT SIM BLGD	0.58
17115	BAND TRAIN FAC	0.72
17120	GEN INST BLDGS	0.85
17121	INDOOR FIRE RG	0.72
17130	APPL INST BLDG	0.58
17140	AR CENTER	0.72
17142	NG CENTER	0.72
17160	TASC	0.72
17182	TRGT MOV SIM BD	0.58
21110	MT HNGR AVUM	0.68
21111	MT HNGR AVIM	0.71
21120	MISC ACFT MAINT	0.71
21210	GM MAINT BLDG	0.71
21407	NG MAINT FAC	0.67
21409	AR MAINT FAC	0.67
21410	VEH MNT SH ORG	0.54
21420	VEH MNT SH DS	0.50
21435	VEH REBUILD FAC	0.71
21510	GUN/WPN REPAIR	0.71
21610	AMMO MAINT FAC	0.71
21800	SP PURP MNT SHP	0.71
21810	PAR/ABN EQP REP	0.71
21830	MISC MAINT BLDG	0.55
21900	MNT INST O&R	0.71
22110	AC PROD BLDG	0.76
22210	GM PROD BLDG	0.76
22310	SHIP PROD BLDG	0.76
22410	TANK/AUTO PROD	0.76
22510	WEAPON PROD BLD	0.76
22610	EXPLOSIVE PROD	0.76

FCG	DESCRIPTION	% OF NEW CONSTRUCTION
22710	COMMO PROD BLDG	0.76
22810	LTHR & TEX PLNT	0.76
22820	CONST EQP PLANT	0.76
22830	RR EQP PLANT	0.69
22840	PRINT PLANT	0.76
22890	MISC PROD BLDG	0.76
31010	RDT&E LABS	0.71
31110	AC RDT&E	0.71
31210	MSL SPACE RDT&E	0.71
31310	MAR RDT&E	0.71
31410	TANK/AUTO RDT&E	0.71
31510	WEAPON RDT&E	0.71
31610	EXPLOSIVE RDT&E	0.71
31710	ELEC RDT&E	0.71
31810	PROP RDT&E	0.71
31910	NON-METAL RDT&E	0.55
32010	UND-WAT EQU RDT	0.71
32110	TECH SERVICE	0.71
42100	AMMO STOR-DEP	0.36
42200	AMMO STOR-INST	0.36
43200	COLD STOR-INST	0.18
44100	GEN P WH-DEP	0.52
44200	GEN P WH-INST	0.38
44230	CONT HUM WH	0.52
44240	INFL MATLS WH	0.35
44260	VEH STOR SHED	0.52
51010	HOSPITAL	0.82
53040	VET FACILITY	0.40
54010	DENTAL CLINIC	0.83
55010	HEALTH CLINIC	0.83
61050	GEN PURP ADMIN	0.47
72100	ENL UPH	0.41
72114	EN BKS AT/MOB	0.64
72170	SR ENL QTRS	0.55
72181	ENL BKS TRAINEE	0.39
72200	UPH DPNT FAC	0.38

FCG	DESCRIPTION	% OF NEW CONSTRUCTION
72400	OFF UPH	0.2
73010	FIRE STATION	0.7
73015	CONFINEMENT FAC	0.3
73020	CHAPEL CTR FAC	0.2
73028	DRUG ABUSE CTR	0.4
73030	LNDRY/DRYCL FAC	0.3
73048	DEPN GR SCH	0.5
73049	DEPN HIGH SCH	0.5
73073	POST OFFICE	0.3
74006	BANK	0.3
74010	AUDTM GEN PURP	0.4
74011	BOWLING CTR	0.6
74014	CHILD SPT CTR	0.6
74021	COMMISSARY	0.2
74022	SKILL DEV CTR	0.5
74024	SKILL CTR AUTO	0.5
74025	ACES FACILITY	0.5
74028	PHYS FIT CTR	0.3
74032	TRANS HSG FAC	0.3
74033	COMMUNITY CTR	0.4
74041	LIBRARY CTR	0.4
74046	OPEN DINING FAC	0.6
74052	EXCH SVC STA	0.6
74053	EXCH MAIN RETL	0.7
74064	REST/CAFE	0.6
74066	YOUTH CENTER	0.4
74069	RECREATION BLDG	0.4
76010	MUSEUM	0.7

BRAC RENOVATION PROJECTS

	BRAC	Data									
	BRAC 1		BRAC 91		BRAC93		Total SF SUM	Total PROJ CNT	FCG	ISR FCG	SF*FACTOR
CATCD	SF SUM	PROJ CNT	SF SUM	PROJ CNT	SF SUM	PROJ CNT				COST FACTOR	PRODUCT
14184	16365	1	0	0	0	0	16365	1	14182	0.71	11619.15
17120	0	0	44295	1	0	0	44295	1	17120	0.85	37650.75
17130	31613	1	141486	2	0	0	173099	3	17130	0.58	100397.42
17140	28160	1	388504	1	0	0	416664	2	17140	0.72	299998.08
21210	0	0	0	0	150188	2	150188	2	21210	0.71	106633.48
31220	0	0	4794	1	0	0	4794	1	31210	0.71	3403.74
31740	0	0	118292	1	0	0	118292	1	31710	0.71	83987.32
51010	34589	2	0	0	0	0	34589	2	51010	0.82	28362.98
51090	0	0	12980	1	0	0	12980	1	51010	0.82	10643.6
61018	0	0	280000	2	0	0	280000	2	61050	0.47	131600
61031	14185	1	0	0	0	0	14185	1	61050	0.47	6666.95
61041	6136	1	0	0	0	0	6136	1	61050	0.47	2883.92
61050	238789	4	125071	2	0	0	363860	6	61050	0.47	171014.2
72111	0	0	192855	1	0	0	192855	1	72100	0.41	79070.55
Grand Total	369837	11	1308277	12	150188	2	1828302	25			1073932.1
ISR-FCG COST FACTOR WEIGHTED AVERAGED BASED ON TOTAL SF=										0.59	

Source: July 94 BRAC Construction Database

STANDARD FACTOR #38
INFO MANAGEMENT ACCOUNT

1. DESCRIPTION: The average percent of project cost required to provide communications; only used for projects measured in square feet.

2. VALIDATED VALUE: 15% on the average; 13% for new construction and 17% for renovation work

3. DATA SOURCE: BRAC 1, 91, and 93 planning estimates and actual costs, where available.

a. DATE LAST UPDATED: 30 Jul 94

b. DATE OF NEXT UPDATE: As Required

4. METHODOLOGY: For analysis purposes, the average cost of information systems associated with military construction or renovation projects is estimated to be an additional 15% of the total project cost. A more precise percentage depends upon the type of facility to be constructed, whether the project is new work or renovation work, and the communications infrastructure that is in place to support the finished facility. However, 15% is reasonable when viewed across the entire spectrum.

The cost of information systems associated with a project to construct an Information Systems Facility (ISF) could be as high as 50% of the total project cost. In such an example, the information systems costs would be severely underestimated using 15%. A barracks or warehouse would be significantly over estimated using 15%. To refine the analysis, the IMA factor should be applied in accordance with the type of facility being considered and whether it is new construction or renovation, as suggested below.

Also, when considering a renovation project, versus a new construction, the IMA percentage factor should be increased by 30%. [The ratio of IMA cost to the lower renovation cost per SF of space is a higher percentage than for new construction.]

a. Instructional Facilities: 10% new
13% renovation

b. Administrative Facilities: 20% new
26% renovation

Note: This assumes state-of-the-art technology, high volume of personal computers, local area networks, provision for fiber optic distribution systems, and expansion or placement of Local Switching Nodes.

c. Troop Facilities (barracks/dining): 6% new
8% renovation

d. Industrial Facilities:

Laboratory: 12% new
16% renovation

Note: This assumes a high tech facility with computer based research/analysis type equipment requiring high speed data transfer.

Non-Lab (Warehouse/storage facilities, vehicle maintenance, etc.): 2%

5. VALIDATION PROCEDURE: Actual experience with BRAC projects and analysis of historical data.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Catherine A. Michaliga
CATHERINE A. MICHALIGA
Chief
USAISC BRAC Office-
Fort Ritchie

DEPARTMENT OF THE ARMY
UNITED STATES ARMY INFORMATION SYSTEMS COMMAND
BASE REALIGNMENT AND CLOSURE OFFICE
312 ARGONNE AVENUE
FORT RITCHIE, MARYLAND 21719-3100

REPLY TO ATTENTION OF

27 JUL 1994

ASSD-SS-R (5-10c)

MEMORANDUM THRU Commander, HQ, USAISC, ATTN: ASSD-SS, Fort Huachuca, Arizona 85613-5000

FOR Headquarters, Department of the Army, ATTN: SAIS-PPG, Washington, DC 20310-0107

SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model (BRAC 95 Data Call #9)

1. References.

a. Memorandum, DACS-TABS, 7 Jul 94, Subject as above.

b. Memorandum, HQDA, SAIS-PPG, undated, Subject as above.

2. In response to references, we have analyzed planning data and actual data, where available, from the BRAC Construction Army program for the BRAC 1, 91 and 93 programs. Based on this analysis, we have concluded that the Information Mission Area (IMA) standard factor (#63) of 15% is a fair average, if no other considerations can be evaluated.

3. However, an average standard factor of 13% is more accurate for new construction, and an average of 17% is more accurate for renovation. Typically, the absolute cost of IMA will be the same for new construction or renovation because the IMA cabling and systems upgrades are newly installed to bring the facility to IMA standards. However, because the cost of renovation work is less per square foot than new construction, the ratio of IMA to renovation is a higher percentage of the total project cost. It follows then that, since the cost of new construction is higher, the ratio of IMA to new construction is a lower percentage of the total project cost.

4. The type of facility and the condition and capacity of the existing information systems infrastructure will also impact on the actual IMA percentage. If this criteria is known, the IMA factor should be adjusted, as recommended in the enclosed certification. These percentages are averages, based on our experience with the BRAC construction program, to date. We can

provide the detailed documentation which was used to derive these percentages, if required. Our certification statement is enclosed.

5. We are anticipating your need for our support associated with a particular COBRA scenario. Therefore, we are prepared to do detailed IMA cost estimates to support your analysis, if funding can be provided to support this requirement.

6. USAISC - Voice of America's Army.

Catherine A. Michalga

CATHERINE A. MICHALGA
Chief
USAISC BRAC Office-
Fort Ritchie

Encl

CF:
HQDA, ATTN: DAIM-BO
HQDA, ATTN: DAEN-ZCI-A

STANDARD FACTOR #39
DESIGN PERCENTAGE

1. Description.

The average percentage of construction project cost that must be allowed to accomplish planning and design.

2. Validated Value. 10 percent

3. Data Sources.

1) MCA Planning and Design briefing to ACE 30 Jan 92 CEMP-MA Mr. Phil Hunt, (202) 272-1995

2) LMI MCA Planning and Design Funding Requirements, Nov 90

a. Date last updated: FY 94/97 P&D programmed on the basis of the formula in source 1 and was accepted by OSD.

b. Date of next update: unknown

4. Methodology.

Army MCA uses an assumption that P&D is 9 percent of project cost. This assumption is based upon historical Army, Navy, and AF costs as analyzed by Logistics Management Institute. Based on professional judgement, an additional one percent is added to that figure to fund a compressed design schedule.

5. Validation Procedures.

Planning and Design factor has not changed from the AAA validated factor used in BRAC 91 & BRAC 93. BRAC design and construction schedules are often compressed due to the need to complete an action within a statutory time limit or to quickly generate savings. An additional one percent of planning and design gives the decision maker flexibility to choose to pay a premium for speed.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

STANDARD FACTOR #40
SIOH PERCENTAGE

1. Description.

The average percentage of construction cost which must be added to project cost to cover project Supervision, Inspection, and Overhead (SIOH). (Allowed entries 0.0 to 100.0 percent)

2. Validated Value. 6.0 percent

3. Data Sources.

All CONUS FY 94/97 projects have SIOH of 6.0 percent. This cost is standard in the 1391 processor. Only projects built OCONUS have a different value.

a. Date last updated: Projects are updated continuously. Cost is governed by AR 415-15, dated 1 December 1983.

b. Date of next update: N/A

4. Methodology.

All current FY 94/97 projects were reviewed for the SIOH percentage. All CONUS projects had a SIOH value of 6.0 percent.

5. Validation Procedures.

HQUSACE confirms that SIOH is a standard factor used in the DD1391 processor, with limited opportunity for change. This is the same percentage used for BRAC 91 & BRAC 93, validated by AAA at that time.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

b. Line item appropriation of funds is required on each project in MCA, MCDM, and AFH programs.

Chapter 5
Execution

5–1. Coordination

a. Effective project development, design management, and cost engineering require close coordination among the using agency, installation, MACOM, USACE, and HQDA.

b. The USACE commander will normally delegate authority to the USACE MSC commander to execute MILCON projects. This authority is typically redelegated to the USACE district commander assigned for military support in a particular geographic region. The USACE MSC and district will normally perform direct management of the design and construction of the MILCON project.

c. MILCON programs should normally be obligated in the first quarter of the program year.

d. Guidance on design of specific facilities is provided in appendix K.

5–2. Design management

a. The cost to complete engineering and design of a project will be in accordance with HQUSACE guidance.

b. DA Standard Designs will be used for design development, if available. Standard designs may be tailored to the specific requirements of the project and adapted to the Installation Design Guide.

(1) DD Forms 1391-EF will indicate if standard designs are being used. If an available DA Standard Design is not to be used, the DD Form 1391-EF will include justification in the supporting paragraphs.

(2) When using a DA Standard Design, deviations from mandatory design elements require a waiver. Requests for such waivers will be addressed to HQUSACE (CEMP-E).

c. Concept designs are governed first by the scope and then by the cost of the project, as defined in the DD Form 1391-EF. Final designs are governed principally by the cost of the project as reflected in DEPSECDEF program approvals during the PBD cycle. Congressional changes will be incorporated by the USACE district and coordinated with the MACOM per instructions issued by HQDA (DAIM-FD) through HQUSACE (CEMP-M).

d. Reviews of project documentation on preliminary, concept, and final designs will be conducted by authorized representatives from MACOMs, installations, using agencies, and USACE.

e. Any deviation in primary facility scope must be within standards or criteria, and must be approved by HQDA (DAIM-FD) in coordination with the DA staff proponent.

f. A value engineering (VE) study will be made on each project with a programmed amount exceeding $2 million.

g. A project management plan will be developed by the USACE district for each project. The project management plan will establish scope, schedule, budgets, interface with the user, and technical performance requirements for the management and control of the project. The plan will provide performance measurement criteria including major milestones. In addition, the plan will document the USACE and user commitments required for project execution.

5–3. Design directives

a. Design directives authorize various stages of project design, indicate project scope and cost, and provide special instructions for the design of the project. The design execution process is managed, in part, by using design codes. Since design funds are centrally managed, only HQUSACE (CEMP-M) has the authority to issue a design code to the appropriate USACE MSC or district.

b. Design codes are defined as follows:

other pre-design work to the extent defined by special instructions in individual directives. Selection and negotiation (not award) of an architect-engineer (A-E) contract for concept design is authorized.

(2) *Code 2.* Award of design contract is authorized. Preparation of concept design is authorized. Approved concept design is considered to be 35 percent of the total design effort.

(3) *Code 3.* Project is authorized for a non-traditional acquisition process.

(4) *Code 4.* The project design is on hold, pending a supplemental design directive.

(5) *Code 5.* The project is deferred from the program. Do not start design. If concept or final design of the project by USACE district in-house personnel has begun, it will be terminated. If concept or final design is being accomplished by A-E contract, it will be concluded per paragraph 5–4 *d*.

(6) *Code 6.* The project is authorized for final design.

(7) *Code 7.* Not used.

(8) *Code 8.* The project is canceled and if design is being accomplished by A-E contract, it will be concluded per paragraph 5–4 *d*.

(9) *Code 9.* A construction contract (or design-construct contract) is authorized for award.

5–4. Architect-Engineer contracts

a. The contracting officer may contract for A-E services for execution of the design.

b. The fee under any A-E contract for services for developing plans and specifications will not exceed 6 percent of the estimated cost of construction. The 6 percent statutory limitation applies only to production and delivery of design plans and specifications for construction. The costs of non-design services, including the following, are exempt from 6 percent limitations:

(1) Project development
(2) Engineering feasibility
(3) Deficiency studies
(4) Site investigations
(5) Subsurface explorations
(6) Surveys
(7) Shop drawing review
(8) Construction inspection
(9) Preparation of operating manuals and similar activities
(10) Furniture-related interior design
(11) Construction cost estimates
(12) Economic analyses
(13) National pollution discharge elimination system (NPDES) and other environmental permits
(14) Hazardous, toxic, and radioactive waste (HTRW) surveys.

c. If design costs are estimated to exceed $300,000 (the amount specified in 10 USC 2807), award of A-E contract or initiation of in-house design will not be accomplished until HQDA fulfills all congressional notification requirements mandated by Section 2807.

d. A deferred or canceled project may require termination of the A-E contract. Work must cease or be completed through the next logical stopping point. If an A-E contract is not terminated, HQUSACE will immediately notify HQDA (DAIM-FD) who, in turn, will notify DASA(IH).

e. Projects in the National Capital Region require review by the National Capital Planning Commission or the Commission of Fine Arts, or both. Provision must be made in A-E contracts to accommodate the presentations needed to seek necessary approvals.

5–5. Pre-design activities

a. Pre-design activities will begin when a Code 1 design directive is received from HQUSACE. Unless otherwise directed, pre-design activities require the following documentation before beginning:

(1) MACOM approved DD Form 1391-EF.

(2) Architectural and engineering instructions, or special instructions issued by HQUSACE, if required.

STANDARD FACTOR #41
CONTINGENCY PERCENTAGE

1. Description.

Percentage added to the estimated contract cost, to cover unforeseen construction problems which could increase the cost of a project.

2. Validated Value.

New Construction	5%
Renovation	10%
COBRA Value	7%

3. Data Sources.

All CONUS FY 94/97 projects have a contingency of either 5 or 10 percent. These are standard factors in the 1391 processor.

a. Date last updated: Projects are updated continuously. Cost is governed by AR 415-15, dated 1 December 1983.

b. Date of next update: N/A

4. Methodology.

Current FY94/97 projects were reviewed for the Contingency percentages. All CONUS projects had a contingency percentage of either 5 percent for new construction or 10 percent for renovation. Renovation is higher since once demolition occurs, the contractor may find more significant and costly problems than when building new. An average of the two factors, rounding down to allow for preponderance of new construction over renovation results in the validated value.

5. Validation Procedures.

HQUSACE confirms that contingency is a standard factor used in the DD1391 processor, with limited opportunity for change. This is the same percentage used for BRAC 91 & BRAC 93, validated by AAA at that time. An average is used since the standard factor must apply to both new construction and to renovations.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

STANDARD FACTOR #42
SITE PEP PERCENTAGE

1. Definition. The average percent of construction cost which must be added to to project cost to cover site preparation of the construction area and supporting facilities. Allowed entries 0.0 to 100.0 percent.

2. Validated Value: 24 percent

3. Data Source. HQRPLANS Construction Cost Factor Report.

   a. Date last updated: July 1994

   b. Date of next update: December 1994

4. Methodology.

The methodology to determine this factor is to take the average project cost factor found in HQRPLANS for all FCG with unit measure (UM) of SF, subtract 11% for SIOH and contingency, then add in 6% for MCA support to IMA. The result is a 24% Site Prep/Support Facilities factor.

The MCA unit cost factors for FCGs with a UM of SF include $10/SF to account for the costs of demolition generally required before a new building may be constructed. The $10/SF includes costs of physical demolition as well as an average level of asbestos/lead paint removal. FCG project cost factors include supervision, inspection and overhead (SIOH), Contingency and Support Facilities factors. Pre-construction planning and design is not included.

The FCG that follow were included in the above calculations:

HQRPLANS FCG CONSTRUCTION COST FACTORS Database
FY 1994 Ver 4.10

FCG	FCG DESCRIPTION	UM	MCA UNIT COST FACTOR	PROJECT COST FACTOR
14110	AF OPS BLDG	SF	135.67	1.33
14112	AV UNIT OPS BLD	SF	129.35	1.33
14182	BDE HQ BLDG	SF	112.53	1.33
14183	BN HQ BLDG	SF	112.53	1.33
14185	CO HQ BLDG	SF	112.53	1.33
+14310	MISC SHIP OPS	SF	97.80	1.33
+17112	FLIGT SIM BLGD	SF	121.99	1.28
17115	BAND TRAIN FAC	SF	107.27	1.28
17120	GEN INST BLDGS	SF	97.80	1.28
17121	INDOOR FIRE RG	SF	99.91	1.28
17130	APPL INST BLDG	SF	107.27	1.28
+17140	AR CENTER	SF	91.50	1.28
+17142	NG CENTER	SF	91.50	1.28

21110	TRGT MOV SIM BD	SF	106.21	1.28
21111	MNT HANGAR AVUM	SF	107.27	1.28
+21120	MNT HANGAR AVIM	SF	106.21	1.28
+21210	MISC ACFT MAINT	SF	139.87	1.28
+21407	GM MAINT BLDG	SF	139.87	1.28
+21409	NG MAINT FAC	SF	152.49	1.28
21410	AR MAINT FAC	SF	100.95	1.28
21420	VEH MNT SH ORG	SF	100.95	1.28
+21435	VEH MNT SH DS	SF	108.32	1.28
+21510	VEH REBUILD FAC	SF	102.01	1.28
+21610	GUN/WPN REPAIR	SF	106.21	1.28
21800	AMMO MAINT FAC	SF	102.01	1.28
+21810	SP PURP MNT SHP	SF	97.80	1.28
+21830	PAR/ABN EQP REP	SF	94.65	1.28
21900	MISC MAINT BLDG	SF	123.04	1.28
+22110	MNT INST O&R	SF	94.65	1.28
+22210	AC PROD BLDG	SF	97.80	1.28
+22310	GM PROD BLDG	SF	94.65	1.28
+22410	SHIP PROD BLDG	SF	94.65	1.28
+22510	TANK/AUTO PROD	SF	94.65	1.28
+22610	WEAPON PROD BLD	SF	94.65	1.28
+22710	EXPLOSIVE PROD	SF	94.65	1.28
+22810	COMMO PROD BLDG	SF	94.65	1.28
+22820	LTHR & TEX PLNT	SF	94.65	1.28
+22830	CONST EQP PLANT	SF	94.65	1.28
+22840	RR EQP PLANT	SF	94.65	1.28
+22890	PRINT PLANT	SF	94.65	1.28
+31010	MISC PROD BLDG	SF	94.65	1.28
+31110	RDT&E LABS	SF	94.65	1.28
+31210	AC RDT&E	SF	94.65	1.28
+31310	MSL SPACE RDT&E	SF	94.65	1.28
+31410	MAR RDT&E	SF	94.65	1.28
+31510	TANK/AUTO RDT&E	SF	165.11	1.28
+31610	WEAPON RDT&E	SF	131.46	1.33
+31710	EXPLOSIVE RDT&E	SF	131.46	1.33
+31810	ELEC RDT&E	SF	131.46	1.33
+31910	PROP RDT&E	SF	131.46	1.33
+32010	NON-METAL RDT&E	SF	131.46	1.33
+32110	UND-WAT EQU RDT	SF	131.46	1.33
+42100	TECH SERVICE	SF	131.46	1.33
42200	AMMO STOR-DEP	SF	131.46	1.33
43200	AMMO STOR-INST	SF	131.46	1.33
+44100	COLD STOR-INST	SF	131.46	1.33
44200	GEN P WH-DEP	SF	131.46	1.33
44230	GEN P WH-INST	SF	148.28	1.33
44240	CONT HUM WH	SF	148.28	1.17
44260	INFL MATLS WH	SF	103.06	1.17
51010	VEH STOR SHED	SF	67.31	1.17
+53040	HOSPITAL	SF	57.84	1.28
54010	VET FACILITY	SF	59.95	1.28
55010	DENTAL CLINIC	SF	102.01	1.28
61050	HEALTH CLINIC	SF	42.07	1.28
72200	GEN PURP ADMIN	SF	158.79	1.28
+73010	UPH DINE FAC	SF	133.56	1.17
+73015	FIRE STATION	SF	167.22	1.33
73020	CONFINEMENT FAC	SF	145.13	1.28
+73028	CHAPEL CTR FAC	SF	99.91	1.28
+73030	DRUG ABUSE CTR	SF	170.37	1.28
+73048	LNDRY/DRYCL FAC	SF	126.20	1.33
	DEPN GR SCH	SF	92.54	1.33
		SF	136.71	1.28
		SF	99.91	1.33
		SF	167.22	1.28
		SF	89.39	1.28
				1.28
				1.33

+73049	DEPN HIGH SCH	SF	99.91	1.33
+73073	POST OFFICE	SF	99.91	1.28
74006	BANK	SF	115.68	1.28
74010	AUDTM GEN PURP	SF	117.79	1.28
74011	BOWLING CTR	SF	136.71	1.28
74014	CHILD SPT CTR	SF	113.58	1.33
74021	COMMISSARY	SF	102.01	1.33
74022	SKILL DEV CTR	SF	102.01	1.28
74024	SKILL CTR AUTO	SF	102.01	1.28
74025	ACES FACILITY	SF	115.68	1.28
74028	PHYS FIT CTR	SF	120.94	1.33
74032	TRANS HSG FAC	SF	96.75	1.33
74033	COMMUNITY CTR	SF	97.80	1.28
74041	LIBRARY CTR	SF	102.01	1.28
74046	OPEN DINING FAC	SF	147.23	1.33
74052	EXCH SVC STA	SF	184.04	1.28
74053	EXCH MAIN RETL	SF	90.44	1.33
74064	REST/CAFE	SF	147.23	1.33
74066	YOUTH CENTER	SF	108.32	1.28
74069	RECREATION BLDG	SF	100.95	1.28
+76010	MUSEUM	SF	148.28	1.22
	AVERAGE		113.79	1.29 (-11+6=1.24)

+ = HQRPLANS/RPLANS Allowances = Total Installation Assets.

-13+6 = 1.22

5. Validation Procedures.

The factors are modified to delete SIOH and Contingency, since these are separate factors in COBRA. A six percent MCA factor in support of Info Systems has been added, since HQRPLANS does not calculate that cost. The 6% factor was used by TABS in BRAC 91 & BRAC 93. This requirement differs from OPA in support of IMA, which is a separate factor provided by the DISC4.

Costs for demolition vary widely depending upon region, environmental regulations, whether troop, contract, or in house labor is used. $10 per SF was deemed by the SME to be the best factor for all costs associated with demolition for use in planning/decision support analysis such as HQRPLANS or COBRA. This planning factor is not intended for use in budget formulation or execution. Specific requirements must be analyzed on a by-installation basis.

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

STANDARD FACTOR # 43
NPV/ROI DISCOUNT RATE

1. DESCRIPTION: The discount rate for COBRA reports of the net present value and the finance report.

2. VALIDATED VALUE: 2.75%

3. DATA SOURCE: See attached documentation.
OMB Circular A-94.

a. LAST UPDATED: 10 Feb 94.

b. DATE OF NEXT UPDATE: Feb 1995.

4. METHODOLOGY: Used info in the new OMB Circular A-94 to derive a 20 year ROI.
10 year = 2.7
30 year= 2.8 20 year = 2.75%

5. VALIDATION PROCEDURE: See attached documentation.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

February 10, 1994

THE DIRECTOR

M-94-14

MEMORANDUM FOR THE HEADS OF DEPARTMENTS AND AGENCIES

FROM: Leon E. Panetta
Director

SUBJECT: 1994 Discount Rates for OMB Circular No. A-94

On October 29, 1992, OMB issued a revision to OMB Circular No. A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs." The revision established new discount rate guidelines for use in benefit-cost and other types of economic analysis.

The revised Circular specifies certain discount rates that will be updated annually when the interest rate and inflation assumptions in the budget are changed. These discount rates are found in Appendix C of the revised Circular. The attachment to this memorandum is an update of Appendix C. It provides discount rates that will be in effect for the period March, 1994, through February, 1995.

The rates presented in Appendix C do not apply to regulatory analysis. They are to be used for lease-purchase and cost-effectiveness analysis, as specified in the Circular.

Attachment

APPENDIX C

DISCOUNT RATES FOR COST-EFFECTIVENESS, LEASE PURCHASE, AND RELATED ANALYSES

Effective Dates. This appendix is updated annually around the time of the President's budget submission to Congress. This version of the appendix is valid through the end of February, 1995. Updates of this appendix will be available upon request from the Office of Economic Policy in OMB (202-395-3381). Copies of the appendix and the Circular may also be obtained from the OMB Publications Office (202-395-7332).

Nominal Discount Rates. Nominal interest rates based on the economic assumptions from the budget are presented in the table below. These nominal rates are to be used for discounting nominal flows, as in lease-purchase analysis.

Nominal Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	30-Year
5.0	5.3	5.5	5.7	5.8

Analyses of programs with terms different from those presented above may use a linear interpolation. For example, a four-year project can be evaluated with a rate equal to the average of the three-year and five-year rates. Programs with durations longer than 30 years may use the 30-year interest rate.

Real Discount Rates. Real interest rates based on the economic assumptions from the budget are presented below. These real rates are to be used for discounting real (constant-dollar) flows, as in cost-effectiveness analysis.

Real Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	30-Year
2.1	2.3	2.5	2.7	2.8

Analyses of programs with terms different from those presented above may use a linear interpolation. For example, a four-year project can be evaluated with a rate equal to the average of the three-year and five-year rates. Programs with durations longer than 30 years may use the 30-year interest rate.

Discount Rate for BRAC-95 Return on Investment Analyses

Background. Cost of Base Realignment Actions (COBRA) algorithms incorporate a discount rate to calculate both the number of years required to obtain a return on investment and a 20 year net present value analysis. The source for identifying the appropriate discount rate is OMB Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs". In BRAC-91, a discount rate of 10% was used for COBRA analyses. In BRAC-93, a discount rate of 7% was used, under the assumption that COBRA analyses were "Base-Case" benefit-cost analyses as defined in the Circular.

Discussion. The COBRA Joint Process Action Team has reached the conclusion that the previous identification of COBRA as a "Base-Case" analysis was incorrect. "Base-Case" is defined in the current version of the Circular as an analysis of "public investments and regulatory programs that provide benefits and costs to the general public." Public investments and regulations are assumed to "displace both private investment and consumption," therefore a 7% discount rate is used to "account for this displacement and to promote efficient investment and regulatory policies." On the other hand, "Cost-Effectiveness" analyses are defined as an "analysis of internal planning decisions of the Federal Government." This definition is much more consistent with the actual use of COBRA as a part of the formulation of base closure recommendations. Our interpretation has been confirmed by Mr. Robert Anderson, OMB Point of Contact for Circular A-94.

The Circular also includes a discussion of when to use a "real" as opposed to "nominal" discount rate, specifying that for analyses such as COBRA, which deal in constant dollars, a real discount rate should be used, and that "analyses that involve constant-dollar costs should use the real Treasury borrowing rate on marketable securities of comparable maturity to the period of analysis." Discount rates are provided annually as an appendix to the Circular. Current rates are as follows:

3-Year	5-Year	7-Year	10-Year	30-Year
2.1%	2.3%	2.5%	2.7%	2.8%

Since COBRA analyses incorporate a 20 Year Net Present Value analysis, a discount rate of 2.75% (average of the 10 and 30 year rates) should be used.

Critics of changing the discount rate may argue that we have lowered the discount rate in an effort to show a more attractive payback period. However, since there is no prescribed "maximum" payback period for base closure decisions, the use of a lower discount rate will not materially affect decisions of whether or not to close/realign an activity. That is, a change in the discount rate will not determine whether or not a decision will result in a net steady-state savings, but, rather, will only affect the number of years required for these net steady-state savings to offset up-front, one-time costs. (As an aside, the Defense Base Closure and Realignment Commission has approved recommendations in prior BRAC rounds with payback periods in excess of 100 years, if other factors warranted the closure action.)

Recommendation. Use a 2.75% discount rate for BRAC-95 COBRA analyses.

STANDARD FACTOR #44
NPV/ROI INFLATION RATE

1. DESCRIPTION: The inflation rate for COBRA NPV and ROI reports.

2. VALIDATED VALUE:

NPV/ROI INFLATION RATE: 0%

3. DATA SOURCE: BRAC 95 DoD Standard Factor. See attached documentation. OSD policy Memo #1 and OMB Circular A-94.

a. LAST UPDATED: Feb 1994.

b. DATE OF NEXT UPDATE: Feb 1995.

4. METHODOLOGY: BRAC 95 Policy memo #1 specifies the data source for inflation is OMB Circular A-94. OMB A-94

5. VALIDATION PROCEDURE:

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

February 10, 1994

THE DIRECTOR

M-94-14

MEMORANDUM FOR THE HEADS OF DEPARTMENTS AND AGENCIES

FROM: Leon E. Panetta
Director

SUBJECT: 1994 Discount Rates for OMB Circular No. A-94

On October 29, 1992, OMB issued a revision to OMB Circular No. A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs." The revision established new discount rate guidelines for use in benefit-cost and other types of economic analysis.

The revised Circular specifies certain discount rates that will be updated annually when the interest rate and inflation assumptions in the budget are changed. These discount rates are found in Appendix C of the revised Circular. The attachment to this memorandum is an update of Appendix C. It provides discount rates that will be in effect for the period March, 1994, through February, 1995.

The rates presented in Appendix C do not apply to regulatory analysis. They are to be used for lease-purchase and cost-effectiveness analysis, as specified in the Circular.

Attachment

APPENDIX C

DISCOUNT RATES FOR COST-EFFECTIVENESS, LEASE PURCHASE, AND RELATED ANALYSES

Effective Dates. This appendix is updated annually around the time of the President's budget submission to Congress. This version of the appendix is valid through the end of February, 1995. Updates of this appendix will be available upon request from the Office of Economic Policy in OMB (202-395-3381). Copies of the appendix and the Circular may also be obtained from the OMB Publications Office (202-395-7332).

Nominal Discount Rates. Nominal interest rates based on the economic assumptions from the budget are presented in the table below. These nominal rates are to be used for discounting nominal flows, as in lease-purchase analysis.

Nominal Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	30-Year
5.0	5.3	5.5	5.7	5.8

Analyses of programs with terms different from those presented above may use a linear interpolation. For example, a four-year project can be evaluated with a rate equal to the average of the three-year and five-year rates. Programs with durations longer than 30 years may use the 30-year interest rate.

Real Discount Rates. Real interest rates based on the economic assumptions from the budget are presented below. These real rates are to be used for discounting real (constant-dollar) flows, as in cost-effectiveness analysis.

Real Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	30-Year
2.1	2.3	2.5	2.7	2.8

Analyses of programs with terms different from those presented above may use a linear interpolation. For example, a four-year project can be evaluated with a rate equal to the average of the three-year and five-year rates. Programs with durations longer than 30 years may use the 30-year interest rate.

Discount Rate for BRAC-95 Return on Investment Analyses

Background. Cost of Base Realignment Actions (COBRA) algorithms incorporate a discount rate to calculate both the number of years required to obtain a return on investment and a 20 year net present value analysis. The source for identifying the appropriate discount rate is OMB Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs". In BRAC-91, a discount rate of 10% was used for COBRA analyses. In BRAC-93, a discount rate of 7% was used, under the assumption that COBRA analyses were "Base-Case" benefit-cost analyses as defined in the Circular.

Discussion. The COBRA Joint Process Action Team has reached the conclusion that the previous identification of COBRA as a "Base-Case" analysis was incorrect. "Base-Case" is defined in the current version of the Circular as an analysis of "public investments and regulatory programs that provide benefits and costs to the general public." Public investments and regulations are assumed to "displace both private investment and consumption," therefore a 7% discount rate is used to "account for this displacement and to promote efficient investment and regulatory policies." On the other hand, "Cost-Effectiveness" analyses are defined as an "analysis of internal planning decisions of the Federal Government." This definition is much more consistent with the actual use of COBRA as a part of the formulation of base closure recommendations. Our interpretation has been confirmed by Mr. Robert Anderson, OMB Point of Contact for Circular A-94.

The Circular also includes a discussion of when to use a "real" as opposed to "nominal" discount rate, specifying that for analyses such as COBRA, which deal in constant dollars, a real discount rate should be used, and that "analyses that involve constant-dollar costs should use the real Treasury borrowing rate on marketable securities of comparable maturity to the period of analysis." Discount rates are provided annually as an appendix to the Circular. Current rates are as follows:

3-Year	5-Year	7-Year	10-Year	30-Year
2.1%	2.3%	2.5%	2.7%	2.8%

Since COBRA analyses incorporate a 20 Year Net Present Value analysis, a discount rate of 2.75% (average of the 10 and 30 year rates) should be used.

Critics of changing the discount rate may argue that we have lowered the discount rate in an effort to show a more attractive payback period. However, since there is no prescribed "maximum" payback period for base closure decisions, the use of a lower discount rate will not materially affect decisions of whether or not to close/realign an activity. That is, a change in the discount rate will not determine whether or not a decision will result in a net steady-state savings, but, rather, will only affect the number of years required for these net steady-state savings to offset up-front, one-time costs. (As an aside, the Defense Base Closure and Realignment Commission has approved recommendations in prior BRAC rounds with payback periods in excess of 100 years, if other factors warranted the closure action.)

Recommendation. Use a 2.75% discount rate for BRAC-95 COBRA analyses.

NATIONAL DEFENSE ESTIMATES FOR

OFFICE OF THE COMPTROLLER OF
THE DEPARTMENT OF DEFENSE
MARCH 1994

STANDARD FACTOR #45
NPV/ROI INFLATION RATE

1. DESCRIPTION: The inflation rates for COBRA Appropriations Reports.

2. VALIDATED VALUE:

INFLATION RATE:

1996 = 2.9%
1997 = 3.0%
1998 = 3.0%
1999 = 3.0%
2000 = 3.0%
2001 = 3.0%
BEYOND = 3.0%

3. DATA SOURCE: BRAC 95 DoD Standard Factor. See attached documentation. Table 5-10 Long Range Inflation - Defense GDP, National Defense Budget for FY 1995.

a. LAST UPDATED: Mar 1994.

b. DATE OF NEXT UPDATE: Mar 1995.

4. METHODOLOGY: BRAC 95 Policy memo #1 specifies the data source for inflation is OMB Circular A-94. OMB A-94

5. VALIDATION PROCEDURE:

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

Table 5-10 [Continued]
LONG RANGE INFLATION - DEFENSE

	Forecast Date	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
GDP	Feb 1975	4.2	4.0																			
	Jan 1976	5.2	4.3	4.1																		
	Jan 1977	5.5	4.9	4.1	3.2																	
	Jan 1978	6.3	5.8	5.3	4.9	4.3																
	Jan 1979	8.0	7.0	6.0	4.8	3.7	2.8															
	Jan 1980	8.7	9.0	8.9	8.3	7.8	6.9	6.2														
	Feb 1981	8.6	8.6	10.0	8.7	7.3	6.2	5.5	5.0													
	Jan 1982	8.6	8.6	9.4	8.2	6.5	5.1	4.8	4.6	4.5												
	Jan 1983	8.8	8.8	9.8	7.0	5.0	5.3	4.9	4.7	4.5	4.5											
	Jan 1984	8.8	8.8	9.8	7.1	4.3	4.3	4.9	4.6	4.3	4.0	3.7										
	Jan 1985	8.8	8.8	9.8	7.1	4.0	3.8	3.7	4.4	4.2	4.0	3.7	3.4									
	Jan 1986	8.8	8.8	10.0	7.3	4.2	3.8	3.6	3.2	4.1	3.9	3.4	2.9	2.3								
	Jan 1987	8.8	8.8	10.0	7.3	4.2	3.8	3.5	2.9	3.1	3.5	3.5	3.3	2.9	2.4							
	Jan 1988	8.8	8.8	10.0	7.3	4.2	3.8	3.2	2.8	2.7	3.7	3.8	3.6	3.3	2.8	2.3						
	Jan 1989	8.8	8.8	10.0	7.3	4.2	3.8	3.1	2.7	3.2	3.1	4.0	3.6	3.3	2.8	2.3	1.8					
	Jan 1990	8.8	8.8	10.0	7.3	4.2	3.8	3.1	2.7	3.2	3.0	4.2	4.0	4.2	4.0	3.7	3.4	3.1				
	Jan 1991	8.8	8.8	10.0	7.3	4.2	3.8	3.1	2.7	3.2	3.0	4.2	4.0	4.4	4.1	3.7	3.6	3.5	3.4			
	Jan 1992	8.8	8.8	10.0	7.3	4.2	3.8	3.1	2.7	3.2	3.0	4.2	4.1	3.9	3.1	3.3	3.3	3.3	3.2	3.2		
	Mar 1993	8.8	8.8	10.0	7.3	4.2	3.8	3.1	2.7	3.2	3.0	4.2	4.1	4.3	2.8	2.4	2.4	2.3	2.3	2.2	2.2	
	Jan 1994	8.8	8.8	10.0	7.3	4.2	3.8	3.1	2.7	3.2	3.0	4.2	4.1	4.3	3.0	2.7	2.5	2.8	2.9	3.0	3.0	3.0
CPIW	Feb 1975	4.4	3.9																			
	Jan 1976	5.4	4.4	4.0																		
	Jan 1977	5.1	4.7	4.0	3.1																	
	Jan 1978	6.1	5.9	5.3	4.8	4.2																
	Jan 1979	8.6	6.9	6.0	4.8	3.7	2.8															
	Jan 1980	10.4	12.4	9.7	8.4	7.8	7.0	6.2														
	Feb 1981	10.4	13.6	11.6	9.1	6.5	5.7	4.8	4.3													
	Jan 1982	10.4	13.5	11.1	8.0	6.3	4.7	4.8	4.6	4.5												
	Jan 1983	10.4	13.5	11.1	7.2	4.9	4.7	4.5	4.7	4.5	4.5											
	Jan 1984	10.4	13.5	11.1	7.2	3.4	4.0	4.5	4.6	4.3	4.0	3.7										
	Jan 1985	10.4	13.5	11.1	7.2	3.4	3.3	3.9	4.3	4.2	4.0	3.7	3.4									
	Jan 1986	10.4	13.5	11.1	7.2	3.4	3.3	3.6	3.4	4.0	3.9	3.4	3.0	2.3								
	Jan 1987	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.3	3.7	3.5	3.4	2.9	2.4							
	Jan 1988	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.7	4.3	4.1	3.7	3.3	2.8	2.3						
	Jan 1989	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.7	4.1	4.0	3.8	3.3	2.8	2.3	1.8					
	Jan 1990	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.7	4.1	4.8	4.0	4.1	3.9	3.7	3.4	3.1				
	Jan 1991	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.7	4.1	4.8	4.8	6.7	4.1	3.8	3.6	3.5	3.4			
	Jan 1992	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.7	4.1	4.8	4.8	4.0	2.8	3.2	3.2	3.2	3.2	3.2		
	Mar 1993	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.7	4.1	4.8	4.8	4.0	2.8	3.1	2.7	2.7	2.7	2.7	2.7	
	Jan 1994	10.4	13.5	11.1	7.2	3.4	3.3	3.6	2.2	2.7	4.1	4.8	4.8	4.0	2.8	2.9	2.7	3.1	3.3	3.3	3.4	3.4

STANDARD FACTORs #53 & #54
MILITARY LIGHT VEHICLE COSTS
MILITARY HEAVY/SPECIAL VEHICLE COSTS

1. DESCRIPTION: The average cost in dollars per ton-mile to transport light vehicles, heavy vehicles and special vehicles as freight.

2. VALIDATED VALUE: $.095 FY 96 DOLLARS

3. DATA SOURCE : See attached documentation. MTMC Traffic Management Progress Report Fiscal Year 1993. DoD total inland freight traffic - DoD major commodity flow for the commodities Vehicles and Parts.

a. DATE LAST UPDATED : 30 Sep 93

b. DATE OF NEXT UPDATE : 30 Sep 94

5. METHODOLOGY : Used $.0882 as the baseline for 1993 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 93 = 95.64, FY 96 = 102.63, escalation factor =

102.63/95.64 = 1.07~~31~~.

.0882 * 1.0731 = $.09~~46~~

round to $.095 $.094

6. VALIDATION PROCEDURE : see attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

FILE NAME: DODCOMFL

INLAND FREIGHT TRAFFIC

DOD MAJOR COMMODITY FLOW

Commodities *	Current Qtr (4TH QTR FY93) No. of Shpmts (000)	Tons (000)	Ton Miles (M)	Cost (000)	Avg Wt Per Shpmt (Tons)	Avg Haul Per Ton	Avg Cost Per Ton Mile	Cumulative FY93 THRU 30 SEP 93 No. of Shpmts (000)	Tons (000)	Ton Miles (M)	Cost (000)	Avg Wt Per Shpmt (Tons)	Avg Haul Per Ton	Avg Cost Per Ton Mile
PETROLEUM PRODUCTS	7.83	3377.8	318.25	23586.4	442.7	390	0.0179	31.28	14177.	5512.24	94384.67	453.2	389	0.0171
AMMUNITION AND EXPLOSIVES	9.93	103.82	98.84	15956.99	10.6	952	0.1615	37.86	471.61	498.01	66246.41	12.5	1056	0.133
VEHICLES AND PARTS	6.81	103.25	[illegible]	[illegible]	15.1	1067	0.0859	20.87	382.4	379.96	33507.83	18.3	994	0.0882
SUBSISTENCE	16.75	125.85	47.27	5944.57	7.8	376	0.1258	63.89	787.03	259.01	25317.16	12.3	329	0.0977
ORDNANCE	1.43	29.91	22.28	2329.49	20.9	745	0.1046	5.73	97.56	83.74	9212.51	17	858	0.11
MILITARY IMPEDIMENTA	0.57	24.24	23.21	2190.26	51.5	958	0.0944	1.65	165.53	214.62	13731.85	100.3	1297	0.064
ELECTRICAL EQUIPMENT	4.99	6.82	6.58	2073.18	1.2	1125	0.3165	19.02	21.78	26.78	8402.44	1.1	1230	0.3138
MACHINERY AND PARTS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.06	92.37	63.99	7534.53	8.4	693	0.1177
IRON/STEEL ARTICLES	2.44	9.21	7.99	846.53	3.8	868	0.106	9.49	53.18	47.96	3871.94	5.6	902	0.0807
CHEMICALS/ACIDS/INSECTICIDES	4.58	4.87	4.53	786.31	1.1	930	0.174	15.61	20.69	25.6	3232.62	1.3	1237	0.1263

* Top 10 commodities based on cost unless totals fluctuate from quarter to quarter in which case additional commodity entries will be shown.

Zero indicates that data input was nominal for the reporting period or no data was reported.

STANDARD FACTOR #46
MATERIAL PER ASSIGNED PERSON

1. DESCRIPTION: The average weight of material per person assigned, other than mission and support equipment which is included on Screen 3. (Allowed entries 0.0 to 10,000.00 pounds per person)

2. VALIDATED VALUE: 710LBS/PERSON

3. DATA SOURCE: U.S. Army Audit Agency INFORMATION MEMORANDUM HQ 91-705, page 13. POC: Ms Jo Spielvogel (703) 697-6262.

a. DATE LAST UPDATED: March 1991.

b. DATE OF NEXT UPDATE: None Scheduled.

4. METHODOLOGY: Average weight computed by a study conducted in 1988 of a personnel movement at McCellan Air Force Base.

5. VALIDATION PROCEDURE: Reference data source provided by the U.S. Army Audit Agency.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

ADMINISTRATIVE WEIGHT/EMPLOYEE

Description	Current Amount	Validated Amount
Administrative Weight/Employee	710	710

DATA SOURCE: McClellan Air Force Base Study, 1988

UNIT OF MEASURE: Pounds

METHODOLOGY: Use average weight computed in the study.

REVIEW RESULTS: We traced the weight of administrative material for each employee to the McClellan Air Force Base Study. The study looked at moving a large activity to the other side of the base. The study found that each person shipped about 710 pounds of professional material during the move. Items of professional material included desks, files, chairs, personal computer equipment, official items and technical material.

10. •Material per assigned person (lbs) 710 lbs
Source: McClellan AFB Closure Study, 1988, Mr Terry Glen, (N) [illegible]
DSN: 633-2225

Intended to capture office type furniture to be shipped.

Calculated as follows:

Desk	125	
File	100	
Chairs	60	
Pers. (official) items	100	
Personal Computer	25	(not everyone has one)
Technical Material	300	
• Total	710 lbs	

[illegible]

[illegible]

STANDARD FACTORS # 47,48,49,50
HOUSEHOLD GOOD WEIGHTS
CHANGE 2 - 5 Oct 95

1. DESCRIPTION: The weight of household good shipped by PCS individuals.

2. VALIDATED VALUES:

Officers: 14,500 lbs
Enlisted: 9,000 lbs
Single : 6,400 lbs

Civilians 18,000 lbs

3. DATA SOURCE : Table of weight allowances, Joint Federal Travel Regulations. Documentation attached.

a. DATE LAST UPDATED : 5 November 1990

b. DATE OF NEXT UPDATE : None scheduled

4. METHODOLOGY :

a. Used a representative grade to estimate the weight of HHG.

MARRIED OFFICERS = 0-3 14,500 lbs
MARRIED ENLISTED = E-5 9,000 lbs
SINLE ENLISTED = E-4 5,250 lbs
SINGLE OFFICER = 0-3 13,000 lbs

Population and grade info from the FAMILY database.

b. for the Military HHG, we used the approximate relationship of 15% officers and 85% enlisted to calculate the average single military weight. We assumed that one half of the E-4s were under two years service which gave an average weight for single enlisted as (7,000 + 3,500)/2 = 5,250 lbs.

.15 * 13,000 = 1,950
.85 * 5,250 = 4,462.5
sum = 6,412.5 round to 6,400 lbs

c. Used Maximum allowable for civilians (18,000 lbs).

5. VALIDATION PROCEDURE : See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTORS # 47,48,49,50
HOUSEHOLD GOOD WEIGHTS

1. DESCRIPTION: The weight of household good shipped by PCS individuals.

2. VALIDATED VALUES:

Officers: 15,371 lbs
Enlisted: 9,467 lbs
Single : 4,607 lbs

Civilians 18,000 lbs

3. DATA SOURCE : Table of weight allowances, Joint Federal Travel Regulations. Documentation attached.

a. DATE LAST UPDATED : 5 November 1990

b. DATE OF NEXT UPDATE : None scheduled

4. METHODOLOGY : Used weighted average for maximum allowable weight by gade for officers and enlisted. Population and grade info from the FAMILY database.

Used Maximum allowable for civilians.

5. VALIDATION PROCEDURE : See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

TOTAL MARRIED=				274495				
TOTAL SINGLE =				150485.6				
MARRIED HHG FACTORS:								
	NUMBER			WEIGHT	TOTAL	WEIGHTED AVG=		15371.97
COL +GO	3457			18000	62226000			
LTC	7360			17500	128800000			
MAJ+W-4	12450			17000	211650000			
CPT+W-3	20052			14500	290754000			
1LT+W-2	7884			13500	106434000			
2LT+W-1	3788			12000	45456000			
	54991				845320000			
						WEIGHTED AVG=		9467.394
E-9	2439			14500	35365500			
E-8	8363			13500	112900500			
E-7	31770			12500	397125000			
E-6	46736			11000	514096000			
E-5	51348			9000	462132000			
E-4	49319			7500	369892500			
E-3	15202			7500	114015000			
E-2	5687			5000	28435000			
E-1	8423			5000	42115000			
	219287				2076076500			
SINGLE HHG FACTORS:								
	NUMBER	%MARRIED	SINGLE	WEIGHT	TOTAL	WEIGHTED AVG=		4607.199
	MARRIED							
MG	97	97.00%	3	18000	54000			
BG	129	96.99%	4	18000	72000			
COL	3457	94.65%	195	18000	3510000			
LTC	7360	92.83%	568	16000	9088000			
MAJ	11122	89.91%	1248	14000	17472000			
W-4	1328	94.72%	74	14000	1036000			
CPT	17682	79.77%	4484	13000	58292000			
W-3	2370	93.52%	164	13000	2132000			
1LT	4449	60.26%	2934	12500	36675000			
W-2	3435	87.29%	500	12500	6250000			
2LT	2638	45.95%	3103	10000	31030000			
W-1	1150	79.80%	291	10000	2910000			
E-9	2439	94.02%	155	12000	1860000			
E-8	8363	93.33%	598	11000	6578000			
E-7	31770	91.02%	3134	10500	32907000			
E-6	46736	88.97%	5794	8000	46352000			
E-5	51348	80.61%	12351	7000	86457000			
E-4	49319	53.25%	43299	5250	227319750			
E-3	15202	32.55%	31502	2000	63004000			
E-2	5687	22.49%	19600	1500	29400000			
E-1	8423	29.20%	20423	1500	30634500			
	274407		150424		693033250			
UNK	217							

a. Effective with the end of the second quarter Fy 88, this data is the official reportable data for use by the Army Personnel community.

The responsible agency is U.S.Army Community and Family Support Center (CFSC), action office CFSC-PNA, telephone Autovon 221-4353, Civilian (703) 325-4353. Address: 2461 EISENHOWER AVE., ALEXANDRIA, VA. 22331-0507 and the POC is MR. TIM WHYTE (ID WHYTE).

c. The primary source of data is the Defense Enrollment Eligibility Reporting System(DEERS) data base, DEFENSE MANPOWER DATA CENTER (DMDC) MONTEREY, CA.

d. Prior to using any data, users must review the users manual to understand the composition, content, and use of this file. A current users manual can be obtained by contacting CFSC-PNA, (userid WHYTE).

Press ENTER To Proceed

PF: 1/13 Help 2/14 HQDA Menu 3/15 Return

4/16 Printer Selection

Service ACTIVE ARMY Location: CONUS Data from 9403

Total ALL Soldiers 424966

Rank	Pcnt	Pcnt Marr	Pcnt Marr W/C	Pcnt Singl	Pcnt Singl W/C	Pcnt Du Mil	Pcnt Du Mil W/C
PV1	6.79	29.20	52.78	70.79	3.53	.74	17.20
PV2	5.95	22.49	46.17	77.50	2.23	1.32	7.44
PFC	10.99	32.55	46.52	67.44	4.05	2.61	17.86
CPL	21.79	53.25	57.95	46.74	9.36	6.37	36.52
SGT	14.99	80.61	74.39	19.38	23.43	9.37	50.25
SSG	12.36	88.97	82.83	11.02	41.69	8.73	57.54
SFC	8.21	91.02	86.34	8.97	51.13	7.58	62.00
MSG	2.11	93.33	86.70	6.66	48.57	5.74	62.13
SGM	.61	94.02	80.19	5.97	45.16	3.81	63.63
WO1	.34	79.80	72.69	20.19	12.02	4.85	48.57
CW2	.93	87.29	79.44	12.70	27.59	4.37	51.74
CW3	.60	93.52	85.65	6.47	56.09	3.94	52.00
CW4	.33	94.72	77.10	5.27	47.29	2.28	56.25
2LT	1.35	45.95	37.41	54.04	3.22	5.36	15.25
1LT	1.74	60.26	45.65	39.73	6.47	6.98	15.89
CPT	5.22	79.77	66.70	20.22	10.01	7.62	30.27
MAJ	2.91	89.91	82.02	10.08	21.23	7.51	41.01
TC	1.87	92.83	84.23	7.16	25.52	5.56	44.89
OL	.79	94.65	77.49	5.34	27.22	2.16	52.05
BG	.03	96.99	58.13	3.00		1.50	
MG	.02	97.00	37.11	3.00			
LTG	.01	100.00	38.23				
GEN	.05	100.00	42.85				
ENLST	83.80	61.58	71.27	38.42	10.06	6.03	47.00
OFFCR	16.20	80.19	72.87	19.81	11.06	6.31	33.49
TOTAL	100.00	64.59	71.59	35.41	10.15	6.08	44.73

Soldier Married Content Summary

Service ACTIVE ARMY Location CONUS Data from 9403

Rank	Soldiers Married Male	Soldiers Married Female	Soldiers Married Total	Percentage Soldiers Married Male	Percentage Soldiers Married Female	Percentage Soldiers Married Total
PV1	7118	1305	8423	30	27	29
PV2	4741	946	5687	22	25	22
PFC	12698	2504	15202	32	35	33
CPL	42422	6897	49319	54	51	53
SGT	45993	5355	51348	83	66	81
SSG	42784	3952	46736	91	71	89
SFC	29519	2251	31770	93	70	91
MSG	8021	342	8363	95	65	93
SGM	2403	36	2439	95	47	94
CDT	0	0	0	0	0	0
WO1	1100	50	1150	81	60	80
CW2	3314	121	3435	88	68	87
CW3	2315	55	2370	94	70	94
CW4	1316	12	1328	95	67	95
2LT	2156	482	2638	47	43	46
1LT	3762	687	4449	62	54	60
CPT	15574	2108	17682	83	62	80
MAJ	9999	1123	11122	93	70	90
LTC	6825	535	7360	96	67	93
COL	3082	108	3190	97	59	95
BG	128	1	129	98	33	97
MG	97	0	97	97	0	97
LTG	34	0	34	100	0	100
GEN	7	0	7	100	0	100
UNK	213	4	217	72	44	71
Enlst	195699	23588	219287	63	51	62
Offcr	49709	5282	54991	83	60	80
Total	245621	28874	274495	66	52	65

PF: 2/14 HQDA Menu 3/15 Rtn to prev 4/16 Rtn to Army
5/17 Rtn to Locn 7/19 Pg Back 8/20 Pg Fwd

★ TABLE OF PCS WEIGHT ALLOWANCES (POUNDS)

Service and Grade [1, 3, 8]

Effective with respect to transportation of household goods occurring on or after 5 November 1990

Army, Air Force, and Marine Corps	Navy, Coast Guard, and National Oceanic and Atmospheric Administration	Public Health Service	Weight Allowances	
			With[2] Dependents	Without Dependents
General, General of the Army, Lieutenant general, Major general, Brigadier general, and Colonel	Admiral, Vice admiral, Rear admiral (upper half), Rear admiral (lower half), Commodore, and Captain	Surgeon general, Deputy and assistant surgeon generals, Assistant surgeon general, and Director	18,000	18,000
Lieutenant colonel	Commander	Senior	17,500	16,000
Major and warrant officer (W-4)	Lieutenant commander and warrant officer (W-4)	Full	17,000	14,000
Captain and warrant officer (W-3)	Lieutenant and warrant officer (W-3)	Senior assistant	14,500	13,000
First Lieutenant, contract surgeon warrant officer (W-2)	Lieutenant (junior grade) and warrant officer (W-2)	Assistant	13,500	12,500
Second lieutenant, officer graduate of Service Academy, and warrant officer (W-1)	Ensign, officer graduate of Service Academy, and warrant officer (W-1)	Junior assistant	12,000	10,000
Enlisted personnel	**Enlisted personnel**			
E-9	E-9		14,500[4]	12,000[4]
E-8	E-8		13,500	11,000
E-7	E-7		12,500	10,500
E-6	E-6		11,000	8,000
E-5	E-5		9,000	7,000
E-4 (over 2 years service)	E-4 (over 2 years service)		8,000	7,000
E-4 (2 years service or less)	E-4 (2 years service or less)		7,000	3,500
E-3	E-3		5,000	2,000[5]
E-2	E-2		5,000	1,500[5]
E-1	E-1		5,000	1,500[5]
[6]Aviation cadet	[6]Aviation cadet			
[7]Service academy cadets and midshipmen	[7]Service academy cadets and midshipmen			350

C8000 MAXIMUM WEIGHT ALLOWANCES

★1. GENERAL. The maximum weight of household goods that may be transported or stored in connection therewith at Government expense is limited to 18,000 pounds net weight for all employees. The total weight of household goods stored incident to an assignment outside the continental United States plus the weight of household goods transported under this part will not exceed the maximum weight allowance authorized herein. For inclusion of baggage allowances in certain cases, see par. C2304.

2. DETERMINING THE NET WEIGHT

a. Uncrated Shipments. When household goods are shipped uncrated as in a household mover's van or similar conveyance, the net weight shall be that shown on the bill of lading or on the weight certificate attached thereto, which, under Interstate Commerce Commission (ICC) regulations, includes the weight of barrels, boxes, cartons, and similar materials used in packing, but does not include pads, chains, dollies, and other equipment needed to load and secure the shipment. When a noncommercial means of shipment is involved, the above provisions of the ICC regulations shall apply for the purpose of determining the net weight. When employee's claim is based on constructive weight as authorized in subpar. d, the net weight shall be the weight as determined under that provision.

b. Crated Shipments. When property is transported crated, the net weight shall not include the weight of the crating material; therefore, the net weight shall be computed as being 60% of the gross weight. However, if the net weight computed in this manner exceeds the applicable weight limitation and if it is determined that, for reasons beyond the employee's control, unusually heavy crating and packing materials were necessarily used, the net weight may be computed at less than 60% of the gross weight.

c. Containerized Shipments. When special containers designed normally for repeated use, such as lift vans, CONEX transporters, and household-goods shipping boxes are used and the known tare weight does not include the weight of interior bracing and padding materials but only the weight of the container, the net weight of the household goods shall be 85% of the gross weight less the weight of the container. If the known tare weight includes interior bracing and padding materials so that the net weight is the same as it would be for uncrated shipments in interstate commerce, the net weight shall not be subject to the above reduction. If the gross weight of the container cannot be obtained, the net weight of the household goods shall be determined from the cubic measurement on the basis of 7 pounds per cubic foot of properly loaded container space.

d. Constructive Weight. If no adequate scale is available at point of origin, at any point en route, or at destination, a constructive weight, based on 7 pounds per cubic foot of properly loaded van space, may be used. Such constructive weight also may be used for a part-load when its weight could not be obtained at origin, en route, or at destination, without first unloading it or other part-loads being carried in the same vehicle, or when the household goods are not weighed because of the carrier's charges for a local or metropolitan area move are properly computed on a basis other than the weight or volume of the shipment (as when payment is based on an hourly rate and the distance involved). However, in such instances the employee should obtain a statement from the carrier showing the amount of properly loaded van space required for the shipment.

3. EMPLOYEE MARRIED TO MEMBER OF A UNIFORMED SERVICE. An employee married to a member of a Uniformed Service has the same entitlements to shipment and storage of household goods as an employee who is not married to a

STANDARD FACTOR #51
TOTAL HHG COSTS

1. DESCRIPTION: The costs per 100 lbs for packing, unpacking, storage and miscellaneous expences for shipping household goods within CONUS.

2. VALIDATED VALUES : $35.00 FY 96 DOLLARS

3. DATA SOURCE : Commuted Rate Schedule for Transportation and Storage of Household Goods - Supplement #9. See Attached data sheet.

a. DATE LAST UPDATED : 30 April 1993

b. DATE OF NEXT UPDATE : Unk

4. METHODOLOGY : Developed 4 linear relationships (using regression) between the rate in dollars and the miles transported for housedhold good shipments. The relationships were developed for four weights that cover the expected range of shipments 4,000lbs; 8,000lbs; 12,000lbs; and 16,000lbs. Each relationship provides a intercept on the cost per shipment axis at zero miles - this represents the cost to pay everything except transportation, i.e. - packing, unpacking, etc. Using the four intercept value with the lbs associated, another linear relationship was formed to predict the cost in packing/unpacking for an unknown number of lbs. The weighted average shipment for HHG (7265lbs) is used to predict the HHG cost of $33 per 100lbs. Used $33 as the baseline for 1993 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 93 = 95.64, FY 96 = 102.63, escalation factor = 102.63/95.64 = 1.0731. Round to 1.07.

33 * 1.07 = $35.31
round to $35

5. VALIDATION PROCEDURE : See attached documentation.
I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTOR #51
TOTAL HHG COSTS

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round to $35

5. VALIDATION PROCEDURE : See attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

Washington, D.C. 20405

COMMUTED RATE SCHEDULE
FOR TRANSPORTATION AND STORAGE OF HOUSEHOLD GOODS
Supplement 9

TO: Heads of Federal agencies

1. Purpose. This document transmits a revised commuted rate schedule containing rates to be used in reimbursing civilian employees of the United States Government for transportation, temporary storage, and related expenses incurred in moving their household goods and personal effects when authorized at Government expense.

2. Effective date. The rates and charges in the attached commuted rate schedule apply on shipments begun on or after January 3, 1993.

3. General. Van carriers of household goods have published certain changes in rates and charges for the transportation of household goods effective January 3, 1993. The appropriate changes are reflected in the attached revised commuted rate schedule.

4. Explanation of changes. The entire commuted rate schedule has been restructured to align it with the Household Goods Carriers' Bureau tariff on which it is based.

5. Cancellation. Supplements 3, 6, and 8 of the commuted rate schedule are canceled.

6. Filing instructions.

a. Remove the entire commuted rate schedule and insert the attached new pages.

b. It is recommended that the removed pages be retained for determining which commuted rates were in effect at particular times. The current commuted rate schedule consists of pages from supplement 9.

7. Inquiries. Inquiries regarding use of the restructured commuted rate schedule may be directed to the GSA Central Zone, Travel and Transportation Management Branch (6FBX), 4400 College Boulevard, Suite 175, Overland Park, KS 66211, or telephone 913-236-2510.

At the direction of the Administrator of General Services.

ROGER D. DANIERO
Commissioner
Federal Supply Service

SECTION 3 - TRANSPORTATION ALLOWANCES

PEAK SEASON TRANSPORTATION ALLOWANCES (CONTINUED)

(APPLICABLE BETWEEN MAY 15 AND SEPTEMBER 30)

ITEM 3-100

(RATES ON THIS PAGE ARE SUBJECT TO ITEM 80, INSURANCE SURCHARGE)

MILES		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT	
		1000 POUNDS	ADD'L CWT.	2000 POUNDS	ADD'L CWT.	4000 POUNDS	ADD'L CWT.	8000 POUNDS	ADD'L CWT.	12000 POUNDS	ADD'L CWT.	16000 POUNDS	ADD'L CWT.
FROM	TO	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS
801	820	879	66.50	1634	64.05	2727	51.58	4790	49.18	6757	43.83	8802	53.14
821	840	887	66.20	1649	65.40	2757	52.23	4846	49.83	6836	44.18	8896	53.79
841	860	895	67.00	1665	66.05	2788	52.93	4903	50.43	6930	44.78	8711	54.44
861	880	1003	67.80	1681	66.75	2918	53.58	4959	51.05	7001	45.38	8816	55.10
881	1000	1011	68.60	1697	67.45	2946	54.23	5015	51.68	7082	45.95	8930	55.75
1001	1050	1027	70.10	1729	68.90	2906	55.55	5128	52.93	7245	47.13	9130	57.06
1051	1100	1043	71.80	1759	69.35	2966	56.88	5241	54.15	7407	48.30	9330	58.37
1101	1150	1059	73.30	1791	71.75	3026	58.20	5354	55.40	7570	49.45	9548	59.68
1151	1200	1075	74.70	1822	73.30	3086	59.53	5467	56.65	7732	50.63	9750	60.99
1201	1250	1091	76.30	1854	74.80	3146	60.83	5579	57.90	7896	51.80	9967	62.29
1251	1300	1107	77.80	1886	76.05	3206	62.15	5692	59.15	8056	52.95	10170	63.60
1301	1350	1123	79.30	1918	77.50	3266	63.48	5806	60.30	8220	54.15	10386	64.91
1351	1400	1138	80.90	1949	78.90	3326	64.80	5918	61.53	8383	55.30	10595	66.22
1401	1450	1155	82.40	1979	79.35	3386	66.10	6030	62.86	8545	56.48	10804	67.53
1451	1500	1171	84.00	2011	81.75	3446	67.43	6143	64.13	8708	57.65	11014	68.84
1501	1550	1187	85.50	2042	83.20	3506	68.75	6256	65.35	8870	58.83	11223	70.14
1551	1600	1203	87.00	2073	84.65	3566	70.08	6369	66.60	9033	60.08	11432	71.46
1601	1650	1219	88.60	2105	86.05	3626	71.40	6482	67.83	9195	61.18	11642	72.78
1651	1700	1235	90.10	2136	87.50	3686	72.70	6594	69.10	9358	62.33	11851	74.07
1701	1750	1251	91.70	2168	88.90	3746	74.03	6707	70.33	9520	63.53	12061	75.38
1751	1800	1267	93.20	2199	90.35	3806	75.35	6820	71.58	9683	64.68	12270	76.69
1801	1850	1283	94.70	2230	91.80	3866	76.68	6933	72.83	9846	65.83	12479	77.99
1851	1900	1299	96.30	2262	93.30	3926	78.00	7046	74.05	10008	67.03	12689	79.31
1901	1950	1315	97.80	2293	94.85	3986	79.30	7158	75.33	10171	68.18	12898	80.61
1951	2000	1331	98.40	2325	96.05	4046	80.63	7271	76.55	10333	69.38	13107	81.92
2001	2050	1347	100.90	2356	97.50	4106	81.85	7384	77.80	10496	70.53	13317	83.23
2051	2100	1363	102.40	2387	98.95	4166	83.28	7497	79.03	10658	71.70	13526	84.54
2101	2150	1379	104.00	2419	100.35	4226	84.58	7609	80.30	10821	72.85	13735	85.84
2151	2200	1395	105.50	2450	101.75	4286	85.83	7722	81.53	10983	74.05	13945	87.15
2201	2250	1411	107.10	2482	103.15	4346	87.25	7835	82.78	11146	75.20	14154	88.46
2251	2300	1427	108.60	2513	104.60	4406	88.58	7948	84.00	11308	76.38	14363	89.77
2301	2350	1443	110.10	2544	106.05	4466	89.90	8061	85.25	11471	77.55	14573	91.08
2351	2400	1459	111.70	2576	107.45	4526	91.20	8173	86.50	11633	78.73	14782	92.38
2401	2450	1475	113.20	2607	108.90	4586	92.53	8286	87.75	11796	79.88	14991	93.69
2451	2500	1491	114.80	2638	100.30	4646	93.85	8399	89.00	11958	81.05	15201	95.01
2501	2550	1507	116.30	2670	101.75	4706	95.18	8512	90.23	12121	82.23	15410	96.31
2551	2600	1523	117.80	2701	103.20	4766	96.48	8624	91.50	12284	83.38	15619	97.62
2601	2650	1539	119.40	2733	104.60	4826	97.80	8737	92.73	12446	84.58	15829	98.93
2651	2700	1555	120.90	2764	106.05	4886	99.13	8850	93.98	12609	85.73	16038	100.24
2701	2750	1571	122.50	2796	107.45	4946	100.45	8963	95.20	12771	86.90	16247	101.54
2751	2800	1587	124.00	2827	108.90	5006	101.78	9076	96.45	12934	88.08	16457	102.86
2801	2850	1603	125.50	2859	110.35	5066	103.08	9188	97.70	13096	89.25	16666	104.16
2851	2900	1619	127.10	2890	111.75	5126	104.40	9301	98.95	13259	90.40	16875	105.47
2901	2950	1635	128.60	2921	113.20	5186	105.73	9414	100.18	13421	91.60	17085	106.78
2951	3000	1651	130.20	2953	114.60	5245	107.05	9527	101.43	13584	92.75	17294	108.08

(Effective: January 3, 1993)

SECTION 3 - TRANSPORTATION ALLOWANCES

PEAK SEASON TRANSPORTATION ALLOWANCES

(APPLICABLE BETWEEN MAY 16 AND SEPTEMBER 30)

ITEM 3-100

(RATES ON THIS PAGE ARE SUBJECT TO ITEM 80, INSURANCE SURCHARGE)

MILES		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT		WEIGHT	
		1000 POUNDS	ADD'L CWT.	2000 POUNDS	ADD'L CWT.	4000 POUNDS	ADD'L CWT.	8000 POUNDS	ADD'L CWT.	12000 POUNDS	ADD'L CWT.	16000 POUNDS	ADD'L CWT.
FROM	TO	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS	BASE	EXCESS
1	20	628	32.20	950	24.00	1430	23.00	2362	22.73	3261	17.00	3976	24.05
21	40	630	33.20	972	24.95	1471	23.95	2429	23.55	3371	18.70	4119	25.74
41	60	650	34.40	994	25.90	1512	24.85	2506	24.38	3481	19.53	4262	26.64
61	80	661	35.50	1016	26.95	1553	25.75	2583	25.20	3591	20.35	4405	27.53
81	100	673	36.40	1037	27.95	1594	26.65	2660	26.03	3701	21.18	4548	28.43
101	120	684	37.50	1059	28.90	1636	27.55	2737	26.95	3811	22.00	4691	29.32
121	140	695	38.60	1081	29.75	1678	28.45	2814	27.88	3921	22.83	4834	30.21
141	160	706	39.60	1102	30.75	1717	29.35	2891	28.50	4031	23.65	4977	31.11
161	180	718	40.60	1124	31.70	1758	30.25	2968	29.30	4141	24.48	5120	32.00
181	200	729	41.70	1146	32.65	1799	31.15	3046	30.13	4251	25.30	5263	32.89
201	220	734	42.30	1157	33.10	1819	31.63	3084	30.55	4306	25.73	5336	33.34
221	240	740	42.80	1168	33.60	1840	32.08	3123	30.95	4361	26.13	5408	33.79
241	260	746	43.30	1179	34.10	1860	32.53	3161	31.38	4416	26.55	5479	34.24
261	280	751	43.80	1189	34.60	1881	32.98	3200	31.78	4471	26.98	5550	34.69
281	300	757	44.30	1200	35.05	1901	33.45	3238	32.20	4527	27.35	5621	35.13
301	320	763	44.80	1211	35.55	1922	33.90	3277	32.63	4582	27.78	5693	35.58
321	340	768	45.40	1222	36.00	1942	34.35	3316	33.03	4637	28.18	5764	36.03
341	360	774	45.90	1233	36.45	1962	34.80	3354	33.45	4692	28.60	5836	36.48
361	380	780	46.40	1244	36.95	1983	35.25	3393	33.85	4747	29.00	5907	36.92
381	400	785	47.00	1255	37.40	2003	35.70	3431	34.28	4802	29.43	5979	37.37
401	420	791	47.40	1265	37.95	2024	36.15	3470	34.68	4857	29.83	6050	37.81
421	440	796	48.00	1276	38.40	2044	36.60	3508	35.10	4912	30.25	6122	38.26
441	460	802	48.50	1287	38.90	2065	37.05	3547	35.50	4967	30.65	6193	38.71
461	480	808	49.00	1298	39.35	2085	37.53	3586	35.90	5022	31.08	6265	39.15
481	500	813	49.60	1309	39.95	2106	37.95	3624	36.33	5077	31.48	6336	39.60
501	520	819	50.10	1320	40.35	2127	38.38	3662	36.75	5132	31.90	6408	40.05
521	540	827	50.60	1335	41.10	2157	39.03	3718	37.38	5213	32.50	6513	40.71
541	560	835	51.00	1361	41.80	2187	39.70	3775	37.98	5294	33.10	6618	41.36
561	580	843	52.40	1387	42.50	2217	40.35	3831	38.63	5376	33.65	6722	42.01
581	600	851	53.30	1383	43.20	2247	41.03	3888	39.23	5457	34.25	6827	42.67
601	620	860	53.50	1399	43.95	2277	41.80	3944	39.95	5530	34.95	6932	43.30
621	640	867	54.70	1414	44.65	2307	42.53	4000	40.50	5620	35.40	7036	43.95
641	660	875	55.50	1430	45.35	2337	43.00	4057	41.10	5701	36.00	7141	44.63
661	680	883	56.70	1445	46.10	2367	43.85	4113	41.73	5782	36.60	7246	45.29
681	700	891	57.00	1461	46.80	2397	44.53	4170	42.33	5863	37.15	7350	45.94
701	720	899	57.80	1477	47.50	2427	44.90	4226	42.98	5945	37.75	7455	46.59
721	740	907	58.50	1492	48.25	2457	45.63	4282	43.60	6026	38.35	7560	47.25
741	760	915	59.30	1508	48.95	2487	46.30	4339	44.20	6107	38.93	7664	47.90
761	780	923	60.10	1524	49.65	2517	46.95	4395	44.83	6188	39.53	7769	48.56
781	800	931	60.90	1540	50.35	2547	47.63	4452	45.45	6270	40.10	7874	49.21
801	820	939	61.60	1555	51.10	2577	48.28	4508	46.08	6351	40.68	7978	49.86
821	840	947	62.40	1571	51.80	2607	48.93	4564	46.70	6432	41.28	8083	50.52
841	860	955	63.20	1587	52.50	2637	49.60	4621	47.30	6513	41.88	8188	51.18
861	880	963	63.90	1602	53.25	2667	50.25	4677	47.95	6595	42.43	8292	51.83
881	900	971	64.70	1618	53.95	2697	50.93	4734	48.55	6676	43.03	8397	52.48

(Effective: January 3, 1993)

				LBS	COST TO PACK
	Regression	Output		4000	
Constant			1491 805		37 29513494
Std Err of Y Est			26 18473		
R Squared			0 997288		
No of Observations			56		
Degrees of Freedom			54		
X Coefficient(s)		1 339231			
Std Err of Coef		0 009504			
	Regression	Output		8000	
Constant			2468 328		30 85410513
Std Err of Y Est			49 39432		
R Squared			0 99727		
No of Observations			56		
Degrees of Freedom			54		
X Coefficient(s)		2 518201			
Std Err of Coef		0 017929			
	Regression	Output		12000	
Constant			3415 097		28 45913855
Std Err of Y Est			74 52076		
R Squared			0 997009		
No of Observations			56		
Degrees of Freedom			54		
X Coefficient(s)		3 629073			
Std Err of Coef		0 027049			
	Regression	Output		16000	
Constant			4195 34		26 22087504
Std Err of Y Est			92 91343		
R Squared			0 997198		
No of Observations			56		
Degrees of Freedom			54		
X Coefficient(s)		4 675253			
Std Err of Coef		0 033725			

WEIGHT	PACKING ETC
4000	37 29513
8000	30 85411
12000	28 45914
16000	26 22088
SUM	122 8293
AVG	30 70731

	Regression	Output
Constant		39 61175
Std Err of Y Est		1 60813
R Squared		0 924608
No of Observations		4
Degrees of Freedom		2
X Coefficient(s)	-0 00089044	
Std Err of Coef	0 000179794	

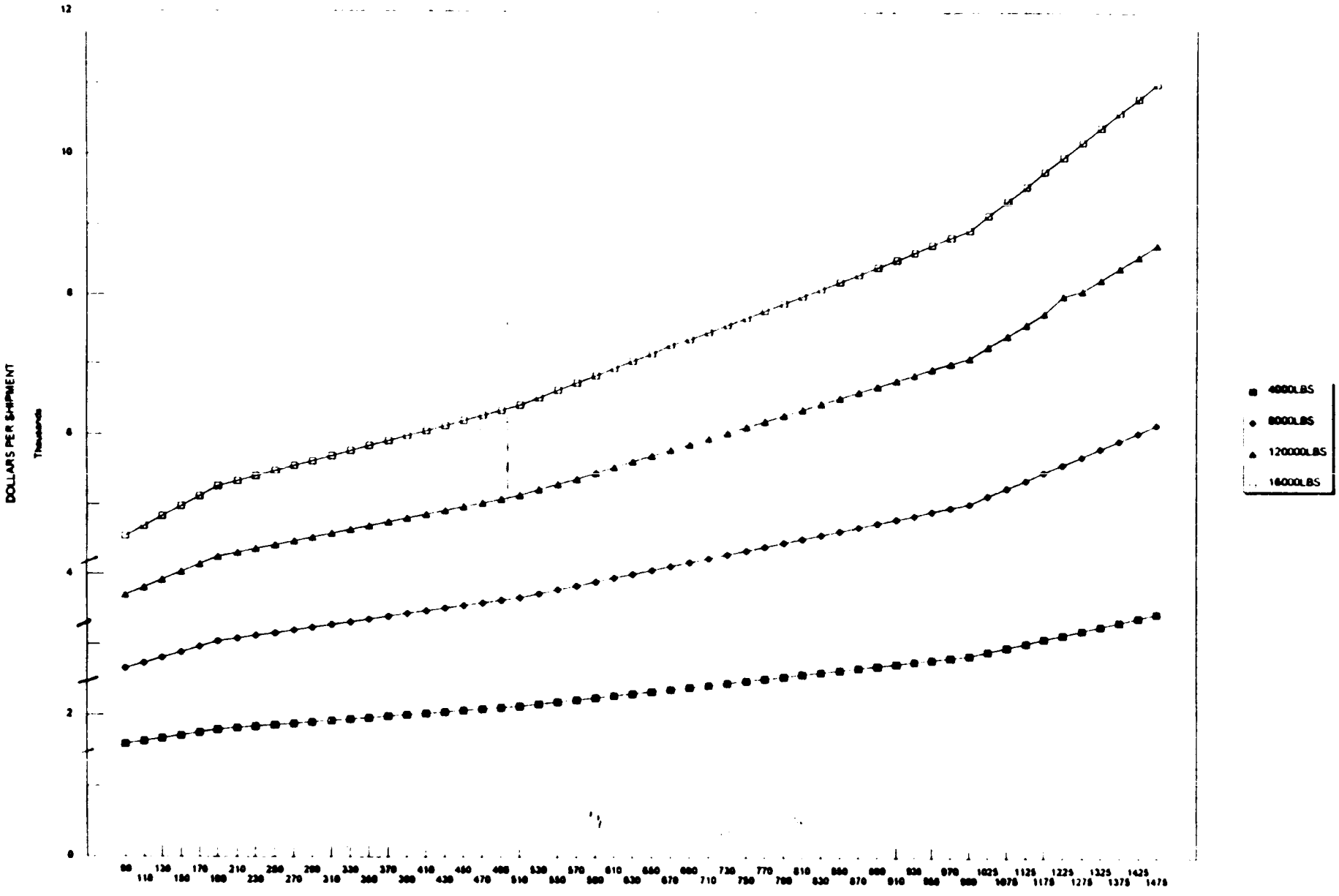
EQUASION – COST TO PACK,ETC = 39 61175 - 00089044(LBS)

FOR LBS = 7265 COST TO PACK = 33 14287682

90	1594	2660	3701	4548
110	1635	2737	3811	4681
130	1676	2814	3921	4834
150	1717	2891	4031	4977
170	1758	2969	4141	5120
190	1799	3046	4251	5263
210	1819	3084	4308	5335
230	1840	3123	4381	5406
250	1860	3161	4418	5478
270	1881	3200	4471	5550
290	1901	3239	4527	5621
310	1922	3277	4582	5693
330	1942	3316	4637	5764
350	1962	3354	4692	5836
370	1983	3393	4747	5907
390	2003	3431	4802	5979
410	2024	3470	4857	6050
430	2044	3508	4912	6122
450	2065	3547	4967	6193
470	2085	3586	5022	6265
490	2106	3624	5077	6336
510	2127	3662	5132	6408
530	2157	3718	5213	6513
550	2187	3775	5294	6618
570	2217	3831	5367	6722
590	2247	3888	5457	6827
610	2277	3944	5538	6932
630	2307	4000	5620	7036
650	2337	4057	5701	7141
670	2367	4113	5782	7246
690	2397	4170	5863	7350
710	2427	4226	5945	7455
730	2457	4282	6026	7560
750	2487	4339	6107	7664
770	2517	4395	6188	7769
790	2547	4452	6270	7874
810	2577	4508	6351	7978
830	2607	4564	6432	8083
850	2637	4621	6513	8188
870	2667	4677	6595	8292
890	2697	4734	6676	8397
910	2727	4790	6757	8502
930	2757	4846	6839	8606
950	2786	4903	6920	8711
970	2816	4959	7001	8816
990	2846	5015	7082	8920
1025	2906	5128	7245	9130
1075	2966	5241	7407	9339
1125	3026	5354	7570	9548
1175	3086	5467	7733	9758
1225	3146	5579	7895	9967
1275	3206	5692	8058	10176
1325	3266	5805	8220	10386
1375	3326	5918	8383	10595
1425	3386	6030	8545	10804
1475	3446	6143	8708	11014

COST TO PACK/UNPACK/EE AVG SHIPMENT $33.00 FY 93

SHIPMENT COST PER MILE



TOTAL MARRIED=				274495				
TOTAL SINGLE =				150485.6				
ARRIED HHG FACTORS:								
	NUMBER			WEIGHT	TOTAL	WEIGHTED AVG=		15371.97
COL +GO	3457			18000	62226000			
LTC	7360			17500	128800000			
MAJ+W-4	12450			17000	211650000			
CPT+W-3	20052			14500	290754000			
1LT+W-2	7884			13500	106434000			
2LT+W-1	3788			12000	45456000			
	54991				845320000			
						WEIGHTED AVG=		9467.394
E-9	2439			14500	35365500			
E-8	8363			13500	112900500			
E-7	31770			12500	397125000			
E-6	46736			11000	514096000			
E-5	51348			9000	462132000			
E-4	49319			7500	369892500			
E-3	15202			7500	114015000			
E-2	5687			5000	28435000			
E-1	8423			5000	42115000			
	219287				2076076500			
SINGLE HHG FACTORS:								
	NUMBER	%MARRIED	SINGLE	WEIGHT	TOTAL	WEIGHTED AVG=		4607.199
	MARRIED							
MG	97	97.00%	3	18000	54000			
BG	129	96.99%	4	18000	72000			
COL	3457	94.65%	195	18000	3510000			
LTC	7360	92.83%	568	16000	9088000			
MAJ	11122	89.91%	1248	14000	17472000			
W-4	1328	94.72%	74	14000	1036000			
CPT	17682	79.77%	4484	13000	58292000			
W-3	2370	93.52%	164	13000	2132000			
1LT	4449	60.26%	2934	12500	36675000			
W-2	3435	87.29%	500	12500	6250000			
2LT	2638	45.95%	3103	10000	31030000			
W-1	1150	79.80%	291	10000	2910000			
E-9	2439	94.02%	155	12000	1860000			
E-8	8363	93.33%	598	11000	6578000			
E-7	31770	91.02%	3134	10500	32907000			
E-6	46736	88.97%	5794	8000	46352000			
E-5	51348	80.61%	12351	7000	86457000			
E-4	49319	53.25%	43299	5250	227319750			
E-3	15202	32.55%	31502	2000	63004000			
E-2	5687	22.49%	19600	1500	29400000			
E-1	8423	29.20%	20423	1500	30634500			
	274407		150424		693033250			
NK	217							
		OVERALL AVG	WEIGHT=		7265.44829763			

STANDARD FACTOR #52
EQUIPMENT PACKING AND CRATING

1. DESCRIPTION: The cost for packing and crating of military equipment and material to be moved. (Allowed entries 0.0 to 100,000.00 $/ton)

2. VALIDATED VALUE: $284 PER TON FY 96 DOLLARS

3. DATA SOURCE: See attached documentation. Navy study conducted on packing and crating military equipment. This study most closely replicates the true cost associated with this factor.

   a. DATE LAST UPDATED: July 1994.

   b. DATE OF NEXT UPDATE: Unk.

4. METHODOLOGY: Used $271 as the baseline for 1994 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4, National Defense Budget Estimates for FY 1995. FY 94 = 97.84, FY 96 = 102.63,

escalation factor = 102.63/97.84 = 1.409

271 * 1.0489 = $284

5. VALIDATION PROCEDURE: None taken.

STATEMENT OF CERTIFICATION:

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

AVERAGE COST TO PACK, CRATE, UNPACK AND UNCRATE ONE TON OF MISSION SUPPORT EQUIPMENT

Crate size = L-88" X W-45" X H-40"

1. Material/labor to construct crate	$165.00
2. Pack and crate	$ 52.00
One WG-6 step 3 ($13.00) X 4 hours	
3. Uncrate and unpack	$ 48.24
One WG-6 step 3 ($13.00) X 2 hours = $26.00 One WG-4 step 3 ($11.12) X 2 hours = $22.24	
4. Supply clerk (documentation)	$ 2.77
One GS-5 step 6 ($11.07) X 15 minutes	
5. Stencil/mark	$ 2.78
One WG-4 step 3 ($11.12) X 15 minutes	
TOTAL COST	$270.79

NOTE: Because of the lack of insight into how other activities may have derived their figures, this Center is unable to explain any difference between the dollar figure derived above and a figure developed by another activity. Given the indeterminate nature of the question, this activity has, in the short time provided, derived a best estimate for the average cost. Discussions on 14 July with various senior members of the packing section served to reinforce the basic validity of the $271.00 figure quoted.

Encl. (3)

STANDARD FACTOR #55
POV REIMBURSEMENT

1. DESCRIPTION: The average reimbursement rate for driving Personally Owned Vehicles. (Allowed entries 0.00 to 100,000.00 $/mile)

2. VALIDATED VALUE: $.18 FY 96 DOLLARS

3. DATA SOURCE: See attached documentation. Joint Federal Travel Regulation, Vol 1, Chapter 5, Part B, Paragraph U5105.B.1.

a. DATE LAST UPDATED: 30 Sep 93

b. DATE OF NEXT UPDATE: 30 Sep 94

5. METHODOLOGY:

$.15 per mile for one authorized traveler
$.17 per mile for two authorized travelers
$.19 per mile for three authorized travelers
$.20 per mile for four or more authorized travelers

AVERAGE Value = $17.75. Round to $.18

6. VALIDATION PROCEDURE: see attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

POV REIMBURSEMENT COST

Description	Current Amount	Validated Amount
POV MILEAGE REIMBURSEMENT RATE	$.20	$.1775

DATA SOURCE: Joint Federal Travel Regulation, Vol 1, Chapter 5,Part B, paragraph U5105.B.1 is the supporting documentation for military personnel.

Joint Travel Regulation , Vol 2, Appexidx G is the supporting documentation for civilian personnel.

UNIT OF MEASURE: DOLLARS/MILES

MTHODOLOGY:

$.15 per mile for one authorized traveler occupying POC

.17 per mile for two authorized travelers occupying POC

.19 per mile for three authorized travelers occupying POC

.20 per mile for four or more authorized travelers occupying POC

Take the above rates, add together then divide by 4. The average rate is 17.75 cents per mile.

Review Results: Both the military and civilian rates are the same ($.1775).

SUBSISTENCE

U5100 GENERAL

This Part covers permanent change of station (PCS) travel entitlements for the member's personal travel. Members who are ordered to make a PCS move are entitled to personal travel and transportation allowances outlined in this Part from the old permanent duty station (PDS) to the new PDS. A member on PCS orders who takes leave before joining the new station is not deprived of the allowances prescribed in this Chapter which would otherwise accrue had the member not taken leave.

U5105 TRAVEL AND TRANSPORTATION OPTIONS

A. General. Incident to a PCS, a member may elect to:

1. travel by a privately owned conveyance (POC) (if the member travels by POC, the member will be reimbursed on a MALT PLUS basis (subpar. B)); or

2. personally procure transportation by common carrier (if the member travels by personally procured transportation by common carrier, the member will receive reimbursement plus per diem (subpar. C); or

3. be provided transportation in kind (if the member is provided transportation in kind, the member will receive transportation in kind plus per diem (subpar. D));

except in situations involving:

1. travel performed partly at personal expense and partly by Government Transportation Request (GTR) and/or Government conveyance (subpar. E);

2. directed modes of transportation and group travel (par. U5108);

3. overseas travel (par. U5116);

4. special circumstances (par. U5120);

5. delivery/pickup of a privately owned vehicle to and from the water port (par. U5410-D);

6. travel discussed in Chapter 7 for which travel and transportation options are specifically prescribed therein.

B. Monetary Allowance in Lieu of Transportation Plus Flat Per Diem When Travel Is by POC. A member traveling on PCS by POC is entitled to MALT PLUS. (The use of a POC for PCS travel, other than transoceanic, is considered as advantageous to the Government.) The MALT portion of this allowance is paid on a "per mile" basis for the official distance of each portion of the ordered travel (for an explanation of a separate journey, see par. U5150). The PLUS portion of this allowance is paid on a whole day calendar basis for the allowable travel time. MALT PLUS and/or a per diem or actual expense allowance, as prescribed in Chapter 4, Part B or C, as applicable, cannot be paid for the same day. However, a per diem or actual expense allowance is authorized for any necessary delay of processing time at a passenger port of embarkation/debarkation or personnel processing center (except when prohibited by pars. U5125-A3 and U5130-A3). The rates of reimbursement under the MALT PLUS allowance are as specified in subpars. 1 and 2.

1. MALT Rates Payable. The MALT for members performing PCS travel by POC is based on the number of authorized travelers traveling in the POC. An authorized traveler is any member or dependent performing travel incident to PCS orders. Such MALT rates will be as follows:

a. $0.15 per mile when only one authorized traveler occupies the POC;

b. $0.17 per mile when two authorized travelers occupy the same POC;

c. $0.19 per mile when three authorized travelers occupy the same POC; and

d. $0.20 per mile when four or more authorized travelers occupy the same POC.

Reimbursement of parking fees, ferry fares, road, bridge and tunnel tolls is authorized for travel by POC under this paragraph for travel over the most direct route between the official points involved. Only the member responsible for paying the operating expenses of the POC will be entitled to the MALT and reimbursable expenses. Operating expenses are

STANDARD FACTOR #56
AIR TRANSPORT COST
Change 2 - 5 Oct 95

1. DESCRIPTION: The average cost of air transporting a passenger. (Allowed entries 0.00 to 100,000.00 $/mile)

2. VALIDATED VALUE: $.20 FY 96 DOLLARS

3. DATA SOURCE: See attached documentation. MTMC Traffic Management Progress Report, FY 93 - Passenger Traffic. Airline Mode of Transportation.

a. DATE LAST UPDATED: 30 Sep 1993

b. DATE OF NEXT UPDATE: 30 Sep 1994

5. METHODOLOGY: Used $0.1821 as the baseline for 1993 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4 , National Defense Budget Estimates for FY 1995. FY 93 = 95.64, FY 96 = 102.63, escalation factor =

102.63/95.64 = 1.0731.

$0.1821* 1.0731 = $0.1954

round to $0.20

6. VALIDATION PROCEDURE: see attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTOR #56
AIR TRANSPORT COST

1. DESCRIPTION: The average cost of air transporting a passenger. (Allowed entries 0.00 to 100,000.00 $/mile)

2. VALIDATED VALUE: $.195 FY 96 DOLLARS

3. DATA SOURCE: See attached documentation. MTMC Traffic Management Progress Report, FY 93 - Passenger Traffic. Airline Mode of Transportation.

a. DATE LAST UPDATED: 30 Sep 1993

b. DATE OF NEXT UPDATE: 30 Sep 1994

5. METHODOLOGY: Used $0.1821 as the baseline for 1993 dollars, then inflated to 1996 using the GRAND TOTAL factor from Table 5-4, National Defense Budget Estimates for FY 1995. FY 93 = 95.64, FY 96 = 102.63, escalation factor =

102.63/95.64 = 1.0731.

$0.1821* 1.0731 = $0.1954

round to $0.195

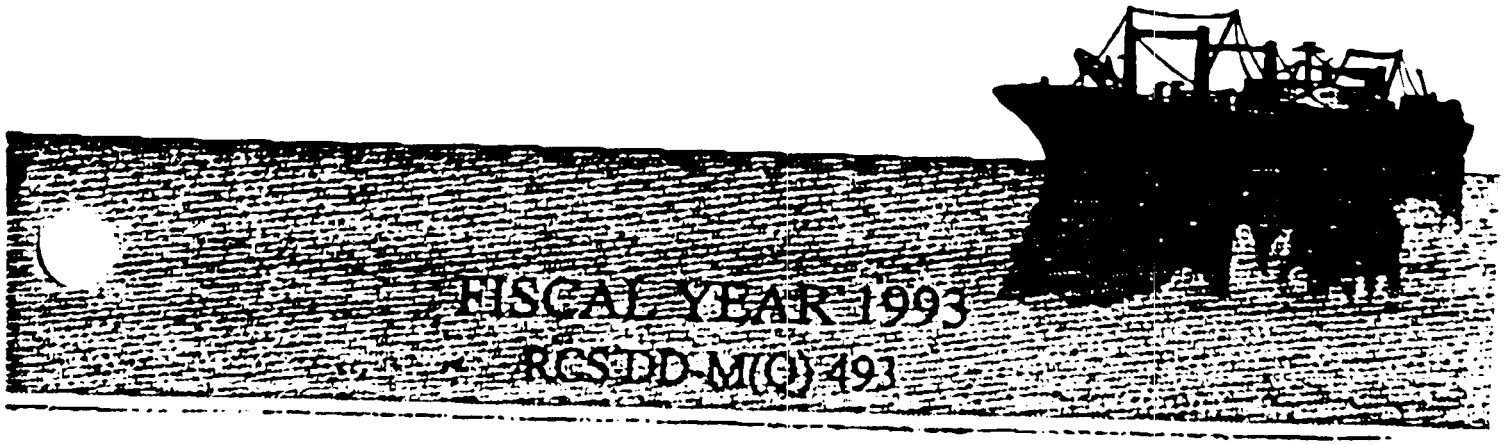
6. VALIDATION PROCEDURE: see attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

ENCL 11

TRAFFIC MANAGEMENT PROGRESS REPORT



FISCAL YEAR 1993

RCS DD-M(Q) 493

FILE NAME: PTAVGFAR

PASSENGER TRAFFIC

AVERAGE FARES AND AVERAGE JOURNEY

Mode of Shipment	DURING FISCAL YEAR 1992			Comparative Qtr: 4th Qtr FY 92			Current Qtr: 4th Qtr FY 93			Cumulative FY 1993 Thru 30 Sep 93		
	Average Fare Per PAX	Average Fare Per PAX Mile	Average Journey Per PAX	Average Fare Per PAX	Average Fare Per PAX Mile	Average Journey Per PAX	Average Fare Per PAX	Average Fare Per PAX Mile	Average Journey Per PAX	Average Fare Per PAX	Average Fare Per PAX Mile	Average Journey Per PAX
Passenger Traffic - Total	$139.29	$0.1645	847	$141.39	$0.1724	820	$159.06	$0.1852	859	$156.20	$0.1779	878
Airline	$179.15	$0.1683	1,065	$188.47	$0.1767	1,067	$203.42	$0.1900	1,071	$195.56	$0.1821	1,074
Coach	$177.33	$0.1691	1,049	$186.44	$0.1784	1,045	$203.38	$0.1933	1,052	$195.36	$0.1849	1,057
First Class	$456.75	$0.4264	1,071	$216.35	$0.2710	798	$460.50	$0.5005	920	$246.49	$0.2297	1,073
Charter	$215.43	$0.1553	1,387	$216.71	$0.1583	1,369	$204.77	$0.1473	1,391	$200.57	$0.1378	1,456
Bulk Purchase	$164.37	$0.1940	847	$182.98	$0.2016	908	$173.11	$0.1814	954	$169.28	$0.1916	883
Human Remains	$242.78	$0.2304	1,054	$246.00	$0.2424	1,016	$272.02	$0.2541	1,071	$272.02	$0.2541	1,071
Charter Air Taxi	$211.29	$0.6553	80	$0.00	$0.0000	0	$0.00	$0.0000	0	$0.00	$0.0000	0
Bus	$17.57	$0.0970	181	$18.16	$0.1034	176	$18.76	$0.0961	195	$17.99	$0.0917	196
Regular	$16.53	$0.1223	135	$16.84	$0.1281	131	$21.73	$0.1424	153	$17.92	$0.1214	148
Charter	$18.82	$0.0911	207	$19.82	$0.0969	205	$18.98	$0.0886	214	$18.63	$0.0853	218
Bulk Purchase	$9.48	$0.1883	50	$9.46	$0.1832	52	$14.85	$0.1782	83	$12.93	$0.1942	67
Railroad	$26.29	$0.1912	137	$51.29	$0.2604	197	$55.20	$0.3532	156	$53.49	$0.3223	166
Coach	$25.89	$0.1857	139	$53.29	$0.2600	205	$55.99	$0.3528	159	$54.04	$0.3248	166
First Class	$0.00	$0.0000	0	$0.00	$0.0000	0	$0.00	$0.0000	0	$0.00	$0.0000	0
Bulk Purchase	$29.70	$0.2456	121	$20.89	$0.2799	75	$35.18	$0.3699	95	$39.25	$0.2537	155

STANDARD FACTOR #57
MISC PCS COST

1. DESCRIPTION: The average cost of air transporting a passenger. (Allowed entries 0.00 to 100,000.00 $/mile)

2. VALIDATED VALUE: $700 FY 96 DOLLARS

3. DATA SOURCE: See attached documentation. Joint Federal Travel Regulation, Vol 2, Appendix C, Paragraph C9003.

a. DATE LAST UPDATED: Unk

b. DATE OF NEXT UPDATE: Unk

5. METHODOLOGY: Used the $700 for an employee with dependents.

6. VALIDATION PROCEDURE: see attached documentation.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

3. costs reimbursed under other provisions of law or regulations;
4. costs or expenses incurred for reasons of personal taste or preference and not required because of the move;
5. losses covered by insurance;
6. fines or other penalties imposed upon him or his dependents;
7. judgments, court costs, and similar expenses growing out of civil actions;
8. any other expenses brought about by circumstances, factors, or actions in which the move to a new duty station was not the proximate cause.

Examples of the types of costs in the foregoing items 1 through 8 which are not reimbursable from this allowance are as follows:

1. losses in selling or buying homes and personal property and cost items related to such transactions;
2. duplication of payments for otherwise reimbursable expenses;
3. cost of additional insurance on household goods while in transit to new duty station, or cost of loss or damage to such property;
4. additional costs of moving household goods caused by exceeding the maximum weight limitation for which the employee has eligibility as provided by law or in this Volume;
5. higher income, real estate, sales, or other taxes as the result of establishing residence in the new locality;
6. fines imposed for traffic infractions while en route to the new duty station locality;
7. accident insurance premiums or liability costs incurred in connection with travel to the new duty station locality, or any other liability imposed upon the employee for uninsured damage caused by accidents for which he or his dependents are held responsible;
8. losses as the result of the sale or disposal of items of personal property not considered convenient or practicable to move;
9. damage or loss of clothing, luggage, or other personal effects while traveling to the new duty station locality;
10. subsistence, transportation, or mileage expenses in excess of the amounts reimbursed as per diem or other allowances under the provisions of this Volume;
11. medical expenses due to illness or injuries of the employee or his dependents while en route to the new duty station or while living in temporary quarters;
12. costs incurred in connection with structural alterations; remodeling or modernizing of living quarters, garages, or other buildings, to accommodate privately owned automobiles, appliances, or equipment; or the cost of replacing or repairing worn out or defective appliances or equipment shipped to the new location;
13. costs of purchasing clothing, appliances, and equipment incident to relocation;
14. costs of newly acquired items, such as the purchase or installation cost of new rugs or drapes.

C9002 ELIGIBILITY

A miscellaneous expense allowance will be payable to an employee for whom a permanent change of station is authorized or approved, when he has discontinued and established a residence in connection with such change of station, regardless of where the old or new duty station is located, provided an appropriate agreement is signed.

★C9003 AMOUNT ALLOWABLE

1. MINIMUM. Allowances in the following amounts may be paid without being supported by receipts or itemized statements indicating the nature of costs or expenses being reimbursed:

1. $350 or the equivalent of 1 week's basic compensation, whichever is the lesser amount, for an employee without dependents;
2. $700 or the equivalent of 2 weeks' basic compensation, whichever is the lesser amount, for an employee with dependents;

w/o J X

STANDARD FACTOR #58
AVG MILITARY TOUR LENGTH

1. DESCRIPTION: The average length of military assignments. This is used to adjust the moving population to account for those personnel who would move each year, independent of the closure/realignment action. (Allowed entries 1 to 20 years)

2. VALIDATED VALUE: As of May 1994, the aggregate Time On Station (TOS) is approximately 2.9 years. Current OCONUS tour length is approximately 2.5 years and the CONUS TOS is 3.1 years.

3. DATA SOURCE: The calculations used data from the following databases (DB) within PERSCOM; The Personnel DB (PERDB), the Requisition DB (REQDB), and the 905-ORG-COR (a data table extract for the PMAD).

a. DATE LAST UPDATED: May 1994

b. DATE OF NEXT UPDATE: October 1994

4. METHODOLOGY: The overall TOS was calculated by weighing the OCONUS tour length and the CONUS TOS by their respective number of authorizations (auths) and dividing by the total number of auths in the Army. The average OCONUS tour length algorithm accounts for the distribution of auths in various OCONUS geographic locations, weights the auths by the tour length for the geographic location and then derives the overall OCONUS tour length by adding the weighted auths together and dividing by the total number of auths. The OCONUS TOS is a snapshot of TOS for a group of soldiers on orders in May 94. The algorithm considered soldiers on orders, excluded first termers, MSG(P), SGM and soldiers with blank date last PCS on the database. The algorithm simply took the difference from the date last PCS and the scheduled date of arrival at the next duty station for each soldier and calculated an average TOS for the group. Efforts are under way to establish a more robust algorithm for calculating the TOS. In the future, an in-house program will be used to derive the most current TOS for the Army population as a whole.

5. VALIDATION PROCEDURE: Validation doesn't apply. The element is a mathematical calculation, based on data from established databases, resulting in a deterministic solution. No probabilities, simulations or predictive modelling were incorporated.

STATEMENT OF CERTIFICATION: The information supplied is accurate and complete to the best of my knowledge and belief.

Michael J. Shane

MICHAEL J. SHANE
Colonel, GS
Chief, Enlisted Division

LATEST UPDATE SEP 94
2.9 YEARS TIME ON STATION.
CVF

MOS	SKL LVL					AVERAGE NUMBER MONTHS
98G						
	3		16.00		001	[illegible]
	4		4.00		001	[illegible]
98H	1		10.00		[illegible]	[illegible]
	2		7.00		[illegible]	[illegible]
	3		7.00		[illegible]	[illegible]
	4		3.00		[illegible]	[illegible]
98J	1		18.00		[illegible]	[illegible]
	2		[illegible]		[illegible]	[illegible]
	3		[illegible]		[illegible]	[illegible]
	4		1.00		[illegible]	[illegible]
98K	1		2.00		[illegible]	[illegible]
	2		1.00		001	[illegible]
	3		4.00		001	[illegible]
	4		[illegible]		001	[illegible]
98Z	5		3.00		001	[illegible]
OVERALL		[illegible]	9949.00	[illegible]	001	307 [illegible]

TIME ON STATION

34.51 MONTHS ÷ 12

2.9

```
000014      OPTION ERROR=0 NODATE NOCENTER;
000016
000017 DATA TOS(KEEP=SSN NAME PMOSEN SKL DTEAPC ORDTGC DROS);
000018     INFILE CONUS;
000019     INPUT ROCMSN $ 4 ROCMAA $ 67 ORDTGC $ 86-89 RCDTVL $ 106-107
000020        SSN $ 436-444 RECSTA $ 445 NAME $ 446-472
000021        PLVL SKL $ 497-498 PMOSEN $ 515-517 SKL 518 ORAGST $ 617
000022        AFACNM $ 626-629 AFA $ 667 YMAEAT $ 668-673 DROS $ 926-927
000023        DTCETS $ 952-955 ADCTR $ 954-957 SCCMPT $ 968 DTEAPC $ 978-981
000024        PERSSS $ 986-987 ACMINO $ 1024;
000025 IF CONFND='C';
000026 IF ACAGMS='ONOR';
000027 IF ROCMSN NOT IN ('C');
000028 IF RECSTA='C';
000029 IF SCCMPT='R';
000030 IF ROCMSN NOT IN ('N' 'P' 'Q');
000031 IF PERSSS NOT IN ('TN' 'TR');
000032 IF ORAGST IN ('I' 'J' 'K' 'L');
000033 IF ORDTGC GE '9409';
000034 IF PMOSEN IN ('31Y' '75C' '75E' '75L' '92A' '950');
000036
000037  PROC SORT DATA=WORK.TOS;
000038     BY PMOSEN SKL;
000039
000040  [illegible]
000041
000042     SET WORK.TOS;
000043     IF PMOSEN SKL;
000044       IF [illegible]
000045          [illegible];
000046          [illegible];
000047          [illegible];
```

3 of 3

STANDARD FACTOR #59
ROUTINE PCS COSTS
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average routine PCS costs per military position, per move. This is used in conjunction with the Average Military Tour Length to offset PCS costs to account for personnel who would move each year, independent of the closure/realignment action. (Allowed entries 0.00 to 100,000.00 $/person/move)

2. VALIDATED VALUE: $4,503 FY 96 dollars

3. DATA SOURCE : BRAC 95 COBRA run.

   a. DATE LAST UPDATED : 26 Sep 1994.

   b. DATE OF NEXT UPDATE : NA

5. METHODOLOGY : See attached COBRA reports.

6. VALIDATION PROCEDURE : None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

Data As Of 07:25 09/13/1994, Report Created 07:54 09/26/1994

Department : ARMY
Option Package : ROUTINE PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\BRAC95.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : 100+ Years

NPV in 2015($K): 4,442
1-Time Cost($K): 4,503

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,503	0	0	0	0	0	4,503	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,503	0	0	0	0	0	4,503	0

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	162	0	0	0	0	0	162
Enlisted	838	0	0	0	0	0	838
Students	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0
TOTAL	1,000	0	0	0	0	0	1,000

$4,503 PER "Routine" PCS

COBRA FILE - ROUTINE.CBR

MOVEMENT DISTANCE = 1,000 MILES.

Summary:

CALCULATION OF PCS EXPENSES FOR ROUTINE PCS COSTS.

RATIO OF OFFICERS VS ENLISTED TAKEN FROM "FAMILY" DATA BASE. SEE SF#1, OFFICERS MARRIED

Data As Of 07:25 09/13/1994, Report Created 07:54 09/26/1994

Department : ARMY
Option Package : ROUTINE PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\BRAC95.SFF

Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,503	0	0	0	0	0	4,503	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,503	0	0	0	0	0	4,503	0

Savings ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

STANDARD FACTOR #59
ROUTINE PCS COSTS

1. DESCRIPTION: The average routine PCS costs per military position, per move. This is used in conjunction with the Average Military Tour Length to offset PCS costs to account for personnel who would move each year, independent of the closure/realignment action. (Allowed entries 0.00 to 100,000.00 $/person/move)

2. VALIDATED VALUE: 0.0

3. DATA SOURCE: NONE

   a. DATE LAST UPDATED: NA

   b. DATE OF NEXT UPDATE: NA

5. METHODOLOGY:

6. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTOR #59
ROUTINE PCS COSTS
Change 3 - 14 Oct 1994

1. DESCRIPTION: The average routine PCS costs per military position, per move. This is used in conjunction with the Average Military Tour Length to offset PCS costs to account for personnel who would move each year, independent of the closure/realignment action. (Allowed entries 0.00 to 100,000.00 $/person/move)

2. VALIDATED VALUE: $4,665 FY 96 dollars

3. DATA SOURCE: BRAC 95 COBRA run.

   a. DATE LAST UPDATED: 14 Oct 95.

   b. DATE OF NEXT UPDATE: NA

5. METHODOLOGY: See attached COBRA reports.

6. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTOR #60
ONE-TIME PCS COST OFFICER
Change 3 - 14 Oct 94

1. DESCRIPTION: The average one-time PCS cost for an officer. This factor

2. VALIDATED VALUE: $6,134

3. DATA SOURCE : BRAC 95 COBRA run.

   a. DATE LAST UPDATED : 14 Oct 1994.

   b. DATE OF NEXT UPDATE : NA

5. METHODOLOGY : See attached COBRA report.

6. VALIDATION PROCEDURE : None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

#4,665

COBRA REALIGNMENT SUMMARY (COBRA v5.01)
Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : 100+ Years

NPV in 2015($K): 4,602
1-Time Cost($K): 4,665

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,665	0	0	0	0	0	4,665	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,665	0	0	0	0	0	4,665	0

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	162	0	0	0	0	0	162
Enlisted	838	0	0	0	0	0	838
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	1,000	0	0	0	0	0	1,000

Summary:

CALCULATION OF PCS EXPENSES FOR "ROUTINE PCS".

$ 6,134

COBRA REALIGNMENT SUMMARY (COBRA v5.01)
Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : 100+ Years

NPV in 2015($K): 6,051
1-Time Cost($K): 6,134

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	6,134	0	0	0	0	0	6,134	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	6,134	0	0	0	0	0	6,134	0

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	1,000	0	0	0	0	0	1,000
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	1,000	0	0	0	0	0	1,000

Summary:

CALCULATION OF PCS EXPENSES FOR OFFICERS MOVING TO BASE X.

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.01) - Page 2
Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Pctrs File : C:\COBRA\DOD95.SFF

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COST	4,665	0	0	0	0	0	4,665	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	4,392	0	0	0	0	0	4,392
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,665	0	0	0	0	0	4,665

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	4,665	0	0	0	0	0	4,665	0

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPS	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	25	0	0	0	0	0	25
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hires	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	208	0	0	0	0	0	208
POV Miles	180	0	0	0	0	0	180
HHG	3,303	0	0	0	0	0	3,303
Misc	700	0	0	0	0	0	700
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,665	0	0	0	0	0	4,665

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	4,665	0	0	0	0	0	4,665	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	4,392	0	0	0	0	0	4,392
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,665	0	0	0	0	0	4,665

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	4,665	0	0	0	0	0	4,665	0

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

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

INPUT DATA REPORT (COBRA v5.01)
Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

Base Name	Strategy:
NOTIONAL BASE #1, US	Realignment
BASE X, US	Realignment

Summary:

CALCULATION OF PCS EXPENSES FOR "ROUTINE PCS".

INPUT SCREEN TWO - DISTANCE TABLE

From Base:	To Base:	Distance:
NOTIONAL BASE #1, US	BASE X, US	1,000 mi

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NOTIONAL BASE #1, US to BASE X, US

	1996	1997	1998	1999	2000	2001
Officer Positions:	162	0	0	0	0	0
Enlisted Positions:	838	0	0	0	0	0
Civilian Positions:	0	0	0	0	0	0
Student Positions:	0	0	0	0	0	0
Missn Eqpt (tons):	0	0	0	0	0	0
Suppt Eqpt (tons):	0	0	0	0	0	0
Mil Light Vehic (tons):	0	0	0	0	0	0
Heavy/Spec Vehic (tons):	0	0	0	0	0	0

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

Total Officer Employees:	162	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	838	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.00
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	20.9%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	0	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: BASE X, US

Total Officer Employees:	1,000	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	0	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.02
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	0.0%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	73	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

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

Name: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 06:26 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

Percent Officers Married:	74.00%	Civ Early Retire Pay Factor:	9.00%
Percent Enlisted Married:	55.50%	Priority Placement Service:	60.00%
Enlisted Housing MilCon:	82.00%	PPS Actions Involving PCS:	50.00%
Officer Salary($/Year):	77,068.00	Civilian PCS Costs ($):	28,800.00
Off BAQ with Dependents($):	7,717.00	Civilian New Hire Cost($):	1,109.00
Enlisted Salary($/Year):	34,120.00	Nat Median Home Price($):	114,600.00
Enl BAQ with Dependents($):	5,223.00	Home Sale Reimburse Rate:	10.00%
Avg Unemploy Cost($/Week):	174.00	Max Home Sale Reimburs($):	22,385.00
Unemployment Eligibility(Weeks):	18	Home Purch Reimburse Rate:	5.00%
Civilian Salary($/Year):	45,998.00	Max Home Purch Reimburs($):	11,919.00
Civilian Turnover Rate:	15.00%	Civilian Homeowning Rate:	64.00%
Civilian Early Retire Rate:	10.00%	HAP Home Value Reimburse Rate:	22.90%
Civilian Regular Retire Rate:	5.00%	HAP Homeowner Receiving Rate:	5.00%
Civilian RIF Pay Factor:	34.00%	RSE Home Value Reimburse Rate:	18.00%
SF File Desc:	brac95.sff	RSE Homeowner Receiving Rate:	12.00%

STANDARD FACTORS SCREEN TWO - FACILITIES

RPMA Building SF Cost Index:	1.00	Rehab vs. New MilCon Cost:	59.00%
BOS Index (RPMA vs population):	1.00	Info Management Account:	15.00%
(Indices are used as exponents)		MilCon Design Rate:	10.00%
Program Management Factor:	10.00%	MilCon SIOH Rate:	6.00%
Caretaker Admin(SF/Care):	162.00	MilCon Contingency Plan Rate:	7.00%
Mothball Cost ($/SF):	1.25	MilCon Site Preparation Rate:	24.00%
Avg Bachelor Quarters(SF):	388.00	Discount Rate for NPV.RPT/ROI:	2.75%
Avg Family Quarters(SF):	1,819.00	Inflation Rate for NPV.RPT/ROI:	0.00%

APPDET.RPT Inflation Rates:
1996: 2.90% 1997: 3.00% 1998: 3.00% 1999: 3.00% 2000: 3.00% 2001: 3.00%

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

Material/Assigned Person(Lb):	710	Equip Pack & Crate($/Ton):	284.00
HHG Per Off Family (Lb):	14,500.00	Mil Light Vehicle($/Mile):	0.10
HHG Per Enl Family (Lb):	9,000.00	Heavy/Spec Vehicle($/Mile):	0.10
HHG Per Mil Single (Lb):	6,400.00	POV Reimbursement($/Mile):	0.18
HHG Per Civilian (Lb):	18,000.00	Avg Mil Tour Length (Years):	3.10
Total HHG Cost ($/100Lb):	35.00	Routine PCS($/Pers/Tour):	0.00
Air Transport ($/Pass Mile):	0.20	One-Time Off PCS Cost($):	6,134.00
Misc Exp ($/Direct Employ):	700.00	One-Time Enl PCS Cost($):	4,381.00

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

Category	UM	$/UM	Category	UM	$/UM
Horizontal	(SY)	38	APPLIED INSTR	(SF)	114
Waterfront	(LF)	0	LABS (RDT&E)	(SF)	175
Air Operations	(SF)	130	CHILD CARE CENTER	(SF)	120
Operational	(SF)	119	PRODUCTION FAC	(SF)	100
Administrative	(SF)	106	PHYSICAL FITNESS FAC	(SF)	128
School Buildings	(SF)	104	Optional Category F	( )	0
Maintenance Shops	(SF)	108	Optional Category G	( )	0
Bachelor Quarters	(EA)	46,227	Optional Category H	( )	0
Family Quarters	(EA)	88,689	Optional Category I	( )	0
Covered Storage	(SF)	60	Optional Category J	( )	0
Dining Facilities	(SF)	180	Optional Category K	( )	0
Recreation Facilities	(SF)	0	Optional Category L	( )	0
Communications Facil	(SF)	0	Optional Category M	( )	0
Shipyard Maintenance	(SF)	0	Optional Category N	( )	0
RDT & E Facilities	(SF)	139	Optional Category O	( )	0
POL Storage	(BL)	0	Optional Category P	( )	0
Ammunition Storage	(SF)	0	Optional Category Q	( )	0
Medical Facilities	(SF)	0	Optional Category R	( )	0
Environmental	( )	0			

Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	6,134	0	0	0	0	0	6,134	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	6,134	0	0	0	0	0	6,134	0

Savings ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.01)
Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIF	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPS	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	25	0	0	0	0	0	25
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hire	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	208	0	0	0	0	0	208
POV Miles	180	0	0	0	0	0	180
HHG	4,772	0	0	0	0	0	4,772
Misc	700	0	0	0	0	0	700
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	6,134	0	0	0	0	0	6,134

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SPF

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COST	6,134	0	0	0	0	0	6,134	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.01) - Page 3
Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	5,860	0	0	0	0	0	5,860
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	6,134	0	0	0	0	0	6,134

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	6,134	0	0	0	0	0	6,134	0

Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPS	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	25	0	0	0	0	0	25
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hires	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	208	0	0	0	0	0	208
POV Miles	180	0	0	0	0	0	180
HHG	4,772	0	0	0	0	0	4,772
Misc	700	0	0	0	0	0	700
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	6,134	0	0	0	0	0	6,134

Data As Of 07:25 09/13/1994, Report Created 06:18 10 12 1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	6,134	0	0	0	0	0	6,134	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 06 18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	5,860	0	0	0	0	0	5,860
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	6,134	0	0	0	0	0	6,134

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	6,134	0	0	0	0	0	6,134	0

Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFP

Base: BASE X, US

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

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

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

INPUT DATA REPORT (COBRA v5.01)
Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

Base Name	Strategy:
NOTIONAL BASE #1, US	Realignment
BASE X, US	Realignment

Summary:

CALCULATION OF PCS EXPENSES FOR OFFICERS MOVING TO BASE X.

INPUT SCREEN TWO - DISTANCE TABLE

From Base:	To Base:	Distance:
NOTIONAL BASE #1, US	BASE X, US	1,000 mi

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NOTIONAL BASE #1, US to BASE X, US

	1996	1997	1998	1999	2000	2001
Officer Positions:	1,000	0	0	0	0	0
Enlisted Positions:	0	0	0	0	0	0
Civilian Positions:	0	0	0	0	0	0
Student Positions:	0	0	0	0	0	0
Missn Eqpt (tons):	0	0	0	0	0	0
Suppt Eqpt (tons):	0	0	0	0	0	0
Mil Light Vehic (tons):	0	0	0	0	0	0
Heavy/Spec Vehic (tons):	0	0	0	0	0	0

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

Total Officer Employees:	1,000	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	0	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.00
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	20.9%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	0	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: BASE X, US

Total Officer Employees:	1,000	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	0	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.02
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	0.0%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	73	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

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

Name: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 06:18 10/12/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

Percent Officers Married:	74.00%	Civ Early Retire Pay Factor:	9.00%
Percent Enlisted Married:	55.50%	Priority Placement Service:	60.00%
Enlisted Housing MilCon:	82.00%	PPS Actions Involving PCS:	50.00%
Officer Salary($/Year):	77,068.00	Civilian PCS Costs ($):	28,800.00
Off BAQ with Dependents($):	7,717.00	Civilian New Hire Cost($):	1,109.00
Enlisted Salary($/Year):	34,120.00	Nat Median Home Price($):	114,600.00
Enl BAQ with Dependents($):	5,223.00	Home Sale Reimburse Rate:	10.00%
Avg Unemploy Cost($/Week):	174.00	Max Home Sale Reimburs($):	22,385.00
Unemployment Eligibility(Weeks):	18	Home Purch Reimburse Rate:	5.00%
Civilian Salary($/Year):	45,998.00	Max Home Purch Reimburs($):	11,919.00
Civilian Turnover Rate:	15.00%	Civilian Homeowning Rate:	64.00%
Civilian Early Retire Rate:	10.00%	HAP Home Value Reimburse Rate:	22.90%
Civilian Regular Retire Rate:	5.00%	HAP Homeowner Receiving Rate:	5.00%
Civilian RIF Pay Factor:	34.00%	RSE Home Value Reimburse Rate:	18.00%
SF File Desc:	brac95.sff	RSE Homeowner Receiving Rate:	12.00%

STANDARD FACTORS SCREEN TWO - FACILITIES

RPMA Building SF Cost Index:	1.00	Rehab vs. New MilCon Cost:	59.00%
BOS Index (RPMA vs population):	1.00	Info Management Account:	15.00%
(Indices are used as exponents)		MilCon Design Rate:	10.00%
Program Management Factor:	10.00%	MilCon SIOH Rate:	6.00%
Caretaker Admin(SF/Care):	162.00	MilCon Contingency Plan Rate:	7.00%
Mothball Cost ($/SF):	1.25	MilCon Site Preparation Rate:	24.00%
Avg Bachelor Quarters(SF):	388.00	Discount Rate for NPV.RPT/ROI:	2.75%
Avg Family Quarters(SF):	1,819.00	Inflation Rate for NPV.RPT/ROI:	0.00%

APPDET.RPT Inflation Rates:
1996: 2.90% 1997: 3.00% 1998: 3.00% 1999: 3.00% 2000: 3.00% 2001: 3.00%

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

Material/Assigned Person(Lb):	710	Equip Pack & Crate($/Ton):	284.00
HHG Per Off Family (Lb):	14,500.00	Mil Light Vehicle($/Mile):	0.10
HHG Per Enl Family (Lb):	9,000.00	Heavy/Spec Vehicle($/Mile):	0.10
HHG Per Mil Single (Lb):	6,400.00	POV Reimbursement($/Mile):	0.18
HHG Per Civilian (Lb):	18,000.00	Avg Mil Tour Length (Years):	3.10
Total HHG Cost ($/100Lb):	35.00	Routine PCS($/Pers/Tour):	0.00
Air Transport ($/Pass Mile):	0.20	One-Time Off PCS Cost($):	0.00
Misc Exp ($/Direct Employ):	700.00	One-Time Enl PCS Cost($):	0.00

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

Category	UM	$/UM	Category	UM	$/UM
Horizontal	(SY)	38	APPLIED INSTR	(SF)	114
Waterfront	(LF)	0	LABS (RDT&E)	(SF)	175
Air Operations	(SF)	130	CHILD CARE CENTER	(SF)	120
Operational	(SF)	119	PRODUCTION FAC	(SF)	100
Administrative	(SF)	106	PHYSICAL FITNESS FAC	(SF)	128
School Buildings	(SF)	104	Optional Category F	( )	0
Maintenance Shops	(SF)	108	Optional Category G	( )	0
Bachelor Quarters	(EA)	46,227	Optional Category H	( )	0
Family Quarters	(EA)	88,689	Optional Category I	( )	0
Covered Storage	(SF)	60	Optional Category J	( )	0
Dining Facilities	(SF)	180	Optional Category K	( )	0
Recreation Facilities	(SF)	0	Optional Category L	( )	0
Communications Facil	(SF)	0	Optional Category M	( )	0
Shipyard Maintenance	(SF)	0	Optional Category N	( )	0
RDT & E Facilities	(SF)	139	Optional Category O	( )	0
POL Storage	(BL)	0	Optional Category P	( )	0
Ammunition Storage	(SF)	0	Optional Category Q	( )	0
Medical Facilities	(SF)	0	Optional Category R	( )	0
Environmental	( )	0			

STANDARD FACTOR #60
ONE-TIME PCS COST OFFICER
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average one-time PCS cost for an officer. This factor

2. VALIDATED VALUE: $6,202

3. DATA SOURCE: BRAC 95 COBRA run.

   a. DATE LAST UPDATED: 26 Sep 1994.

   b. DATE OF NEXT UPDATE: NA

5. METHODOLOGY: See attached COBRA report.

6. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

Data As Of 07.25.09.13.1994, Report Created 08:00:09.26.1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\BRAC95.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : 100+ Years

NPV in 2015($K): 6,119
1-Time Cost($K): 6,202

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
NilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	6,202	0	0	0	0	0	6,202	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	6,202	0	0	0	0	0	6,202	0

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	1,000	0	0	0	0	0	1,000
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0
TOTAL	1,000	0	0	0	0	0	1,000

$6,202 PER OFFICER PCS

COBRA FILE = OFFMOV.CBR

MOVEMENT DISTANCE = 1,000 MILES

Summary:

CALCULATION OF PCS EXPENSES FOR OFFICERS MOVING TO BASE X.

Data As Of 07:25 09/13/1994, Report Created 08:00 09/26/1994

Department : ARMY
Option Package : OFFICER PCS
Scenario File : C:\COBRA\OFFMOV.CBR
Std Fctrs File : C:\COBRA\BRAC95.SFF

Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	6,202	0	0	0	0	0	6,202	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	6,202	0	0	0	0	0	6,202	0

Savings ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

STANDARD FACTOR #60
ONE-TIME PCS COST OFFICER

1. DESCRIPTION: The average one-time PCS cost for an officer. This factor

2. VALIDATED VALUE: 0.0

3. DATA SOURCE : NONE

   a. DATE LAST UPDATED : NA

   b. DATE OF NEXT UPDATE : NA

5. METHODOLOGY : This factor is used to cost the one-time moving cost associated with the final PCS move of an officer who is eliminated by a BRAC recommendation. As a matter of Army policy, no officers are eliminated as a direct result of BRAC actions.

6. VALIDATION PROCEDURE : None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTOR #61
ONE-TIME PCS COST ENLISTED
Change 3 - 14 Oct 1994

1. DESCRIPTION: The average one-time costs of enlisted PCSs, per person. This is used in conjunction with the number of officer positions eliminated to estimate costs of moving enlisted to their "final" locations. (Allowed entries 0.00 to 100,000.00 $/person)

2. VALIDATED VALUE: $4,381

3. DATA SOURCE : BRAC 95 COBRA run.

   a. DATE LAST UPDATED : 14 Oct 1994.

   b. DATE OF NEXT UPDATE : NA

4. METHODOLOGY : See attached Documentation.

5. VALIDATION PROCEDURE : None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

COBRA REALIGNMENT SUMMARY (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 11:53 10/03/1994

#4,381

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : 100+ Years

NPV in 2015($K): 4,322
1-Time Cost($K): 4,381

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,381	0	0	0	0	0	4,381	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,381	0	0	0	0	0	4,381	0

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	0	0	0	0	0	0	0
Enlisted	1,000	0	0	0	0	0	1,000
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	1,000	0	0	0	0	0	1,000

Summary:

CALCULATION OF PCS EXPENSES FOR ENLISTED MOVING TO BASE X.

COBRA REALIGNMENT SUMMARY (COBRA v5.0A*P) - Page 2
Data As Of 07:25 09/13/1994, Report Created 13 53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,381	0	0	0	0	0	4,381	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,381	0	0	0	0	0	4,381	0

Savings ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 11:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIF	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPS	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	25	0	0	0	0	0	25
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hire	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	208	0	0	0	0	0	208
POV Miles	180	0	0	0	0	0	180
HHG	3,019	0	0	0	0	0	3,019
Misc	700	0	0	0	0	0	700
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SPF

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COST	4,381	0	0	0	0	0	4,381	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03 1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Pctrs File : C:\COBRA\DOD95.SFF

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	4,108	0	0	0	0	0	4,108
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	4,381	0	0	0	0	0	4,381	0

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPS	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	25	0	0	0	0	0	25
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hires	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	208	0	0	0	0	0	208
POV Miles	180	0	0	0	0	0	180
HHG	3,019	0	0	0	0	0	3,019
Misc	700	0	0	0	0	0	700
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	4,381	0	0	0	0	0	4,381	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	4,108	0	0	0	0	0	4,108
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	4,381	0	0	0	0	0	4,381	0

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

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

INPUT DATA REPORT (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Pctrs File : C:\COBRA\DOD95.SPF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

Base Name	Strategy:
NOTIONAL BASE #1, US	Realignment
BASE X, US	Realignment

Summary:

CALCULATION OF PCS EXPENSES FOR ENLISTED MOVING TO BASE X.

INPUT SCREEN TWO - DISTANCE TABLE

From Base:	To Base:	Distance:
NOTIONAL BASE #1, US	BASE X, US	1,000 mi

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NOTIONAL BASE #1, US to BASE X, US

	1996	1997	1998	1999	2000	2001
Officer Positions:	0	0	0	0	0	0
Enlisted Positions:	1,000	0	0	0	0	0
Civilian Positions:	0	0	0	0	0	0
Student Positions:	0	0	0	0	0	0
Missn Eqpt (tons):	0	0	0	0	0	0
Suppt Eqpt (tons):	0	0	0	0	0	0
Mil Light Vehic (tons):	0	0	0	0	0	0
Heavy/Spec Vehic (tons):	0	0	0	0	0	0

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

Total Officer Employees:	0	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	1,000	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.00
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	20.9%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	0	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: BASE X, US

Total Officer Employees:	0	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	0	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.02
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	0.0%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	73	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

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

Name: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

Percent Officers Married:	74.00%	Civ Early Retire Pay Factor:	9.00%
Percent Enlisted Married:	55.50%	Priority Placement Service:	60.00%
Enlisted Housing MilCon:	82.00%	PPS Actions Involving PCS:	50.00%
Officer Salary($/Year):	77,068.00	Civilian PCS Costs ($):	28,652.00
Off BAQ with Dependents($):	7,717.00	Civilian New Hire Cost($):	1,109.00
Enlisted Salary($/Year):	34,120.00	Nat Median Home Price($):	114,600.00
Enl BAQ with Dependents($):	5,223.00	Home Sale Reimburse Rate:	5.00%
Avg Unemploy Cost($/Week):	174.00	Max Home Sale Reimburs($):	22,385.00
Unemployment Eligibility(Weeks):	18	Home Purch Reimburse Rate:	5.00%
Civilian Salary($/Year):	45,998.00	Max Home Purch Reimburs($):	11,919.00
Civilian Turnover Rate:	15.00%	Civilian Homeowning Rate:	64.00%
Civilian Early Retire Rate:	10.00%	HAP Home Value Reimburse Rate:	22.90%
Civilian Regular Retire Rate:	5.00%	HAP Homeowner Receiving Rate:	5.00%
Civilian RIF Pay Factor:	34.00%	RSE Home Value Reimburse Rate:	18.00%
SF File Desc:	brac95.sff	RSE Homeowner Receiving Rate:	12.00%

STANDARD FACTORS SCREEN TWO - FACILITIES

RPMA Building SF Cost Index:	1.00	Rehab vs. New MilCon Cost:	59.00%
BOS Index (RPMA vs population):	1.00	Info Management Account:	15.00%
(Indices are used as exponents)		MilCon Design Rate:	10.00%
Program Management Factor:	10.00%	MilCon SIOH Rate:	6.00%
Caretaker Admin(SF/Care):	162.00	MilCon Contingency Plan Rate:	7.00%
Mothball Cost ($/SF):	1.25	MilCon Site Preparation Rate:	24.00%
Avg Bachelor Quarters(SF):	388.00	Discount Rate for NPV.RPT/ROI:	2.75%
Avg Family Quarters(SF):	1,819.00	Inflation Rate for NPV.RPT/ROI:	0.00%

APPDET.RPT Inflation Rates:
1996: 2.90% 1997: 3.00% 1998: 3.00% 1999: 3.00% 2000: 3.00% 2001: 3.00%

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

Material/Assigned Person(Lb):	710	Equip Pack & Crate($/Ton):	284.00
HHG Per Off Family (Lb):	14,500.00	Mil Light Vehicle($/Mile):	0.10
HHG Per Enl Family (Lb):	9,000.00	Heavy/Spec Vehicle($/Mile):	0.10
HHG Per Mil Single (Lb):	6,400.00	POV Reimbursement($/Mile):	0.18
HHG Per Civilian (Lb):	18,000.00	Avg Mil Tour Length (Years):	1.00
Total HHG Cost ($/100Lb):	35.00	Routine PCS($/Pers/Tour):	0.00
Air Transport ($/Pass Mile):	0.20	One-Time Off PCS Cost($):	0.00
Misc Exp ($/Direct Employ):	700.00	One-Time Enl PCS Cost($):	0.00

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

Category	UM	$/UM	Category	UM	$/UM
Horizontal	(SY)	38	APPLIED INSTR	(SF)	114
Waterfront	(LF)	0	LABS (RDT&E)	(SF)	175
Air Operations	(SF)	130	CHILD CARE CENTER	(SF)	120
Operational	(SF)	119	PRODUCTION FAC	(SF)	100
Administrative	(SF)	106	PHYSICAL FITNESS FAC	(SF)	128
School Buildings	(SF)	104	Optional Category F	( )	0
Maintenance Shops	(SF)	108	Optional Category G	( )	0
Bachelor Quarters	(EA)	46,227	Optional Category H	( )	0
Family Quarters	(EA)	88,689	Optional Category I	( )	0
Covered Storage	(SF)	60	Optional Category J	( )	0
Dining Facilities	(SF)	180	Optional Category K	( )	0
Recreation Facilities	(SF)	0	Optional Category L	( )	0
Communications Facil	(SF)	0	Optional Category M	( )	0
Shipyard Maintenance	(SF)	0	Optional Category N	( )	0
RDT & E Facilities	(SF)	139	Optional Category O	( )	0
POL Storage	(BL)	0	Optional Category P	( )	0
Ammunition Storage	(SF)	0	Optional Category Q	( )	0
Medical Facilities	(SF)	0	Optional Category R	( )	0
Environmental	( )	0			

STANDARD FACTOR #61
ONE-TIME PCS COST ENLISTED
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average one-time costs of enlisted PCSs, per person. This is used in conjunction with the number of officer positions eliminated to estimate costs of moving enlisted to their "final" locations. (Allowed entries 0.00 to 100,000.00 $/person)

2. VALIDATED VALUE: $4,174

3. DATA SOURCE : BRAC 95 COBRA run.

   a. DATE LAST UPDATED : 26 Sep 1994.

   b. DATE OF NEXT UPDATE : NA

4. METHODOLOGY : See attached Documentation.

5. VALIDATION PROCEDURE : None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTOR #61
ONE-TIME PCS COST ENLISTED
Change 3 - 14 Oct 1994

1. DESCRIPTION: The average one-time costs of enlisted PCSs, per person. This is used in conjunction with the number of officer positions eliminated to estimate costs of moving enlisted to their "final" locations. (Allowed entries 0.00 to 100,000.00 $/person)

2. VALIDATED VALUE: $4,381

3. DATA SOURCE: BRAC 95 COBRA run.

   a. DATE LAST UPDATED: 14 Oct 1994.

   b. DATE OF NEXT UPDATE: NA

4. METHODOLOGY: See attached Documentation.

5. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

ENL MOVE

#4,381

COBRA REALIGNMENT SUMMARY (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : 100+ Years

NPV in 2015($K): 4,322
1-Time Cost($K): 4,381

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,381	0	0	0	0	0	4,381	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,381	0	0	0	0	0	4,381	0

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	0	0	0	0	0	0	0
Enlisted	1,000	0	0	0	0	0	1,000
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	0	0
TOTAL	1,000	0	0	0	0	0	1,000

Summary:

CALCULATION OF PCS EXPENSES FOR ENLISTED MOVING TO BASE X.

COBRA REALIGNMENT SUMMARY (COBRA v5.0A*P) - Page 2
Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,381	0	0	0	0	0	4,381	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,381	0	0	0	0	0	4,381	0

Savings ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIF	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPS	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	25	0	0	0	0	0	25
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hire	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	208	0	0	0	0	0	208
POV Miles	180	0	0	0	0	0	180
HHG	3,019	0	0	0	0	0	3,019
Misc	700	0	0	0	0	0	700
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.0A"P) - Page 2
Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\E.ELMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COST	4,381	0	0	0	0	0	4,381	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.0A*P) - Page 3
Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	4,108	0	0	0	0	0	4,108
OTHER							
MAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	4,381	0	0	0	0	0	4,381	0

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME COSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
Land Purch	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPS	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	248	0	0	0	0	0	248
Freight	25	0	0	0	0	0	25
Vehicles	0	0	0	0	0	0	0
Driving	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Program Plan	0	0	0	0	0	0	0
Shutdown	0	0	0	0	0	0	0
New Hires	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	208	0	0	0	0	0	208
POV Miles	180	0	0	0	0	0	180
HHG	3,019	0	0	0	0	0	3,019
Misc	700	0	0	0	0	0	700
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Pctrs File : C:\COBRA\DOD95.SFP

Base: NOTIONAL BASE #1, US

RECURRINGCOSTS -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	4,381	0	0	0	0	0	4,381	0

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: NOTIONAL BASE #1, US

ONE-TIME NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	273	0	0	0	0	0	273
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	4,108	0	0	0	0	0	4,108
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Info Manage	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
Land	0	0	0	0	0	0	0
TOTAL ONE-TIME	4,381	0	0	0	0	0	4,381

RECURRING NET -----($K)-----	1996	1997	1998	1999	2000	2001	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	4,381	0	0	0	0	0	4,381	0

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

ONE-TIME SAVES -----($K)-----	1996	1997	1998	1999	2000	2001	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
Fam Housing	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Land Sales	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

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

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

Base: BASE X, US

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

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

INPUT DATA REPORT (COBRA v5.0A*P)
Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Pctrs File : C:\COBRA\DOD95.SPF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 1996

Model does Time-Phasing of Construction/Shutdown: Yes

Base Name	Strategy:
NOTIONAL BASE #1, US	Realignment
BASE X, US	Realignment

Summary:

CALCULATION OF PCS EXPENSES FOR ENLISTED MOVING TO BASE X.

INPUT SCREEN TWO - DISTANCE TABLE

From Base:	To Base:	Distance:
NOTIONAL BASE #1, US	BASE X, US	1,000 mi

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from NOTIONAL BASE #1, US to BASE X, US

	1996	1997	1998	1999	2000	2001
Officer Positions:	0	0	0	0	0	0
Enlisted Positions:	1,000	0	0	0	0	0
Civilian Positions:	0	0	0	0	0	0
Student Positions:	0	0	0	0	0	0
Mission Eqpt (tons):	0	0	0	0	0	0
Suppt Eqpt (tons):	0	0	0	0	0	0
Mil Light Vehic (tons):	0	0	0	0	0	0
Heavy/Spec Vehic (tons):	0	0	0	0	0	0

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

Total Officer Employees:	0	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	1,000	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.00
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	20.9%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	0	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Pctrs File : C:\COBRA\DOD95.SPF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: BASE X, US

Total Officer Employees:	0	RPMA Non-Payroll ($K/Year):	0
Total Enlisted Employees:	0	Communications ($K/Year):	0
Total Student Employees:	0	BOS Non-Payroll ($K/Year):	0
Total Civilian Employees:	0	BOS Payroll ($K/Year):	0
Mil Families Living On Base:	0.0%	Family Housing ($K/Year):	0
Civilians Not Willing To Move:	0.0%	Area Cost Factor:	1.02
Officer Housing Units Avail:	0	CHAMPUS In-Pat ($/Visit):	0
Enlisted Housing Units Avail:	0	CHAMPUS Out-Pat ($/Visit):	0
Total Base Facilities(KSF):	0	CHAMPUS Shift to Medicare:	0.0%
Officer VHA ($/Month):	0	Activity Code:	
Enlisted VHA ($/Month):	0		
Per Diem Rate ($/Day):	73	Homeowner Assistance Program:	No
Freight Cost ($/Ton/Mile):	0.07	Unique Activity Information:	No

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: NOTIONAL BASE #1, US

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

Name: BASE X, US

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

Data As Of 07:25 09/13/1994, Report Created 13:53 10/03/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\DOD95.SFF

STANDARD FACTORS SCREEN ONE - PERSONNEL

Percent Officers Married:	74.00%	Civ Early Retire Pay Factor:	9.00%
Percent Enlisted Married:	55.50%	Priority Placement Service:	60.00%
Enlisted Housing MilCon:	82.00%	PPS Actions Involving PCS:	50.00%
Officer Salary($/Year):	77,068.00	Civilian PCS Costs ($):	28,652.00
Off BAQ with Dependents($):	7,717.00	Civilian New Hire Cost($):	1,109.00
Enlisted Salary($/Year):	34,120.00	Nat Median Home Price($):	114,600.00
Enl BAQ with Dependents($):	5,223.00	Home Sale Reimburse Rate:	5.00%
Avg Unemploy Cost($/Week):	174.00	Max Home Sale Reimburs($):	22,385.00
Unemployment Eligibility(Weeks):	18	Home Purch Reimburse Rate:	5.00%
Civilian Salary($/Year):	45,998.00	Max Home Purch Reimburs($):	11,919.00
Civilian Turnover Rate:	15.00%	Civilian Homeowning Rate:	64.00%
Civilian Early Retire Rate:	10.00%	HAP Home Value Reimburse Rate:	22.90%
Civilian Regular Retire Rate:	5.00%	HAP Homeowner Receiving Rate:	5.00%
Civilian RIF Pay Factor:	34.00%	RSE Home Value Reimburse Rate:	18.00%
SF File Desc:	brac95.sff	RSE Homeowner Receiving Rate:	12.00%

STANDARD FACTORS SCREEN TWO - FACILITIES

RPMA Building SF Cost Index:	1.00	Rehab vs. New MilCon Cost:	59.00%
BOS Index (RPMA vs population):	1.00	Info Management Account:	15.00%
(Indices are used as exponents)		MilCon Design Rate:	10.00%
Program Management Factor:	10.00%	MilCon SIOH Rate:	6.00%
Caretaker Admin(SF/Care):	162.00	MilCon Contingency Plan Rate:	7.00%
Mothball Cost ($/SF):	1.25	MilCon Site Preparation Rate:	24.00%
Avg Bachelor Quarters(SF):	388.00	Discount Rate for NPV.RPT/ROI:	2.75%
Avg Family Quarters(SF):	1,819.00	Inflation Rate for NPV.RPT/ROI:	0.00%

APPDET.RPT Inflation Rates:
1996: 2.90% 1997: 3.00% 1998: 3.00% 1999: 3.00% 2000: 3.00% 2001: 3.00%

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

Material/Assigned Person(Lb):	710	Equip Pack & Crate($/Ton):	284.00
HHG Per Off Family (Lb):	14,500.00	Mil Light Vehicle($/Mile):	0.10
HHG Per Enl Family (Lb):	9,000.00	Heavy/Spec Vehicle($/Mile):	0.10
HHG Per Mil Single (Lb):	6,400.00	POV Reimbursement($/Mile):	0.18
HHG Per Civilian (Lb):	18,000.00	Avg Mil Tour Length (Years):	1.00
Total HHG Cost ($/100Lb):	35.00	Routine PCS($/Pers/Tour):	0.00
Air Transport ($/Pass Mile):	0.20	One-Time Off PCS Cost($):	0.00
Misc Exp ($/Direct Employ):	700.00	One-Time Enl PCS Cost($):	0.00

STANDARD FACTORS SCREEN FOUR - MILITARY CONSTRUCTION

Category	UM	$/UM	Category	UM	$/UM
Horizontal	(SY)	38	APPLIED INSTR	(SF)	114
Waterfront	(LF)	0	LABS (RDT&E)	(SF)	175
Air Operations	(SF)	130	CHILD CARE CENTER	(SF)	120
Operational	(SF)	119	PRODUCTION FAC	(SF)	100
Administrative	(SF)	106	PHYSICAL FITNESS FAC	(SF)	128
School Buildings	(SF)	104	Optional Category F	( )	0
Maintenance Shops	(SF)	108	Optional Category G	( )	0
Bachelor Quarters	(EA)	46,227	Optional Category H	( )	0
Family Quarters	(EA)	88,689	Optional Category I	( )	0
Covered Storage	(SF)	60	Optional Category J	( )	0
Dining Facilities	(SF)	180	Optional Category K	( )	0
Recreation Facilities	(SF)	0	Optional Category L	( )	0
Communications Facil	(SF)	0	Optional Category M	( )	0
Shipyard Maintenance	(SF)	0	Optional Category N	( )	0
RDT & E Facilities	(SF)	139	Optional Category O	( )	0
POL Storage	(BL)	0	Optional Category P	( )	0
Ammunition Storage	(SF)	0	Optional Category Q	( )	0
Medical Facilities	(SF)	0	Optional Category R	( )	0
Environmental	( )	0			

STANDARD FACTOR #61
ONE-TIME PCS COST ENLISTED
Change 1 - 26 Sep 1994

1. DESCRIPTION: The average one-time costs of enlisted PCSs, per person. This is used in conjunction with the number of officer positions eliminated to estimate costs of moving enlisted to their "final" locations. (Allowed entries 0.00 to 100,000.00 $/person)

2. VALIDATED VALUE: $4,174

3. DATA SOURCE : BRAC 95 COBRA run.

   a. DATE LAST UPDATED : 26 Sep 1994.

   b. DATE OF NEXT UPDATE : NA

4. METHODOLOGY : See attached Documentation.

5. VALIDATION PROCEDURE : None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

Charles V. Fletcher
CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

COBRA REALIGNMENT SUMMARY (COBRA v5.00)

Data As Of 07:25 09/13/1994, Report Created 08:30 09/26/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Factrs File : C:\COBRA\BRAC95.SFF

Starting Year : 1996
Final Year : 1996
ROI Year : 100+ Years

NPV in 2015($K): 4,118
1-Time Cost($K): 4,174

Net Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,174	0	0	0	0	0	4,174	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,174	0	0	0	0	0	4,174	0

	1996	1997	1998	1999	2000	2001	TOTAL
POSITIONS ELIMINATED							
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0
POSITIONS REALIGNED							
Officers	0	0	0	0	0	0	0
Enlisted	1,000	0	0	0	0	0	1,000
Students	0	0	0	0	0	0	0
Civilian	0	0	0	0	0	0	0
TOTAL	1,000	0	0	0	0	0	1,000

$4,174 PER ENL PCS

COBRA FILE = ENLMOV.CBR

MOVEMENT DISTANCE = 1,000 MILES

Summary:

CALCULATION OF PCS EXPENSES FOR ENLISTED MOVING TO BASE X.

Data As Of 07:25 09/13/1994, Report Created 08:30 09/26/1994

Department : ARMY
Option Package : ENLISTED PCS
Scenario File : C:\COBRA\ENLMOV.CBR
Std Fctrs File : C:\COBRA\BRAC95.SFF

Costs ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	4,174	0	0	0	0	0	4,174	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	4,174	0	0	0	0	0	4,174	0

Savings ($K) Constant Dollars

	1996	1997	1998	1999	2000	2001	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0
Overhd	0	0	0	0	0	0	0	0
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0

STANDARD FACTOR #61
ONE-TIME PCS COST ENLISTED

1. DESCRIPTION: The average one-time costs of enlisted PCSs, per person. This is used in conjunction with the number of officer positions eliminated to estimate costs of moving enlisted to their "final" locations. (Allowed entries 0.00 to 100,000.00 $/person)

2. VALIDATED VALUE: 0.0

3. DATA SOURCE: NONE

   a. DATE LAST UPDATED: NA

   b. DATE OF NEXT UPDATE: NA

4. METHODOLOGY: See attached Documentation, OSD Policy Memo Number Two; Force Structure Savings. This factor is used to cost the one-time moving cost associated with the final PCS move of an enlisted soldier who is eliminated by a BRAC recommendation. As a matter of Army policy, no enlisted soldiers are eliminated as a direct result of BRAC actions.

5. VALIDATION PROCEDURE: None taken.

I certify that the information supplied is accurate and complete to the best of my knowledge and belief.

CHARLES V. FLETCHER
MAJ, IN
OPERATIONS ANALYST

STANDARD FACTORS
CONSTRUCTION FACTORS

1. Description.

The average cost per unit of measure ($/UM) for new construction of each of the military construction categories listed. (Allowed entries 0.00 to 99,999.99 $/UM)

2. Validated Value. See Below.

3. Data Sources.

July 1994 2 HQRPLANS Cost Factor and Escalation tables. R&K Engineering uses most recent Corps of Engineers publications, based upon DOD guidance, for unit cost and inflation factors.

a. Date last updated: July 1994

b. Date of next update: December 1994

4. Methodology.

FCG Construction Cost factors from the July 1994 HQRPLANS database are listed in the column labeled FY94 FACTOR. The escalation factor for FY1996 is 1.0588. The product of the FCG Construction Cost factor with the escalation factor is the result in the column labeled FY 96 FACTOR. The average of the FY96 FACTOR for the listed FCGs is the standard factor used in COBRA, labeled COBRA FACTOR.

MCA unit cost factors for FCGs with a UM of SF include $10/SF to account for the costs of demolition generally required before a new building may be constructed. Costs reflected are FY 94 dollars, then inflated to FY 96. Specific factors shown in the following table:

##	Construction Factor FCG	Description	UM	FY94 FACTOR	FY96 FACTOR	COBRA FACTOR
50.	Horizontal					
	45200	VEH HARDSTAND	SY	36.02	38.14	38.14
51.	Waterfront		SY	(not used)		
52.	Air Ops					130.28
	21110	MT HNGR AVUM	SF	106.21	112.46	
	21111	MT HNGR AVIM	SF	139.87	148.09	

##	Construction Factor FCG	Description	UM	FY94 FACTOR	FY96 FACTOR	COBRA FACTOR
53.	Operations					119.15
	14182	BDE HQ BLDG	SF	112.53	119.15	
	14183	BN HQ BLDG	SF	112.53	119.15	
	14185	CO HQ BLDG	SF	112.53	119.15	
54.	Administrative					
	61050	GEN PURP ADMIN	SF	99.91	105.78	105.78
55.	School Buildings					
55a	17120	GEN INST BLDGS	SF	97.80	103.55	103.55
55b	17130	APPL INST BLDG	SF	107.27	113.58	113.58
56.	Maintenance Shops					107.64
	21410	VEH MNT SH ORG	SF	108.32	114.69	
	21420	VEH MNT SH DS	SF	102.01	108.01	
	21800	SPEC PURP MT	SF	94.65	100.22	
57.	UEPH					
	7210S	ENL UPH (PLNG)	PN	43660*	46227*	46227*
	* Source: SEP 94 HQRPLANS					
58.	Family Housing					
	71100	FAMILY HOUSING	SF	83764	88689	88689
59.	Covered Storage					60.13
	44200	GEN P WH-INST	SF	57.84	61.24	
	44230	CONT HUM WH	SF	59.95	63.47	
	44100	GEN P WH-DEP	SF	67.31	71.27	
	44260	VEH STOR SHED	SF	42.07	44.54	
60.	Recreation					
	74028	Phys Fit Ctr	SF	120.94	128.05	128.05

The follwing items are not in Standard Factors datacall but should be added:

74014	Child Spt Ctr	SF	113.58	120.26	120.26
72200	Dinning Fac	SF	170.37	180.39	180.39
31010	RDTE Labs	SF	165.11	174.82	174.82
31X10	RDTE non-lab	SF	131.46	139.19	139.19
22X10	Production Fac	SF	94.65	100.22	100.22

5. Validation Procedures.

MCA unit cost factors are based upon the most recent USACE publication on Area and Unit Cost Factors. Inflation factor was extracted from HQRPLANS Escalation Factor table.

General Analytics Corporation

MEMORANDUM

TO: MEMORANDUM FOR RECORD

FROM: Chip Larouche

DATE: August 25, 1994

SUBJECT: UEPH SOURCE FOR COBRA STANDARD FACTOR

On 1 August 1994, I contacted Bob Martin, R&K Engineering, Roanoke, Virginia to determine what the September 1994 HQRPLANS construction factor would be that corresponded to the new 1 + 1 criteria for EUPH. After checking his database, he informed me that the new factor will be $43660.

The September 1994 HQRPLANS is scheduled to be "on-line" during the first week of September 1994. When available, I will download the construction factors report and provide it to TABS & AAA.

Chip Larouche

CF

AAA
TABS

STATEMENT OF CERTIFICATION:

I am the proponent for the data element specified in the information above and certify that the information supplied is accurate and complete to the best of my knowledge and belief.

DAVID A. YENTZER
Chief,
Installation Planning Division

DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON DC 20310-0600

REPLY TO
ATTENTION OF

DAIM-FDP-A

7 Dec 94

MEMORANDUM FOR DIRECTOR, THE ARMY BASING STUDY

SUBJECT: Standard Factors for the Cost of Base Realignment Actions (COBRA) Model

1. References

a. DACS-TABS Memorandum dated 7 July 1994, SAB.

b. DAIM-FDP-A Memorandum dated 3 August 1994, SAB.

2. The unit cost factor for new construction of Family Housing used in the September version of the Headquarters, Real Property Planning and Analysis System (HQRPLANS) has increased by 8.29% over the previous HQRPLANS factor that was provided to your office in August for use in COBRA. All other construction cost factors previously provided for use in COBRA have not changed significantly. Recommend that the following factor be used by COBRA in order to provide Family Housing construction costs that include the most up to date factors available:

FCG	Description	UM	FY94 Factor	FY96 Factor	COBRA Factor
7110F	FAMILY HOUSING	FA	90707	96040	96040

3. POC is MS. Maureen Wylie, x44313.

FOR THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT

DAVID A. YENTZER
Chief,
Installation Planning Division