

START
DCN 1589

Department : US Army
Option Package : ALFA
Scenario File : C:\COBRA\TESTDATA.CBR
Std Fctrs File : C:\COBRA\STDFCTRS.SPF

Starting Year : 1992
Final Year : 1997
ROI Year : 1998 (1 Year)

NPV in 2011(\$K): -74,656
1-Time Cost(\$K): 68,569

Net Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-11,266	-42,936	-11,266
Overhd	1,092	1,046	1,134	1,185	1,155	1,009	6,623	918
Moving	2,011	1,226	2,281	4,129	2,622	427	12,696	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	8,391	3,150	1,294	14,024	-8,806	-14,633	3,421	-18,814

POSITIONS ELIMINATED	1992	1993	1994	1995	1996	1997	Total
	Off	10	10	10	10	0	0
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

POSITIONS REALIGNED	1992	1993	1994	1995	1996	1997	Total
	Off	60	60	60	60	60	0
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	1,353	1,591	1,454	7,598	1,454
Overhd	1,111	1,246	1,464	1,678	1,800	1,789	9,090	1,699
Moving	2,071	1,286	2,341	4,189	2,682	427	12,996	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	11,258	10,476	12,780	31,642	19,359	12,833	98,348	8,653

Savings (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	330	493	644	780	2,466	781
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	17,618	28,165	27,466	94,927	27,467

1. CHANGE DISCOUNT RATE FROM 10% TO 15%

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 08:45 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 1999 (2 Years)

NPV in 2011(\$K) : -41,522
 1-Time Cost(\$K) : 68,569

Net Costs (\$K) Constant Dollars	1992						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-11,266	-42,936	-11,266
Overhd	1,092	1,046	1,134	1,185	1,155	1,009	6,623	918
Moving	2,011	1,226	2,281	4,129	2,622	427	12,696	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	8,391	3,150	1,294	14,024	-8,806	-14,633	3,421	-18,814

	1992	1993	1994	1995	1996	1997	Total
POSITIONS ELIMINATED							
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

	1992	1993	1994	1995	1996	1997	Total
POSITIONS REALIGNED							
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	1,353	1,591	1,454	7,598	1,454
Overhd	1,111	1,246	1,464	1,678	1,800	1,789	9,090	1,699
Moving	2,071	1,286	2,341	4,189	2,682	427	12,996	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	11,258	10,476	12,780	31,642	19,359	12,833	98,348	8,653

Savings (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	330	493	644	780	2,466	781
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	17,618	28,165	27,466	94,927	27,467

1. CHANGE DISCOUNT RATE TO 5%

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 08:46 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 1998 (1 Year)

NPV in 2011(\$K): -136,580
 1-Time Cost(\$K): 68,569

Net Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-11,266	-42,936	-11,266
Overhd	1,092	1,046	1,134	1,185	1,155	1,009	6,623	918
Moving	2,011	1,226	2,281	4,129	2,622	427	12,696	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	8,391	3,150	1,294	14,024	-8,806	-14,633	3,421	-18,814

	1992	1993	1994	1995	1996	1997	Total
POSITIONS ELIMINATED							
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270
POSITIONS REALIGNED							
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SPF

	Costs (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	1,353	1,591	1,454	7,598	1,454
Overhd	1,111	1,246	1,464	1,678	1,800	1,789	9,090	1,699
Moving	2,071	1,286	2,341	4,189	2,682	427	12,996	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	11,258	10,476	12,780	31,642	19,359	12,833	98,348	8,653

	Savings (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	330	493	644	780	2,466	781
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	17,618	28,165	27,466	94,927	27,467

1. KEEP DISCOUNT RATE AT 5% AND CHANGE INFLATION RATE FROM 0% TO 4%

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 08:53 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Pctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 1998 (1 Year)

NPV in 2011(\$K): -228,800
 1-Time Cost(\$K): 68,569

Net Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-11,266	-42,936	-11,266
Overhd	1,092	1,046	1,134	1,185	1,155	1,009	6,623	918
Moving	2,011	1,226	2,281	4,129	2,622	427	12,696	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	8,391	3,150	1,294	14,024	-8,806	-14,633	3,421	-18,814

	1992	1993	1994	1995	1996	1997	Total
POSITIONS ELIMINATED							
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

	1992	1993	1994	1995	1996	1997	Total
POSITIONS REALIGNED							
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Costs (\$K) Constant Dollars								
	1992	1993	1994	1995	1996	1997	Total	Beyond
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MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	1,353	1,591	1,454	7,598	1,454
Overhd	1,111	1,246	1,464	1,678	1,800	1,789	9,090	1,699
Moving	2,071	1,286	2,341	4,189	2,682	427	12,996	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	11,258	10,476	12,780	31,642	19,359	12,833	98,348	8,653

Savings (\$K) Constant Dollars								
	1992	1993	1994	1995	1996	1997	Total	Beyond
	----	----	----	----	----	----	----	-----
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	330	493	644	780	2,466	781
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	17,618	28,165	27,466	94,927	27,467

2. FACILITIES

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 08:56 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 1999 (2 Years)

NPV in 2011(\$K): -78,779
 1-Time Cost(\$K): 78,441

Net Costs (\$K) Constant Dollars	1992						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-11,266	-42,936	-11,266
Overhd	1,092	1,046	3,934	2,691	3,267	1,558	13,590	-1,170
Moving	2,011	1,226	2,281	4,129	2,622	427	12,696	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	8,391	3,150	4,094	15,530	-6,694	-14,084	10,387	-20,903

POSITIONS ELIMINATED	1992						Total
	1992	1993	1994	1995	1996	1997	
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

POSITIONS REALIGNED	1992						Total
	1992	1993	1994	1995	1996	1997	
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

	Costs (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	1,353	1,591	1,454	7,598	1,454
Overhd	1,111	1,246	4,426	3,653	4,761	3,763	18,962	1,699
Moving	2,071	1,286	2,341	4,189	2,682	427	12,996	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	11,258	10,476	15,741	33,617	22,320	14,807	108,220	8,653

	Savings (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	492	962	1,494	2,205	5,372	2,870
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,647	18,087	29,014	28,891	97,832	29,556

2. FACILITIES AND CARETAKERS

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 08:57 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 1998 (1 Year)

NPV in 2011(\$K): -88,130
 1-Time Cost(\$K): 78,441

Net Costs (\$K) Constant Dollars

	1992	1993	1994	1995	1996	1997	Total	Beyond
	----	----	----	----	----	----	----	-----
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-11,266	-42,936	-11,266
Overhd	372	181	2,934	1,564	2,140	431	7,622	-2,298
Moving	2,011	1,226	2,281	4,129	2,622	427	12,696	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	7,671	2,285	3,094	14,403	-7,821	-15,211	4,420	-22,031

	1992	1993	1994	1995	1996	1997	Total
	----	----	----	----	----	----	-----
POSITIONS ELIMINATED							
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

	1992	1993	1994	1995	1996	1997	Total
	----	----	----	----	----	----	-----
POSITIONS REALIGNED							
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

	Costs (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	1,353	1,591	1,454	7,598	1,454
Overhd	391	381	3,426	2,525	3,634	2,636	12,994	572
Moving	2,071	1,286	2,341	4,189	2,682	427	12,996	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	10,537	9,611	14,742	32,489	21,193	13,680	102,252	7,525

	Savings (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	492	962	1,494	2,205	5,372	2,870
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,647	18,087	29,014	28,891	97,832	29,556

3. MOVE IN 1992

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 09:06 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SPF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 2002 (5 Years)

NPV in 2011(\$K): -41,779
 1-Time Cost(\$K): 101,204

Net Costs (\$K) Constant Dollars

	1992	1993	1994	1995	1996	1997	Total	Beyond
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	2,320	-2,969	-5,790	-7,983	-9,428	-10,090	-33,940	-10,090
Overhd	1,923	979	934	812	558	-179	5,027	-340
Moving	28,558	1,226	2,281	4,129	2,622	427	39,242	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	3,414	1,877	1,877	-70	-7,026	-5,066	-4,994	-5,066
TOTAL	40,629	4,049	2,270	14,827	-8,226	-14,645	38,904	-18,896

	1992	1993	1994	1995	1996	1997	Total
POSITIONS ELIMINATED							
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

POSITIONS REALIGNED							
Off	220	60	60	60	60	0	460
Enl	220	60	60	60	60	0	460
Stu	0	0	0	0	0	0	0
Civ	720	0	30	30	30	0	810
TOT	1,160	120	150	150	150	0	1,730

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SPF

	Costs (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	5,521	2,546	2,566	2,687	2,925	2,788	19,033	2,788
Overhd	1,942	2,003	2,165	2,336	2,425	2,392	13,264	2,232
Moving	28,778	1,286	2,341	4,189	2,682	427	39,702	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	3,647	2,110	2,110	163	140	0	8,170	0
TOTAL	45,098	12,566	14,814	33,634	21,318	14,770	142,201	10,520

	Savings (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	3,201	5,516	8,356	10,670	12,353	12,878	52,973	12,878
Overhd	19	1,024	1,231	1,525	1,867	2,571	8,237	2,572
Moving	220	60	60	60	60	0	460	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	4,468	8,517	12,544	18,807	29,545	29,415	103,297	29,416

3. MOVE IN 1997

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 09:08 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 2001 (4 Years)

NPV in 2011(\$K) : -53,834
 1-Time Cost(\$K) : 101,204

Net Costs (\$K) Constant Dollars	1992						1993		1994		1995		1996		1997		Total	Beyond	
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995			1996
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531												0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-6,513	-38,183												-9,945
Overhd	1,384	1,265	1,299	1,308	1,248	1,612	8,117												-340
Moving	2,011	1,226	2,281	4,129	2,622	26,973	39,242												0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962												-3,400
Other	1,877	1,877	1,877	-70	-7,026	-3,529	-4,994												-5,066
TOTAL	8,683	3,369	1,459	14,147	-8,713	18,807	37,751												-18,751

	1992	1993	1994	1995	1996	1997	Total	
POSITIONS ELIMINATED								
Off	10	10	10	10	0	0	40	
Enl	10	10	10	10	0	0	40	
Civ	10	70	40	40	30	0	190	
TOT	30	90	60	60	30	0	270	

	1992	1993	1994	1995	1996	1997	Total	
POSITIONS REALIGNED								
Off	60	60	60	60	60	160	460	
Enl	60	60	60	60	60	160	460	
Stu	0	0	0	0	0	0	0	
Civ	60	0	30	30	30	660	810	
TOT	180	120	150	150	150	980	1,730	

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SPF

Costs (\$K) Constant Dollars								
	1992	1993	1994	1995	1996	1997	Total	Beyond
	----	----	----	----	----	----	-----	-----
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	1,353	1,591	6,207	12,352	2,776
Overhd	1,404	1,465	1,629	1,802	1,892	2,392	10,583	2,232
Moving	2,071	1,286	2,341	4,189	2,682	27,133	39,702	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	1,537	8,170	0
TOTAL	11,550	10,695	12,944	31,766	19,451	46,433	132,838	10,508

Savings (\$K) Constant Dollars								
	1992	1993	1994	1995	1996	1997	Total	Beyond
	----	----	----	----	----	----	-----	-----
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	330	493	644	780	2,466	2,572
Moving	60	60	60	60	60	160	460	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	17,618	28,165	27,626	95,087	29,259

4.

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 1999 (2 Years)

NPV in 2011(\$K): -63,226
 1-Time Cost(\$K): 84,520

Net Costs (\$K) Constant Dollars	1992						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,811	4,731	5,284	27,631	11,052	4,973	59,483	0
Person	-1,004	-3,994	-7,083	-9,286	-10,786	-11,448	-43,601	-11,448
Overhd	1,092	1,054	1,160	1,261	1,285	1,160	7,013	1,075
Moving	2,011	1,226	2,281	4,129	2,622	427	12,696	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	9,787	4,555	2,804	21,251	-5,947	-13,353	19,097	-18,839

POSITIONS ELIMINATED	1992						Total
	1992	1993	1994	1995	1996	1997	
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

POSITIONS REALIGNED	1992						Total
	1992	1993	1994	1995	1996	1997	
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

	Costs (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	6,606	5,526	6,079	27,631	11,052	4,973	61,868	0
Person	755	1,154	1,115	1,227	1,409	1,272	6,933	1,272
Overhd	1,111	1,254	1,490	1,755	1,929	1,940	9,480	1,857
Moving	2,071	1,286	2,341	4,189	2,682	427	12,996	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	12,654	11,880	14,289	38,870	22,218	14,113	114,024	8,629

	Savings (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	330	493	644	780	2,466	781
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	17,618	28,165	27,466	94,927	27,467

5.

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 2000 (3 Years)

NPV in 2011(\$K): -57,487
 1-Time Cost(\$K): 91,873

Net Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	6,523	5,393	6,012	30,940	12,376	5,569	66,813	0
Person	-1,004	-3,935	-6,966	-9,160	-10,604	-11,266	-42,936	-11,266
Overhd	1,092	1,046	1,134	1,185	1,155	1,009	6,623	918
Moving	2,018	1,226	2,286	4,135	2,626	427	12,719	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-5,066
TOTAL	10,507	5,267	3,629	24,616	-4,567	-12,727	26,725	-18,814

	1992	1993	1994	1995	1996	1997	Total
POSITIONS ELIMINATED							
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	40	30	0	190
TOT	30	90	60	60	30	0	270

POSITIONS REALIGNED							
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Pctrs File : C:\COBRA\STDFCTRS.SFF

	Costs (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	7,318	6,188	6,807	30,940	12,376	5,569	69,198	0
Person	755	1,212	1,232	1,353	1,591	1,454	7,598	1,454
Overhd	1,111	1,246	1,464	1,678	1,800	1,789	9,090	1,699
Moving	2,078	1,286	2,346	4,195	2,686	427	13,019	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	13,373	12,593	15,115	42,235	23,598	14,739	121,652	8,653

	Savings (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	10,513	12,195	12,720	50,534	12,720
Overhd	19	200	330	493	644	780	2,466	781
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	17,618	28,165	27,466	94,927	27,467

6.

COBRA REALIGNMENT SUMMARY (COBRA v5.08) - Page 1/2
 Data As Of 15:37 03/19/1991, Report Created 10:00 02/09/1995

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SPF

Starting Year : 1992
 Final Year : 1997
 ROI Year : Immediate

NPV in 2011(\$K): -208,711
 1-Time Cost(\$K): 79,940

Net Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	4,414	3,276	3,683	20,353	8,141	3,664	43,531	0
Person	-1,004	-3,935	-6,966	-15,524	-33,704	-34,366	-95,500	-34,366
Overhd	1,289	1,194	1,245	656	535	288	5,207	150
Moving	1,998	1,226	2,270	4,490	2,612	427	13,023	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	2,271	2,271	2,271	3,621	-6,688	-5,066	-1,319	-5,066
TOTAL	8,969	3,692	1,788	11,183	-32,198	-38,454	-45,020	-42,682

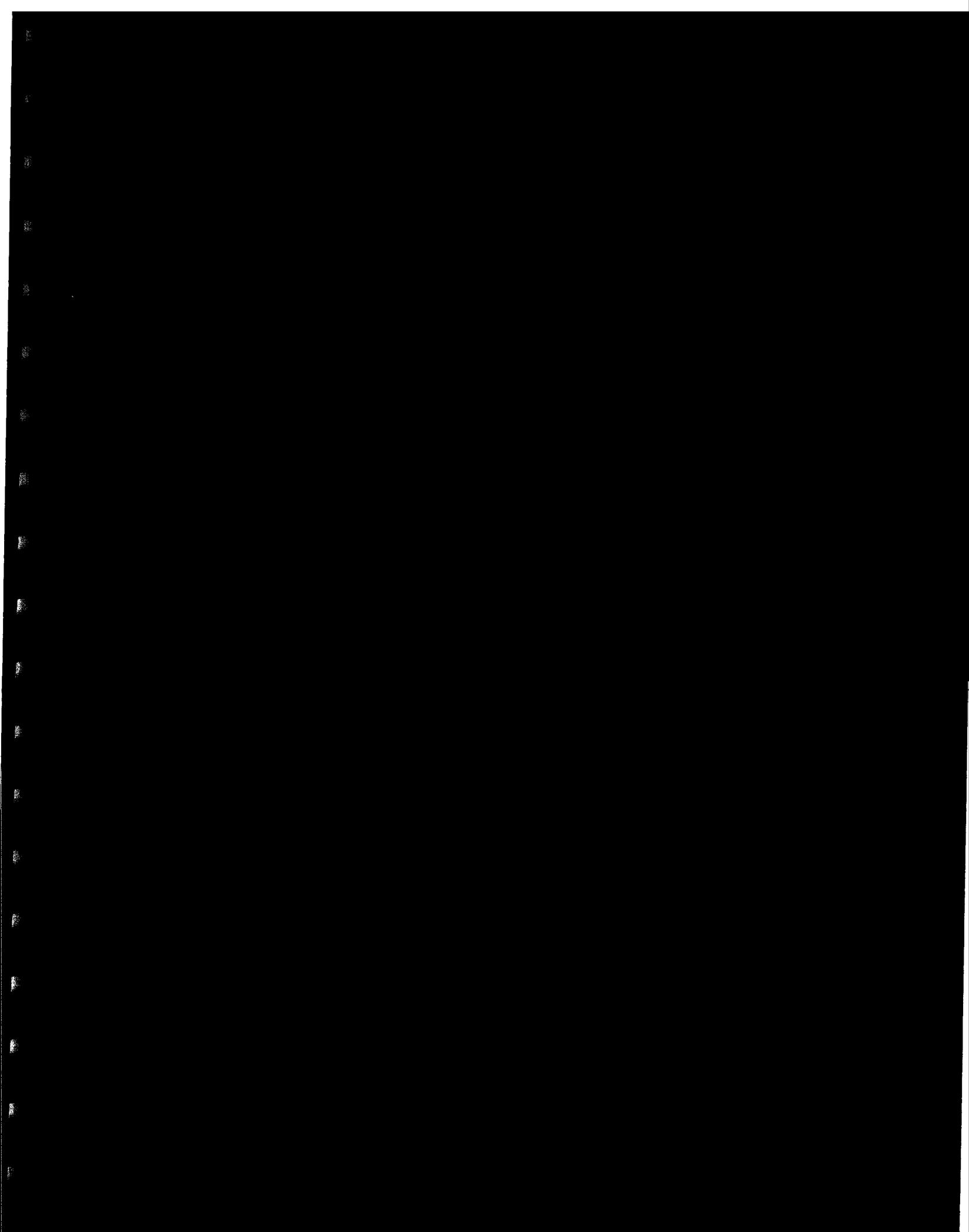
	1992	1993	1994	1995	1996	1997	Total
POSITIONS ELIMINATED							
Off	10	10	10	10	0	0	40
Enl	10	10	10	10	0	0	40
Civ	10	70	40	700	30	0	850
TOT	30	90	60	720	30	0	930

	1992	1993	1994	1995	1996	1997	Total
POSITIONS REALIGNED							
Off	60	60	60	60	60	0	300
Enl	60	60	60	60	60	0	300
Stu	0	0	0	0	0	0	0
Civ	60	0	30	30	30	0	150
TOT	180	120	150	150	150	0	750

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\STDFCTRS.SFF

Costs (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	5,209	4,071	4,478	20,353	8,141	3,664	45,916	0
Person	755	1,212	1,232	6,539	1,591	1,454	12,784	1,454
Overhd	1,308	1,394	1,575	1,761	1,862	1,836	9,736	1,699
Moving	2,058	1,286	2,330	4,550	2,672	427	13,323	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,504	2,504	2,504	3,854	478	0	11,845	0
TOTAL	11,835	11,017	13,274	40,963	19,749	12,880	109,719	8,653

Savings (\$K)	Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	1,759	5,148	8,198	22,063	35,295	35,820	108,284	35,820
Overhd	19	200	330	1,105	1,327	1,547	4,529	1,549
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	5,066
TOTAL	2,866	7,326	11,485	29,780	51,948	51,334	154,740	51,335



**User's
Manual
C O B R A
Cost Of Base
Realignment
Actions**

V5.01

October 1994

Prepared for the COBRA Joint Process Action Team by:

 **RICHARDSON and KIRMSE, Inc.**
ENGINEERING • PLANNING • SYSTEMS

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CHAPTER 1
INTRODUCTION

CHAPTER 1 - INTRODUCTION

1.1 THE MANUAL

The modifications and enhancements that have been incorporated into this version of COBRA make its operations and capabilities different from previous versions. In addition, COBRA now comes with a new module called ADDER. This manual should therefore be read completely, even if the user is familiar with COBRA. The manual is written so that after its initial reading, users need generally refer only to the section(s) where he or she has a question.

Throughout the manual, when a single key-press is described, the notation < > is used (for example <ENTER> means to press the ENTER key). Similarly, when two keys are to be pressed at the same time, they are both shown within the < > (for example <ALT-S> means to press the ALT and the S keys, simultaneously). When a string of characters are to be pressed they will be shown within quotation marks (for example "B:" means to press the B and the : keys, sequentially).

1.2 BACKGROUND

The Cost of Base Realignment Actions (COBRA) model was originally developed in early 1988 by the United States Air Force Cost Center, in conjunction with the Logistics Management Institute, to evaluate the cost of Air Force stationing actions. This Lotus Spreadsheet based model was adopted by the 1988 Base Realignment and Closure Commission to evaluate and compare the relative costs of stationing alternatives. Throughout 1988 the Commission reviewed and revised the model so it could be used by all Military Departments. As a result it was used to produce all cost estimates used by the 1988 Closure Commission.

At the conclusion of the Commission, the General Accounting Office (GAO) reviewed the COBRA model and provided the Commission with a list of minor model modifications, and stated in their final report "...that the Cost of Base Realignment Actions Model used by the Commission and the Military Departments is a conceptionally sound tool for evaluating costs, savings, and payback periods." Consequently, the model was revised once more to satisfy those GAO concerns that could be accommodated. Ultimately, this model was released in May 1989 and was selected as the starting point to evaluate the 1991 Commission stationing actions. It soon became apparent that the revised Lotus based COBRA would have difficulty satisfying the long term Department of Defense (DOD) requirements.

The Department of the Army then took over the continued development and modification of the COBRA model. Richardson and Kirmse Engineering, Incorporated was tasked to make a detailed examination of the model and to provide recommendations as to how it could be improved. The Lotus 1-2-3 COBRA was found to be a valuable analytical tool, but with several limitations. R&K Engineering subsequently converted COBRA to a true computer model using

the Pascal programming language. Several versions of this new COBRA program were developed and used for the 1991 Commission. The latest version in general use was V1.42.

In early 1992, R&K was tasked to make a series of enhancements to COBRA in preparation for the 1993 Commission. The result was a variety of improvement changes in the COBRA model. The Version 4.00 series of COBRA enabled the model closure/realignment scenarios to involve up to 15 separate bases, each of which could be a Losing Base, a Gaining Base, or both a Losing and a Gaining Base. It incorporated numerous improvements to accommodate unique costs and savings, which allowed industrial activities to be modeled without disconnecting the model's standard algorithms. In those cases where the unique attributes of an activity could not be accommodated by the standard algorithms, a "Unique Activities" data entry screen was used. The 4.00 series revised calculations to better account for Construction Costs, Transfer of Military Students, Costs of Local Moves, CHAMPUS Costs, Homeowners Assistance Costs, and several other cost/savings factors. This series also made input of data more easy and logical, with information on a single base input on a small number of base-specific screens rather than being spread over many general input screens.

In 1994, R&K Engineering was again tasked to make a series of enhancements to COBRA in preparation for the 1995 Commission. The result is as described in this manual.

1.3 CAPABILITIES AND OPERATIONS

The COBRA model is designed to estimate the costs and savings associated with a proposed base closure or realignment action, using data that is readily available to the Military Department staffs without extensive field studies. In addition, the model can be used to compare the relative cost differences between various stationing alternatives. It is not designed to produce budget estimates, but to provide a consistent method of evaluating closure and realignment options. Although COBRA produces data formatted similarly to Military Department budget data, an exact match between the two should not be expected.

COBRA calculates the costs and savings of base closure/realignment scenarios over a period of 20 years, or longer if necessary. It models all activities (moves, construction, procurements, sales, closures) as taking place during the first 6 years, and thereafter all costs and savings are treated as steady-state. The key output value produced is the Return on Investment Year. This is the point in time where savings generated equal (and then exceed) costs incurred. In other words, this is the point when the realignment/closure has paid for itself and net savings start to accrue.

COBRA allows closure/realignment scenarios to be compared in terms of when Return on Investment is achieved. Should Return on Investment not be achieved for a specific scenario, that action will result in a net cost rather than savings. Similarly, if a scenario has a long Payback Period (late Return on Investment) it will not start to generate net savings until well after the action would have been completed. Such an action would generally be less beneficial

than one with an earlier Return on Investment.

Net Present Value costs and savings figures generated are reported as Present Value dollars. In simple terms, this is the amount of dollars that would have to be invested during the Base Year at the assumed discount (interest) rate to cover the costs or match the savings at a specific point in the future. This is important because it eliminates artificial distinctions between scenarios based on inflation, while highlighting the affects of timing on model results.

This version of COBRA also includes a companion program called ADDER. ADDER loads the output data from one or more COBRA scenarios and adds all costs and savings into one set of reports for the total group of scenarios.

CHAPTER 2
INSTALLATION of COBRA V5.01

CHAPTER 2 - INSTALLATION of COBRA V5.01

2.1 HARDWARE REQUIRED

COBRA will run on any IBM 286-compatible computer with MS-DOS 3.00 or higher, 640K of RAM, and at least one megabyte of hard drive space to hold the program, input data, and reports. The minimum **RECOMMENDED** configuration is a 25 MHz 386 computer with at least one megabyte of RAM, MS-DOS 5.0 running in high memory, and a hard disk with an access time of 30 ms or less with ten megabytes free before installing COBRA. COBRA will run on monochrome systems; but color is highly recommended, since color is used to emphasize different fields on the menus and input screens.

2.2 INSTALLATION INSTRUCTIONS

COBRA is supplied on a floppy diskette as a file named COBIN501.EXE, a self-extracting archive containing the program, overlay, and assorted data files. The diskette also contains INSTALL.EXE, a program for safely creating directories and installing COBRA, and a text file named READ.ME containing installation instructions.

Insert the COBRA distribution diskette into one of your floppy disk drives. (For the purpose of illustration, we will assume you use the "A:" drive; if not, then use "B:" wherever the instructions say "A:".)

Type the command "A:INSTALL", then press <ENTER>. This will execute the program INSTALL.EXE supplied on the floppy disk that you inserted in the "A:" drive and start the installation process. If you have Microsoft Windows, do not install COBRA while Windows is running.

The COBRA installation program will then display the current disk and directory in use by MS-DOS, the amount of free space left on that disk, and a menu of options for the user (see Figure 1). COBRA will not be installed on any disk with less than one megabyte (a little over one million bytes) of available space.

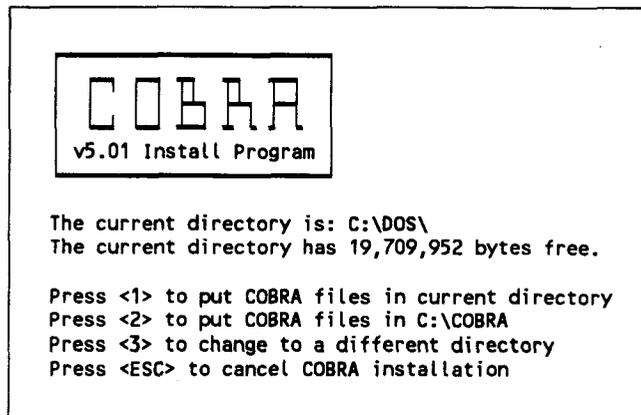


FIGURE 1 - Installation Screen

Pressing <1> will cause COBRA and ADDER to be installed in the current directory if there is sufficient free space on the disk. If there is not, the program will issue a warning and return to the Installation Screen. If an old version of COBRA is already in the directory, those program and system files will be overwritten.

Pressing <2> will install COBRA and ADDER in a directory named "C:\COBRA". If there is no "C:\COBRA" directory, the installation program will create it. As with option <1>, it will check for available disk space and will overwrite any old COBRA system and program files. If you install COBRA in C:\COBRA and have Microsoft Windows in C:\WINDOWS, the installation program will give you the option of adding COBRA and ADDER icons to your Windows desktop.

Pressing <3> will allow the user to change the current drive and directory. The user will be asked to enter the new drive and directory (such as "D:\COB"). If the directory does not exist, the installation program will create it. If for some reason the directory cannot be created (such as a write-protected or non-existent disk), the program will issue a warning and return to the Installation Screen. The user should now press <1> to complete the installation in the new drive and directory.

Pressing <ESC> will cancel the COBRA installation and return the user to DOS. When COBRA has been successfully installed using options <1> or <2>, the user will be returned to the DOS prompt, in the directory to which COBRA has been installed. Enter "COBRA" then if you want to run COBRA, or "ADDER" to run ADDER.

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CHAPTER 3
OPERATING COBRA

CHAPTER 3 - OPERATING COBRA

It is assumed that users of COBRA will be generally familiar with the operation of the computer. No general keyboard instructions are therefore provided in this manual; rather only COBRA specific information will be included. Should users require generalized computer operation information they should consult their computer manual(s). The most efficient operation of COBRA is achieved by using a mouse wherever possible. Therefore, instructions in this manual will key on "mouse commands" to the system. However, in all cases "keyboard commands" will also be described so that the COBRA user can individually determine how he or she is most comfortable "navigating" through COBRA.

3.1 INITIATING COBRA

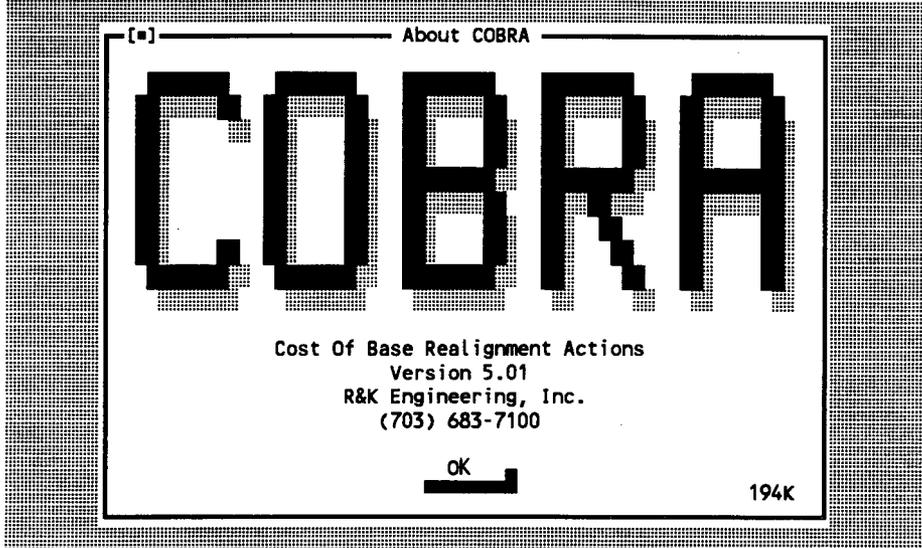
To open the COBRA program, access the disk/directory where COBRA has been installed (see Chapter 2), type "COBRA" and press <ENTER>. The "About COBRA" window will then appear (see Figure 2).

This welcome screen identifies the COBRA model and its version number; the telephone number of R&K Engineering, the COBRA developer, is also provided. The lower-right corner of the window contains the amount of free memory available, in K (kilobytes). This window can be accessed later on (see Section 3.3) to check the current free memory.

To close the "About COBRA" window and access the Main Menu, click on the "OK" at the bottom-center of the window. Other methods of closing the window are: clicking on the Close Window Square [■] at the upper-left of the window border; clicking on the words "ESC-Close window" on the bottom border; pressing <ENTER>; or pressing <ESC>.

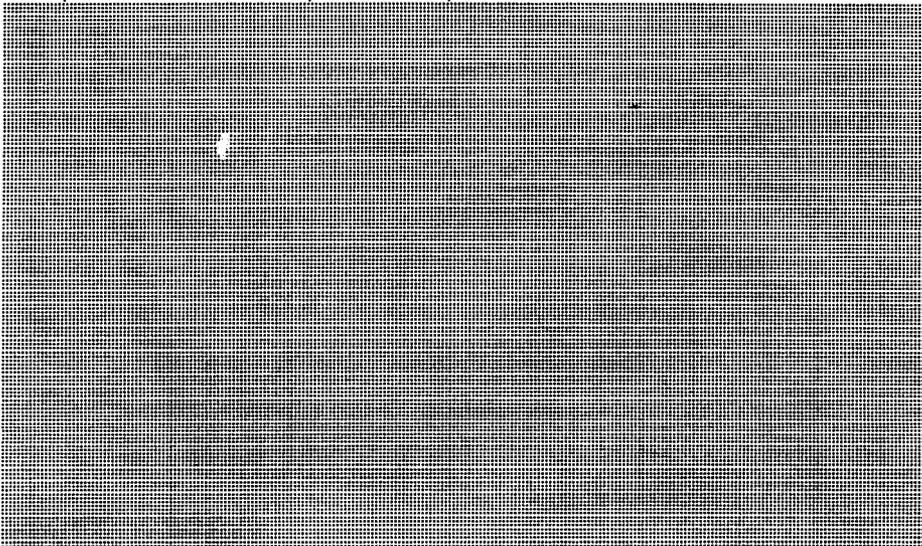
3.2 THE MAIN MENU

The Main Menu is the starting point for using the COBRA program. Upon closing the initial display of the "About COBRA" window, the screen will display the Main Menu (see Figure 3). Along the top of this screen are displayed the "Help", "File", "DataBase", "Input Data", "Reports", "Windows", and "Quit" menu selections. During the use of COBRA additional menu windows, reports, and other data are displayed on the screen, however the Main Menu selections will always remain displayed behind any other active displays. Each of the Main Menu selections is summarized below.



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 2 - "About COBRA" Window



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 3 - Main Menu

3.3 HELP

From the Main Menu the Help selection is made by either clicking on the word "Help" along the top of the Main Menu screen, or by pressing <ALT-H>. The Help menu will appear (see Figure 4). By clicking on the words "About COBRA" or by pressing <A>, the "About COBRA" window will again be displayed (see Section 3.1, above). The Help menu may be closed by clicking on another Main Menu selection, by clicking on an open area of the screen surface, by clicking on the words "ESC-Close window" on the bottom border, or by pressing <ESC>.

3.3.1 Viewing Help

Users of COBRA may want to access the on-screen COBRA Help Text while they are working. This can be done by selecting a Help file to view or by invoking the Context-Sensitive Help. Help files can be selected only from the Help menu. By clicking on the words "View Help" or by pressing <V>, the "View Help" window is displayed (see Figure 5). This window may also be opened from the Main Menu, by pressing <ALT-F1>. The user can view the Help text by double clicking on the Help file which is desired. The Help files may also be accessed by pressing <TAB> to move the cursor to the Help files list, with the <↑> <↓> keys then being used to highlight the desired Help file. The highlighted Help file can then be viewed by clicking on the word "OK" or by pressing <ENTER>. The user may move up or down through the Help text using the mouse or the <↑> <↓> and <Page Up> <Page Down> keys. This window may be closed and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.

3.3.2 Printing Help

The user may want to print one of the Help files. This is done by clicking on the words "Print Help" on the Help menu or by pressing <P>. This will display the "Print Help" window, from which a Help file may be selected for printing exactly as it would be selected for viewing (see Section 3.3.1 above).

3.3.3 Context-Sensitive Help

The COBRA user may want to access information which is specific to the place in COBRA where he or she is at the time. This is most easily done through the use of Context-Sensitive Help. This feature is invoked by pressing <F1>, or clicking on "F1-Help", which will display on-screen text intended to provide information specific to that place in COBRA where the user is at the time. The user may move up or down through the Help text using the mouse or the <↑> <↓> and <Page Up> <Page Down> keys.

About COBRA
View Help ALT-F1 Print Help Files Used
Calculator ALT-C Calendar COBRA Setup

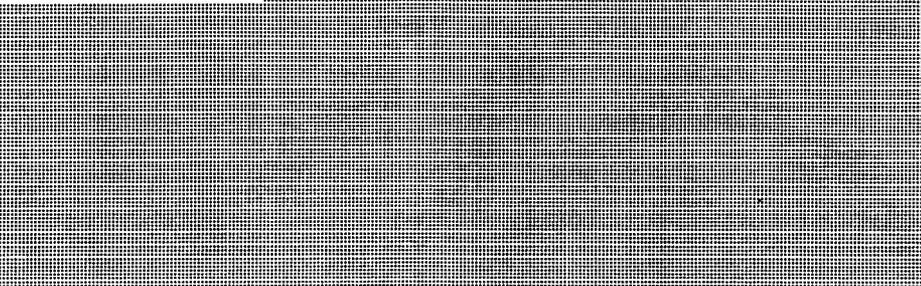


FIGURE 4 - Help Menu

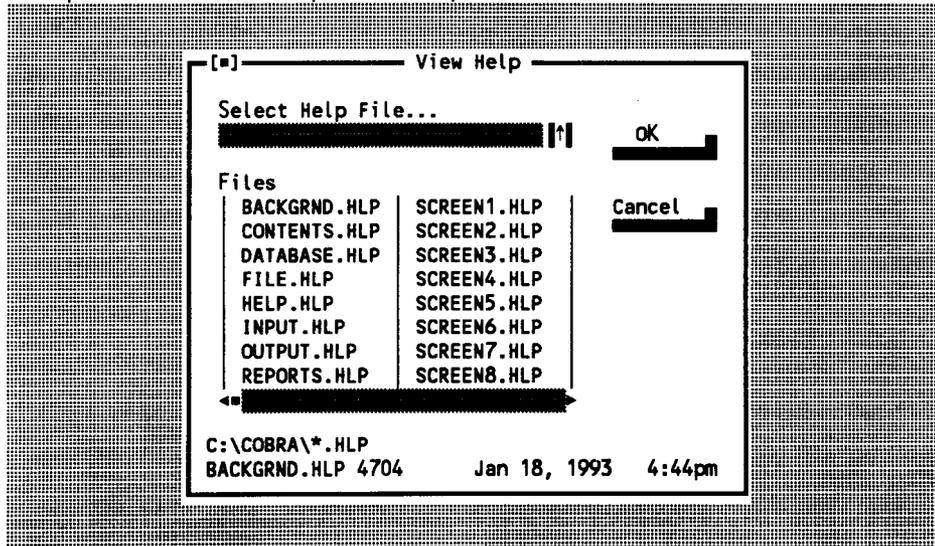


FIGURE 5 - "View Help" Window

A number of highlighted cross-reference words in the Context-Sensitive Help text are provided so the user can skip to other Help texts which cover related subjects. The user can change the designated keyword in the text by clicking on it, or by pressing <TAB> one or more times. Then press <ENTER> to shift to the cross-referenced Help text.

3.3.4 Files in Use

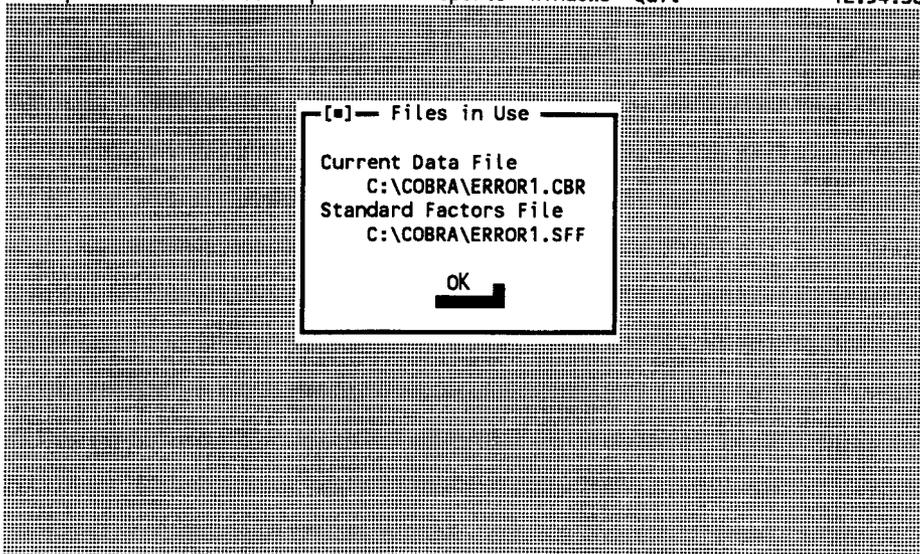
The user should always be aware of which Data and Standard Factors files are in use. By clicking on the words "Files Used" on the Help menu or by pressing <F>, the "Files in Use" window is displayed (see Figure 6). If Data and Standard Factors files are in Program memory at the time this window is opened, they will be indicated here. The Data file in use is also displayed along the bottom border of the Main Menu and will remain there until replaced in, or cleared from Program memory. The window may be closed and the user returned to the Main Menu by clicking on the "OK", or by clicking on the Close Window Square, or by pressing either <ENTER> or <ESC>.

3.3.5 On-Screen Calculator

By clicking on the word "Calculator" or by pressing <C> from the Help menu, a simple four-function calculator will be displayed (see Figure 7). This can also be done from the Main Menu by pressing <ALT-C>. To operate the calculator you can either click on the buttons with the mouse, or use the keyboard. The calculator has four arithmetic function keys, ten number keys, and "C" to clear the calculator, "←" to erase the last character entered, and "±" to change the sign of the number in the display. The keyboard keys <Backspace> and <_> also erase the last character and change sign, respectively. The calculator may be closed and the user returned to the Main Menu by clicking on the Close Window Square, or by pressing <ESC>.

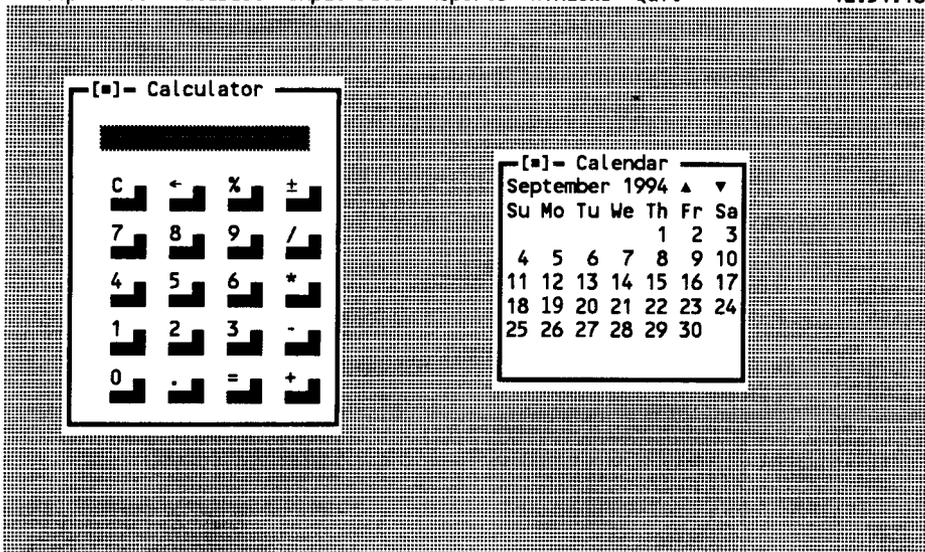
3.3.6 On-Screen Calendar

By clicking on the work "CalenDar" or by pressing <D> on the Help menu, a calendar of the current month can be displayed (see Figure 7). The current date is also highlighted. Past and future months can be displayed by clicking on the triangles (▼ and ▲) or by pressing the <+> and <-> keys. The calendar may be closed and the user returned to the Main Menu by clicking on the Close Window Square, or by pressing <ESC>.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 6 - "Files in Use" Window



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 7 - Calculator and Calendar

3.3.7 Changing COBRA Set-Up

COBRA has several options for generating and printing its reports that can be changed by using the "COBRA Setup" Window (see Figure 8). By clicking on the words "COBRA Setup" or by pressing <S> from the Help Menu, the "COBRA Setup" window is displayed. To cancel any change(s), close the window and return to the Main Menu click on the word "Cancel", or click on the Close Window Square, or press <ESC>. Click on "OK" to save changes.

COBRA will format its output for most dot matrix (those that are EPSON/IBM compatible) and laser (those that are are HP LaserJet compatible) printers, or print them unformatted (requiring a wide-carriage printer for most reports). The user can select which type of printer is to be used, along with a printer device name for that printer. If printing with COBRA does not work, it may be necessary to change the Printer Set-Up inside of COBRA. By clicking on the words "Printer Setup" on the Help menu or by pressing <S>, the "Printer Setup" window is displayed (see Figure 8). The default device name is "PRN" which will work with most system configurations. Should a system not be able to print with this setting (a LAN for example), or should the system have multiple printers (a LaserJet on LPT1: and a dot matrix on LPT2:, for example) the correct device name can be entered in the appropriate "Device Name" field.

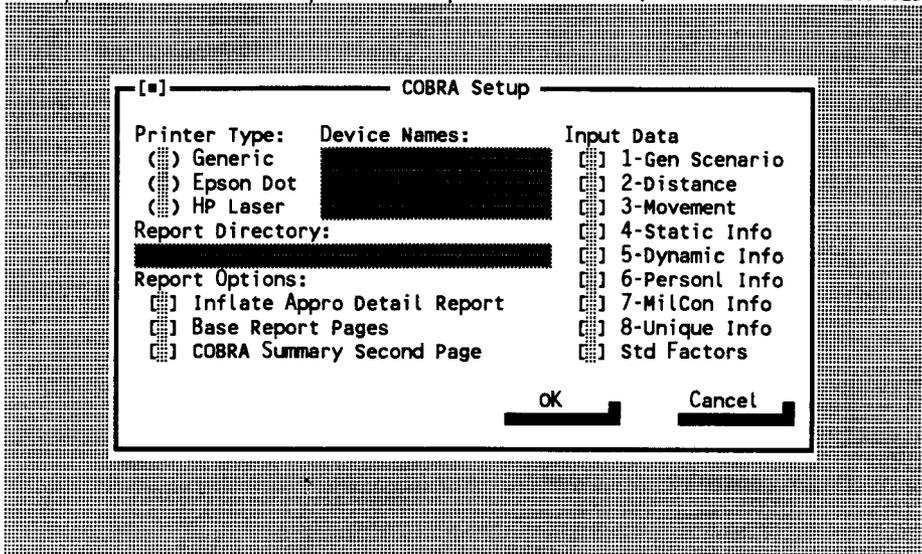
If the user wants to change the directory to be used to store Reports, the new entry can be typed into the "Report Directory" field. This may be useful if the user wants to run a new scenario or set of Reports, while continuing to save the current Reports in memory. Unless the directory is changed, any new Reports will automatically overwrite the old ones.

The user can limit the scope of Input Data reports generated by selecting which Input screens (see Chapter 4) are included in the report. Click on the desired screen names, or press <ALT> and the highlighted letter, to turn that screen on or off (those screens with an "X" next to them will be included in future Input Data reports.

Other options available are whether or not the inflation values on Standard Factors Screen Two will be applied to the Appropriation Detail report, whether or not some reports will have pages for each individual base, and whether or not to include a second page with the COBRA Summary report listing total Costs and Savings. Click on the desired options, or press <ALT> and the highlighted letter, to turn that option on or off (those options with an "X" next to them will be used in future reports.

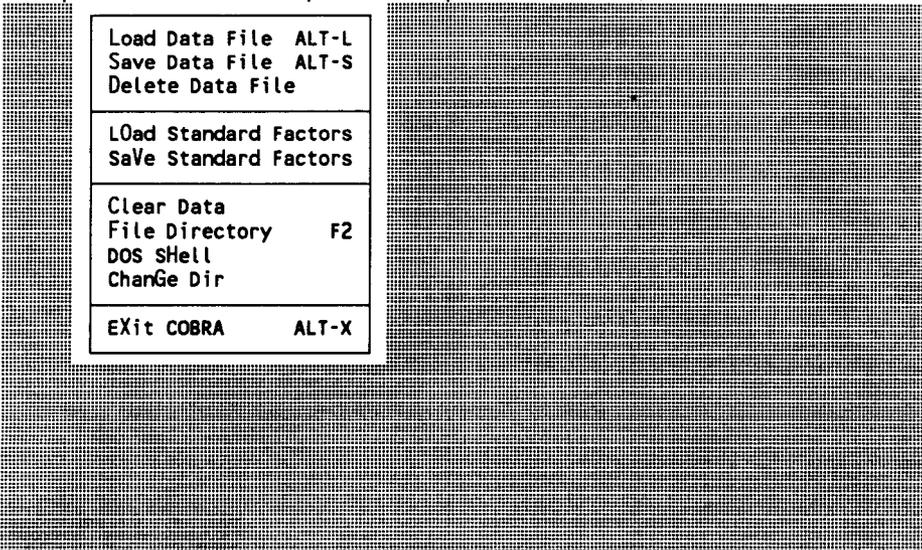
3.4 FILE

The File selection is made by either clicking on the word "File" along the top of the Main Menu screen, or by pressing <ALT-F>. The File menu will appear (see Figure 9). The File menu may be closed by clicking on another Main Menu selection, by clicking on an open area of the screen surface, by clicking on the words "ESC-Close window" on the bottom border, or by pressing <ESC>.



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 8 - "COBRA Setup" Window



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 9 - File Menu

3.4.1 Loading Saved Data

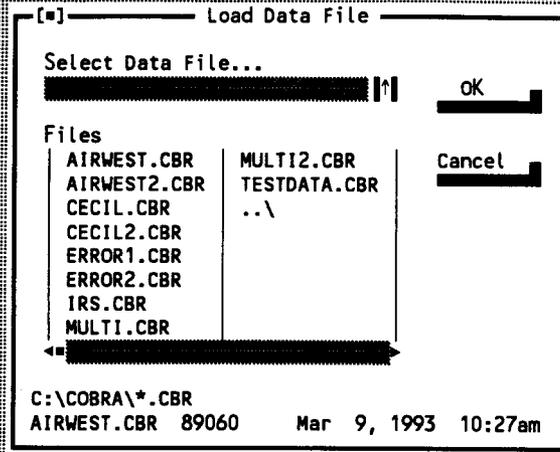
COBRA users may want to run a saved scenario, or retrieve a saved scenario in order to confirm entries and/or make changes. By clicking on the words "Load Data File" on the File menu or by pressing <L>, the "Load Data File" window is displayed (see Figure 10). This window may also be opened from the Main Menu, by pressing <ALT-L>. Retrieval of a saved data set (in the form "*.CBR") is done by double clicking on the file name desired. The Files list may also be accessed by pressing <TAB> to move the cursor to the Data files list, with the <↑> <↓> keys then being used to highlight the desired Data file. The highlighted Data file can be retrieved by clicking on the word "Open" or by pressing <ENTER>. **Any Data set which was in COBRA Program memory will be removed and replaced when the new Data set is loaded.** Once loaded, the file name of the Data set will be displayed at the bottom border as described in Section 3.3.4 above. This window may be closed and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>. Note that scenario files created with COBRA versions 4.00 through 4.04 can be loaded into COBRA version 5.01.

3.4.2 Saving Current Data

New or revised scenarios should be saved for future retrieval and use. By clicking on the words "Save Data File" on the File menu or by pressing <S>, the "Save Data File" window is displayed (see Figure 11). This window may also be opened from the Main Menu, by pressing <ALT-S>. The saving of the currently used data set is done by typing the Data file name desired or leaving the previously saved file name, and then clicking on the word "Save". The file may also be saved by pressing <ENTER>. This window may be closed, the save canceled, and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>. The user should save the scenario before executing; particularly if the scenario is a new one, so that the filename will appear on all of the reports generated.

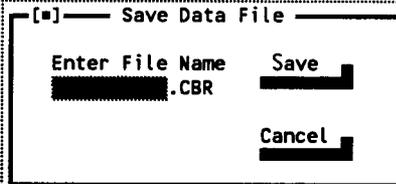
3.4.3 File Directory

The user may want to review the list of COBRA files in a directory. This is done by clicking on the words "File Directory" on the File menu or by pressing <F>. This can also be done from the Main Menu by pressing <F2>. This creates and displays a Report named "COBFILES.RPT" which lists all Data files and Standard Factors files in the current directory. These files are displayed with the English text name on the left (this is the user created common name/description), and the complete path name on the right (includes the user defined file name). The mouse or <↑> <↓> keys can be used to scroll through the files list. This window may be closed and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 10 - "Load Data File" Window



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 11 - "Save Data File" Window

3.4.4 Clearing the Data Set

To create a COBRA scenario from scratch, the Program memory should be cleared of any other Data set that may have been in use. By clicking on the words "Clear Data Set" on the File menu or by pressing <C>, the currently used Data Set is removed from the COBRA Program memory (If previously saved, it remains saved). A new Data Set can then be created using the "Input Data" menu. This window may be closed and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.

3.4.5 Deleting Saved Data

The user may want to permanently remove a scenario Data set from disk when it is outdated and no longer under consideration. By clicking on the words "Delete Data File" on the File menu or by pressing <D>, the "Delete Data File" window is displayed (see Figure 12). The deletion of a saved Data file is done by double clicking on the file to be deleted. The Data files list may also be accessed by pressing <TAB> to move the cursor to the list, with the <↑> <↓> keys then being used to highlight the desired Data file. The highlighted Data file can then be deleted and the user returned to the Main Menu by clicking on the word "OK" or by pressing <ENTER>. This window may be closed, the delete function canceled, and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.

3.4.6 Loading Standard Factors

If the scenario Data set does not have a specific Standard Factors file associated with it, or if the user wants to change the Standard Factors file to be used, the new Standard Factors file must be loaded into Program memory. By clicking on the words "Load Standard Factors" on the File menu or by pressing <O>, the "Load Standard Factors" window is displayed (see Figure 13). The retrieval of a saved Standard Factors file (in the form "*.SFF") is done by double clicking on the file name desired. The Files list may also be accessed by pressing <TAB> to move the cursor to the Standard Factors files list, with the <↑> <↓> keys then being used to highlight the desired file. The highlighted Standard Factors file can be retrieved by clicking on the word "Open" or by pressing <ENTER>. This window may be closed and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.

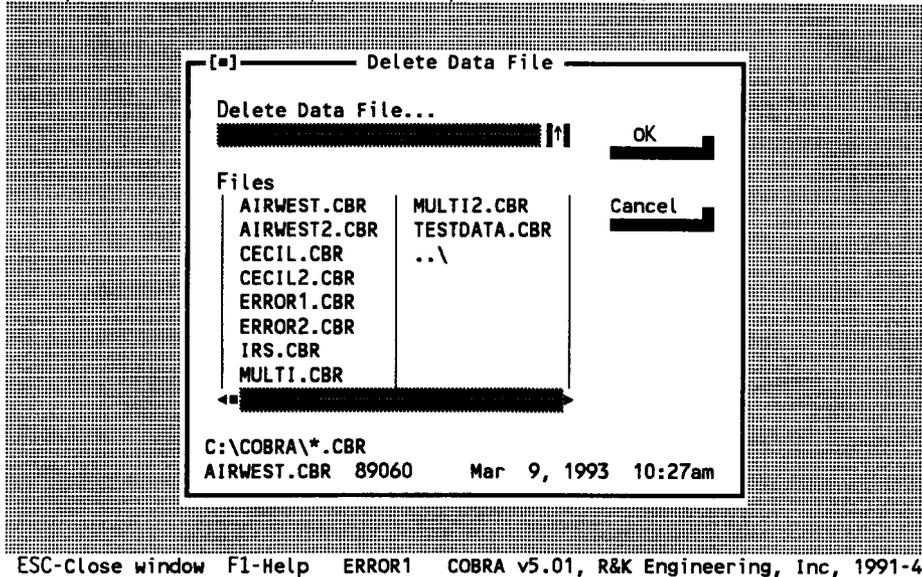


FIGURE 12 - "Delete Data File" Window

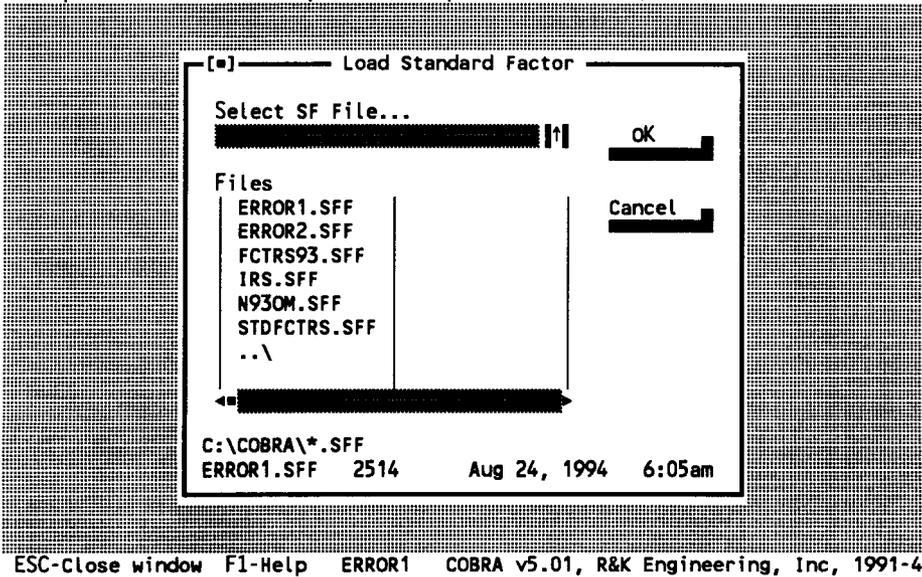


FIGURE 13 - "Load Standard Factors" Window

3.4.7 Saving Standard Factors

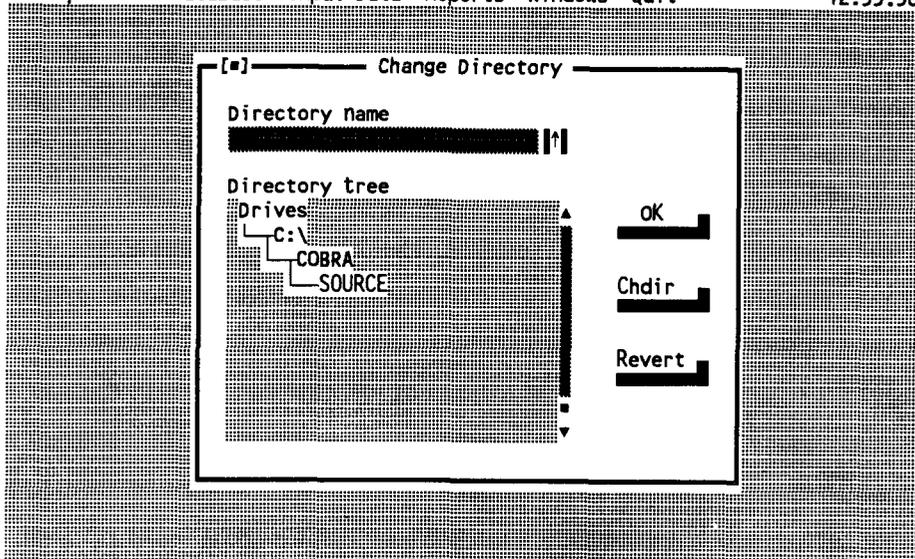
New or modified Standard Factors files should be saved for future retrieval and use. By clicking on the words "SaVe Standard Factors" on the File menu or by pressing <V>, the "Save Standard Factors" window is displayed. Saving the currently used Standard Factors file is done by typing the Standard Factors file name desired or leaving the previously saved file name, and then clicking on the word "Save". The file may also be saved by pressing <ENTER>. This window may be closed, the save canceled, and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.

3.4.8 DOS Shell/Change Directory

By clicking on the words "DOS SHell" or by pressing <H> on the File menu, a DOS Shell may be accessed. The user may return to COBRA by typing "EXIT" at the DOS prompt. Similarly, by clicking on the words "ChanGe Dir" or by pressing <G> the "Change Directory" menu is displayed (see Figure 14). The current directory will be displayed on this window, both in directory name and directory tree format. The directory may be changed using this function, with all file loads and saves, from that point on, going to or coming from the new directory. The user may type in the new drive and directory into the "Directory name" field, or may designate the new directory on the "directory tree". The user can click on "Chdir", or press <C> to change the directory but return to this window. By clicking on "OK", or by pressing <ENTER> the directory will be changed, and the user returned to the Main Menu. By clicking on "Revert", or pressing <R> the directory will revert to the initial setting (when the window was first opened) and the user returned to this window. Lastly, by clicking on the Close Window Square, or by pressing <ESC> the change directory actions are stopped, and the user returned to the Main Menu.

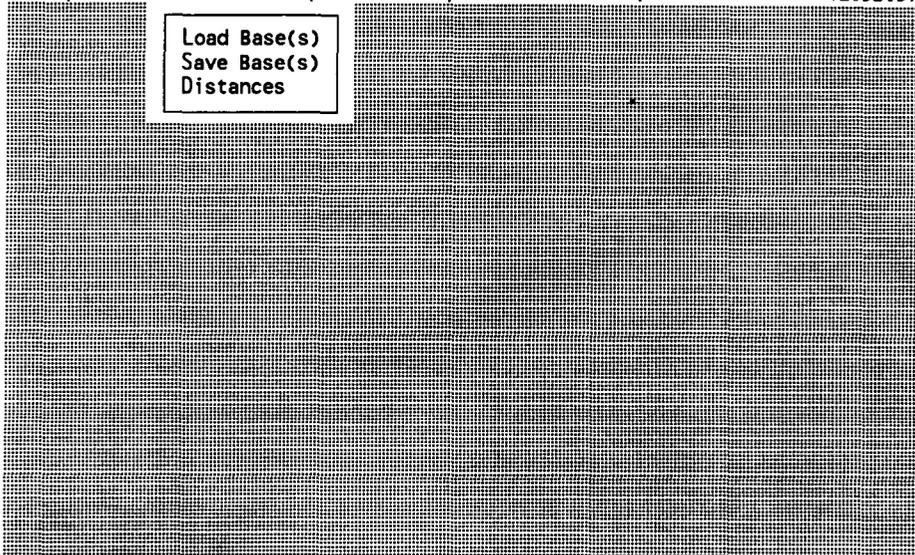
3.4.9 Exiting COBRA

When the user has finished using COBRA, he or she should always use the Exit command to terminate the program. This is required to prevent inadvertent loss of data by improper termination (such as switching the computer off). By clicking on the Words "EXit COBRA" on the File menu or by pressing <X> the user may exit COBRA and return to the DOS prompt. This command may also be selected by pressing <ALT-X> from the Main Menu. These and Quitting (see section 3.9) are the only proper methods of exiting the COBRA program.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 14 - "Change Directory" Window



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 15 - Database Menu

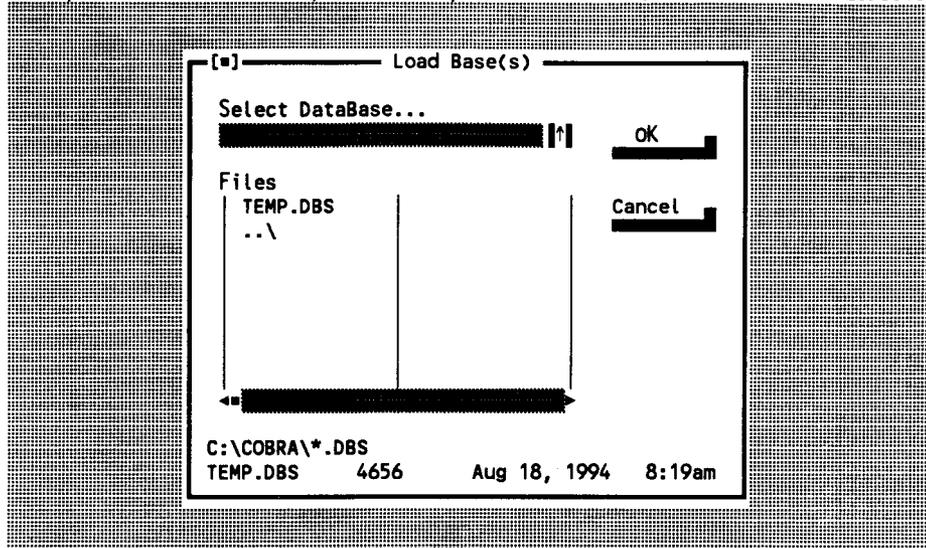
3.5 DATABASE

COBRA has two types of databases which can assist the user in entering scenario data (see Section 3.6 and Chapter 4). The Database selection is made by either clicking on the word "DataBase" on the Main Menu, or by pressing <ALT-D>. The Database menu will then appear (see Figure 15). The use of these databases will allow the user to save and retrieve both base-specific data (see Section 4.4) and distances between bases (see Section 4.2). The storage and retrieval of this information will make initial scenario data entry easier and will promote consistency between scenarios which involve the same base(s). The Database menu may be closed and the user returned to the Main Menu by clicking on another Main Menu selection, by clicking on an open area of the screen surface, or by pressing <ESC>.

3.5.1 Loading Base(s)

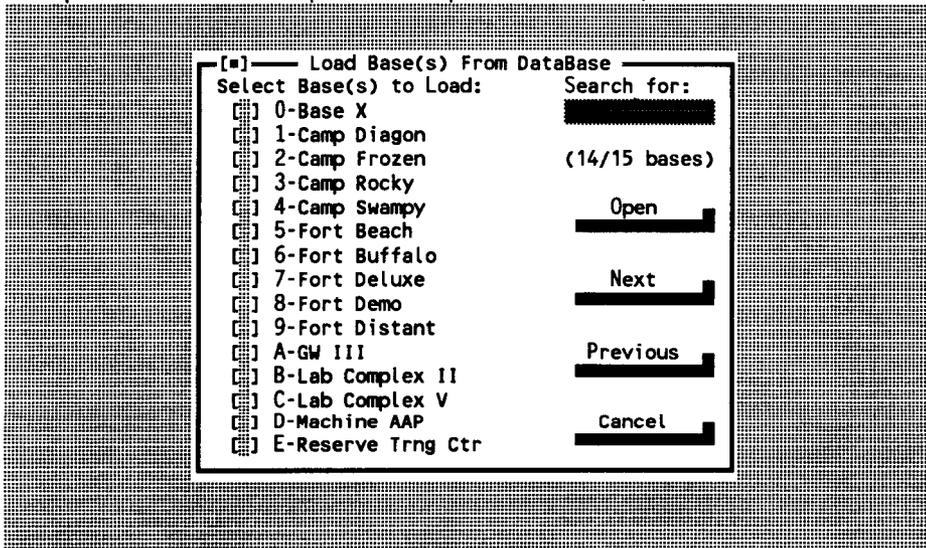
The Load Base(s) function is used to load information from the Base Information database to Program memory. This database contains information on specific bases which is required to complete Data Entry Screen 4 (see Section 4.4). By clicking on the words "Load Base(s)" on the Database menu or by pressing <L>, the "Load Base(s)" window is displayed (see Figure 16). The selection of the database file to be loaded from is made by clicking on the file name desired. The Files list may also be accessed by pressing <TAB> to move the cursor to the database files list, with the <↑> <↓> keys then being used to highlight the desired database file. The highlighted file can be accessed by clicking on "OK" or by pressing <ENTER>. This window may be closed, the load canceled, and the user returned to the Main Menu by clicking on the word "Cancel", by clicking the Close Window Square, or by pressing <ESC>.

When a database file has been selected, the "Load Base(s) From DataBase" window is displayed (see Figure 17). This window consists of one or more pages listing all bases which have data stored in the database file. The user may now select up to 15 bases to be loaded from the database into Program memory. The base is selected by clicking on the space in front of the base name, or by typing the highlighted number/letter for the base, or by scrolling to the base name and pressing <SPACE BAR> to select it. A selected base will appear with [X] in front of it on the list. The selected base(s) are loaded into Program memory by clicking on the word "Open", by pressing <O>, or by pressing <ENTER>. To see other pages of this window, click on "Next" or "Previous", or press <N> or <P>. The "Next" and "Previous" selections load the bases selected on the current page, and then move to the new page. To do a quick search for a base, type the base name in the "Search for:" field and click on "Open" or press <O>. Search can also be invoked by pressing <ENTER> once to complete the base name entry, and again pressing <ENTER> to start the search. COBRA will load any bases selected on the current page, and then move to the page containing the name of the base searched for. All bases loaded from the database will automatically be entered into the COBRA scenario, and the stored information for each base entered into Data Entry Screen 4. This window may be closed with no further loading, and the user returned to the Main Menu, by clicking on the word "Cancel", by clicking on the Close Window Square, or by pressing <ESC>.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 16 - "Load Bases" Window



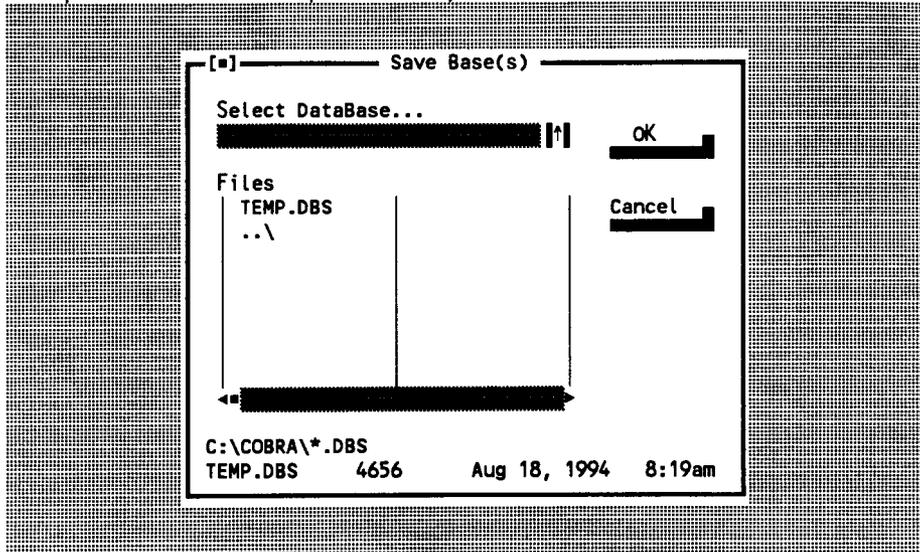
ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 17 - "Load Base(s) From DataBase" Window

3.5.2 Saving Base(s)

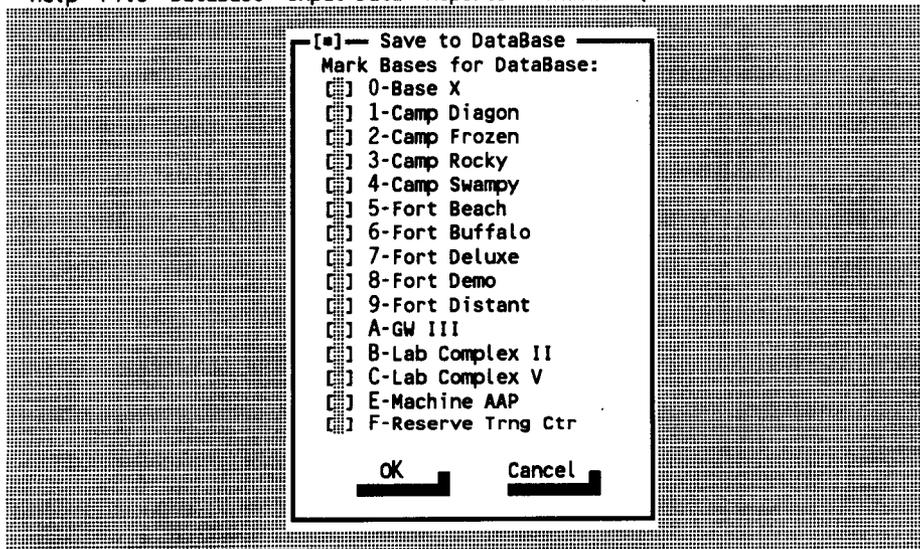
When the user wants to save information from Program memory to the Base Information database, the Save Base(s) function is used. This will save information on selected bases from the current scenario to a Base Information database. By clicking on the words "Save Base(s)" on the Database menu or by pressing <S>, the "Save Base(s)" window is displayed (see Figure 18). The selection of the Base Information database file, to be saved to, is made by clicking on the file name desired. The Files list may also be accessed by pressing <TAB> to move the cursor to the database files list, with the <↑> <↓> keys then being used to highlight the desired database file. The highlighted database file can be accepted by clicking on "OK" or by pressing <ENTER>. A new Base Information database file can be created by entering a new file name and clicking on "OK" or pressing <ENTER>. This window may be closed, the save canceled, and the user returned to the Main Menu by clicking on the word "Cancel", by clicking the Close Window Square, or by pressing <ESC>.

When a Base Information database file has been selected the "Save to DataBase" window is displayed (see Figure 19). This window consists of one page, listing all bases which are used in the current scenario. The user may now select those bases to be saved to the database from Program memory. The base is selected by clicking on the space in front of the base name, or by typing the highlighted number/letter for the base, or by scrolling to the base name and pressing <SPACE BAR> to select it. A selected base will appear with [X] in front of it on the list. The selected base(s) are saved into the database by clicking on "OK", or by pressing <ENTER>. This window may be closed, the save canceled, and the user returned to the Main Menu, by clicking on the word "Cancel", by clicking on the Close Window Square, or by pressing <ESC>.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 18 - "Save Base(s)" Window



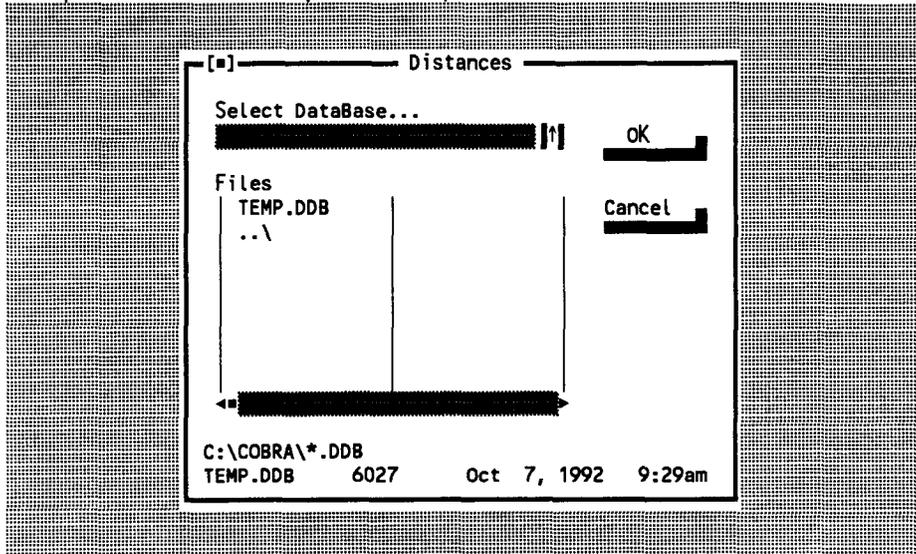
ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 19 - "Save to DataBase" Window

3.5.3 Loading/Saving Distances

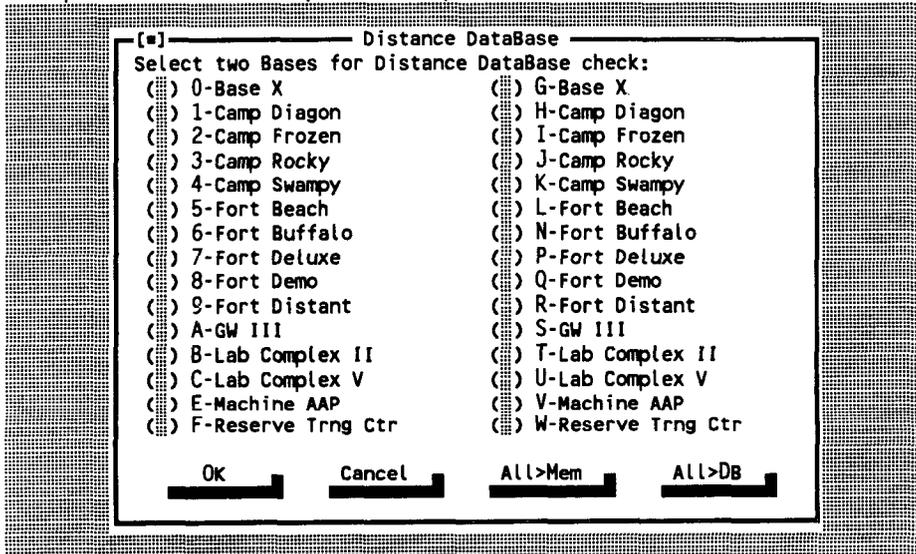
The second COBRA database is the Distances database, which contains the distances between pairs of bases. These can be used to enter distance information required on Data Entry Screen 2 (see Section 4.2). When the user wants to load distances from, or save distances to the Distances database, the Distances function is used. By clicking on the word "Distances" on the Database menu or by pressing <D>, the "Distances" window is displayed (see Figure 20). The selection of the Distances database file to be loaded from/saved to is made by clicking on the file name desired. The Files list may also be accessed by pressing <TAB> to move the cursor to the database files list, with the <↑> <↓> keys then being used to highlight the desired database file. The highlighted database file can be accepted by clicking on "OK" or by pressing <ENTER>. A new Distances database file can be created by entering a new file name and clicking on "OK" or pressing <ENTER>. This window may be closed, the save canceled, and the user returned to the Main Menu by clicking on the word "Cancel", by clicking the Close Window Square, or by pressing <ESC>.

When a Distances database file has been selected the "Distances DataBase" window is displayed (see Figure 21). This window consists of one page, listing all bases which are used in the current scenario. The user may now select a pair of bases to check for distance data. The pair of bases is designated by picking one from the right column and a second from the left column. Bases are designated by clicking on the space in front of the base name or on the name itself, or by typing the highlighted number/letter for the base, or by scrolling to the base and pressing the <SPACE BAR>. Designated bases will have (●) in front of their names.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 20 - "Distances" Window



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

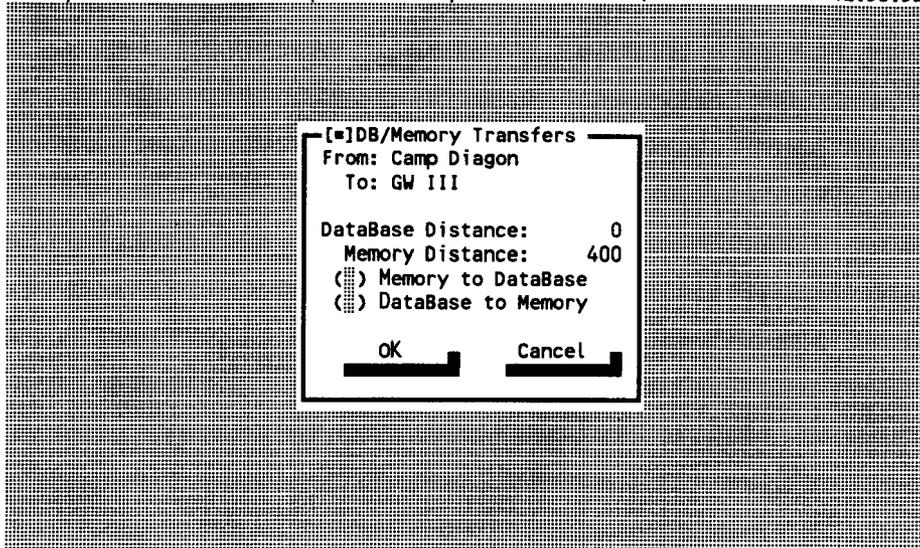
FIGURE 21 - "Distance DataBase" Window

When the user clicks on "OK", or presses <ENTER> a "DB/Memory Transfers" window is displayed (see Figure 22). The "DB/Memory Transfers" window displays the names of the two bases, and the distance currently in Program memory as well as that in the database. If these distances are not the same, the user can transfer the correct value from one data location to the other. This is done by clicking on one of the memory transfer choices (Memory to DataBase or DataBase to Memory) and either clicking on "OK" or pressing <ENTER>. Should no transfer be wanted, the user can click on "Cancel" or press <ESC> to return to the "Distances DataBase" window, and another pair of bases may be selected.

The "Distances DataBase" window also has two shortcut transfer options. By clicking on "All>Mem" or pressing <M>, all distances in the database between pairs of bases in the scenario can be transferred to Program memory. Similarly, by clicking on "All>DB" or by pressing <D>, all distances in Program memory can be transferred to the database. When either of these options is selected COBRA will inform the user as to how many distances were found. **Care must be taken when loading distances to Program memory since COBRA expects only to have distances entered when people/equipment moves are planned between those bases (see Section 4.2).** The "Distance DataBase" window can be closed and the user returned to the Main Menu by clicking on "Cancel", by clicking on the Close Window Square, or by pressing <ESC>.

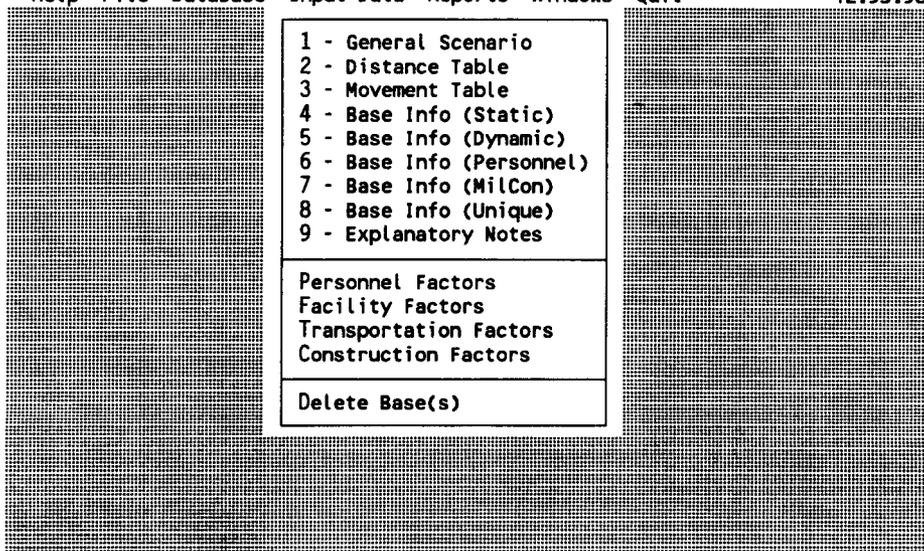
3.6 INPUT DATA

To create a scenario from scratch or to change an already loaded Data set the Input Data selection is used. The Input Data selection is made by either clicking on the words "Input Data" along the top of the Main Menu screen, or by pressing <ALT-I>. The Input Data menu will then appear (see Figure 23). The Data Entry and Standard Factors screens are entered by clicking on the desired screen name. A screen may also be entered by typing the highlighted number/letter (shown in a different color) or by cursoring to the desired screen name and pressing <ENTER>. Data entry is covered in detail in the Chapter 4. The Input Data menu may be closed by clicking on another Main Menu selection, by clicking on an open area of the screen surface, by clicking on the words "ESC-Close window" on the bottom border, or by pressing <ESC>.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 22 - "DB/Memory Transfers" Window



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 23 - Input Data Menu

3.6.1 Deleting a Base

The user may wish to change an existing scenario by simply removing one of the bases involved. The deletion of a base removes the specific base and all activities involving that base from the scenario. By clicking on the words "Delete Bases" on the Input Data menu or by pressing <D>, the "Delete Bases" window is displayed (see Figure 24). The deletion of a base(s) from the scenario is done by designating the base(s) listed on the window by clicking in the space in front of the base name, and then clicking on the word "Delete" or pressing <ENTER>. A base may also be selected by moving the cursor to the base (using the <↑> <↓> keys) and then pressing the Space Bar. Another way to designate the base to be deleted is to type the highlighted number/letter in front of that base name. To cancel the delete function, close the window and return to the Main Menu click on the word "Cancel", or click on the Close Window Square, or press <ESC>.

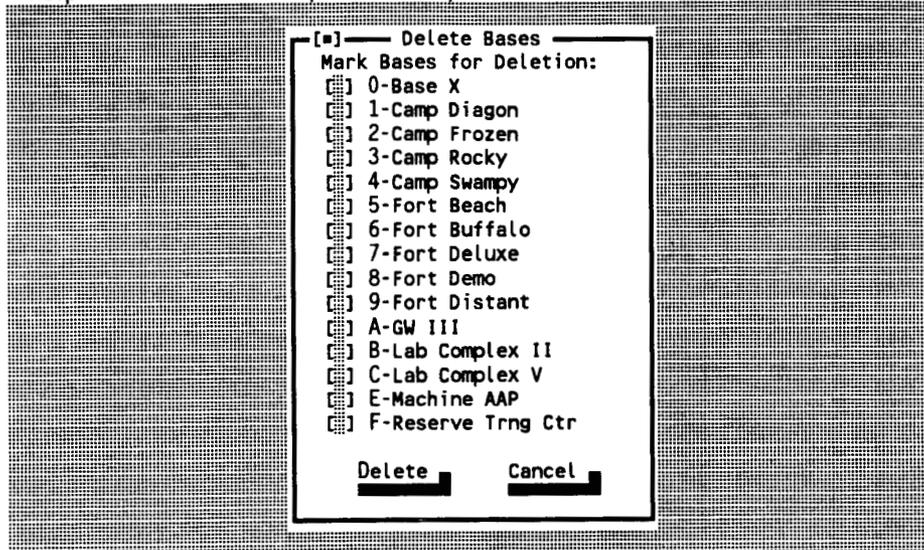
3.7 REPORTS

COBRA output Reports are created, viewed on the screen, and printed using the Reports selection on the Main Menu. The Reports selection is made by either clicking on the word "Reports" along the top of the Main Menu screen, or by pressing <ALT-R>. The Reports menu will then appear (see Figure 25). The Reports menu may be closed by clicking on another Main Menu selection, by clicking on an open area of the screen surface, by clicking on the words "ESC-Close window" on the bottom border, or by pressing <ESC>.

3.7.1 Generating Reports (Running COBRA)

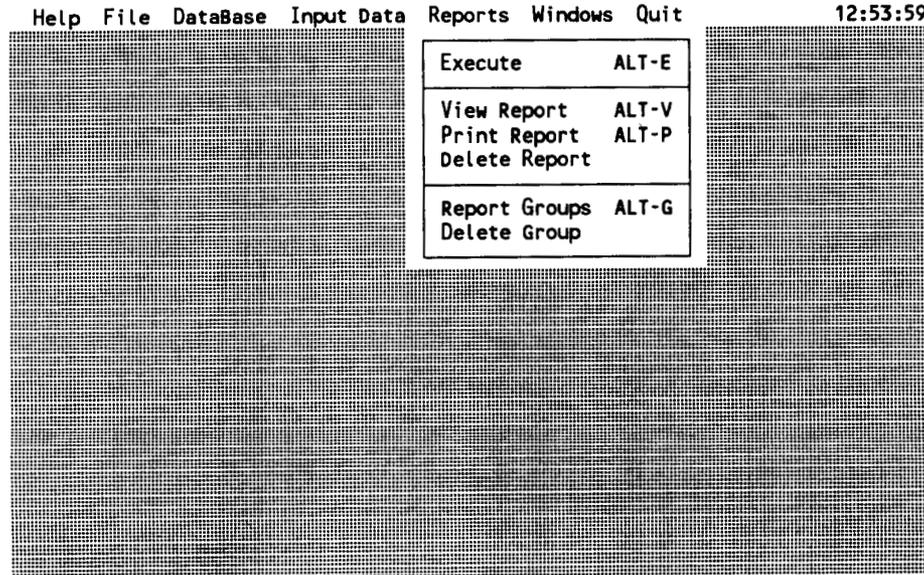
The user must generate COBRA Reports using the current Data set and Standard Factors before these Reports can be viewed or printed. By clicking on the word "Execute" on the Reports menu or by pressing <E>, the COBRA program will generate all Reports. **This must be done before Reports can be viewed in the screen or printed.** Reports can also be executed from the Main Menu by pressing <ALT-E>. Output Reports are covered in detail in the Chapter 5. This option also creates an output data file (with the same filename as the COBRA scenario, but with an ".OUT" extension) for use with the ADDER program (see Chapter 6).

If while it is executing, COBRA detects inconsistencies in the scenario data a Scenario Error Report will be generated (see Section 5.13). **This Report should be reviewed, and potential errors resolved before the other COBRA Reports are used for analysis purposes.**



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 24 - "Delete Bases" Window



ESC-Close window F1-Help (none) COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 25 - Reports Menu

3.7.2 Viewing a Report

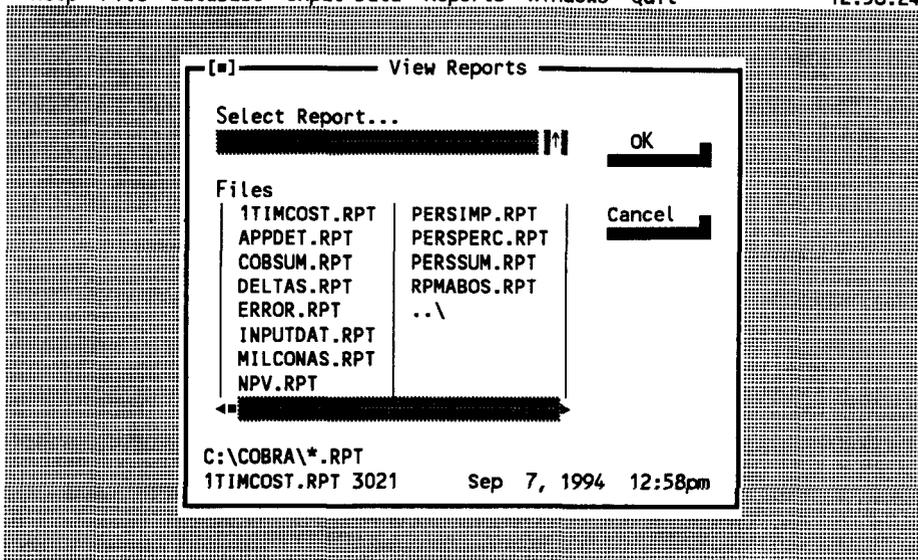
Analysis of COBRA outputs can be done by viewing Reports on the computer screen or by studying printed Reports. By clicking on the words "View Report" on the Reports menu or by pressing <V>, the "View Reports" window is displayed (see Figure 26). This can also be done from the Main Menu by pressing <ALT-V>. The selection of a Report for viewing on the screen is done by double clicking on the name of the desired Report. The Report file list may also be accessed by pressing <TAB> to move the cursor to the Reports file list, with the <↑> <↓> keys then being used to highlight the desired Report. The highlighted Report can then be viewed by clicking on the word "Open" or by pressing <ENTER>. This window may be closed and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking on the Close Window Square, or by pressing <ESC>.

3.7.3 Printing a Report

Although COBRA output Reports can be viewed on the computer screen, eventually paper copies of at least some Reports will be needed. By clicking on the words "Print Report" on the Reports menu or by pressing <P>, a "Print Reports" window, similar to the "View Reports" window, is displayed. This can also be done from the Main Menu by pressing <ALT-P>. The Report is selected by double clicking on the name of the desired Report. The Reports file list may also be accessed by pressing <TAB> to move the cursor to the Reports file list, with the <↑> <↓> keys then being used to highlight the desired Report. The highlighted Report can then be selected by clicking on the "OK" or by pressing <ENTER>. Once a Report is selected it is immediately printed and the user is automatically returned to the Main Menu. To cancel the Report selection before printing, close the window, and return to the Main Menu, click on the word "Cancel", or click on the Close Window Square, or press <ESC>.

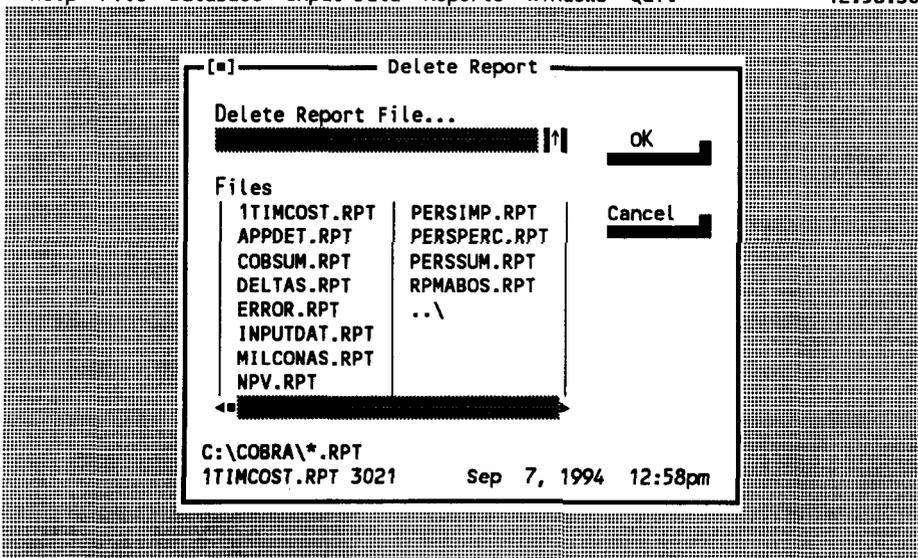
3.7.4 Deleting a Report

Standard COBRA Reports (Report formats) should generally not need to be deleted, as new COBRA runs overwrite previous reports. However, by clicking on the words "Delete Report" on the Reports menu or by pressing <R>, the "Delete Report" window will be displayed (see Figure 27). To delete a Report double click on the name of the Report. The Report file list may also be accessed by pressing <TAB> to move the cursor to the list, with the <↑> <↓> keys being used to highlight the desired Report. The highlighted Report can then be deleted by clicking on the "OK" or by pressing <ENTER>. To cancel the delete function, close the window and return to the Main Menu click on the word "Cancel", or click on the Close Window Square, or press <ESC>.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 26 - "View Reports" Window



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

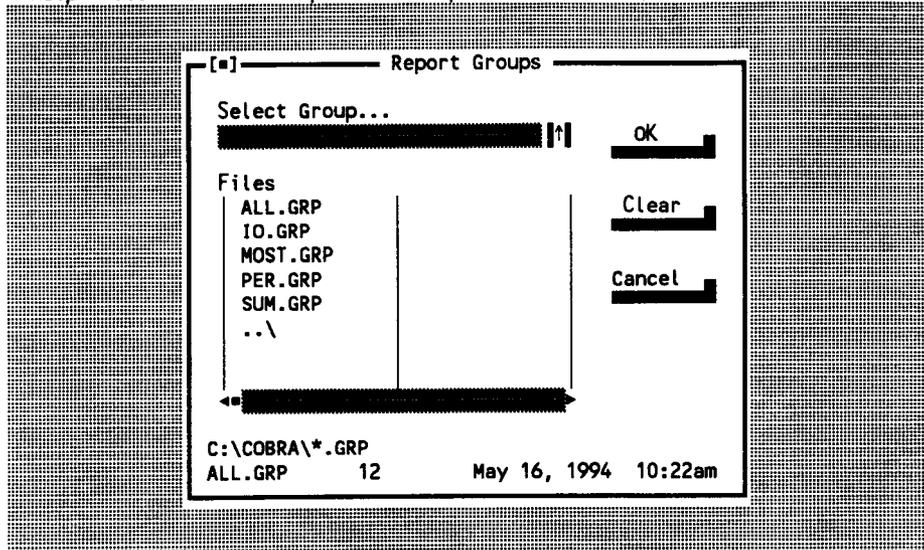
FIGURE 27 - "Delete Reports" Window

3.7.5 Viewing or Printing a Group of Reports

Many COBRA users will want to view or print two or more different Reports from an individual scenario. By clicking on the words "Report Groups" or by pressing <G> on the Reports menu, the "Report Groups" window is displayed (see Figure 28). There are several preset Report Groups already programmed, which may be viewed, modified, or added to as described below.

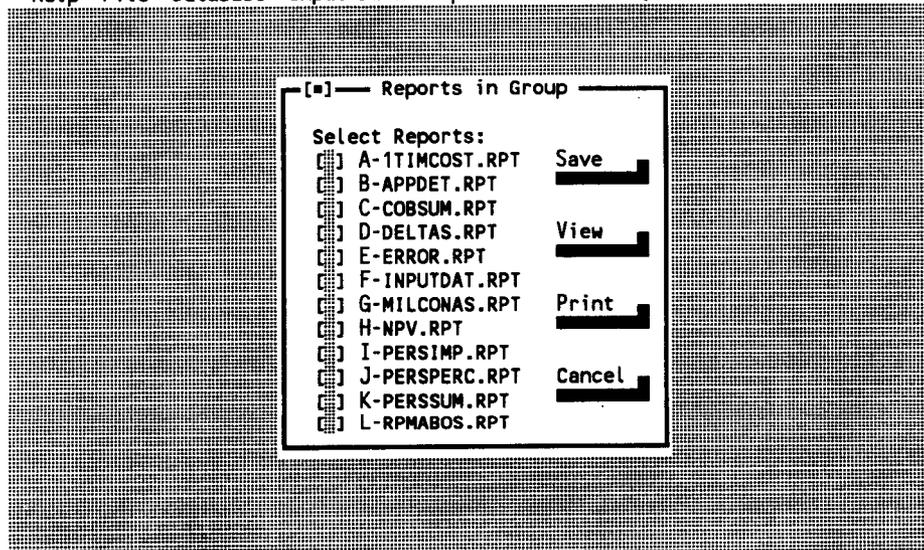
The Report Group is selected by double clicking on the name of desired group on the "Report Groups" window. The Report Group file list may also be accessed by pressing <TAB> to move the cursor to the list, with the <↑> <↓> keys being used to highlight the desired group. The highlighted Report Group can then be selected by clicking on the "OK" or by pressing <ENTER>. When a Report Group is selected the "Reports in Group" window is displayed (see Figure 29) showing the Reports that are currently included in that group ([X] indicates that the Report is included). When the word "Clear" is clicked or the <C> is pressed on the "Report Groups" window a blank "Reports in Group" window is displayed. When the word "Cancel" is clicked, or the Close Window Square clicked, or <ESC> pressed the "Report Groups" window is closed and the user returned to the Main Menu.

To add a Report to or delete a Report from the group on the "Reports in Group" window click on the Report name. Reports may also be added/deleted by typing the highlighted letter in front of the Report name, or by highlighting the desired Report (<TAB> to move from right to left column, and <↑> <↓> keys to move cursor to desired Report) and pressing the <Space Bar>. To view the group shown on the "Reports in Group" window click on the word "View" or press <V>. To print the group shown on the "Reports in Group" window click on the word "Print" or press <P>. To save the Report Group shown click on the word "Save" or press <S>. Any view, print, or save actions selected will be executed and the user returned to the "Reports in Group" window. See section 3.8 for a discussion of windows manipulations. To close the window and return to the Main Menu click on the word "Cancel", or click on the Close Window Square, or press <ESC>.



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 28 - "Report Groups" Menu



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

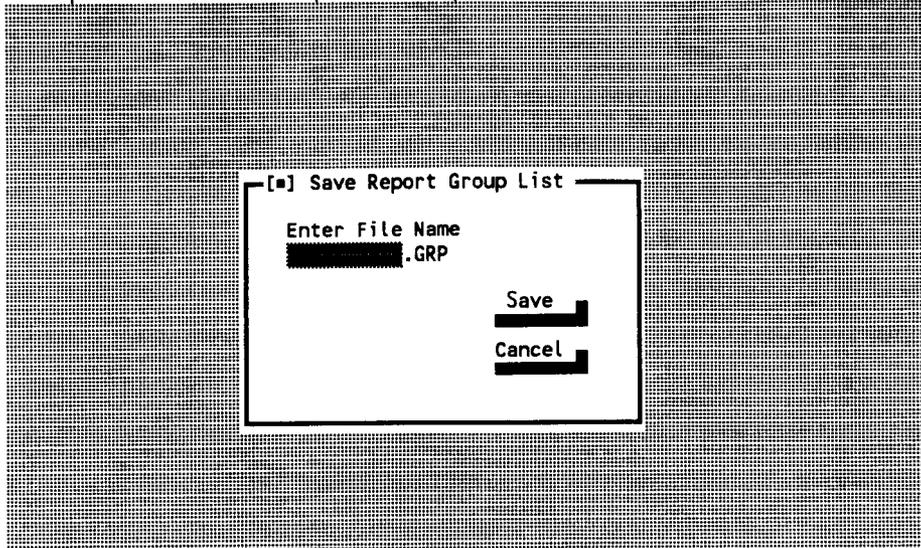
FIGURE 29 - "Reports in Group" Window

3.7.6 Saving a Group of Reports

The user will generally want to save a new or modified Report Group for future retrieval and use. By clicking on the word "Save" or pressing <S> on the "Reports in Group" window, the "Save Report Group List" window is displayed (see Figure 30). If the user has changed an existing Report Group, the old name will be displayed, otherwise that field will be blank. The modified group list can be saved under the old name by clicking on the word "Save" or by pressing <ENTER> twice. The modified group or a newly created group list can be saved in the same way, after the new name has been typed in the space indicated. The save function can be canceled and the user returned to the "Reports in Group" window by clicking on the word "Cancel", or by clicking on the Close Window Square, or by pressing <ESC>.

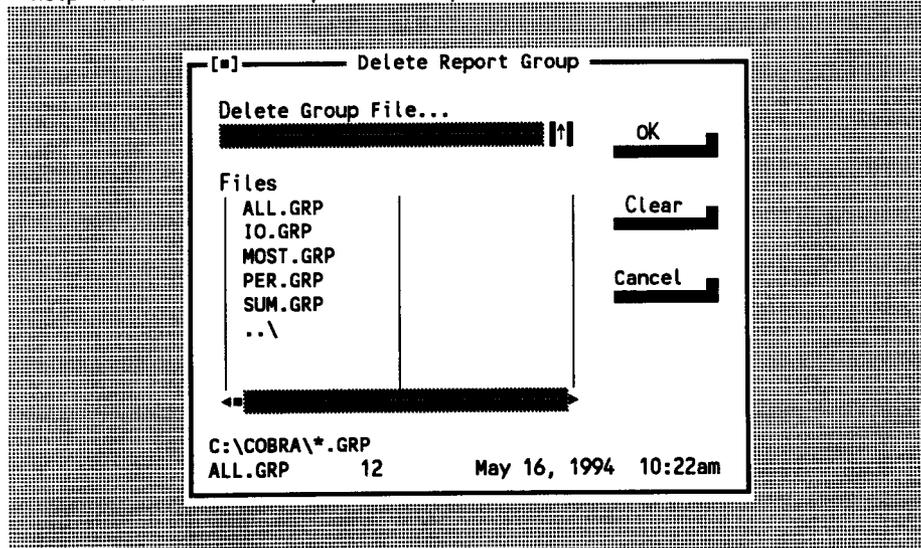
3.7.7 Deleting a Group of Reports

The user may at some point want to delete a Report Group from COBRA. This process will only delete the grouping of the Reports; no Report that was in the group will be deleted from COBRA when the group of Reports is deleted. By clicking on the words "Delete Group" on the Reports menu or by pressing <D>, the "Delete Report Group" window will be displayed (see Figure 31). To delete a Report Group double click on the name of the group. The Report Group file list may also be accessed by pressing <TAB> to move the cursor to the list, with the <↑> <↓> keys being used to highlight the desired group. The highlighted group can then be deleted by clicking on the "OK" or by pressing <ENTER>. To cancel the delete function, close the window and return to the Main Menu click on the word "Cancel", or click on the Close Window Square, or press <ESC>.



ESC-Close window F1-Help AIRWEST COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 30 - "Save Report Group List" Window



ESC-Close window F1-Help ERROR1 COBRA v5.01, R&K Engineering, Inc, 1991-4

FIGURE 31 - "Delete Report Group" Window

3.8 WINDOWS

Many of the functions of COBRA, as well as inputs of data and outputs of Reports are accomplished through the use of windows displayed on the computer screen. The easiest way to operate COBRA in this windows environment is by using a mouse, however keyboard operations are also possible. The Windows menu selection is made by either clicking on the word "Windows" along the top of the Main Menu, or by pressing <ALT-W> (see Figure 32). The following discussion will describe general windows operations using mouse, keyboard, and the Windows menu. The sample COBRA window (see Figure 33) is notional; all windows features are described for it, however no actual COBRA window has all of these features active.

(1) Close Window Square. Clicking on this part of a window will close it, just as if <ESC> had been pressed. The Close Window Square is only present if the window is active.

(2) Window Title. By placing the mouse cursor on the title and pressing the mouse button, the window can be moved (dragged) to another location on the computer screen. This can also be done by pressing <CTRL-F5>, or selecting "Size/Move" on the Windows menu; the window can then be moved using the arrow keys, and placed by pressing <ENTER>.

(3) Window Number. A number is only presented when more than one window can be displayed (such as when viewing Reports). Clicking anywhere on an inactive window will make that window active (only one window can be active at a time). Pressing <ALT> and the Window number will also make the window active. Pressing <F6> or selecting "Next" on the Windows menu will shift the active window to the next window; <SHIFT-F6> will shift to the previous window.

(4) Zoom Icon. Clicking on this icon (↑) will expand the window to its full size, and place the unZoom icon in its place. Clicking on the unZoom icon (↓) will shrink the window back to its previous size. Pressing <F5> or selecting "Zoom" on the Windows menu will also toggle the active window between Zoomed and unZoomed conditions.

(5) Vertical Scroll Bar. Clicking on the triangles above or below the bar will scroll the text in the window up or down, while dragging the square will move the text proportionally. The text can also be moved using the <↑> <↓> and <PageUp> or <PageDown> keys.

(6) Horizontal Scroll Bar. Clicking on the triangles left or right of the bar will scroll the text in the window left or right, while dragging the square will move the text proportionally. The text can also be moved using the <←> <→> keys.

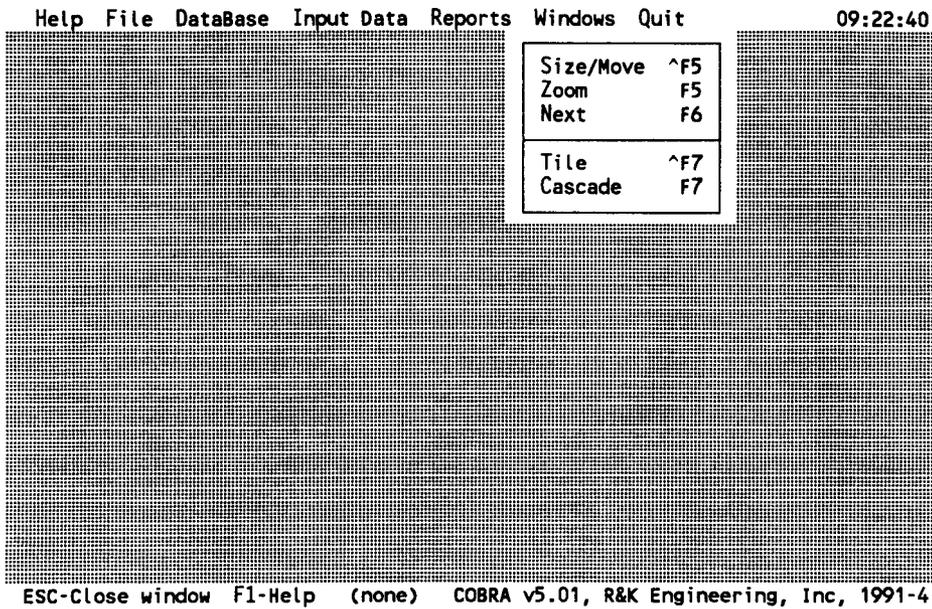


FIGURE 32 - Windows Menu

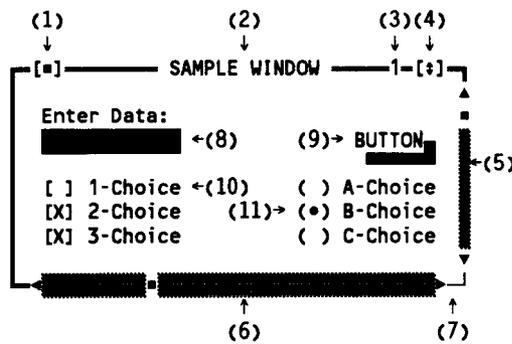


FIGURE 33 - Sample COBRA Window

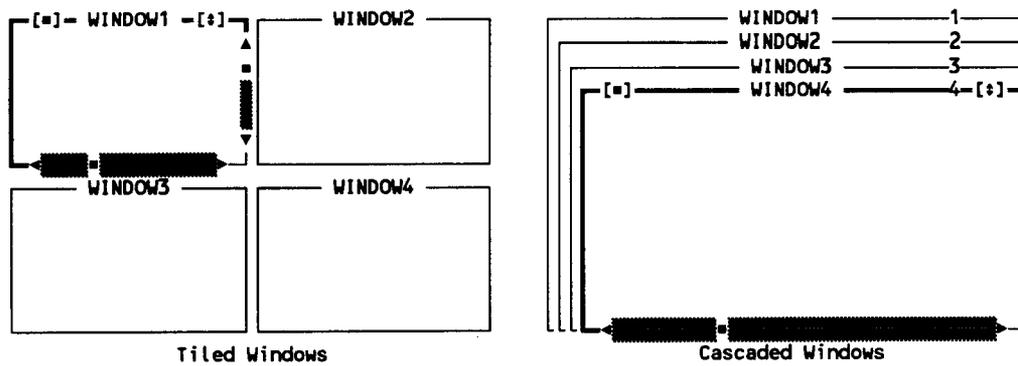


FIGURE 34 - Tiled/Cascaded Windows

(7) Grow Corner. Clicking here and dragging will allow window to be resized. This can also be done by pressing <CTRL-F5> or selecting "Size/Move" on the Windows menu; the window can then be sized using <SHIFT> and the arrow keys, and placed by pressing <ENTER>.

(8) Input Field. This is where input is entered to COBRA. All Data and Standard Factors screens contain this type of field. Other examples are windows where file names are entered. To use an input field, move the cursor to the field using the mouse or the keyboard, then type in the applicable entry and press <ENTER>.

(9) Button. Examples are "Cancel", "Next", "Save", and "OK" buttons. Clicking on a button with the mouse causes COBRA to react as though an actual button with the same function had been pressed with a finger. Buttons can also be activated by typing the highlighted character, or by pressing <ENTER> to activate the highlighted button.

(10) Checkboxes. These allow the selection of one or more items from a list (such as Reports or Bases). The item(s) are selected by clicking on it/them with the mouse, by typing the highlighted character, or by moving the cursor onto the item and pressing the <SPACE BAR>.

(11) Radio Buttons. These function just like checkboxes, except that only one item may be selected from each list (such as for Printer Setup or the Distance Database). Selecting a second item will cancel the previous selection (just like the buttons on your car radio).

When the user wants to display more than one window on the screen (several Reports for example) they may be sized and moved using the features described above, or they may be automatically displayed as either tiled or cascaded windows (see Figure 34). These automatic windows displays are invoked from the "View Reports" mode by pressing <CTRL-F7> or <F7> respectively. These can also be selected from the Windows menu by selecting "Tile" or "Cascade" or pressing <T> or <C>.

3.9 QUIT

Clicking on the Word "Quit" or pressing <ALT-Q> from the Main Menu is the same as exiting COBRA from the File Menu (see Section 3.4.9).

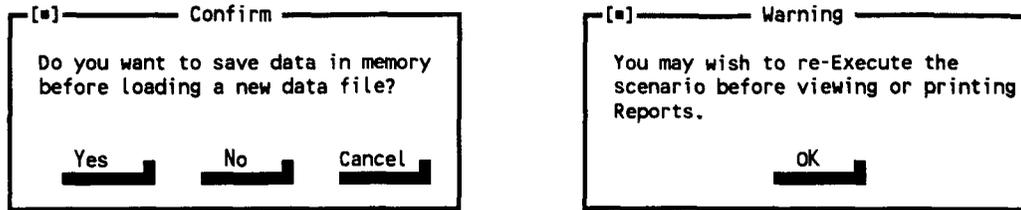


FIGURE 35 - Confirmation Boxes

3.10 WARNING/CONFIRMATION BOXES

There are several safety features built into COBRA, designed to prevent inadvertent termination of the program, deletion of files, or other possible user errors. These are presented as "Warning" or "Confirm" boxes (see Figure 35) alerting the user to the situation, and requiring the user to indicate if he or she wants to continue with the operation. The choice is made by clicking on the option desired, or by typing the highlighted letter, or by pressing <ENTER> to chose the preferred (highlighted) option.

3.11 ADVANCED OPERATIONS (Using Command-Line Parameters)

To allow for more efficient use of COBRA, or to automate some tasks, the user may issue some COBRA commands **directly** from the DOS command line by use of Command-Line Parameters. These advanced features are completely optional. The user may choose never to use them.

Entering "COBRA" is sufficient to initiate COBRA and provide access to the Main Menu. The user can then load a Data file to work with, through the COBRA menus. If the user wished to have COBRA automatically load a certain Data file when COBRA was initiated, he or she would enter "COBRA /L=filename" at the command prompt. COBRA will be then loaded, and the Data file named "filename" will be in memory when the user is given access to the Main Menu.

To initiate COBRA, load a Data file, and execute it to create Reports, the user would enter "COBRA /E=filename". COBRA will then be initiated, and the user will be given access to the Main Menu after the Data file named "filename" has been loaded and the Reports executed.

If the user wishes to create Reports from a Data file without modifying data before (or after); entering "COBRA /X=filename" will cause COBRA to load the scenario and execute the Reports, after which COBRA will return the computer to the MS-DOS command line. This option is most useful for automating COBRA Report generation through MS-DOS batch files.

Additionally, another parameter can be used to change the directory into which the Reports will be created. By using "/D=directory" after "COBRA" (and another parameter, if specified), the default Reports directory specified in the Set-Up file (see Section 3.8.2) will be overridden by the directory specified in this parameter.

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CHAPTER 4
COBRA DATA INPUT

CHAPTER 4 - COBRA DATA INPUT

The COBRA model requires the input of specific data before it can execute its Reports. This is done through the Data Entry screens and the Standard Factors tables which were briefly described in Section 3.6. Whether data is being input for the first time, or it is being modified from a saved data file, it is important to understand all of the inputs that are components of the COBRA model and therefore impact the reported results. Data Entry screens are constructed so that the user need only select one screen for the initial input/update of data, thereafter moving between screens/pages by clicking on the words "Next" and "Previous"; respective keyboard commands are <ALT-N> and <ALT-P>. This saves the data on a screen/page to Program memory. The screen/page can also be saved and the user return to the Main Menu by clicking on "Done" or pressing <ALT-D>. To close the Data Entry screens without saving and return to the Main Menu click on the Close Window Square or press <ESC>. **Be sure to save new data to Program memory before closing a screen/page, or it will be lost.** The cursor is moved from place to place on a screen by using the mouse or by repeated pressing of the <ENTER>, <TAB>, <Shift-TAB>, or the <↑> <↓> keys. The four Standard Factors tables are similarly completed. Detailed screen inputs are described below. See Section 3.4.2 for saving current scenario data to disk.

4.1 DATA ENTRY SCREEN 1 - GENERAL SCENARIO

This is the first Data Entry screen, where the general information is entered which defines the scenario being analyzed. Screen 1 (see Figure 36) is contained on one page.

The screenshot shows a data entry screen titled "Screen One - General Scenario". At the top, there are fields for "Option Pkg:", "Standard Factor File:", "Department:", "Year One=FY:", and "Auto Time-Phase?". Below these are two columns of data entry fields, each with headers "Base Name", "State", "CY*", and "BD*". A "Summary/Description:" field is located below the first column. At the bottom, there are fields for "Time/Date of Data:", "Set:", and "Auto Time-Phase?". The "Set:" field has a legend: "*CY=Close/Deact Year" and "*BD=Base Deact (Y/N)". At the very bottom, there are "Next" and "Done" buttons.

FIGURE 36 - Screen One - General Scenario

Option Package Name

This is a free text name for the realignment/closure option. This appears on most output Reports and on the File Directory (see Section 3.4.3) (Allowed entries up to 20 characters)

Department

The department running the scenario (Army, Navy, Marine Corps, Air Force, or other agency). This entry is only for information, all calculations are identical for the various Military Departments, except that the Army uses vehicle tons rather than numbers of vehicles moved, and ships all vehicles (see Section 4.3). (Allowed entries up to 20 characters; default algorithms are non-Army)

Standard Factor File

The Standard Factor file that is to be used with this scenario. When a Data set has been loaded the previously used Standard Factors file will be displayed here. When the user enters a different name, that new Standard Factors file replaces the old one and becomes the one to be used. When entering a new (never saved) name, users need not enter the path and extension; these will be automatically added. (Allowed entries up to 79 characters)

Year One is Fiscal Year

The first fiscal year of modeled scenario. COBRA will automatically show the correct years on other screens and Reports based on this year. (Allowed entries four digits, 1990 to 2100; the default is 1996)

Auto Time-Phase?

The default ([X], or on) will cause the model to automatically schedule construction and shut downs based on the movement of personnel. Disabling this field (a value of [], or off) by clicking on the field allows user entered scheduling (on Screen 5) to be applied to construction and shut downs. (Allowed entries [X] or [], default is [X])

Base Name

The name of each base involved in the scenario (up to 15 individual bases per scenario). The names entered will automatically be entered where appropriate in the remainder of the Data Entry screens. See Section 3.5.1 for a discussion of loading bases from the database. (Allowed entries up to 20 characters)

State

The two letter abbreviation of the state where the base is located. (Allowed entries 2 characters)

Close Year (or Deactivate Year)

If the base is to be closed or deactivated, the year that the action will be accomplished. This is used in calculating Return On Investment years (see Section 5.1). (Allowed entries 0 to 6) Entry of the default (0) means that the activity at the base is realignment only. Cost/savings algorithms are different for closing, deactivating, and realigning bases.

Base Deactivated

If the base is to be deactivated rather than closed, enter "Y" for yes. Cost/savings algorithms are different if the base is deactivating rather than closing. (Allowed entries Y or N; Default value is 'N')

Summary/Description

This is an eight-line, free text field for the user to enter a summary description of the scenario being modeled. This is for information only, but if entered, it will be printed on the Realignment Summary Report (see Section 5.1) and will appear in the File Directory (see Section 3.4.3). (Allowed entries up to 78 characters per line)

Time/Date of Data

The time/date of the data used in the scenario; this will be printed on each COBRA output Report. If a saved data file is used the time/date of that file will automatically be displayed here. The user can type in a new time/date in any desired format, or use the Set entry to enter the actual time/date. (Allowed entries up to 20 characters)

Set

This allows the user to enter the actual time/date in the Time/Date of Data field. Entering [X] in the Set space will enter the current time/date in the format HH:MM MM/DD/YYYY. (Allowed entries [X] or [])

4.2 DATA ENTRY SCREEN 2 - DISTANCE TABLE

Screen 2 (see Figure 37) will be displayed on one or more pages, depending on the number of bases entered on Screen 1.

[=] Screen Two - Distance Table
Distance between Bases (in Miles)

From: Camp Diagon, VA	To: GW III, RI
From: Camp Diagon, VA	To: Camp Frozen, NY
From: Camp Diagon, VA	To: Camp Rocky, OH
From: Camp Diagon, VA	To: Camp Swampy, LA
From: Camp Diagon, VA	To: Fort Beach, CA
From: Camp Diagon, VA	To: Fort Buffalo, KS
From: Camp Diagon, VA	To: Fort Deluxe, CA
From: Camp Diagon, VA	To: Fort Demo, AR
From: Camp Diagon, VA	To: Fort Distant, AK
From: Camp Diagon, VA	To: Lab Complex II, MD
From: Camp Diagon, VA	To: Lab Complex V, MA
From: Camp Diagon, VA	To: Machine AAP, MN
From: Camp Diagon, VA	To: Base X
From: GW III, RI	To: Camp Frozen, NY
From: GW III, RI	To: Camp Rocky, OH
From: GW III, RI	To: Camp Swampy, LA

Next Previous Done

FIGURE 37 - Screen Two - Distance Table

Distance Between Bases

The distance in miles between bases involved in movements of personnel or equipment. All combinations of bases which were entered on Screen 1 will be presented with a place to enter the distance between them. The user will enter only the distances between bases which, in the scenario, will have movements take place (eg. If the scenario shows movements from Base A to Base B, and from Base B to Base C, the user will enter distances between A and B, and between B and C, but not enter the distance between A and C.). The combinations of bases shown to have moves planned (distances between them entered) will be automatically entered where appropriate on the remainder of the Data Entry screens. See Section 3.5.3 for a discussion of loading distances from the database. (Allowed entries 0 to 15,000 miles)

In fact, COBRA won't like if distances are entered for Base combinations where no movement is to occur.

4.3 DATA ENTRY SCREEN 3 - MOVEMENT TABLE

For each pair of bases with movements planned (as defined by Screen 2 entries), the user will enter the personnel, equipment, and vehicles moving in each of the scenario years. The model will use these figures to calculate personnel and transportation costs and to automatically schedule construction and shutdown at each base. The pairs of bases will be entered automatically; the user need only enter the data below for the appropriate pair of bases. A separate page will be presented for each pair of bases (see Figure 38).

Screen Three - Movement Table						
FROM Camp Diagon TO GW III, RI	1994	1995	1996	1997	1998	1999
Officer Positions:						
Enlisted Positions:						
Civilian Positions:						
Student Positions:						
Mission Equip (tons):						
Support Equip (tons):						
Military Light Vehicles:						
Heavy/Special Vehicles:						
FROM GW III, RI TO Camp Diagon	1994	1995	1996	1997	1998	1999
Officer Positions:						
Enlisted Positions:						
Civilian Positions:						
Student Positions:						
Mission Equip (tons):						
Support Equip (tons):						
Military Light Vehicles:						
Heavy/Special Vehicles:						
List Moves in Year ONLY!		Next	Previous		Done	

FIGURE 38 - Screen Three - Movement Table

Officer Positions

The total number of officer and warrant officer positions moving from one base of a pair to the other base in each year of the scenario. (Allowed entries 0 to 30,000 officers)

Enlisted Positions

The total number of enlisted personnel positions moving from one base of a pair to the other base in each year of the scenario. (Allowed entries 0 to 30,000 enlisted personnel)

Civilian Positions

The total number of civilian government employee positions (not contractors) moving from one base of a pair to the other base in each year of the scenario. (Allowed entries 0 to 30,000 civilians)

Student Positions

The total number of military student slots (PCS and TDY) moving from one base of a pair to the other in each year of the scenario. (Allowed entries 0 to 30,000 students)

Mission Equipment

The total tons (2000 pounds/ton) of mission equipment moving from one base of a pair to the other base in each year of the scenario. (Allowed entries 0 to 99,999 tons)

Support Equipment

The total tons (2000 pounds/ton) of support equipment moving from one base of a pair to the other base in each year of the scenario. (Allowed entries 0 to 99,999 tons)

Military Light Vehicles

The total number of vehicles which will be driven from one base of a pair to the other base in each year of the scenario. The Army enters tons rather than number of vehicles. (Allowed entries 0 to 99,999 vehicles, or tons for Army)

Heavy/Special Vehicles

The total number of large/special vehicles which will be transported (not driven) from one base of a pair to the other base in each year of the scenario. The Army enters tons rather than number of vehicles. (Allowed entries 0 to 99,999 vehicles, or tons for Army)

4.4 DATA ENTRY SCREEN 4 - BASE INFORMATION (STATIC)

For each base identified in the scenario (listed on Screen 1) the user will enter the specific information below. This data defines the starting point at each base as well as lists values which are expected to remain relatively constant at the base over the period of analysis. It will not change over the scenario years, and will change very little, if at all, from one scenario to another. A separate page will be presented for each base (see Figure 39). The user should save this data for each base so that time can be saved when the same base is part of another scenario. See Section 3.5.1 and 3.5.4 for discussions of loading this data from/to the database.

[#] Screen Four - Base Information (Static)

Base: Fort Deluxe, CA	
Total Officers (1993):	RPMA Non-Payroll (\$K/Yr):
Total Enlisted (1993):	Communication Costs (\$K/Yr):
Total Students (1993):	BOS Non-Payroll (\$K/Yr):
Total Civilians (1993):	BOS Payroll (\$K/Yr):
	Fam Housing Costs (\$K/Yr):
% Mil Families On Base: %	Area Cost Factor:
% Civs Not Will to Move: %	
Off Housing Units Vacant:	CHAMPUS In-Patient(\$/Vis):
Enl Housing Units Vacant:	CHAMPUS Out-Patient(\$/Vis):
Total Facilities (KSF):	CHAMPUS Shift to Medicare: %
Officer VHA (\$/Month):	Activity Code:
Enlisted VHA (\$/Month):	
Per Diem Rate (\$/Day):	<input type="checkbox"/> Homeowner Assistance Program
Freight Cost (\$/Ton/Mi):	<input type="checkbox"/> Unique Activity Information
	<input type="button" value="Next"/> <input type="button" value="Previous"/> <input type="button" value="Done"/>

FIGURE 39 - Screen Four - Base Information (Static)

Total Officers (Year 0)

The total number of officers assigned to the base at the beginning of the scenario. (Allowed entries 0 to 50,000 officers)

Total Enlisted Personnel (Year 0)

The total number of enlisted personnel assigned to the base at the beginning of the scenario. (Allowed entries 0 to 50,000 enlisted personnel)

Total Military Students (Year 0)

The total number of military students assigned to the base at the beginning of the scenario. (Allowed entries 0 to 50,000 students)

Total Civilian Employees Year (0)

The total number of civilian government employees (not contractors) assigned to the base at the beginning of the scenario. (Allowed entries 0 to 50,000 civilians)

Percent of Military Families Living On Base

The percent of assigned military families which live on the base at the beginning of the scenario. (Allowed entries 0.0 to 100.0 percent)

Percent Civilians Not Willing to Move

The percent of assigned civilian employees who if their positions were moved to a new base would not be willing to relocate to the new base. (Allowed entries 0.0 to 100.0 percent)

Officer Housing Units Vacant

The total number of officer family housing units (sets of quarters) which are vacant at the beginning of the scenario. (Allowed entries 0 to 9,000 units; usually 0)

Enlisted Housing Units Vacant

The total number of enlisted family housing units (sets of quarters) which are vacant at the beginning of the scenario. (Allowed entries 0 to 9,000 units; usually 0)

Total Facilities

The total thousands of square feet of facilities, **except for Family Housing**, existing on the base at the beginning of the scenario. Family housing units and costs are treated separately from the rest of the base facilities. (Allowed entries 0 to 20,000,000 thousand square feet)

Officer VHA

The average monthly Variable Housing Allowance for officers who live off-base. (Allowed entries 0 to 20,000 \$/month)

Enlisted VHA

The average monthly Variable Housing Allowance for enlisted personnel who live off-base. (Allowed entries 0 to 20,000 \$/month)

Per Diem Rate

The per diem rate at the base. (Allowed entries 0 to 400 \$/day).

Freight Cost

The average cost of freight movement expected at the base. (Allowed entries 0.00 to \$100.00 \$/ton/mile)

RPMA Non-Payroll

The Real Property Maintenance Activities budget for the base at the beginning of the scenario which does not include either payroll or family housing costs (which are accounted for separately). (Allowed entries 0 to 99,999,999 \$K/Yr)

Communications Costs

The base communications budget at the beginning of the scenario. If not separated from other Base Operations Costs they may be entered as part of the Base Operations Non-Payroll Costs, and no communications costs entered here. (Allowed entries 0 to 99,999,999 \$K/Yr)

Base Operations Non-Payroll

The base operations budget for the base at the beginning of the scenario which does not include military or government civilian payroll costs (which are accounted for separately). Department contracts, which do include contractor payroll costs, should be included in this figure. (Allowed entries 0 to 99,999,999 \$K/Yr)

Base Operations Payroll

The base operations payroll budget at the beginning of the scenario. (Allowed entries 0 to 99,999,999 \$K/Yr)

Family Housing Costs

The total family housing budget for the base at the beginning of the scenario. (Allowed entries 0 to 99,999,999 \$K/Yr)

Area Cost Factor

The published Area Cost Factor for construction costs at the base. (Allowed entries 0.00 to 5.00; Default value is 1.00)

CHAMPUS In-Patient

The average cost paid by CHAMPUS for each in-patient visit of retirees and their dependents to civilian (off-base) hospitals/treatment facilities. (Allowed entries 0 to 99,999,999 \$/visit)

CHAMPUS Out-Patient

The average cost paid by CHAMPUS for each out-patient visit of retirees and their dependents to civilian (off-base) hospitals/treatment facilities. (Allowed entries 0 to 99,999,999 \$/visit)

CHAMPUS Shift to Medicare

The percent of retirees and dependents who are eligible for Medicare rather than CHAMPUS. This is used to adjust CHAMPUS costs for those entitled to Medicare coverage. (Allowed entries 0.00 to 100.00 percent; Default value is 20.9%)

Activity Code

A unique code for each installation, so that ADDER can identify installations in multiple scenarios for the Economic Impact Database (see Chapter 6). (Allowed entries up to six alphanumeric characters; installations with no activity code will be ignored by ADDER when making an Economic Impact Database file.)

Homeowner Assistance Program

Designated [X] if the base will have Homeowner Assistance Program costs incurred. When HAP is not applied at a base Relocation Services Entitlement (RSE) costs may be incurred for civilian employees. (Allowed entries On [X] or Off [])

Unique Activity Information

Designated [X] if the activity being modeled can not be modeled using standard calculations. Marking this field with an "X" will disconnect several of the model's algorithms and make Screen 8 - "Unique Activities" available for data entry (see Section 4.8). (Allowed entries On [X] or Off [])

4.5 DATA ENTRY SCREEN 5 - BASE INFORMATION (DYNAMIC)

For each base identified in the scenario (listed on Screen 1) the user will enter the specific information below. A separate page will be presented for each base (see Figure 40). This data does change over the scenario years, and will be greatly different from one scenario to another.

```

[*] Screen Five - Base Information (Dynamic)
Base: Camp Rocky, OH      1994      1995      1996      1997      1998      1999
1-Time Unique Cost($K):
1-Time Unique Save($K):
1-Time Moving Cost($K):
1-Time Moving Save($K):
Env Non-MilCon Reqd($K):
Actv Mission Cost*($K):
Actv Mission Save*($K):
Misc Recur Cost*($K):
Misc Recur Save*($K):
Land +Purch/-Sale($K):
Construction Schedule:
Shutdown Schedule:
Construct Avoid ($K):
Fam Hous Con Avoid($K):
Procurement Avoid*($K):
CHAMPUS InPat*(Vis/Yr):
CHAMPUS OutPat*(Vis/Yr):
Facility ShutDown(KSF):
Fam Housing ShutDown:
(CHAMPUS values are +Increases / -Decreases)
Next Previous Done
*1999 value used in Beyond years
  
```

FIGURE 40 - Screen Five - Base Information (Dynamic)

One-Time Unique Costs

The unique non-recurring expenditures during each year which can not be portrayed properly elsewhere. (Allowed entries 0 to 999,999 \$K)

One-Time Unique Savings

The unique non-recurring savings during each year which can not be portrayed properly elsewhere. (Allowed entries 0 to 999,999 \$K)

One-Time Moving Costs

The unique costs of moving during each year. Examples are special equipment or munitions transportation or calibration of laboratory equipment after it is moved. (Allowed entries 0 to 999,999 \$K)

One-Time Moving Savings

The unique savings of moving during each year. (Allowed entries 0 to 999,999 \$K)

Environmental Non-Construction Required

The costs (negative if savings) in each scenario year of environmental mitigation, which are not construction. An example would be the purchase of additional sewage treatment, or solid waste disposal from off base. (Allowed entries -99,999 to 999,999 \$K)

Activity Mission Costs

The change in mission costs each year realized by the activity(ies) which are involved in the closure/realignment. These are costs incurred by the activity; not part of the normal operations of the base. Examples of activity mission costs are fuel to travel to training areas, supplies, contracts, etc. not part of normal base overhead costs. These costs should be entered for the base the activity is located at. The figure entered in the last year will be assumed to continue throughout the remainder of the modeled years. (Allowed entries 0 to 999,999 \$K)

Activity Mission Savings

The change in mission savings each year realized by the activity(ies) which are involved in the closure/realignment. These are savings incurred by the activity; not part of the normal operations of the base. These savings should be entered for the base the activity is located at. The figure entered in the last year will be assumed to continue throughout the remainder of the modeled years. (Allowed entries 0 to 999,999 \$K)

Miscellaneous Recurring Costs

Recurring costs in each year, which are not covered in other entries above. The figure entered in the last year will be assumed to continue throughout the remainder of the modeled years. (Allowed entries 0 to 999,999 \$K)

Miscellaneous Recurring Savings

Recurring savings in each year, which are not covered in other entries above. The figure entered in the last year will be assumed to continue throughout the remainder of the modeled years. (Allowed entries 0 to 999,999 \$K)

Land Purchases/Sales

The purchase or sale price of land during each scenario year. (Allowed entries -99,999 to 999,999 \$K)

Construction Schedule

The user may enter the percent of construction to be completed (and therefore the percent of construction costs incurred) in each year. User must have turned on Auto Time-Phase? on Screen 1; otherwise COBRA will calculate the construction schedule based on percentage of personnel moving in the next year (this is so construction is finished before the people who require those facilities are moved. (Allowed entries 0 to 100 percent)

Shutdown Schedule

The user may enter the percent of facilities shutdown to be completed in each year. User must have turned on Auto Time-Phase? on Screen 1; otherwise COBRA will calculate the shutdown schedule based on percentage of personnel moving out. (Allowed entries 0 to 100 percent)

Construction Avoidance

The savings during each year generated by not having to construct projects (less Family Housing projects) which are no longer necessary because of the closure/realignment action. (Allowed entries 0 to 999,999 \$K)

Family Housing Construction Avoidance

The savings during each year generated by not having to construct Family Housing projects which are no longer necessary because of the closure/realignment action. (Allowed entries 0 to 999,999 \$K)

Procurement Avoidance

The savings during each year generated by the reduction/cancellation of current contracts (not already included in mission, RPMA, or Base Ops costs). If reduction/cancellation of a contract will result in penalty costs, they should be subtracted from the savings in the first year that savings are reported. Also any termination penalties for mission, RPMA, and Base Ops contracts should be reflected here. The figure entered in the last year will be assumed to continue throughout the remainder of the modeled years. (Allowed entries 0 to 999,999 \$K)

On-Base In-Patient Retiree Visits

The yearly change in the number of in-patient visits of retirees and their dependents to the on-base hospital/treatment facilities. This is used to calculate costs/savings of changes in CHAMPUS load. (Allowed entries -30,000 to 30,000 visits)

On-Base Out-Patient Retiree Visits

The yearly change in the number of out-patient visits of retirees and their dependents to the on-base hospital/treatment facilities. This is used to calculate costs/savings of changes in CHAMPUS load. (Allowed entries -30,000 to 30,000 visits)

Facilities Shut Down

The total thousands of square feet of buildings to be closed. (Allowed entries 0 to 999,999 thousand square feet)

Family Housing Shutdown

The percent of Family Housing that is to be shutdown. (Allowed entries 0.0 to 100.0 percent)

4.6 DATA ENTRY SCREEN 6 - BASE INFORMATION (PERSONNEL)

For each base identified in the scenario (listed on Screen 1) the user will enter the specific information below. A separate page will be presented for each base (see Figure 41). This data does change over the scenario years, and will be greatly different from one scenario to another.

```

-[*]----- Screen Six - Base Information (Personnel) -----
Base: Fort Distant, AK
          1994    1995    1996    1997    1998    1999
Force Structure Changes by Year (+Increases / -Decreases)
Officer Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Enlisted Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Civilian Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Student Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Scenario Changes by Year (+Additions / -Eliminations)
Officer Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Enlisted Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Civilian Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Scenario Changes (No Salary Savings) by Year (-Eliminations)
Officer Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Enlisted Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Civilian Changes: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Caretaker Staff Changes by Year (+Increases / -Decreases)
Military Caretakers: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Civilian Caretakers: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████

List Changes in Year ONLY!           Next       Previous       Done
  
```

FIGURE 41 - Screen Six - Base Information (Personnel)

Officer Force Structure Changes

The total number of officer and warrant officer position changes at the base in each year, **independent of the closure/realignment action**. Costs/savings resulting from force structure changes are excluded from COBRA calculations. (Allowed entries -30,000 to 30,000 officers)

Enlisted Force Structure Changes

The total number of enlisted position changes at the base in each year, **independent of the closure/realignment action**. Costs/savings resulting from force structure changes are excluded from COBRA calculations. (Allowed entries -30,000 to 30,000 enlisted)

Civilian Force Structure Changes

The total number of civilian position changes at the base in each year, **independent of the closure/realignment action**. Costs/savings resulting from force structure changes are excluded from COBRA calculations. (Allowed entries -30,000 to 30,000 civilians)

Student Force Structure Changes

The total number of military student position changes at the base in each year, **independent of the closure/realignment action**. Costs/savings resulting from force structure changes are excluded from COBRA calculations. (Allowed entries -30,000 to 30,000 civilians)

Officer Scenario Changes

The total number of officer and warrant officer positions added or eliminated at the base in each year, **as a direct result of the closure/realignment action**. Savings resulting from positions eliminated are included in COBRA calculations. (Allowed entries -30,000 to 30,000 officers)

Enlisted Scenario Changes

The total number of enlisted positions added or eliminated at the base in each year, **as a direct result of the closure/realignment action**. Savings resulting from positions eliminated are included in COBRA calculations. (Allowed entries -30,000 to 30,000 enlisted)

Civilian Scenario Changes

The total number of civilian positions added or eliminated at the base in each year, **as a direct result of the closure/realignment action**. Savings resulting from positions eliminated are included in COBRA calculations. (Allowed entries -30,000 to 30,000 civilians)

Officer Scenario Changes (No Salary Savings)

The total number of officer and warrant officer positions eliminated at the base in each year, **as a direct result of the closure/realignment action**. There are no salary savings resulting from these positions eliminated. (Allowed entries 0 to -30,000 officers)

Enlisted Scenario Changes (No Salary Savings)

The total number of enlisted positions eliminated at the base in each year, **as a direct result of the closure/realignment action**. There are no salary savings resulting from these positions eliminated. (Allowed entries 0 to -30,000 enlisted)

Civilian Scenario Changes (No Salary Savings)

The total number of civilian positions eliminated at the base in each year, **as a direct result of the closure/realignment action**. There are no salary savings resulting from these positions eliminated. (Allowed entries 0 to -30,000 civilians)

Military Caretakers

The total number of military personnel added to or subtracted from a caretaker force at the base for each year. It is assumed that military caretakers are enlisted personnel.

* This should be used only if the base is deactivating. (Allowed entries -30,000 to 30,000 military)

Civilian Caretakers

The total number of government civilian personnel added to or subtracted from a caretaker force at the base for each year. This should be used only if the base is deactivating. (Allowed entries -30,000 to 30,000 civilians)

4.7 DATA ENTRY SCREEN 7 - BASE INFORMATION (CONSTRUCTION)

For each base identified in the scenario (listed on Screen 1) the user will enter the specific information below. A separate page will be presented for each base (see Figure 42). If construction is not needed at the base, the Screen should be left blank.

[*] Screen Seven - Base Information (Military Construction)

Base: Camp Swampy, LA

DESCRIPTION:	CATEG:	CONSTRUC:	REHAB:	TOTAL COST(\$K):	COMMENTS:
		NEW			

Next Previous Done

FIGURE 42 - Screen Seven - Base Information (Military Construction)

Description

The description of a construction and/or rehabilitation effort required to support the closure/realignment scenario. (Allowed entries up to 20 characters)

Category

The MILCON category of the requirement, from Standard Factors Table 4 (see Section 4.13). The user may, if desired, only type in the first three letters, and the program will automatically complete the entry from those categories on the Construction Standard Factors Table. If the entry is not listed on Standard Factors Table 4, COBRA will change it to "OTHER". (Allowed entries up to 5 characters)

New Construction

The size of the new construction required, in the appropriate units of measure (SF, SY, LF, BL), from Standard Factors Table 4 (see Section 4.13). This value times the unit cost on Standard Factors Table 4, is the basis of new construction costs. (Allowed entries 0 to 99,999,999 of the unit of measure)

Rehabilitation

The size of the rehabilitation requirement, in the appropriate units of measure (SF, SY, LF, BL), from Standard Factors Table 4 (see Section 4.13). This value times the unit cost and rehabilitation vs new construction, on Standard Factors Table 2, is the basis of rehabilitation costs. (Allowed entries 0 to 99,999,999 of the unit of measure)

Total Cost

The total cost, for the requirement where it is listed, for new construction and/or rehabilitation needed to support the closure/realignment action. **When the user enters a figure here construction costs are not calculated but the figure entered here is accepted as the total cost; COBRA then disregards the New Construction and Rehab figures for Military Construction cost calculations (although these figures are used elsewhere, and must be entered).** Requirements in the "OTHER" category have no unit costs in the Standard Factors table, and must have their Total Costs entered here. (Allowed entries 0 to 99,999,999 \$K)

Comments

This is a place for the user to enter up to a full line of text to describe or clarify the scope of the construction listed. The screen only shows a small window of this text at one time, however when printed on the Military Construction Assets Report (see Section 5.8) the entire line will appear on the line right below that showing the numerical information for the requirement. (Allowed entries up to 78 characters)

4.8 DATA ENTRY SCREEN 8 - BASE INFORMATION (UNIQUE ACTIVITIES)

This Data Entry screen is available for those situations where the model's standard algorithms do not apply. "Unique Activities" are defined as those installations for which the model's overhead, support for move, caretaker/mothball, and equipment/vehicle movement algorithms cannot be used. Most industrial activities can be accommodated without the use of this screen. In those cases where Screen 8 is required, the user must first designate the base as a Unique Activity on Screen 4 (see Section 4.4). A separate page will be presented for each indicated base (see Figure 43).

[=] Screen Eight - Base Information (Unique Activity)

Base: Camp Diagon, VA
(All values in \$K)

	1994	1995	1996	1997	1998	1999
Overhead Costs						
Admin/Planning:						
Operating*:						
Mothball:						
Caretakers*:						
Unique Other*:						
Overhead Savings						
Operating*:						
Unique Other*:						
Moving Costs						
Pack/Unpack:						
Freight:						
Vehicle Moves:						
Driving:						

*1999 value used in Beyond years

Next Previous Done

FIGURE 43 - Screen Eight - Base Information (Unique Activities)

Administrative and Planning Overhead Costs

The administrative and planning overhead costs for each scenario year. (Allowed entries 0 to 9,999,999 \$K)

Operating Overhead Costs

The operating overhead costs for each scenario year; the figure entered for the last year will be assumed to continue through the remainder of the study years. (Allowed entries 0 to 9,999,999 \$K)

Mothball Overhead Costs

The mothball overhead costs for each scenario year. (Allowed entries 0 to 9,999,999 \$K)

Caretaker Overhead Costs

The caretaker overhead costs for each scenario year; the figure entered for the last year will be assumed to continue through the remainder of the study years. (Allowed entries 0 to 9,999,999 \$K)

Other Overhead Costs

The overhead costs for each scenario year which are not included in the overhead costs listed above; the figure entered for the last year will be assumed to continue through the remainder of the study years. (Allowed entries 0 to 9,999,999 \$K)

Operating Overhead Savings

The operating overhead savings for each scenario year; the figure entered for the last year will be assumed to continue through the remainder of the study years. (Allowed entries 0 to 9,999,999 \$K)

Other Overhead Savings

The overhead savings for each scenario year which are not included in the operating overhead savings listed above; the figure entered for the last year will be assumed to continue through the remainder of the study years. (Allowed entries 0 to 9,999,999 \$K)

Packing/Unpacking Moving Costs

The packing and unpacking moving costs for each scenario year. (Allowed entries 0 to 9,999,999 \$K)

Freight Moving Costs

The freight moving costs for each scenario year. (Allowed entries 0 to 9,999,999 \$K)

Vehicle Moving Costs

The vehicle moving costs for each scenario year, **excluding those vehicles which are driven.** (Allowed entries 0 to 9,999,999 \$K)

Driving Moving Costs

The costs of driving vehicles during their movement. (Allowed entries 0 to 9,999,999 \$K)

4.9 DATA ENTRY SCREEN 9 - EXPLANATORY NOTES

A single page screen is provided for the user to make any end notes that are desired (see Figure 44). These may explain the overall scenario or expand on information input on a specific Data Entry or Standard Factors screen. This information will be printed only on the Input Data Report (see Section 5.12).

Screen Nine - Explanatory Notes
Explanatory Notes for Input Data report:

Pages FootNoted:

<input type="checkbox"/> 1-General	<input type="checkbox"/> 4-Static	<input type="checkbox"/> 7-MilCon	<input type="checkbox"/> Facil SF
<input type="checkbox"/> 2-Distance	<input type="checkbox"/> 5-Dynamic	<input type="checkbox"/> 8-Unique	<input type="checkbox"/> Tranprt SF
<input type="checkbox"/> 3-Movement	<input type="checkbox"/> 6-Personel	<input type="checkbox"/> PerSont SF	<input type="checkbox"/> MilCon SF

Previous
Done

FIGURE 44 - Screen Nine - Explanatory Notes

Explanatory Notes for Input Data Report:

A free text input of user's notes referring to one or more screens. (Allowed entries 16 lines of up to 78 characters; although only 74 characters show per line on this screen at one time)

Pages Footnoted:

User indicates screen(s) to which the note(s) apply, by clicking on the space for that screen, or by moving the cursor to highlight that screen and pressing the Space Bar, or by typing the highlighted number/letter of the screen. These screens will then be identified as having note(s) on the Input Data Report (see Section 5.12). (Allowed entries On [X] or Off []))

4.10 STANDARD FACTORS TABLE 1 - PERSONNEL (see Figure 45)

This and the other Standard Factors Tables contain information common to all bases in the scenario. This data will not change for any one scenario, and should change very little, if at all, from one scenario to another. These Standard Factors tables should be saved for use in subsequent scenarios (see Section 3.4.6).

[*] Table One - Standard Personnel Factors

Officers Married: [REDACTED] %	Civ Retired Pay Factor: [REDACTED] %
Enlisted Married: [REDACTED] %	Priority Placement: [REDACTED] %
Enlisted Housing MilCon: [REDACTED] %	PPS Place Involv PCS: [REDACTED] %
	Civ PCS Cost (\$): [REDACTED]
Officer Salary (\$/Year): [REDACTED]	New Hire Cost (\$): [REDACTED]
Officer BAQ w/Depdts (\$): [REDACTED]	
Enlisted Salary (\$/Year): [REDACTED]	Nat Median Home Price(\$K): [REDACTED]
Enlisted BAQ w/Depdts (\$): [REDACTED]	Home Sale Reimburse Rate: [REDACTED] %
Avg Unemploy Cost(\$/Week): [REDACTED]	Max Home Sale Reimburs(\$): [REDACTED]
Unemploy Eligible (Weeks): [REDACTED]	Home Purch Reimburse Rate: [REDACTED] %
Civilian Salary (\$/Year): [REDACTED]	Max Home Purch Reimbur(\$): [REDACTED]
	Home Ownership Rate: [REDACTED] %
Civilian Turnover: [REDACTED] %	HAP Home Value Rate: [REDACTED] %
Civilian Early Retirement: [REDACTED] %	HAP Receiving Rate: [REDACTED] %
Civilian Regular Retire: [REDACTED] %	RSE Home Value Rate: [REDACTED] %
Civilian RIF Pay Factor: [REDACTED] %	RSE Receiving Rate: [REDACTED] %

Standard Factors File
 Description: [REDACTED] Next Done

FIGURE 45 - Table One - Standard Personnel Factors

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 HAP, HHG transportation, and Family Housing budget. (Allowed entries 0.00 to 100.00 percent)

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 HAP, HHG transportation, and Family Housing budget. (Allowed entries 0.00 to 100.00 percent)

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/barracks. (Allowed entries 0.00 to 100.00 percent)

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 \$/Year)

Officer BAO - 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)

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 \$/Year)

Enlisted BAO - 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)

Average Unemployment Costs

The average weekly unemployment cost. This is used to calculate unemployment costs over the period of unemployment eligibility. (Allowed entries 0.00 to 2,000.00 \$/week; Default is \$216/week)

Unemployment Eligibility

The number of weeks 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; Default is 26 weeks)

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 \$/Year)

Civilian Turnover

The average percent of government civilian employees who normally leave their positions each year 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)

Civilian Early Retirement

The average percent of government civilian employees who retire early each year 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)

Civilians regular Retirement

The average percent of government civilian employees expected to retire each year but **not as a result of closure/realignment actions**. This is used to adjust the size of the civilian workforce for normal retirement. (Allowed entries 0.00 to 100.00 percent)

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 In Force associated with the closure/realignment action**. (Allowed entries 0.00 to 100.00 percent)

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)

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)

PPS Placements Involving PCS

The percent of personnel who receive jobs through the Priority Placement System who must move more than 50 miles. This is used to calculate moving costs. (Allowed entries 0.00 to 100.00 percent)

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 \$)

New Hire Cost

The average cost to hire a new civilian employee. (Allowed entries 0.00 to 10,000.00 \$)

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 RSE costs. (Allowed entries 0.00 to 2,500.00 \$K)

Home Sale Reimbursement Rate

The average percent of home sales reimbursement. (Allowed entries 0.00 to 100.00 percent)

Maximum Home Sale Reimbursement

The maximum reimbursement for home sales. (Allowed entries 0.00 to 25,000.00 \$)

Home Purchase Reimbursement Rate

The average percent of home purchase reimbursement. (Allowed entries 0.00 to 100.00 percent)

Maximum Home Purchase Reimbursement

The maximum reimbursement for home purchase. (Allowed entries 0.00 to 25,000.00 \$)

Home Ownership Rate

The average percent of military personnel and government civilian employees who own their homes. (Allowed entries 0.00 to 100.00 percent)

Homeowners Assistance Program (HAP) Home Value Rate

The percent of house value that HAP will pay. This is used to calculate HAP costs, which reported on the HAP/RSE line of the output Reports. (Allowed entries 0.00 to 100.00 percent; Default is 37%)

Homeowners Assistance Program (HAP) Receiving Rate

The average percent of homeowners who will be provided with this service. HAP will only be costed at a base when RSE is not applied, and it will be reported on the HAP/RSE line of output Reports. (Allowed entries 0.00 to 100.00 percent; Default is 20%)

Relocation Service Entitlement (RSE) Home Value Rate

The percent of house value that RSE will pay. This is used to calculate RSE costs, which reported on the HAP/RSE line of the output Reports. (Allowed entries 0.00 to 100.00 percent; Default is 23%)

Relocation Service Entitlement (RSE) Receiving Rate

The average percent of Civilian homeowners who will be provided with this service. RSE will only be costed at a base when HAP is not applied, and it will be reported on the HAP/RSE line of output Reports. (Allowed entries 0.00 to 100.00 percent; Default is 15%)

Standard Factors File Description

A free-text entry for the user to describe the Standard Factors file. This is only used when the user calls-up the File Directory (see Section 3.4.3). (Allowed entries up to 20 characters)

4.11 STANDARD FACTORS TABLE 2 - FACILITIES (see Figure 46)

[#] Table Two - Standard Facilities Factors

RPMA/BOS MODIFIERS		MILCON PERCENTAGES	
RPMA Building SF Index:		Rehab vs. New Construct:	%
BOS Population Index:		Info Management Account:	%
Program Management Factor:	%	Design Percentage:	%
(Indices are used as exponents)		SIOH Percentage:	%
CARETAKER COSTS		Contingency Percentage:	%
Admin Space (SF/Pers):		Site Prep Percentage:	%
Mothball Cost (\$/SF):		NET PRESENT VALUE REPORT	
AVERAGE SIZES		NPV/ROI Discount Rate:	%
Bachelor Quarters (SF):		NPV/ROI Inflation Rate:	%
Family Quarters (SF):		APPROPRIATION REPORT INFLATION RATES	
	1994	1995	1996
	%	%	%
	1997	1998	1999
	%	%	%
			Beyond
			%
	Next	Previous	Done

FIGURE 46 - Table Two - Standard Facilities Factors

RPMA Buildings Index

The exponent of base building square footage, used in Real Property Maintenance Activity Non-Payroll 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 ≤ 1.0 . (Allowed entries 0.00 to 5.00)

BOS Population Index

The exponent of base population, used in Base Operations Support Non-Payroll 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 ≤ 1.0 . (Allowed entries 0.00 to 10.00)

Program Management Factor

Coefficient that the Base Operations Support (Payroll and Non-Payroll) is multiplied by to calculate the costs of administrative support for movements of personnel and equipment. (Allowed entries 0.0 to 100.0)

Caretaker Admin Space Needs

The average administrative space required for each caretaker. (Allowed entries 0.0 to 1,000,000.0 SF)

Mothball Cost

The average cost to mothball facilities. (Allowed entries 0.00 to 100.00 \$/square feet)

Average Bachelor Quarters Size

The average square feet of bachelor quarters. This is used to convert square feet of construction into sets of bachelor quarters. (Allowed entries 0 to 500 square feet)

Average Family Quarters Size

The average square feet of family quarters. This is used to convert square feet of construction into sets of family quarters. (Allowed entries 0 to 2,000 square feet)

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 costs for rehabilitation rather than new construction requirements. (Allowed entries 0.0 to 100.0 percent)

Information Management Account Percentage

The average percent of construction cost required to provide communications; only used for categories measured in square feet. (Allowed entries 0.0 to 100.0 percent)

Design Percentage

The average percent of construction cost which must be added to accomplish planning and design. (Allowed entries 0.0 to 100.0 percent)

SIOH Percentage

The average percent of construction cost which must be added to cover project supervision, inspection, and overhead. (Allowed entries 0.0 to 100.0 percent)

Contingency Percentage

The average percent of construction cost which must be added to cover unforeseen (contingency) requirements. (Allowed entries 0.0 to 100.0 percent)

Site Preparation Percentage

The average percent of construction cost which must be added to cover site preparation of the construction area. (Allowed entries 0.0 to 100.0 percent)

NPV/ROI Discount Rate

The discount rate to be used for the Net Present Value and Return On Investment calculations (see Sections 5.1 and 5.2). (Allowed entries 0.00 to 100.00 percent)

NPV/ROI Inflation Rate

The inflation rate to be used for the Net Present Value and Return On Investment calculations (see Sections 5.1 and 5.2). (Allowed entries 0.00 to 100.00 percent)

Appropriation Report Inflation Rates

The inflation rate projected for each of the six years of the scenario. These are used for the Appropriations Detail Report only (see Section 5.3) in inflation is enabled (see Section 3.3.7). (Allowed entries 0.00 to 100.00 percent)

4.12 STANDARD FACTORS TABLE 3 - TRANSPORTATION (see Figure 47)

[*] Table Three - Standard Transportation Factors

Material/Assignd Pers(Lb):	Equip Pack & Crate(\$/Ton):
Officer HHG(Lb/Family):	Milit Light Vehic(\$/Mi):
Enlisted HHG(Lb/Family):	Heavy/Spec Vehic(\$/Mi):
Military HHG(Lb/Single):	POV Reimbursement(\$/Mi):
Civilian HHG(Lb/Person):	Air Transport(\$/Pass Mi):
	Misc(\$/Direct Employee):
Total HHG Costs(\$/100Lb):	Avg Mil Tour Length(Yrs):
	Routine PCS(\$/Pers/Tour):
	One-Time Off PCS Cost(\$):
	One-Time Enl PCS Cost(\$):

FIGURE 47 - Table Three - Standard Transportation Factors

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)

Officer HHG

The average pounds of household goods per officer family. (Allowed entries 0 to 100,000 pounds/family)

Enlisted HHG

The average pounds of household goods per enlisted family. (Allowed entries 0 to 100,000 pounds/family)

Military HHG

The average pounds of household goods per single military member. (Allowed entries 0 to 10,000 pounds/military)

Civilian HHG

The average pounds of household goods per government civilian employee. (Allowed entries 0 to 100,000 pounds/employee)

Total HHG Costs

The average cost of packing, storing, and unpacking 100 pounds of household goods. (Allowed entries 0.00 to 100.00 \$/100lb.)

Equipment Packing and Crating

The cost for packing and crating of material to be moved. (Allowed entries 0.0 to 100,000.00 \$/ton)

Military Light Vehicle

The average cost per mile of driving military light vehicles. (Allowed entries 0.00 to 1,000.00 \$/mile)

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 \$/mile)

POV Reimbursement

The average reimbursement rate for driving Personally Owned Vehicles. (Allowed entries 0.00 to 100,000.00 \$/mile)

Air Transport

The average cost of air transporting a passenger. (Allowed entries 0.00 to 100,000.00 \$/mile)

Miscellaneous

The average moving cost per direct employee, not covered by other moving costs. (Allowed entries 0.00 to 100,000.00 \$/employee)

Average Military Tour Length

The average length of military assignments. This is used to adjust the moving costs to account for those personnel who would move each year, independent of the closure/realignment action. (Allowed entries 1.00 to 20.00 years; Default is 3.00 years)

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)

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)

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)

4.13 STANDARD FACTORS TABLE 4 - CONSTRUCTION (see Figure 48)

[#] Table Four - Standard Construction Factors

MilCon Categories	Units	Cost/UM	Optional Categories	Units	Cost/UM
Horizontal	(SY)		A:		
Waterfront	(LF)		B:		
Air Operations	(SF)		C:		
Operational	(SF)		D:		
Administrative	(SF)		E:		
School Buildings	(SF)		F:		
Maintenance Shops	(SF)		G:		
Bachelor Quarters*			H:		
Family Quarters*			I:		
Storage Facilities	(SF)		J:		
Dining Facilities	(SF)		K:		
Recreation Facil	(SF)		L:		
Communications Facil	(SF)		M:		
Shipyards Maintenance	(SF)		N:		
RDT&E Facilities	(SF)		O:		
POL Storage	(BL)		P:		
Ammunition Storage	(SF)		Q:		
Medical Facilities	(SF)		R:		
Environmental					

*Units: SF or EA (each)

Previous Done

Figure 48 - Table Four - Standard Construction Factors

Cost per Unit of Measure

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)

Bachelor Quarters Construction Units

This construction category unit of measure is entered by the user as either SF or EA. (Allowed entries up to two characters; Default value is 'SF')

Family Quarters Construction Units

This construction category unit of measure is entered by the user as either SF or EA. (Allowed entries up to two characters; Default value is 'SF')

Environmental Construction Units

This construction category line is for construction required for environmental mitigation. The units of measure for this category may be filled in by the user (Allowed entries 2 characters e.g. KG, TN, etc.). Only include actual on-base construction here; non-construction environmental mitigation costs are entered on Screen 5.

Optional Categories/Units

These are lines for entry of up to 18 construction requirements (and UM) which do not fit into the listed categories, or that the user wishes to specifically separate from other requirements in a category which is listed. (Allowed entries up to 20 characters for categories, 2 characters for units)

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CHAPTER 5
COBRA REPORT OUTPUT

CHAPTER 5 - COBRA REPORT OUTPUT

This chapter will cover the various Reports that COBRA generates. Although most Reports provide outputs in terms of dollar costs and savings, several also provide non-dollar value information (such as numbers of personnel, square feet of construction, etc.). Both costs and savings can be reported as positive or negative numbers. A cost reported as a positive number represents an actual cost, and a negative cost represents an actual savings. Similarly, a savings reported as a positive number represents an actual savings, and a negative savings represents an actual cost. The viewing and printing of individual and group Reports was discussed earlier (see Section 3.7.5) and therefore, will not be discussed again here. Appendix B contains sample COBRA Reports.

5.1 REALIGNMENT SUMMARY REPORT (File name COBSUM.RPT)

The key output of the COBRA model is the Realignment Summary. This Report is contained on one or two pages (see Section 3.3.7), which display key values with which to evaluate the modeled scenario and to compare it with other scenarios.

ROI Year (Years to Break Even)

This is Fiscal Year (and the years it takes, after completion of the closure/realignment action) to generate enough savings to offset the Total Costs and reach the break even point. In other terms, this is the Payback Period.

Option NPV in (Year 20)

The Net Present Value of the costs (if negative number, savings) of the realignment in discounted constant First Year dollars. This is a measure of the total costs (over the 20-year period of analysis) to be realized by taking the closure/realignment actions in the scenario. The larger the negative value of NPV, the more the net savings and the more advantage there is to the realignment. If the NPV is not a negative number the realignment will result in a net cost over the 20-year period.

Total One-Time Cost

The cost of doing the closure/realignment modeled. This is the amount that must be offset by the net savings generated by the action.

Net Costs, Military Construction

The net costs (if negative number, savings) in each year, due to changes in construction requirements.

Net Costs, Personnel

The net costs (if negative number, savings) in each year, due to changes in housing allowances, salary savings for eliminated personnel positions and associated costs such as severance pay.

Net Costs, Overhead

The net costs (if negative number, savings) in each year, due to changes in overhead; primarily caused by changes on Real Property Maintenance Activities, Base Operations Support, and Program Planning.

Net Costs, Moving

The net costs (if negative number, savings) in each year, due to movement of personnel and material.

Net Costs, Mission

The net costs (if negative number, savings) in each year, realized by the operations of the organizations that are involved in the closure/realignment. These are in such areas as fuel, supplies, contracts, etc. which are not part of normal base overhead functions.

Net Costs, Other

The net costs (if negative number, savings) in each year, due to factors not covered in the other net costs lines. Examples are sales of real estate, non-construction environmental mitigation, procurement changes, and CHAMPUS.

Is CHAMPUS captured?

Officer Positions Eliminated

The total number of officer positions eliminated each year at the bases, as a **direct result of the closure/realignment action**. Does not include positions eliminated with no salary savings.

Enlisted Positions Eliminated

The total number of enlisted positions eliminated each year at the bases, as a **direct result of the closure/realignment action**. Does not include positions eliminated with no salary savings.

Civilian Positions Eliminated

The total number of civilian positions eliminated each year at the bases, as a **direct result of the closure/realignment action**. Does not include positions eliminated with no salary savings.

Officer Realignments

The total number of officer positions realigned each year.

Enlisted Realignments

The total number of enlisted positions realigned each year.

Student Realignments

The total number of student positions realigned each year.

Civilian Realignments

The total number of civilian positions realigned each year.

Total Realignments

The total number of all types of positions realigned each year.

Summary/Description:

If the user has entered a text description of the scenario, it will be printed here (see Section 4.1)

Note: The following values will not be included if the "COBRA Summary Second Page" option in COBRA Setup is disabled (see Section 3.3.7).

Costs, Military Construction

The costs (if negative number, savings) in each year, due to changes in construction requirements.

Costs, Personnel

The costs (if negative number, savings) in each year, due to changes in housing allowances, salary savings for eliminated personnel positions and associated costs such as severance pay.

Costs, Overhead

The costs (if negative number, savings) in each year, due to changes in overhead; primarily caused by changes on Real Property Maintenance Activities, Base Operations Support, and Program Planning.

Costs, Moving

The costs (if negative number, savings) in each year, due to movement of personnel and material.

Costs, Mission

The costs (if negative number, savings) in each year, realized by the operations of the organizations that are involved in the closure/realignment. These are in such areas as fuel, supplies, contracts, etc. which are not part of normal base overhead functions.

Costs, Other

The costs (if negative number, savings) in each year, due to factors not covered in the other net costs lines. Examples are non-construction environmental mitigation, procurement changes, and CHAMPUS.

Savings, Military Construction

The savings (if negative number, costs) in each year, due to changes in construction requirements.

Savings, Personnel

The savings (if negative number, costs) in each year, due to changes in housing allowances, salary savings for eliminated personnel positions and associated costs such as severance pay.

Savings, Overhead

The savings (if negative number, costs) in each year, due to changes in overhead; primarily caused by changes on Real Property Maintenance Activities and Base Operations Support.

Savings, Moving

The savings (if negative number, costs) in each year, due to movement of personnel and material.

Savings, Mission

The savings (if negative number, costs) in each year, realized by the operations of the organizations that are involved in the closure/realignment activities. These are in such areas as fuel, supplies, contracts, etc. which are not part of normal base overhead functions.

Savings, Other

The savings (if negative number, costs) in each year, due to factors not covered in the other net savings lines. Examples are sales of real estate, procurement changes, and CHAMPUS.

5.2 NET PRESENT VALUES REPORT (File name NPV.RPT)

Another key COBRA Report is the Net Present Values (NPV) Report. This is usually contained on a single page, which displays the Cost and Inflated Cost for each year, and NPV of the cost of the realignment for each of the years of the analysis period (only uses more than one page if the years to achieve a net savings is large). The point where the NPV goes from a positive value (a cost) to a negative value (a savings) is the ROI of the scenario; also shown on the COBRA Realignment Summary Report.

Year

The scenario year for which the costs are reported.

Cost

The cost in each year of the analysis (Base-Year dollars).

Adjusted Cost

The inflated/discounted cost in each year of the analysis (Then-Year dollars).

NPV

The Net Present Value of the cumulative cost in each year of the analysis. These are the discounted values of the respective inflated costs for each year.

5.3 APPROPRIATIONS DETAIL REPORT (File name APPDET.RPT)

This Report provides detailed yearly costs, savings, and net costs of the closure/realignment. If the total net costs have not become a negative number (meaning a net savings) at or before the "Beyond" year, no savings are realized for the closure/realignment action. Note that this report may contain pages for each individual base, or be inflated, depending upon the options in the COBRA Setup (see Section 3.3.7).

5.4 ONE-TIME COST REPORT (File name 1TIMCOST.RPT)

This Report provides the total one-time costs, savings, and net costs for the total scenario. The total of the yearly one-time net costs shown on the Appropriations Detail Report is identical to the Total Net One-Time Costs shown on this Report. Note that this report may contain pages for each individual base, depending upon the options in the COBRA Setup (see Section 3.3.7).

5.5 RPMA/BOS CHANGE REPORT (File name RPMABOS.RPT)

This Report shows changes in Real Property Maintenance Activity, Base Operations Support, and Housing costs for each year of the scenario.

5.6 BOS, LAND, SF, AND RPMA DELTAS REPORT (File name DELTAS.RPT)

This Report shows, for each base, the number and percent change in personnel, Base Operations Support costs, Real Property Maintenance Activity costs, combined RPMA and BOS costs, and building square footage. Also shown are the ratio of changes in BOS, RPMA, RPMA plus BOS, acreage, and square footage to changes in personnel.

5.7 MILITARY CONSTRUCTION ASSETS REPORT (File name MILCONAS.RPT)

This Report provides a single-page summary of costs for all bases involved in the closure/realignment where construction or rehabilitation will be required. The cost of each requirement includes not only the construction costs, but also the design, SIOH, site preparation, information management, and contingency costs; also shown are land purchases and construction avoidances. Note that this report may contain pages showing requirements and costs for each individual base, depending upon the options in the COBRA Setup (see Section 3.3.7).

5.8 PERSONNEL IMPACT REPORT (File name PERSIMP.RPT)

This Report shows a one-page summary of yearly civilian personnel realignments and eliminations for the entire scenario. Note that this report may contain pages for each individual base, depending upon the options in the COBRA Setup (see Section 3.3.7).

5.9 PERSONNEL SUMMARY REPORT (File name PERSSUM.RPT)

This Report totals of all personnel Force Structure Changes, Scenario Changes, and Positions Realigning to and from each base.

5.10 PERSONNEL YEARLY PERCENTAGES REPORT (File name PERSPERC.RPT)

This Report shows the yearly number and percentage of personnel changes at each base (percentages are used for automatic scheduling of construction and facilities to be shut down). Also shown are the time-phasing as calculated from the yearly personnel changes. This report is only generated if the "Auto Time-Phase" option on Screen 1 is enabled (see Section 4.1).

5.11 INPUT DATA REPORT (File name INPUTDAT.RPT)

This Report is a print-out of all Data Entry Screens and Standard Factors Tables selected on the COBRA Setup screen (see Section 3.3.7), showing the scenario inputs upon which the other Reports are based.

5.12 SCENARIO ERROR REPORT (File name ERROR.RPT)

This Report is created only if COBRA finds inconsistencies in scenario data. Since all Reports are generated at once, the other Reports will have been made using potentially incorrect data. When a Scenario Error Report is present, therefore, it should be checked immediately to determine if data corrections should be made. Once corrections are made to scenario data the Reports must be executed again before they are used for analysis purposes. The specific data inconsistencies that COBRA checks for are:

Option Package Name, Department

If the Department is not recognized by COBRA, the Report will say so. COBRA will also remind the user if no Option Package Name has been entered.

Base Names

COBRA will alert the user if there are two bases with the same Name, or if a base has no name.

Close Year/Deactivate

COBRA will alert the user if a base is deactivating with no year to be deactivated entered.

Activity Code

COBRA will list all bases with no Activity Code defined on Input Screen 4 (Section 4.4).

Time-Phasing of Construction or Shutdown

If the user is entering these schedules (rather than letting COBRA do them automatically) COBRA will alert if the yearly percentages do not total to 100%.

Caretakers

COBRA will check that no base loses more caretakers than it has, and that none are assigned to a base unless it is to be deactivated.

Personnel Movement/Migration

COBRA will check that no base loses more personnel than it has, and that none remain or move, after it closes.

Personnel Realignments

COBRA checks that civilians retiring, civilian turnover, civilians quitting, and civilians not willing to move never exceed 100%.

Military Construction

COBRA will alert the user if a requirement uses a unit cost of \$0. Also, no requirement with an "OTHER" category must have the total cost specified.

RPMA Calculations

COBRA will alert the user if a base has more square feet shutdown than it had, or if a base still holds facilities after it closes.

CHAPTER 6
OPERATING ADDER

CHAPTER 6 - OPERATING ADDER

ADDER has been designed to operate as closely to COBRA as possible; so that users of COBRA will find ADDER's operation relatively familiar. However, this section should be read completely; and after an initial reading, users need generally refer only to the section(s) where he or she has a question.

6.1 INITIATING ADDER

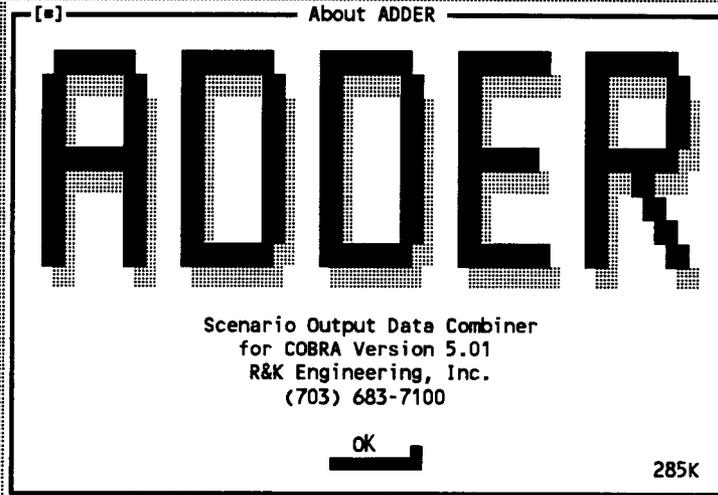
To open the ADDER program, access the disk/directory where COBRA and ADDER have been installed (see Chapter 2), type "ADDER" and press <ENTER>. The "About ADDER" window will then appear (see Figure 49).

This welcome screen identifies the ADDER model and its version number; the telephone number of R&K Engineering, the COBRA developer, is also provided.

To close the "About ADDER" window and access the Main Menu, click on the "OK" at the bottom-center of the window. Other methods of closing the window are: clicking on the Close Window Square [■] at the upper-left of the window border; clicking on the words "ESC-Close window" on the bottom border; pressing <ENTER>; or pressing <ESC>.

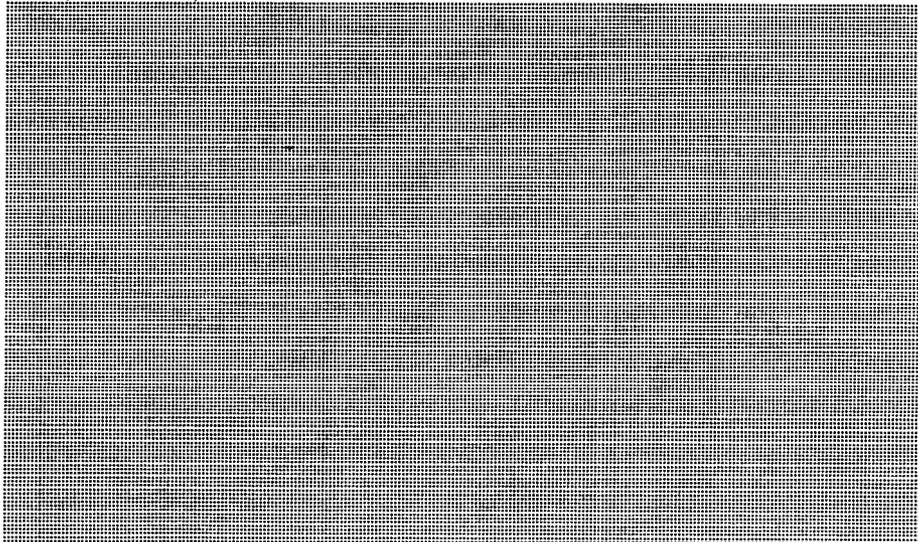
6.2 THE MAIN MENU

The Main Menu is the starting point for using the ADDER program. Upon closing the initial display of the "About ADDER" window, the screen will display the Main Menu (see Figure 50). Along the top of this screen are displayed the "Help", "File", "Reports", "Windows", and "Quit" menu selections. During the use of ADDER additional menu windows, reports, and other data are displayed on the screen; however, the Main Menu selections will always remain displayed behind any other active displays. Each of the Main Menu selections is summarized below.



ESC-Close window F1-Help (none) ADDER v5.01, R&K Engineering, Inc, 1991-4

FIGURE 49 - "About ADDER" Window



ESC-Close window F1-Help (none) ADDER v5.01, R&K Engineering, Inc, 1991-4

FIGURE 50 - Main Menu

6.3 HELP

From the Main Menu the Help selection is made by either clicking on the word "Help" along the top of the Main Menu screen, or by pressing <ALT-H>. The Help menu will appear (see Figure 51). By clicking on the words "About ADDER" or by pressing <A>, the "About ADDER" window will again be displayed (see Section 6.1, above). The Help menu may be closed by clicking on another Main Menu selection, by clicking on an open area of the screen surface, by clicking on the words "ESC-Close window" on the bottom border, or by pressing <ESC>. Note that the ADDER Help Menu is identical to the COBRA Help Menu (see Section 3.3) except for the lack of a "Files Used" command, and for differences in the ADDER Setup (described below).

6.3.1 Changing ADDER Set-Up

ADDER has several options for generating and printing its reports that can be changed by using the "ADDER Setup" Window (see Figure 52). By clicking on the words "ADDER Setup" or by pressing <S> from the Help Menu, the "ADDER Setup" window is displayed. To cancel any change(s), close the window and return to the Main Menu click on the word "Cancel", or click on the Close Window Square, or press <ESC>. Click on "OK" to save changes. Note that COBRA and ADDER use the same configuration file (COBRA.INI), so that any changes made in one affect them both.

ADDER will format its output for most dot matrix (those that are EPSON/IBM compatible) and laser (those that are HP LaserJet compatible) printers, or print them unformatted (requiring a wide-carriage printer for most reports). The user can select which type of printer is to be used, along with a printer device name for that printer. The default device name is "PRN" which will work with most system configurations. Should a system not be able to print with this setting (a LAN for example), or should the system have multiple printers (a LaserJet on LPT1: and a dot matrix on LPT2:, for example) the correct device name can be entered in the appropriate "Device Name" field.

If the user wants to change the directory to be used to store Reports, the new entry can be typed into the "Report Directory" field. This may be useful if the user wants to run a new scenario or set of Reports, while continuing to save the current Reports in memory. Unless the directory is changed, any new Reports will automatically overwrite the old ones.

Other options available are whether or not inflation will be applied to the ADDER Appropriation Detail report, and whether or not to include a second page with the ADDER Summary report listing total Costs and Savings. Click on the desired options, or press <ALT> and the highlighted letter, to turn that option on or off (those options with an "X" next to them will be used in future reports).

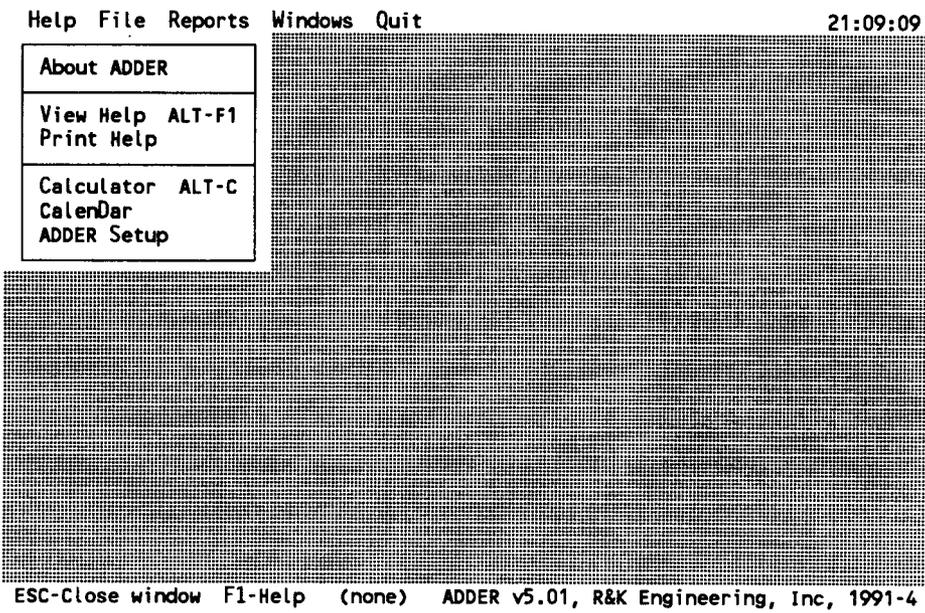


FIGURE 51 - Help Menu

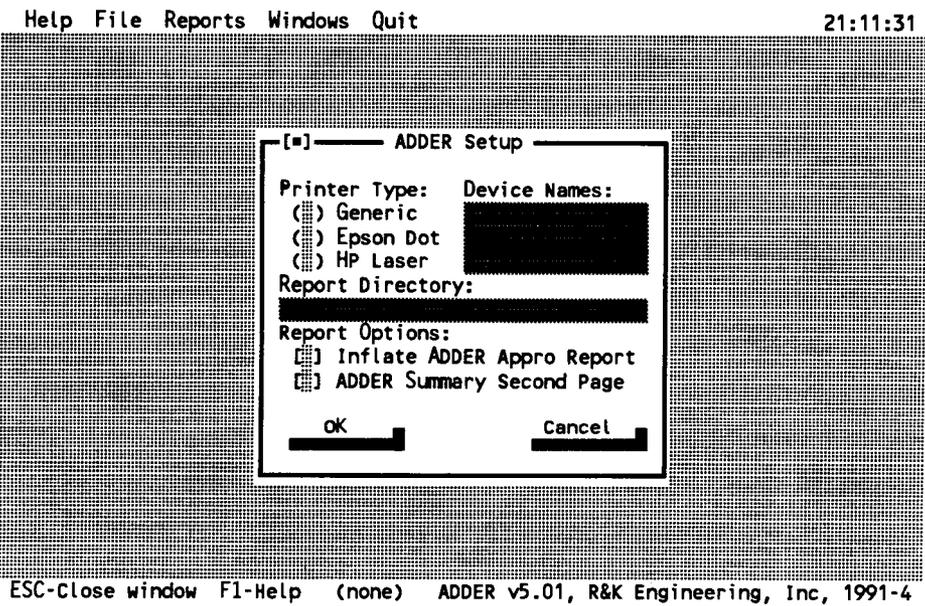


FIGURE 52 - "ADDER Setup" Window

6.4 FILE

The File selection is made by either clicking on the word "File" along the top of the Main Menu screen, or by pressing <ALT-F>. The File menu will appear (see Figure 53). The File menu may be closed by clicking on another Main Menu selection, by clicking on an open area of the screen surface, by clicking on the words "ESC-Close window" on the bottom border, or by pressing <ESC>. Note that the DOS Shell, Change Dir, and Exit options operate in the same manner for ADDER as they do for COBRA (see section 3.4).

6.4.1 Loading Data Files

By clicking on the words "Load Data File" on the File menu or by pressing <L>, the "Select File(s) to Load" window is displayed (see Figure 54). This window consists of one or more pages listing all COBRA output files (in the form "*.OUT") in the current directory. The user may now select as many files as desired to be loaded from the disk into Program memory. The files are selected by clicking on the space in front of the file name, or by typing the highlighted number/letter for the file, or by scrolling to the file name and pressing <SPACE BAR> to select it. A selected file will appear with [X] in front of it on the list. The selected file(s) are loaded into Program memory by clicking on the word "Open", by pressing <O>, or by pressing <ENTER>. To see other pages of this window, click on "Next" or "Previous", or press <N> or <P>. The "Next" and "Previous" selections load the files selected on the current page, and then move to the new page. To do a quick search for a file, type the file name in the "Search for:" field and click on "Open" or press <O>. Search can also be invoked by pressing <ENTER> once to complete the file name entry, and again pressing <ENTER> to start the search. ADDER will load any files selected on the current page, and then move to the page containing the name of the file searched for. This window may be closed with no further loading, and the user returned to the Main Menu, by clicking on the word "Cancel", by clicking on the Close Window Square, or by pressing <ESC>. This window may also be opened from the Main Menu, by pressing <ALT-L>. **Any new files loaded are added to whatever data is already in ADDER Program memory. To clear Program memory before loading in COBRA output file(s), use the Clear Data (see Section 6.4.5) option before the Load Data File option.** The file name of the first data file loaded will be displayed at the bottom border. Note that if different COBRA output files have different values for inflation/discount rates, starting year, etc., the values in the first file loaded will be used.

6.4.2 Loading ALL Files

This option will load ALL COBRA output files (in the form "*.OUT") in the current directory, unlike the Load Data File option (see above) which requires the user to pick and choose files. Note that the Change Dir command (described in section 3.4.8) allows the user to change the current directory. Used in conjunction with the Load ALL Files command, this will allow the user to load all COBRA output files in any directory.

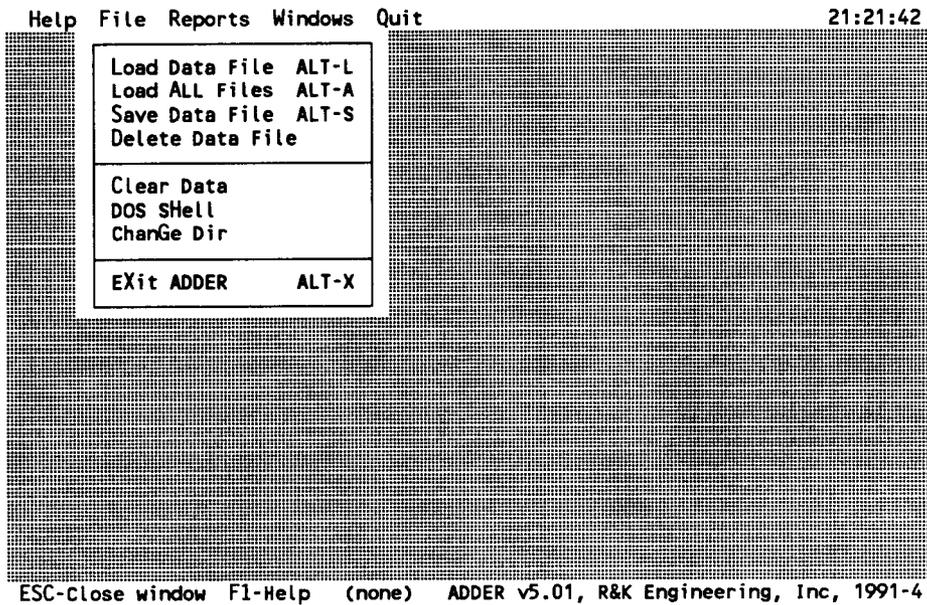


FIGURE 53 - File Menu

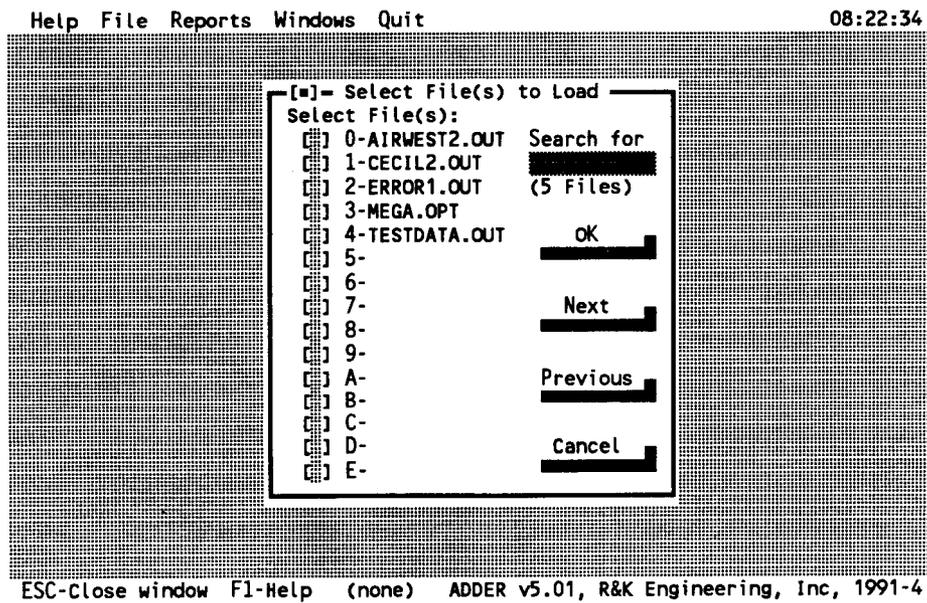


FIGURE 54 - "Select File(s) to Load" Window

6.4.3 Saving Current Data

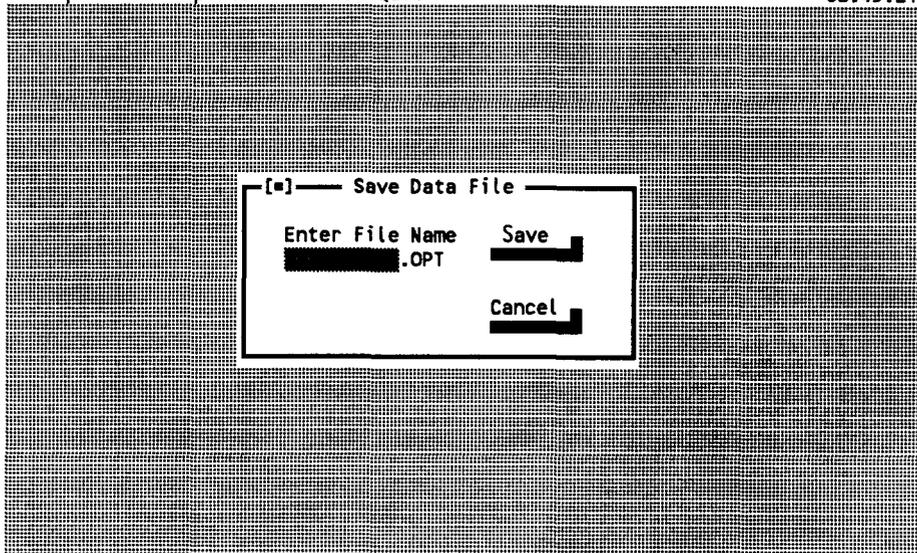
Combined COBRA output files can be saved into a single file for future retrieval and use. By clicking on the words "Save Data File" on the File menu or by pressing <S>, the "Save Data File" window is displayed (see Figure 55). This window may also be opened from the Main Menu, by pressing <ALT-S>. The saving of the current data set is done by typing the Data file name desired or leaving the previously saved file name, and then clicking on the word "Save". The file may also be saved by pressing <ENTER>. This window may be closed, the save canceled, and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>. Note that combined data files have an extension of ".OPT", instead of ".OUT" like single-scenario files.

6.4.4 Clearing the Data Set

To create a new ADDER scenario combination from scratch, the Program memory should be cleared of any currently loaded Data before loading new COBRA output files (see Sections 6.4.1 and 6.4.2). By clicking on the words "Clear Data Set" on the File menu or by pressing <C>, the currently used Data is removed from the ADDER Program memory (If previously saved, it remains saved on disk). A new Data Set can then be created by loading in other COBRA output files. This window may be closed and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.

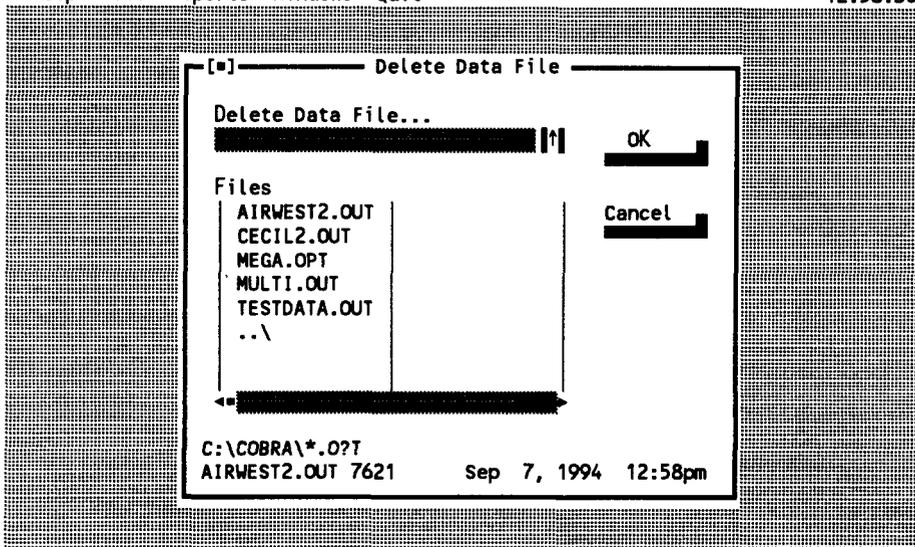
6.4.5 Deleting Saved Data

The user may want to permanently remove COBRA or ADDER output files from disk when they are outdated and/or no longer under consideration. By clicking on the words "Delete Data File" on the File menu or by pressing <D>, a "Delete Data File" window (see Figure 56). The deletion of a saved Data file is done by double clicking on the file to be deleted. The Data files list may also be accessed by pressing <TAB> to move the cursor to the list, with the <↑> <↓> keys then being used to highlight the desired Data file. The highlighted Data file can then be deleted and the user returned to the Main Menu by clicking on the word "OK" or by pressing <ENTER>. This window may be closed, the delete function canceled, and the user returned to the Main Menu by clicking on the word "Cancel", or by clicking the Close Window Square, or by pressing <ESC>.



ESC-Close window F1-Help CECIL2 ADDER v5.01, R&K Engineering, Inc, 1991-4

FIGURE 55 - "Save Data File" Window



ESC-Close window F1-Help TESTDATA ADDER v5.01, R&K Engineering, Inc, 1991-4

FIGURE 56 - "Delete Data File" Window

6.5 REPORTS

ADDER output Reports are created, viewed on the screen, and printed using the Reports selection on the Main Menu. The Reports selection is made by either clicking on the word "Reports" along the top of the Main Menu screen, or by pressing <ALT-R>. The Reports menu will then appear (see Figure 57). The Reports menu may be closed by clicking on another Main Menu selection, by clicking on an open area of the screen surface, by clicking on the words "ESC-Close window" on the bottom border, or by pressing <ESC>. Note that the ADDER Reports menu is identical to the COBRA Reports menu (see Section 3.7) in all ways but the following:

6.5.1 Generating Reports (Running ADDER)

The user must generate ADDER Reports using the current Data files loaded before these Reports can be viewed or printed. By clicking on the word "Execute" on the Reports menu or by pressing <E>, the ADDER program will generate all Reports. **This must be done before Reports can be viewed in the screen or printed.** Reports can also be executed from the Main Menu by pressing <ALT-E>. Output Reports are covered in detail in the Chapter 7. Note that ADDER Reports have an ".ART" extension, rather than the ".RPT" extension used in COBRA. If while it is executing, ADDER detects inconsistencies in the data an ADDER Error Report will be generated (see Section 7.6). **This Report should be reviewed, and errors resolved, before the other ADDER Reports are used for analysis purposes.** ADDER also generates a data file for the Economic Impact Database. This file has the same name as the ADDER data in memory, but with an ".EIR" extension.

6.5.2 Viewing or Printing a Group of Reports

ADDER uses the same Group files (in the format "*.GRP") that COBRA does; considering, for example, the COBRA Summary Report and ADDER Summary Report as equivalent. Since ADDER generates less reports than COBRA, however, the "Reports in Group" window is different (see Figure 58). Other than that, all Group functions work identically for COBRA and ADDER (see Section 3.7.5).

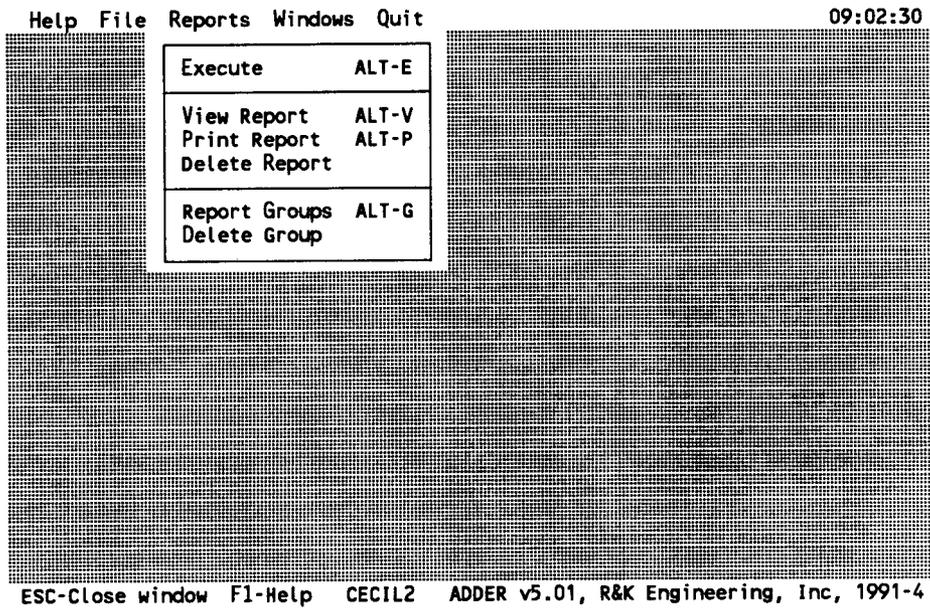


FIGURE 57 - Reports Menu

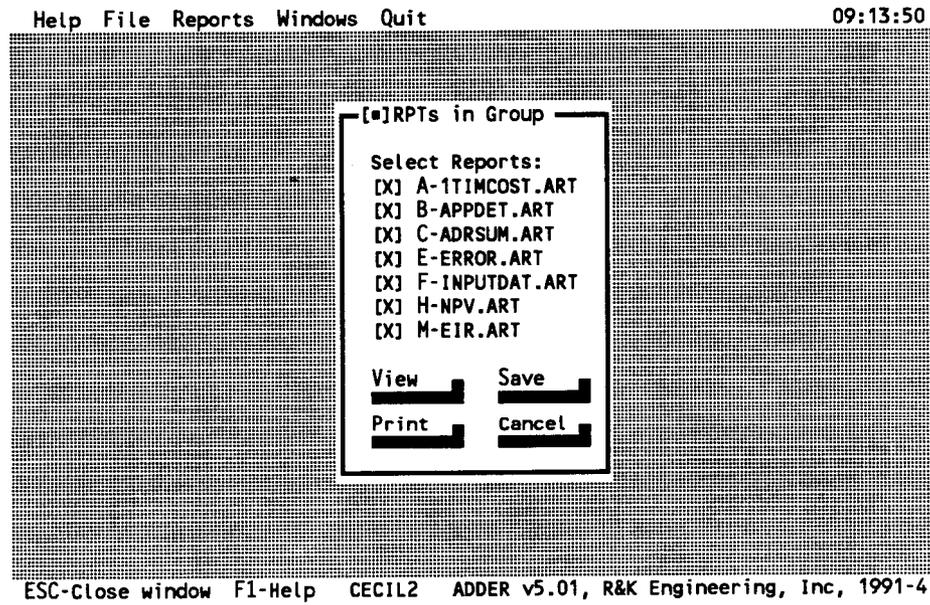


FIGURE 58 - "Reports in Group" window

6.6 WINDOWS

The ADDER Windows Menu (see Figure 59) is in every way identical to the COBRA Windows Menu (see Section 3.8).

6.7 QUIT

Clicking on the Word "Quit" or pressing <ALT-Q> from the Main Menu is the same as exiting ADDER from the File Menu.

6.8 ADVANCED OPERATIONS (Using Command-Line Parameters)

To allow for more efficient use of ADDER, the user may issue some commands to ADDER directly from the DOS command line by use of Command-Line Parameters. These advanced features are completely optional. The user may choose never to use them.

To specify which files ADDER should load, enter "ADDER" followed by as many filenames (including wildcards) as desired. For example, all of the following are legal usages of ADDER:

```
ADDER *.OUT
ADDER TESTDATA.OUT MULTI.OUT
ADDER C:\COBRA\ARMY\*.OUT C:\COBRA\NAVY\*.OUT C:\COBRA\USAF\*.OUT
```

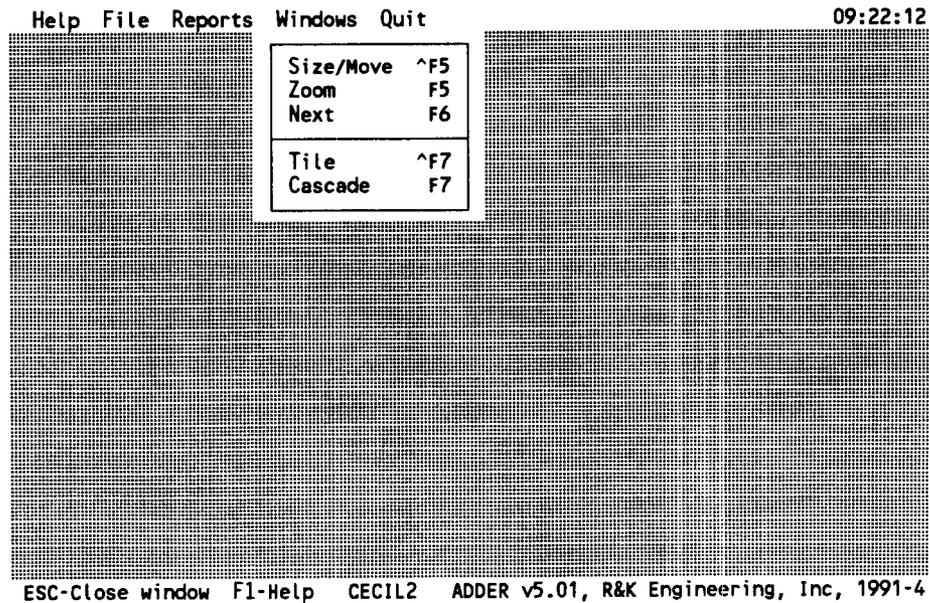


FIGURE 59 - Windows Menu

CHAPTER 7
ADDER REPORT OUTPUT

CHAPTER 7 - ADDER REPORT OUTPUT

This chapter will cover the various Reports that ADDER generates. Although most Reports provide outputs in terms of dollar costs and savings, several also provide non-dollar value information (such as numbers of personnel, etc.). Both costs and savings can be reported as positive or negative numbers. A cost reported as a positive number represents an actual cost, and a negative cost represents an actual savings. Similarly, a savings reported as a positive number represents an actual savings, and a negative savings represents an actual cost. The viewing and printing of individual and group Reports was discussed earlier (see Section 3.7) and therefore, will not be discussed again here. Appendix C contains sample ADDER Reports.

7.1 ADDER REALIGNMENT SUMMARY REPORT (File name ADRSUM.ART)

The key output of the ADDER model is the Realignment Summary. This Report is contained on one or two pages (see Section 6.3.1), which display key values with which to evaluate the modeled scenario and to compare it with other scenarios.

ROI Year (Years to Break Even)

This is Fiscal Year (and the years it takes, after completion of the closure/realignment actions) to generate enough savings to offset the Total Costs and reach the break even point. In other terms, this is the Payback Period.

Option NPV in (Year 20)

The Net Present Value of the costs (if negative number, savings) of the realignments in discounted constant First Year dollars. This is a measure of the total costs (over the 20-year period of analysis) to be realized by taking the closure/realignment actions in the scenario. The larger the negative value of NPV, the more the net savings and the more advantage there is to the realignment. If the NPV is not a negative number the realignment will result in a net cost over the 20-year period.

Total One-Time Cost

The cost of doing the closure/realignments modeled. This is the amount that must be offset by the net savings generated by the actions.

Net Costs, Military Construction

The net costs (if negative number, savings) in each year, due to changes in construction requirements.

Net Costs, Personnel

The net costs (if negative number, savings) in each year, due to changes in housing allowances, salary savings for eliminated personnel positions and associated costs such as severance pay.

Net Costs, Overhead

The net costs (if negative number, savings) in each year, due to changes in overhead; primarily caused by changes on Real Property Maintenance Activities, Base Operations Support, and Program Planning.

Net Costs, Moving

The net costs (if negative number, savings) in each year, due to movement of personnel and material.

Net Costs, Mission

The net costs (if negative number, savings) in each year, realized by the operations of the organizations that are involved in the closure/realignment. These are in such areas as fuel, supplies, contracts, etc. which are not part of normal base overhead functions.

Net Costs, Other

The net costs (if negative number, savings) in each year, due to factors not covered in the other net costs lines. Examples are sales of real estate, non-construction environmental mitigation, procurement changes, and CHAMPUS.

Officer Positions Eliminated

The total number of officer positions eliminated each year at the bases, **as a direct result of the closure/realignment action**. Does not include positions eliminated with no salary savings.

Enlisted Positions Eliminated

The total number of enlisted positions eliminated each year at the bases, **as a direct result of the closure/realignment action**. Does not include positions eliminated with no salary savings.

Civilian Positions Eliminated

The total number of civilian positions eliminated each year at the bases, **as a direct result of the closure/realignment action**. Does not include positions eliminated with no salary savings.

Officer Realignments

The total number of officer positions realigned each year.

Enlisted Realignments

The total number of enlisted positions realigned each year.

Student Realignments

The total number of student positions realigned each year.

Civilian Realignments

The total number of civilian positions realigned each year.

Total Realignments

The total number of all types of positions realigned each year.

Note: The following values will not be included if the "ADDER Summary Second Page" option in COBRA Setup is disabled (see Section 6.3.1).

Costs, Military Construction

The costs (if negative number, savings) in each year, due to changes in construction requirements.

Costs, Personnel

The costs (if negative number, savings) in each year, due to changes in housing allowances, salary savings for eliminated personnel positions and associated costs such as severance pay.

Costs, Overhead

The costs (if negative number, savings) in each year, due to changes in overhead; primarily caused by changes on Real Property Maintenance Activities, Base Operations Support, and Program Planning.

Costs, Moving

The costs (if negative number, savings) in each year, due to movement of personnel and material.

Costs, Mission

The costs (if negative number, savings) in each year, realized by the operations of the organizations that are involved in the closure/realignment. These are in such areas as fuel, supplies, contracts, etc. which are not part of normal base overhead functions.

Costs, Other

The costs (if negative number, savings) in each year, due to factors not covered in the other net costs lines. Examples are non-construction environmental mitigation, procurement changes, and CHAMPUS.

Savings, Military Construction

The savings (if negative number, costs) in each year, due to changes in construction requirements.

Savings, Personnel

The savings (if negative number, costs) in each year, due to changes in housing allowances, salary savings for eliminated personnel positions and associated costs such as severance pay.

Savings, Overhead

The savings (if negative number, costs) in each year, due to changes in overhead; primarily caused by changes on Real Property Maintenance Activities and Base Operations Support.

Savings, Moving

The savings (if negative number, costs) in each year, due to movement of personnel and material.

Savings, Mission

The savings (if negative number, costs) in each year, realized by the operations of the organizations that are involved in the closure/realignment activities. These are in such areas as fuel, supplies, contracts, etc. which are not part of normal base overhead functions.

Savings, Other

The savings (if negative number, costs) in each year, due to factors not covered in the other net savings lines. Examples are procurement changes, and CHAMPUS.

7.2 ADDER NET PRESENT VALUES REPORT (File name NPV.ART)

Another key ADDER Report is the ADDER Net Present Values (NPV) Report. This is usually contained on a single page, which displays the Cost and Inflated Cost for each year, and NPV of the cost of the realignments for each of the years of the analysis period (only uses more than one page if the years to achieve a net savings is large). The point where the NPV goes from a positive value (a cost) to a negative value (a savings) is the ROI of the scenario; also shown on the ADDER Realignment Summary Report.

Year

The scenario year for which the costs are reported.

Cost

The cost in each year of the analyses (Base-Year dollars).

Adjusted Cost

The inflated/discounted cost in each year of the analyses (Then-Year dollars).

NPV

The Net Present Value of the cumulative cost in each year of the analyses. These are the discounted values of the respective inflated costs for each year.

7.3 ADDER APPROPRIATIONS DETAIL REPORT (File name APPDET.ART)

This Report provides detailed yearly costs, savings, and net costs of the closure/realignments. If the total net costs have not become a negative number (meaning a net savings) at or before the "Beyond" year, no savings are realized for the closure/realignment actions. Note that this report may be inflated, depending upon the options in the ADDER Setup (see Section 6.3.1).

7.4 ADDER ONE-TIME COST REPORT (File name 1TIMCOST.ART)

This Report provides the total one-time costs, savings, and net costs for the totalled scenarios. The total of the yearly one-time net costs shown on the Appropriations Detail Report is identical to the Total Net One-Time Costs shown on this Report.

7.5 ADDER INPUT DATA REPORT (File name INPUTDAT.ART)

This Report is a listing of all COBRA scenarios which were combined into this ADDER scenario.

7.6 ADDER ERROR REPORT (File name ERROR.ART)

This Report is created only if ADDER finds inconsistencies in scenario data. Since all Reports are generated at once, the other Reports will have been made using potentially incorrect data. When an ADDER Error Report is present, therefore, it should be checked immediately to determine if data corrections should be made. Once corrections are made to scenario data the Reports must be executed again before they are used for analysis purposes. The specific data inconsistencies that COBRA checks for are:

COBRA Scenario Names

If the same COBRA Scenario filename appears more than once (meaning that that scenario was probably double-counted), the Report will say so.

7.7 ADDER ECONOMIC IMPACT REPORT (File name EIR.ART)

This Report displays economic information that can be used to assess economic impact.

APPENDIX A
TABLE of ACRONYMS

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APPENDIX A - TABLE of ACRONYMS

<u>Acronym</u>	<u>Meaning</u>	<u>Acronym</u>	<u>Meaning</u>
AMC	Army Material Command	POL	Petroleum, Oil, and Lubricants
BAQ	Basic Allowance for Quarters	POV	Privately Owned Vehicle
BL	Barrel	PPS	Priority Placement System
BOS	Base Operations Support	RDT&E	Research, Development, Test and Evaluation
CHAMPUS	Civilian Health and Medical Program for the Uniformed Services	RIF	Reduction in Force
DA	Department of the Army	RITA	Relocation Income Tax Allowance
DOD	Department of Defense	ROI	Return on Investment
DOS	Disk Operating System	RPMA	Real Property Maintenance Activities
EA	Each	RSE	Relocation Service Entitlement
GAO	General Accounting Office	SF	Square Foot (Feet)
HAP	Homeowners Assistance Program	SIOH	Supervision, Inspection, and Overhead
HHG	Household Goods	SY	Square Yard(s)
K	Kilobytes	TDY	Temporary Duty
LAN	Local Area Network	UM	Unit of Measure
LF	Linear Foot (Feet)	VHA	Variable Housing Allowance
MILCON	Military Construction	\$K	Thousands of Dollars
NPV	Net Present Value		
PCS	Permanent Change of Station		

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APPENDIX B
SAMPLE COBRA REPORTS

APPENDIX B - SAMPLE COBRA REPORTS

This appendix contains a set of sample COBRA reports, generated from a fictional closure/realignment scenario. All standard COBRA reports are included, except the Input Data Report (which is only a printout of the input data that makes-up the scenario). Also removed are additional base-specific sections of reports when one such section adequately illustrates COBRA output.

COBRA REALIGNMENT SUMMARY (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

Starting Year : 1992
 Final Year : 1997
 ROI Year : 2000 (3 Years)

NPV in 2011(\$K): -44,749
 1-Time Cost(\$K): 66,866

Net Costs (\$K) Constant Dollars	1992						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	20,697	7,346	7,346	8,141	0	0	43,531	0
Person	-468	-3,085	-6,565	-8,877	-10,374	-10,923	-40,293	-10,923
Overhd	1,076	1,094	1,183	1,234	1,145	971	6,704	918
Moving	2,022	1,111	2,232	3,695	2,488	338	11,886	0
Missio	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Other	1,877	1,877	1,877	-70	-7,026	-5,066	-6,531	-233
TOTAL	25,204	8,004	5,360	1,710	-16,861	-18,081	5,335	-13,638

	1992	1993	1994	1995	1996	1997	TOTAL
POSITIONS ELIMINATED							
Officers		10	10	10	10	0	40
Enlisted		10	10	10	10	0	40
Civilians		10	70	40	40	30	190
TOTAL		30	90	60	60	30	270

	1992	1993	1994	1995	1996	1997	TOTAL
POSITIONS REALIGNED							
Officers		60	60	60	60	60	300
Enlisted		60	60	60	60	60	300
Students		0	0	0	0	0	0
Civilians		60	0	30	30	30	150
TOTAL		180	120	150	150	150	750

COBRA REALIGNMENT SUMMARY (COBRA v5.01) - Page 2
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

	Costs (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	21,492	8,141	8,141	8,141	0	0	45,916	0
Person	491	607	190	231	290	274	2,085	274
Overhd	1,096	1,298	1,518	1,732	1,792	1,752	9,190	1,699
Moving	2,082	1,171	2,292	3,755	2,548	338	12,186	0
Missio	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Other	2,110	2,110	2,110	163	140	0	6,633	0
TOTAL	27,272	13,878	15,407	17,928	9,775	7,864	92,125	7,474

	Savings (\$K) Constant Dollars						Total	Beyond
	1992	1993	1994	1995	1996	1997		
MilCon	795	795	795	0	0	0	2,385	0
Person	959	3,692	6,755	9,108	10,664	11,198	42,377	11,198
Overhd	21	204	335	498	648	781	2,486	781
Moving	60	60	60	60	60	0	300	0
Missio	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Other	233	233	233	233	7,166	5,066	13,164	233
TOTAL	2,068	5,874	10,047	16,218	26,637	25,945	86,790	21,112

NET PRESENT VALUES REPORT (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

Year	Cost(\$)	Adjusted Cost(\$)	NPV(\$)
----	-----	-----	-----
1992	25,204,105	24,031,171	24,031,171
1993	8,003,836	6,937,598	30,968,769
1994	5,359,776	4,223,426	35,192,196
1995	1,709,619	1,224,687	36,416,882
1996	-16,861,245	-10,980,511	25,436,371
1997	-18,080,759	-10,704,266	14,732,105
1998	-13,638,511	-7,340,312	7,391,793
1999	-13,638,511	-6,673,011	718,783
2000	-13,638,511	-6,066,373	-5,347,591
2001	-13,638,511	-5,514,885	-10,862,476
2002	-13,638,511	-5,013,532	-15,876,007
2003	-13,638,511	-4,557,756	-20,433,763
2004	-13,638,511	-4,143,415	-24,577,178
2005	-13,638,511	-3,766,741	-28,343,919
2006	-13,638,511	-3,424,310	-31,768,228
2007	-13,638,511	-3,113,009	-34,881,237
2008	-13,638,511	-2,830,008	-37,711,245
2009	-13,638,511	-2,572,734	-40,283,980
2010	-13,638,511	-2,338,849	-42,622,829
2011	-13,638,511	-2,126,227	-44,749,056

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

	1992	1993	1994	1995	1996	1997	Total
ONE-TIME COSTS -----(\$K)-----	----	----	----	----	----	----	-----
CONSTRUCTION							
MILCON	16,270	6,508	6,508	6,508	0	0	35,795
MILCON	3,527	1,411	1,411	1,411	0	0	7,759
MILCON	1,250	0	0	0	0	0	1,250
O&M							
CIV SALARY							
Personnel	126	315	0	0	0	0	441
Personnel	171	147	73	73	49	0	514
CIV MOVING							
Personnel	149	0	126	126	119	0	520
Personnel	7	0	6	6	5	0	25
Personnel	280	0	237	237	218	0	972
Personnel	527	0	438	438	405	0	1,808
Personnel	19	0	16	16	15	0	66
Personnel	134	0	112	112	105	0	463
Personnel	2	15	9	9	6	0	42
Personnel	165	0	139	139	129	0	573
FREIGHT							
Personnel	4	3	4	4	3	0	18
Personnel	84	225	255	871	396	142	1,972
Personnel	0	158	174	790	316	142	1,580
Personnel	0	59	65	296	118	53	592
Personnel	34	84	0	0	0	0	118
OTHER							
Personnel	223	168	126	94	71	53	735
Personnel	26	26	26	26	22	0	128
Personnel	140	0	15	15	25	0	195
Personnel	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Personnel	73	73	73	73	73	0	364
Personnel	28	28	28	28	28	0	141
Personnel	538	538	538	538	538	0	2,691
Personnel	71	71	71	71	71	0	357
OTHER							
Personnel	163	163	163	163	140	0	792
Personnel	945	945	945	0	0	0	2,835
MILCON	445	222	222	222	0	0	1,112
MILCON	1,002	1,002	1,002	0	0	0	3,006
TOTAL ONE-TIME	26,405	12,163	12,783	12,269	2,855	391	66,866

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.01) - Page 2
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

RECURRINGCOSTS	1992	1993	1994	1995	1996	1997	Total	Beyond
----(\$K)-----	----	----	----	----	----	----	-----	-----
FAM HOUSE OPS	39	94	125	164	180	180	782	180
O&M								
RPMA	0	0	24	30	30	30	112	30
BOS	87	145	218	290	362	362	1,465	362
Unique Operat	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	720	865	1,000	1,127	1,127	1,127	5,967	1,127
MIL PERSONNEL								
House Allow	20	61	102	142	216	274	816	274
OTHER								
Mission	0	550	1,155	3,905	5,005	5,500	16,115	5,500
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	867	1,715	2,623	5,659	6,920	7,474	25,259	7,474
TOTAL COST	27,272	13,878	15,407	17,928	9,775	7,864	92,125	7,474
ONE-TIME SAVES	1992	1993	1994	1995	1996	1997	Total	
----(\$K)-----	----	----	----	----	----	----	-----	
CONSTRUCTION								
MILCON	795	795	795	0	0	0	2,385	
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	60	60	60	60	60	0	300	
Elim PCS	101	101	101	101	0	0	406	
OTHER								
Land Sales	0	0	0	0	2,100	0	2,100	
Environmental	0	0	0	0	0	0	0	
1-Time Other	0	0	0	0	0	0	0	
TOTAL ONE-TIME	956	956	956	161	2,160	0	5,191	
RECURRINGSAVES	1992	1993	1994	1995	1996	1997	Total	Beyond
----(\$K)-----	----	----	----	----	----	----	-----	-----
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
RPMA	1	4	7	10	12	13	48	13
BOS	19	200	328	488	635	768	2,438	768
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	175	1,575	3,500	4,900	6,125	6,650	22,925	6,650
CHAMPUS	0	0	0	0	4,833	4,833	9,666	0
MIL PERSONNEL								
Off Salary	322	967	1,611	2,255	2,578	2,578	10,310	2,578
Enl Salary	135	405	676	946	1,081	1,081	4,324	1,081
House Allow	226	644	867	905	880	889	4,411	889
OTHER								
Procurement	233	233	233	233	233	233	1,398	233
Mission	0	890	1,869	6,319	8,099	8,900	26,077	8,900
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	1,112	4,918	9,090	16,056	24,477	25,945	81,598	21,112
TOTAL SAVINGS	2,068	5,874	10,047	16,218	26,637	25,945	86,790	21,112

Personnel

MILCON
MILCON

TOTAL APPROPRIATIONS DETAIL REPORT (COBRA v5.01) - Page 3
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

Department : US Army
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ONE-TIME NET	1992	1993	1994	1995	1996	1997	Total	
-----(\$K)-----	----	----	----	----	----	----	-----	
CONSTRUCTION								
MILCON	15,475	5,713	5,713	6,508	0	0	33,410	
Fam Housing	3,527	1,411	1,411	1,411	0	0	7,759	
O&M								
Civ Retir/RIF	297	462	73	73	49	0	955	
Civ Moving	1,371	461	1,581	3,044	1,837	338	8,632	
Other	423	278	167	136	118	53	1,176	
MIL PERSONNEL								
Mil Moving	549	549	549	549	651	0	2,847	
OTHER								
HAP / RSE	163	163	163	163	140	0	792	
Environmental	945	945	945	0	0	0	2,835	
Info Manage	445	222	222	222	0	0	1,112	
1-Time Other	1,002	1,002	1,002	0	0	0	3,006	
Land	1,250	0	0	0	-2,100	0	-850	
TOTAL ONE-TIME	25,449	11,206	11,827	12,107	695	391	61,675	
RECURRING NET	1992	1993	1994	1995	1996	1997	Total	Beyond
-----(\$K)-----	----	----	----	----	----	----	-----	-----
FAM HOUSE OPS	39	94	125	164	180	180	782	180
O&M								
RPMA	-1	-4	17	20	17	16	64	16
BOS	68	-54	-110	-198	-273	-406	-973	-406
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	720	865	1,000	1,127	1,127	1,127	5,967	1,127
Civ Salary	-175	-1,575	-3,500	-4,900	-6,125	-6,650	-22,925	-6,650
CHAMPUS	0	0	0	0	-4,833	-4,833	-9,666	0
MIL PERSONNEL								
Mil Salary	-457	-1,372	-2,287	-3,201	-3,659	-3,659	-14,635	-3,659
House Allow	-205	-583	-765	-763	-664	-615	-3,595	-615
OTHER								
Procurement	-233	-233	-233	-233	-233	-233	-1,398	-233
Mission	0	-340	-714	-2,414	-3,094	-3,400	-9,962	-3,400
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	-244	-3,202	-6,467	-10,397	-17,556	-18,471	-56,340	-13,638
TOTAL NET COST	25,204	8,004	5,360	1,710	-16,861	-18,081	5,335	-13,638

TOTAL ONE-TIME COST REPORT (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

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 Option Package : ALFA
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(All values in Dollars)

Category -----	Cost -----	Sub-Total -----
Construction		
Military Construction	35,795,226 ✓	
Family Housing Construction	7,759,477 ✓	
Information Management Account	1,111,752 ✓	
Land Purchases	1,250,000 ✓	
Total - Construction		45,916,455
Personnel		
Civilian RIF	441,000 ✓	
Civilian Early Retirement	514,500 ✓	
Civilian New Hires	195,000 ✓	
Unemployment	117,936 ✓	
Total - Personnel		1,268,436
Overhead		
Administrative Support	734,887 ✓	
Mothball / Shutdown	128,000 ✓	
Total - Overhead		862,887
Moving		
Civilian Moving	4,427,587 ✓	
Civilian PPS	42,000 ✓	
Military Moving	3,553,819 ✓	
Freight	4,162,500 ✓	
One-Time Moving Costs	0	
Total - Moving		12,185,907
Other		
HAP / RSE	791,775 ✓	
Environmental Mitigation Costs	2,885,000	
Total - Other		6,632,775 ✓
Total One-Time Costs		66,866,461
One-Time Savings		
Military Construction Cost Avoidances	2,385,000	
Family Housing Cost Avoidances	0	
Military Moving	300,000	
Eliminated Military PCS	406,360	
Land Sales	2,100,000	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	
Total One-Time Savings		5,191,360
Total Net One-Time Costs		61,675,101

RPMA/BOS CHANGE REPORT (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

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Net Change(\$K)	1992	1993	1994	1995	1996	1997	Total	Beyond
RPMA Change	-1	-4	17	20	17	16	64	16
BOS Change	68	-54	-110	-198	-273	-406	-973	-406
Housing Change	39	94	125	164	180	180	782	180
TOTAL CHANGES	106	35	32	-14	-76	-209	-126	-209

PERSONNEL, SF, RPMA, AND BOS DELTAS (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

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Base	Personnel		SF		
	Change	%Change	Change	%Change	Chg/Per
Ft Deluxe	-1,008	-50%	-128,000	-1%	127
Camp Swampy	125	3%	71,938	1%	575
Ft Beach	125	3%	71,938	1%	575
Camp Dusty	125	3%	71,938	1%	575
Camp Frozen	125	3%	71,938	1%	575
Ft Buffalo	125	3%	71,938	1%	575
Base X	125	0%	0	0%	0

Base	RPMA(\$)			BOS(\$)		
	Change	%Change	Chg/Per	Change	%Change	Chg/Per
Ft Deluxe	-13,496	-1%	13	-767,700	-30%	762
Camp Swampy	4,510	0%	36	72,407	2%	579
Ft Beach	6,274	0%	50	72,407	2%	579
Camp Dusty	6,274	0%	50	72,407	2%	579
Camp Frozen	6,274	0%	50	72,407	2%	579
Ft Buffalo	6,274	0%	50	72,407	2%	579
Base X	0	0%	0	0	0%	0

Base	RPMABOS(\$)		
	Change	%Change	Chg/Per
Ft Deluxe	-781,196	-17%	775
Camp Swampy	76,917	1%	615
Ft Beach	78,682	1%	629
Camp Dusty	78,682	1%	629
Camp Frozen	78,682	1%	629
Ft Buffalo	78,682	1%	629
Base X	0	0%	0

TOTAL MILITARY CONSTRUCTION ASSETS (COBRA v5.01)
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All Costs in \$K

Base Name	Total MilCon	IMA Cost	Land Purch	Cost Avoid	Total Cost
Ft Deluxe	0	0	0	0	0
Camp Swampy	9,050	231	250	-2,385	7,146
Ft Beach	8,485	216	250	0	8,951
Camp Dusty	7,919	202	250	0	8,371
Camp Frozen	7,919	202	250	0	8,371
Ft Buffalo	10,182	260	250	0	10,691
Base X	0	0	0	0	0
Totals:	43,555	1,112	1,250	-2,385	43,531

TOTAL PERSONNEL IMPACT REPORT (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

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	Rate	1992	1993	1994	1995	1996	1997	Total
CIVILIAN POSITIONS REALIGNING OUT		60	0	30	30	30	0	150
Early Retirement*	8.00%	6	0	0	0	0	0	6
Regular Retirement*	10.00%	6	0	6	6	6	0	24
Civilian Turnover*	15.00%	12	0	6	6	6	0	30
Civs Not Moving (RIFs)**		6	0	0	0	0	0	6
Civilians Moving (the remainder)		30	0	18	18	18	0	84
Civilian Positions Available		30	0	12	12	12	0	66
CIVILIAN POSITIONS ELIMINATED		10	70	40	40	30	0	190
Early Retirement	8.00%	1	6	3	3	2	0	15
Regular Retirement	10.00%	1	7	4	4	3	0	19
Civilian Turnover	15.00%	2	11	6	6	5	0	30
Priority Placement#	44.00%	4	31	18	18	13	0	84
Civilians Available to Move		2	15	9	9	7	0	42
Civilians Moving		2	0	9	9	7	0	27
Civilian RIFs (the remainder)		0	15	0	0	0	0	15
CIVILIAN POSITIONS REALIGNING IN		60	0	30	30	30	0	150
Civilians Moving		32	0	27	27	25	0	111
New Civilians Hired		28	0	3	3	5	0	39
Other Civilian Additions		0	0	0	0	0	0	0
TOTAL CIVILIAN EARLY RETIRMENTS		7	6	3	3	2	0	21
TOTAL CIVILIAN RIFs		6	15	0	0	0	0	21
TOTAL CIVILIAN PRIORITY PLACEMENTS#		4	31	18	18	13	0	84
TOTAL CIVILIAN NEW HIRES		28	0	3	3	5	0	39

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

+ The Percentage of Civilians Not Moving (Voluntary RIFs) varies by base.

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

PERSONNEL SUMMARY REPORT (COBRA v5.01)
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PERSONNEL SUMMARY FOR: Ft Deluxe, CA

BASE POPULATION (FY 1992, Prior to BRAC Action):

Officers	Enlisted	Students	Civilians
500	500	0	1,000

PERSONNEL REALIGNMENTS:

To Base: Camp Swampy, LA

	1992	1993	1994	1995	1996	1997	Total
Officers	10	10	10	10	10	0	50
Enlisted	10	10	10	10	10	0	50
Students	0	0	0	0	0	0	0
Civilians	10	0	5	5	5	0	25
TOTAL	30	20	25	25	25	0	125

To Base: Ft Beach, CA

	1992	1993	1994	1995	1996	1997	Total
Officers	10	10	10	10	10	0	50
Enlisted	10	10	10	10	10	0	50
Students	0	0	0	0	0	0	0
Civilians	10	0	5	5	5	0	25
TOTAL	30	20	25	25	25	0	125

To Base: Camp Dusty, NV

	1992	1993	1994	1995	1996	1997	Total
Officers	10	10	10	10	10	0	50
Enlisted	10	10	10	10	10	0	50
Students	0	0	0	0	0	0	0
Civilians	10	0	5	5	5	0	25
TOTAL	30	20	25	25	25	0	125

To Base: Camp Frozen, NY

	1992	1993	1994	1995	1996	1997	Total
Officers	10	10	10	10	10	0	50
Enlisted	10	10	10	10	10	0	50
Students	0	0	0	0	0	0	0
Civilians	10	0	5	5	5	0	25
TOTAL	30	20	25	25	25	0	125

PERSONNEL SUMMARY REPORT (COBRA v5.01) - Page 2
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Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

To Base: Ft Buffalo, KS	1992	1993	1994	1995	1996	1997	Total
Officers	10	10	10	10	10	0	50
Enlisted	10	10	10	10	101442X0		50
Students	0	0	0	0	0	0	0
Civilians	10	0	5	5	5	0	25
TOTAL	30	20	25	25	25	0	125

To Base: Base X	1992	1993	1994	1995	1996	1997	Total
Officers	10	10	10	10	10	0	50
Enlisted	10	10	10	10	10	0	50
Students	0	0	0	0	0	0	0
Civilians	10	0	5	5	5	0	25
TOTAL	30	20	25	25	25	0	125

TOTAL PERSONNEL REALIGNMENTS (Out of Ft Deluxe, CA):	1992	1993	1994	1995	1996	1997	Total
Officers	60	60	60	60	60	0	300
Enlisted	60	60	60	60	60	0	300
Students	0	0	0	0	0	0	0
Civilians	60	0	30	30	30	0	150
TOTAL	180	120	150	150	150	0	750

SCENARIO POSITION CHANGES:	1992	1993	1994	1995	1996	1997	Total
Officers	-10	-10	-10	-10	0	0	-40
Enlisted	-10	-10	-10	-10	0	0	-40
Civilians	-10	-70	-40	-40	-30	0	-190
TOTAL	-30	-90	-60	-60	-30	0	-270

CARETAKER REQUIREMENTS:	1992	1993	1994	1995	1996	1997	Total
Military	3	1	1	1	0	0	6
Civilians	3	1	1	1	0	0	6
TOTAL			2	2	0	0	12

BASE POPULATION (After BRAC Action):	Officers	Enlisted	Students	Civilians
	160	166	0	666

PERSONNEL YEARLY PERCENTAGES (COBRA v5.01)
 Data As Of 15:37 03/19/1991, Report Created 14:52 09/21/1994

Department : US Army
 Option Package : ALFA
 Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
 Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

Base: Ft Deluxe, CA

Year	Moving In		MilCon TimPhas	Move Out/Elim		ShutDn TimPhas
	Total	Percent		Total	Percent	
1992	0	0.00%	33.33%	210	20.59%	20.59%
1993	0	0.00%	16.67%	210	20.59%	20.59%
1994	0	0.00%	16.67%	210	20.59%	20.59%
1995	0	0.00%	16.67%	210	20.59%	20.59%
1996	0	0.00%	16.67%	180	17.65%	17.65%
1997	0	0.00%	0.00%	0	0.00%	0.00%
TOTALS	0	0.00%	100.00%	1020	100.00%	100.00%

Base: Camp Swampy, LA

Year	Moving In		MilCon TimPhas	Move Out/Elim		ShutDn TimPhas
	Total	Percent		Total	Percent	
1992	30	24.00%	40.00%	0	0.00%	16.67%
1993	20	16.00%	20.00%	0	0.00%	16.67%
1994	25	20.00%	20.00%	0	0.00%	16.67%
1995	25	20.00%	20.00%	0	0.00%	16.67%
1996	25	20.00%	0.00%	0	0.00%	16.67%
1997	0	0.00%	0.00%	0	0.00%	16.67%
TOTALS	125	100.00%	100.00%	0	0.00%	100.00%

Base: Ft Beach, CA

Year	Moving In		MilCon TimPhas	Move Out/Elim		ShutDn TimPhas
	Total	Percent		Total	Percent	
1992	30	24.00%	40.00%	0	0.00%	16.67%
1993	20	16.00%	20.00%	0	0.00%	16.67%
1994	25	20.00%	20.00%	0	0.00%	16.67%
1995	25	20.00%	20.00%	0	0.00%	16.67%
1996	25	20.00%	0.00%	0	0.00%	16.67%
1997	0	0.00%	0.00%	0	0.00%	16.67%
TOTALS	125	100.00%	100.00%	0	0.00%	100.00%

SCENARIO ERROR REPORT (COBRA v5.01)

Data As Of 15:37 03/19/1991, Report Created 14:53 09/21/1994

Department : US Army
Option Package : ALFA
Scenario File : C:\COBRA\SOURCE\TESTDATA.CBR
Std Fctrs File : C:\COBRA\SOURCE\STDFCTRS.SFF

PERSONNEL MOVEMENT:

Ft Deluxe has 12 caretakers but is not being deactivated.
Ft Deluxe*416X58dofficers present after closing.
Ft Deluxe had 166 enlisted personnel present after closing.
Ft Deluxe had 666 civilians personnel present after closing.

OVERHEAD/RPMA:

Ft Deluxe still had 9,872 KSF of facilities after closing.

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APPENDIX C
SAMPLE ADDER REPORTS

APPENDIX C - SAMPLE ADDER REPORTS

This appendix contains a set of sample ADDER reports, generated from a group of fictional closure/realignment scenarios. All standard ADDER reports are included, except the Input Data Report (which is only a printout of the list of files making up the scenario).

ADDER REALIGNMENT SUMMARY (ADDER v5.01)
Report Created 15:24 09/21/1994

ADDER Data File: C:\COBRA\SOURCE\ZIP.OUT

Starting Year : 1994
Final Year : 1998
ROI Year : Immediate

NPV in 2013(\$K):-3,459,272
1-Time Cost(\$K): 1,360,583

	Constant Dollars		1996	1997	1998	1999	Total	Beyond
	1994	1995						
MilCon	-137,252	-461,803	229,286	-7,417	-33,700	-21,800	-432,686	0
Person	-144,579	-162,093	-372,157	-270,084	-165,157	-166,256	-1,280,327	-166,256
Overhd	21,070	14,961	-30,625	-70,514	-133,212	-134,713	-333,033	-134,819
Moving	21,025	55,154	61,379	57,807	4,976	675	201,017	0
Missio	-5,694	-8,204	-8,952	-12,352	-13,712	-14,324	-63,238	-14,324
Other	1,332	2,600	40,714	-8,632	-13,852	-10,132	12,029	-466
TOTAL	-244,097	-559,385	-80,355	-311,193	-354,658	-346,550	-1,896,238	-315,866

	1994	1995	1996	1997	1998	1999	TOTAL
POSITIONS ELIMINATED							
Officers	114	92	391	147	0	0	744
Enlisted	726	558	2,202	1,227	0	0	4,713
Civilian	20	842	986	371	60	0	2,279
TOTAL	860	1,492	3,579	1,745	60	0	7,736

	1994	1995	1996	1997	1998	1999	TOTAL
POSITIONS REALIGNED							
Officers	581	1,600	1,393	1,092	120	0	4,786
Enlisted	2,651	9,919	10,293	6,588	120	0	29,571
Students	0	40	0	1,800	0	0	1,840
Civilian	138	1,152	930	588	60	0	2,868
TOTAL	3,370	12,711	12,616	10,068	300	0	39,065

ADDER REALIGNMENT SUMMARY (ADDER v5.01) - Page 2
 Report Created 15:24 09/21/1994

ADDER Data File: C:\COBRA\SOURCE\ZIP.OUT

	Costs (\$K) Constant Dollars						Total	Beyond
	1994	1995	1996	1997	1998	1999		
MilCon	445,276	297,227	273,176	16,283	0	0	1,031,962	0
Person	3,164	18,001	31,759	33,722	33,221	33,190	153,057	33,190
Overhd	23,458	37,636	55,873	62,975	52,517	51,283	283,742	51,177
Moving	22,262	58,875	66,242	62,813	5,096	675	215,964	0
Missio	0	1,100	2,310	7,810	10,010	11,000	32,230	11,000
Other	6,120	5,220	41,180	876	479	0	53,875	0
TOTAL	500,280	418,059	470,539	184,479	101,324	96,148	1,770,830	95,367

	Savings (\$K) Constant Dollars						Total	Beyond
	1994	1995	1996	1997	1998	1999		
MilCon	582,528	759,030	43,890	23,700	33,700	21,800	1,464,648	0
Person	147,742	180,094	403,916	303,807	198,379	199,447	1,433,384	199,447
Overhd	2,388	22,674	86,497	133,490	185,729	185,996	616,775	185,996
Moving	1,237	3,721	4,863	5,006	120	0	14,946	0
Missio	5,694	9,304	11,262	20,162	23,722	25,324	95,468	25,324
Other	4,788	2,620	466	9,508	14,332	10,132	41,846	466
TOTAL	744,377	977,443	550,894	495,672	455,982	442,699	3,667,068	411,233

ADDER NET PRESENT VALUES REPORT (ADDER v5.01)
 Report Created 15:24 09/21/1994

Year	Cost(\$)	Adjusted Cost(\$)	NPV(\$)
1994	-244,096,833	-235,977,315	-235,977,315
1995	-559,384,652	-505,399,584	-741,376,899
1996	-80,355,245	-67,850,771	-809,227,670
1997	-311,192,953	-245,576,345	-1,054,804,015
1998	-354,657,919	-261,566,826	-1,316,370,841
1999	-346,550,268	-238,866,619	-1,555,237,459
2000	-315,865,774	-203,473,575	-1,758,711,034
2001	-315,865,774	-190,162,219	-1,948,873,253
2002	-315,865,774	-177,721,700	-2,126,594,954
2003	-315,865,774	-166,095,047	-2,292,690,001
2004	-315,865,774	-155,229,016	-2,447,919,017
2005	-315,865,774	-145,073,847	-2,592,992,863
2006	-315,865,774	-135,583,034	-2,728,575,897
2007	-315,865,774	-126,713,116	-2,855,289,014
2008	-315,865,774	-118,423,473	-2,973,712,487
2009	-315,865,774	-110,676,143	-3,084,388,630
2010	-315,865,774	-103,435,648	-3,187,824,277
2011	-315,865,774	-96,668,829	-3,284,493,107
2012	-315,865,774	-90,344,700	-3,374,837,807
2013	-315,865,774	-84,434,299	-3,459,272,107

ADDER APPROPRIATIONS DETAIL REPORT (ADDER v5.01)
 Report Created 15:24 09/21/1994

ONE-TIME COSTS -----(\$K)-----	1994	1995	1996	1997	1998	1999	Total
CONSTRUCTION							
MILCON	368,139	246,997	199,585	13,016	0	0	827,737
Fam Housing	73,748	49,785	73,146	2,822	0	0	199,501
Land Purch	2,500	0	0	0	0	0	2,500
O&M							
CIV SALARY							
Civ RIF	252	1,899	1,462	813	0	0	4,426
Civ Retire	343	448	321	264	98	0	1,474
CIV MOVING							
Per Diem	327	2,273	2,616	1,425	238	0	6,879
POV Miles	15	10	20	31	11	0	88
Home Purch	622	3,813	4,476	3,274	436	0	12,621
HHG	1,088	1,864	2,818	2,506	810	0	9,086
Misc	41	211	254	208	30	0	744
House Hunt	285	1,345	1,614	949	210	0	4,403
PPS	4	1,297	1,642	1,057	13	0	4,013
RITA	361	2,143	2,514	1,649	259	0	6,926
FREIGHT							
Packing	188	621	909	523	7	0	2,250
Freight	5,411	9,107	11,060	15,645	791	284	42,300
Vehicles	3,581	711	513	1,735	632	284	7,458
Driving	4	130	135	629	237	107	1,242
Unemployment	67	3,022	3,527	551	0	0	7,166
OTHER							
Admin/Plan	12,791	9,594	5,421	4,066	1,295	106	33,273
Shutdown	492	4,568	4,078	2,868	45	0	12,052
New Hire	280	0	30	30	50	0	390
1-Time Move	1,014	14,456	13,010	7,178	0	0	35,658
MIL PERSONNEL							
MIL MOVING							
Per Diem	1,515	903	1,178	987	146	0	4,729
POV Miles	436	739	447	650	56	0	2,329
HHG	6,227	15,886	18,648	19,850	1,077	0	61,688
Misc	1,142	3,364	4,385	4,513	143	0	13,548
OTHER							
HAP / RSE	326	326	326	326	279	0	1,583
Environmental	3,790	2,890	1,890	0	0	0	8,570
Info Manage	889	445	445	445	0	0	2,223
1-Time Other	2,004	2,004	38,964	550	200	0	43,722
TOTAL ONE-TIME	487,885	380,851	395,437	88,564	7,064	781	1,360,583

ADDER APPROPRIATIONS DETAIL REPORT (ADDER v5.01) - Page 2
 Report Created 15:24 09/21/1994

RECURRINGCOSTS -----(\$K)-----	1994	1995	1996	1997	1998	1999	Total	Beyond
FAM HOUSE OPS	1,696	5,089	9,606	12,483	12,514	12,514	53,902	12,514
O&M								
RPMA	0	0	11,541	11,553	11,553	11,553	46,201	11,553
BOS	5,544	15,162	21,732	28,256	23,360	23,360	117,414	23,360
Unique Operat	0	0	0	0	0	0	0	0
CHAMPUS	0	0	0	0	0	0	0	0
Caretaker	1,440	1,730	1,999	2,255	2,255	2,255	11,935	2,255
MIL PERSONNEL								
House Allow	2,221	12,633	26,419	32,064	33,073	33,190	139,601	33,190
OTHER								
Mission	0	1,100	2,310	7,810	10,010	11,000	32,230	11,000
Misc Recur	1,494	1,494	1,494	1,494	1,494	1,494	8,964	1,494
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	12,395	37,207	75,102	95,915	94,260	95,367	410,247	95,367
TOTAL COST	500,280	418,059	470,539	184,479	101,324	96,148	1,770,830	95,367
ONE-TIME SAVES -----(\$K)-----	1994	1995	1996	1997	1998	1999	Total	
CONSTRUCTION								
MILCON	500,730	629,030	43,890	23,700	33,700	21,800	1,252,850	
Fam Housing	81,798	130,000	0	0	0	0	211,798	
O&M								
1-Time Move	0	0	0	0	0	0	0	
MIL PERSONNEL								
Mil Moving	1,237	3,721	4,863	5,006	120	0	14,946	
Elim PCS	856	592	1,959	1,318	0	0	4,726	
OTHER								
Land Sales	0	0	0	0	4,200	0	4,200	
Environmental	0	0	0	0	0	0	0	
1-Time Other	0	0	0	0	0	0	0	
TOTAL ONE-TIME	584,620	763,343	50,712	30,024	38,020	21,800	1,488,520	
RECURRINGSAVES -----(\$K)-----	1994	1995	1996	1997	1998	1999	Total	Beyond
FAM HOUSE OPS	1,034	8,578	16,531	17,995	18,017	18,017	80,172	18,017
O&M								
RPMA	841	10,408	42,471	58,996	95,218	95,220	303,154	95,220
BOS	513	3,688	27,495	56,498	72,495	72,759	233,449	72,759
Unique Operat	0	0	0	0	0	0	0	0
Civ Salary	350	11,217	33,544	53,443	62,580	63,630	224,765	63,630
CHAMPUS	0	0	0	0	9,666	9,666	19,332	0
MIL PERSONNEL								
Off Salary	2,667	7,134	15,808	26,119	29,556	29,556	110,842	29,556
Enl Salary	6,581	17,264	37,534	65,667	77,632	77,632	282,310	77,632
House Allow	137,288	143,887	315,071	157,260	28,609	28,627	810,742	28,627
OTHER								
Procurement	4,788	2,620	466	9,508	466	466	18,314	466
Mission	5,694	9,304	11,262	20,162	23,722	25,324	95,468	25,324
Misc Recur	0	0	0	0	0	0	0	0
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	159,756	214,100	500,182	465,648	417,962	420,899	2,178,548	411,233
TOTAL SAVINGS	744,377	977,443	550,894	495,672	455,982	442,699	3,667,068	411,233

ADDER APPROPRIATIONS DETAIL REPORT (ADDER v5.01) - Page 3
 Report Created 15:24 09/21/1994

ONE-TIME NET -----(\$K)-----	1994	1995	1996	1997	1998	1999	Total	
CONSTRUCTION								
MILCON	-132,591	-382,033	155,695	-10,683	-33,700	-21,800	-425,112	
Fam Housing	-8,050	-80,215	73,146	2,822	0	0	-12,297	
O&M								
Civ Retir/RIF	595	2,346	1,782	1,078	98	0	5,900	
Civ Moving	11,928	23,526	28,573	29,634	3,675	675	98,011	
Other	14,645	31,639	26,067	14,692	1,390	106	88,540	
MIL PERSONNEL								
Mil Moving	7,227	16,579	17,837	19,677	1,301	0	62,622	
OTHER								
HAP / RSE	326	326	326	326	279	0	1,583	
Environmental	3,790	2,890	1,890	0	0	0	8,570	
Info Manage	889	445	445	445	0	0	2,223	
1-Time Other	2,004	2,004	38,964	550	200	0	43,722	
Land	2,500	0	0	0	-4,200	0	-1,700	
TOTAL ONE-TIME	-96,736	-382,492	344,725	58,540	-30,956	-21,018	-127,937	
RECURRING NET -----(\$K)-----	1994	1995	1996	1997	1998	1999	Total	Beyond
FAM HOUSE OPS	662	-3,489	-6,925	-5,512	-5,503	-5,503	-26,270	-5,503
O&M								
RPMA	-841	-10,408	-30,929	-47,443	-83,664	-83,667	-256,953	-83,667
BOS	5,031	11,474	-5,764	-28,242	-49,134	-49,399	-116,035	-49,399
Unique Operat	0	0	0	0	0	0	0	0
Caretaker	1,440	1,730	1,999	2,255	2,255	2,255	11,935	2,255
Civ Salary	-350	-11,217	-33,544	-53,443	-62,580	-63,630	-224,765	-63,630
CHAMPUS	0	0	0	0	-9,666	-9,666	-19,332	0
MIL PERSONNEL								
Mil Salary	-9,248	-24,398	-53,342	-91,786	-107,189	-107,189	-393,151	-107,189
House Allow	-135,067	-131,254	-288,652	-125,196	4,464	4,563	-671,142	4,563
OTHER								
Procurement	-4,788	-2,620	-466	-9,508	-466	-466	-18,314	-466
Mission	-5,694	-8,204	-8,952	-12,352	-13,712	-14,324	-63,238	-14,324
Misc Recur	1,494	1,494	1,494	1,494	1,494	1,494	8,964	1,494
Unique Other	0	0	0	0	0	0	0	0
TOTAL RECUR	-147,361	-176,893	-425,080	-369,733	-323,702	-325,532	-1,768,301	-315,866
TOTAL NET COST	-244,097	-559,385	-80,355	-311,193	-354,658	-346,550	-1,896,238	-315,866

ADDER ONE-TIME COST REPORT (ADDER v5.01)
Report Created 15:24 09/21/1994

(All values in Dollars)

Category	Cost	Sub-Total
-----	----	-----
Construction		
Military Construction	827,737,571	
Family Housing Construction	199,501,008	
Information Management Account	2,223,502	
Land Purchases	2,500,000	
Total - Construction		1,031,962,081
Personnel		
Civilian RIF	4,425,823	
Civilian Early Retirement	1,473,932	
Civilian New Hires	390,000	
Unemployment	7,166,560	
Total - Personnel		13,456,315
Overhead		
Administrative Support	33,273,077	
Mothball / Shutdown	12,052,120	
Total - Overhead		45,325,197
Moving		
Civilian Moving	40,748,968	
Civilian PPS	4,013,076	
Military Moving	82,294,116	
Freight	53,249,488	
One-Time Moving Costs	35,658,000	
Total - Moving		215,963,648
Other		
HAP / RSE	1,583,554	
Environmental Mitigation Costs	8,570,000	
One-Time Unique Costs	43,722,000	
Total - Other		53,875,554

Total One-Time Costs		1,360,582,795

One-Time Savings		
Military Construction Cost Avoidances	1,252,850,000	
Family Housing Cost Avoidances	211,798,000	
Military Moving	14,946,244	
Eliminated Military PCS	4,725,738	
Land Sales	4,200,000	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	

Total One-Time Savings		1,488,519,982

Total Net One-Time Costs		-127,937,187

ADDER ERROR REPORT (ADDER v5.01)
Report Created 15:24 09/21/1994

ADDER Data File: C:\COBRA\SOURCE\ZIP.OUT

COBRA Scenario File(s) used more than once:
C:\COBRA\SOURCE\TESTDATA.CBR

ADDER ECONOMIC IMPACT REPORT (ADDER v5.01) - Page 2
Report Created 09:08 09/30/1994

Installation: Camp Rocky

State: OH Service: ARMY Year: 1994

Current Base Pers- Off: 200, Enl: 200, Civ: 200, Stu: 100

Action: REALIGNED

	1994	1995	1996	1997	1998	1999	2000	2001
Mil Reloc(OUT)	0	0	50	50	100	0	0	0
Mil Dis (OUT)	0	0	0	0	0	0	0	0
Civ Reloc(OUT)	0	0	20	20	40	0	0	0
Civ Dis (OUT)	0	0	0	0	0	0	0	0
Stu Reloc(OUT)	0	0	10	20	20	0	0	0
Mil Reloc (IN)	50	50	50	50	0	0	0	0
Civ Reloc (IN)	20	20	20	20	0	0	0	0
Stu Reloc (IN)	5	10	15	20	0	0	0	0

APPENDIX D
FILES DIRECTORY

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APPENDIX D - FILES DIRECTORY

This Appendix lists the File Name and the Title/Description of files provided with COBRA V5.01 (Help files and Reports files). They are listed here to assist the user who may not recognize the File Name as it appears on the COBRA screen or window. This information is also available to the user through Context-Sensitive Help (see Section 3.3.3). Should the user need similar information on user-defined files (Data files and Standard Factors files) it is available through the on-screen Files Directory (see Section 3.4.3)

HELP FILES

<u>File Name</u>	<u>Title/Description</u>
BACKGRND.HLP	Background, Capabilities, & Operations
CONTENTS.HLP	List of Help & Reports files
DATABASE.HLP	Description of DataBase Menu options
FILE.HLP	Description of File Menu options
HELP.HLP	Description of Help Menu options
INPUT.HLP	Description of Input Data Menu options
OUTPUT.HLP	Description of Output Reports (see list below)
REPORTS.HLP	Description of Reports Menu options
SCREEN1.HLP	Description of General Scenario Data Entry
SCREEN2.HLP	Description of Distance Table Data Entry
SCREEN3.HLP	Description of Movement Table Data Entry
SCREEN4.HLP	Description of Static Base Data Entry
SCREEN5.HLP	Description of Dynamic Base Data Entry
SCREEN6.HLP	Description of Personnel Base Data Entry
SCREEN7.HLP	Description of Military Construction Data Entry
SCREEN8.HLP	Description of Unique Activity Data Entry
SCREEN9.HLP	Description of Explanatory Notes Data Entry
STDFCTR1.HLP	Description of Personnel Standard Factors
STDFCTR2.HLP	Description of Facility Standard Factors
STDFCTR3.HLP	Description of Transportation Standard Factors
STDFCTR4.HLP	Description of Construction Standard Factors
WINDOWS.HLP	Description of Windows Menu options

COBRA REPORT FILES

<u>File Name</u>	<u>Title/Description</u>
1TIMCOST.RPT	One-Time Costs Report
APPDET.RPT	Appropriations Detail Report
COBSUM.RPT	Realignment Summary Report
DELTAS.RPT	BOS, Land, SF, and RPMA Deltas Report
ERROR.RPT	Scenario Error Report
INPUTDAT.RPT	Input Data Report
MILCONAS.RPT	Military Construction Assets Report
NPV.RPT	Net Present Values Report
PERSSUM.RPT	Personnel Summary Report
PERSIMP.RPT	Personnel Impact Report
PERSPERC.RPT	Personnel Yearly Percentages Report
RPMABOS.RPT	RPMA/BOS Change Report

ADDER REPORT FILES

<u>File Name</u>	<u>Title/Description</u>
1TIMCOST.ART	One-Time Costs Report
ADRSUM.ART	Realignment Summary Report
APPDET.ART	Appropriations Detail Report
EIR.ART	Economic Impact Report
ERROR.ART	Scenario Error Report
INPUTDAT.ART	Input Data Report
NPV.ART	Net Present Values Report

EXTENSIONS USED BY COBRA/ADDER

<u>Extension</u>	<u>Type of File</u>
*.ART	ADDER Report
*.BAK	COBRA Scenario/Standard Factors Backup File
*.CBR	COBRA Scenario Data File
*.CSH	COBRA/ADDER Context Sensitive Help File
*.DBS	COBRA Base Database
*.DDS	COBRA Distance Database
*.EIR	Economic Impact Database Report
*.GRP	COBRA/ADDER Group File
*.HLP	COBRA/ADDER Help Text File
*.OUT	COBRA Output/ADDER Input File
*.RPT	COBRA Report
*.SFF	COBRA Standard Factors File