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pril 13, 1995

es including cover sheet 2

Frank:

~~These~~ This is part of Ann's request (based on April Depot meeting)

~~Ea~~ This is our copy to file. ~~Thos~~

Steve

ANN extra copy

Ann Reese
Base Closure Commission

703-696-0504 ext 176

Fax Phone 695-9811

Fax Phone 703-696-0550

CC: Col Wayne Mayfield

REMARKS: ☐ Urgent ☒ For your review ☒ Reply ASAP ☐ Please Comment

Kevin,

We have reviewed your list of data requests resulting from the 11 April meeting an have the following revisions to your list.

We need three sets of COBRAs (hardcopies and electronic):

1) COBRAs for each ALC installation, Adder COBRA and all worksheets and spreadsheets which relate to the Air Force's revised BRAC submission (which equates to $127 M one time cost, $1,055 M NPV and $91 M steady state savings)

2) COBRAs for each ALC installation, Adder COBRA and all worksheets and spreadsheets which relate to the Air Force's revised baseline for all infrastructure reductions (which equates to $234 M one time costs, $975 M NPV and $92 M steady state savings)

3) COBRAs for each ALC installation, Adder COBRA and all worksheets and spreadsheets which relate to the Air Force's revised baseline for all infrastructure reductions, assuming that DLA reuses facilities (which equates to $217 M one time costs, $975 M NPV and $91 M steady state savings)

We also need the electronic form of the following COBRAs which we already have in hard copy:

1) adder KEL-0120.out

2) KEL-0120.CBR

3) MCC-0120.CBR

We also need all back-up worksheets and spread sheets for DM-1 and DM-2 COBRAs.

Finally, we need the workload shifts by commodity for the revised Air Force base closure recommendation described in hours. (We have your chart that describes the shift in personnel equivalents)

Ann Reese

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE

15 APR 1995

MEMORANDUM FOR BASE CLOSURE COMMISSION (Mr Francis A. Cirillo, Jr.)

FROM: HQ USAF/RT

SUBJECT: Additional Air Logistic Center COBRA Runs

Attached you will find information relating to the depot refinement briefed to you on April 11, 1995. We have provided briefing slides, answers to previously posed questions, and a description of the transportation model as requested. In addition, you will find various COBRA runs, including an overall run and individual installation runs for the following three scenarios:

- Refined numbers for the BRAC recommendation, including improved consolidations (1832 DMBA reductions, $127 M one-time costs)
- Refined numbers for the BRAC recommendation, and assuming DLA does not need space (1713 DMBA reductions, $234 M one-time costs)
- Refined numbers for the BRAC recommendation, and assuming DLA does need space (1713 DMBA reductions, $217 M one-time costs)

I trust this responds to your request. Col Wayne Mayfield, 695-6766, is my point of contact.

JAY D. BLUME, Jr.
Major General, USAF
Special Assistant to the Chief of Staff for
Realignment and Transition

BRAC Implementation (Depot)

TRC Commodity And Process Consolidation Refinement Process Overview

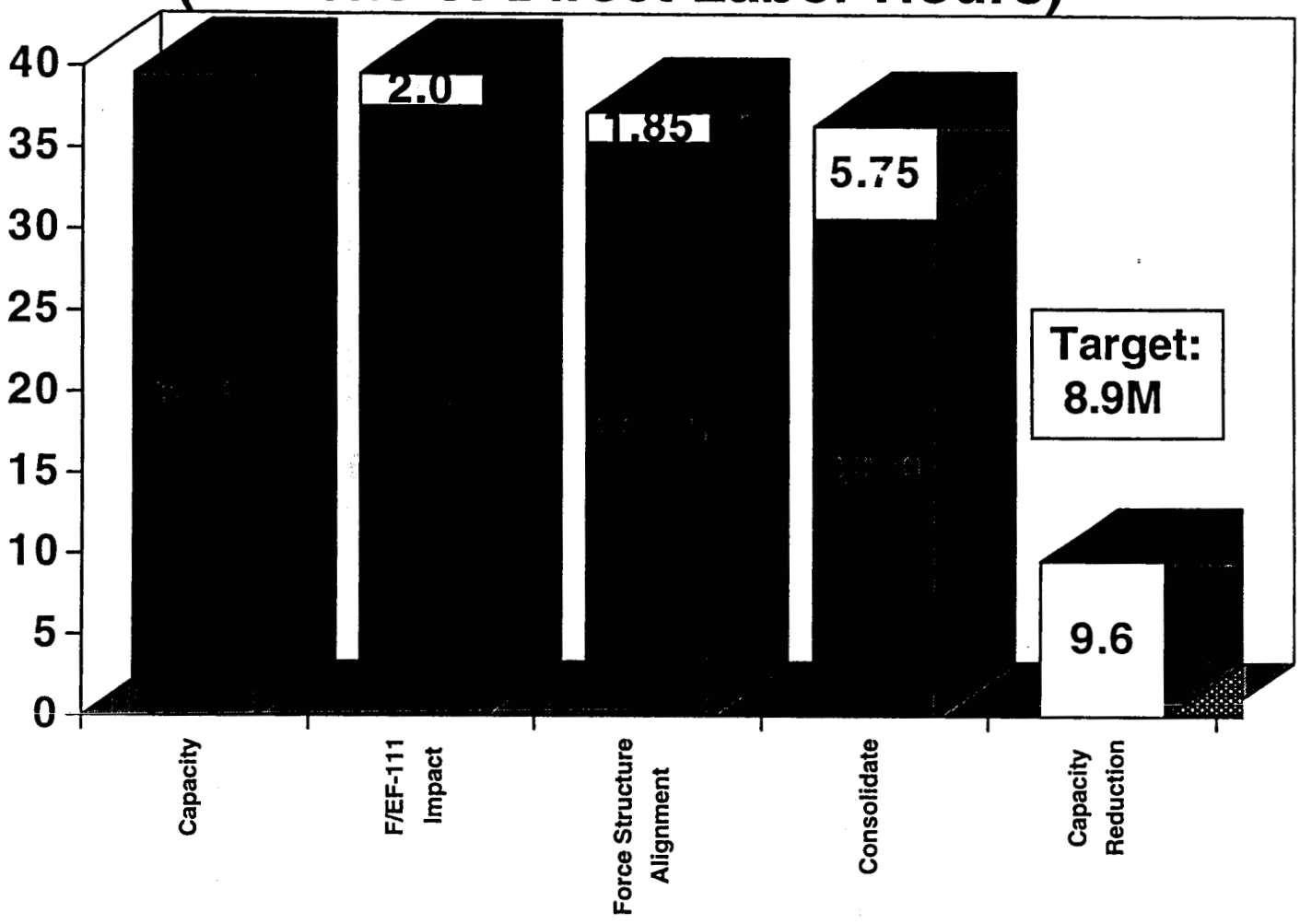
EVENTS	FEB	MAR	APR
1. SECAF/CSAF MEETING-AFMC SENIOR LEADERSHIP	27		
2. AFMC FINALIZED TRC STUDIES - RELIGNMENT AND DOWNSIZING - TRC AND PROCESS REVIEW	28	30	
3. BRAC TRC SITE SURVEYS		13 29	
4. AFMC SENIOR BUSINESS PLANNERS INTEGRATION(TRC STUDIES/SITE SURVEY)			3 7
5. FINAL AFMC RECOMMENDATION COMPLETE - AFMC/CC APPROVAL - AF BCEG APPROVAL - BRIEF SECAF			7 7 8 10
6. BRIEF BRAC COMMISSION STAFF			10

Tasking

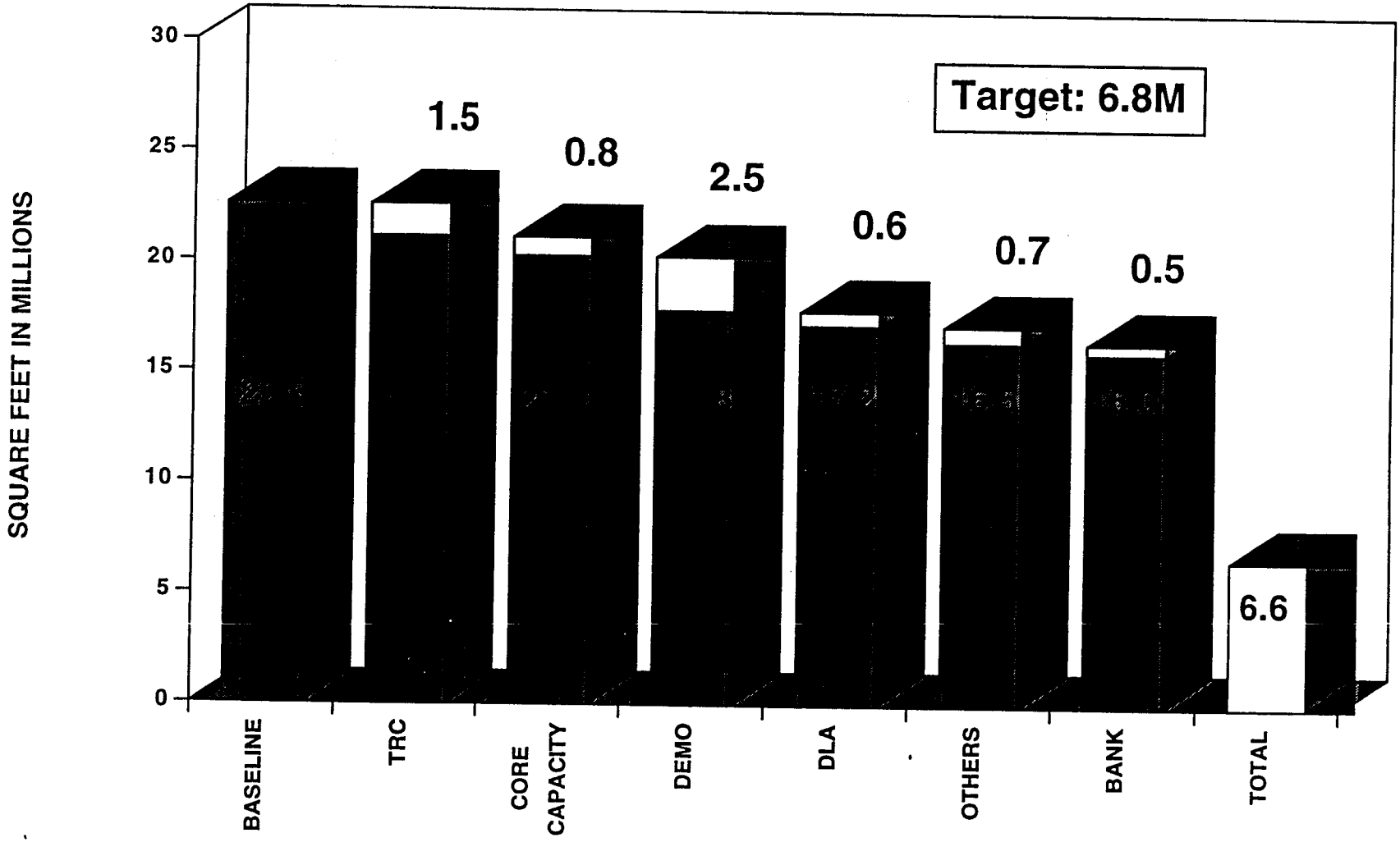
- Identify how AFMC will achieve BRAC recommendations
  - Reduce capacity by 8.9M DPAH
  - Reduce depot infrastructure by 6.8M sq ft
    - Identify 1.9M sq ft space for DLA
  - Eliminate 1706 DMBA manpower authorizations

Implementation (Capacity)

(Millions of Direct Labor Hours)



Implementation
(Square Footage)



Personnel Savings - BRAC Implementation (1713)

	OC	OO	SA	SM	WR	
Composite/Plastic	-26	-26	-12	+135	-106	
Hyd/Pneu	-3	-10	-4	-59	-3	
Tubing (Metal Mfg)	-5	-4	-1	-2	+1	
ATE Software (Avionics)	-88	-26	-46	-21	+73	
Sheetmetal Repair / Mfg	-170	+353	-38	-40	-192	
Machine Mfg (Metal Mfg)	+16	-63	-31	-50	+77	
Foundry		-2	+7	-7	-2	
Instrument/Display	-184	-101		+242	-43	
Abn Electronics	-39	-42		-108	-15	
Electronic Mfg (PWB)		-29		-23	+38	
Electro/Mech Support Equip				-11	-3	
Injection Molding		-3		+2		
IPE Software (Engines)	-34		+6			
Plating	-7	+15	-21	-28	-6	
Engine Related	*-50*		*-112*			
Realignment Totals	-590	+62	-252	+30	-181	
Downsizing Totals	-185	-127	-183	-148	-139	
						Grand Totals
BRAC Implementation Totals	-775	-65	-435	-118	-320	-1713
Initial BRAC Planning Totals	-1058	+237	-433	+14	-466	-1706

Improved Realignments

- Electronic Manufacturing - Printed Wire Boards (OO-ALC vs WR-ALC)
- Sheet Metal Repair/Manufacturing (Leave with A/C vs OO-ALC)
- Instruments (OC-ALC and WR-ALC vs SM-ALC)
- Plating (Consolidate 11 processes at single sites/Downsize 15 in place vs SM-ALC to OO-ALC)

Electronic Manufacturing (Printed Wire Boards)

- BRAC: Consolidate at WR-ALC
  - Collocation with avionics

- Change: Consolidate at OO-ALC
  - Collocation with avionics not necessary
  - OO most mature multi-layer capability
  - Achieve additional 56% capacity reduction

Comparison of BRAC Recommendation and Option			
	Infrastructure Reductions (Sq Ft)	Capacity Reductions (DLH)	Personnel Reductions
BRAC Implmt	25,000	132,124	14
Change	26,300	207,044	21
Improvement	1,300	74,920	7

Sheet Metal Repair/Manufacturing

- BRAC: Consolidate at OO-ALC
  - Efficiencies
  - Synergy
  - Minimal residual

- Change: Downsize
  - Integral to commodity production
  - Eliminates need to duplicate one of a kind fixtures

Comparison of BRAC Recommendation and Option			
	Infrastructure Reductions (Sq Ft)	Capacity Reductions (DLH)	Personnel Reductions
BRAC Implmt	87,800	143,809	87
Change	124,800	170,462	157
Improvement	37,000	26,653	70

Instruments

- BRAC: Consolidate at SM-ALC (except gyros/compasses)
  - Utilized TRC for instruments
  - Utilizes instrument facility

- Change: Consolidate OO at OC and SM at WR
  - Lowest cost option from TRC study

Comparison of BRAC Recommendation and Option			
	Infrastructure Reductions (Sq Ft)	Capacity Reductions (DLH)	Personnel Reductions
BRAC Implmt	127,000	265,160	86
Change	94,600	202,940	129
Improvement	(32,400)	(62,220)	43

Plating

- BRAC: Downsize; move SM-ALC to OO-ALC
  - Eliminates one full plating shop
  - Minimizes transportation expenses (if transferring) by placing SM workload at nearest ALC
- Change: Consolidate 11 and downsize 15 processes
  - BRAC recommendation incompatible with other BRAC recommendations
    - Composites/plastics require plating process support (chemical milling)
    - Hydraulics requires plating process support
  - Reduces requirement to route high volume assets

Comparison of BRAC Recommendation and Option			
	Infrastructure Reductions (Sq Ft)	Capacity Reductions (DLH)	Personnel Reductions
BRAC Implmt	46,000	41,400	47
Change	26,050	57,870	46
Improvement	(19,950)	16,470	(1)

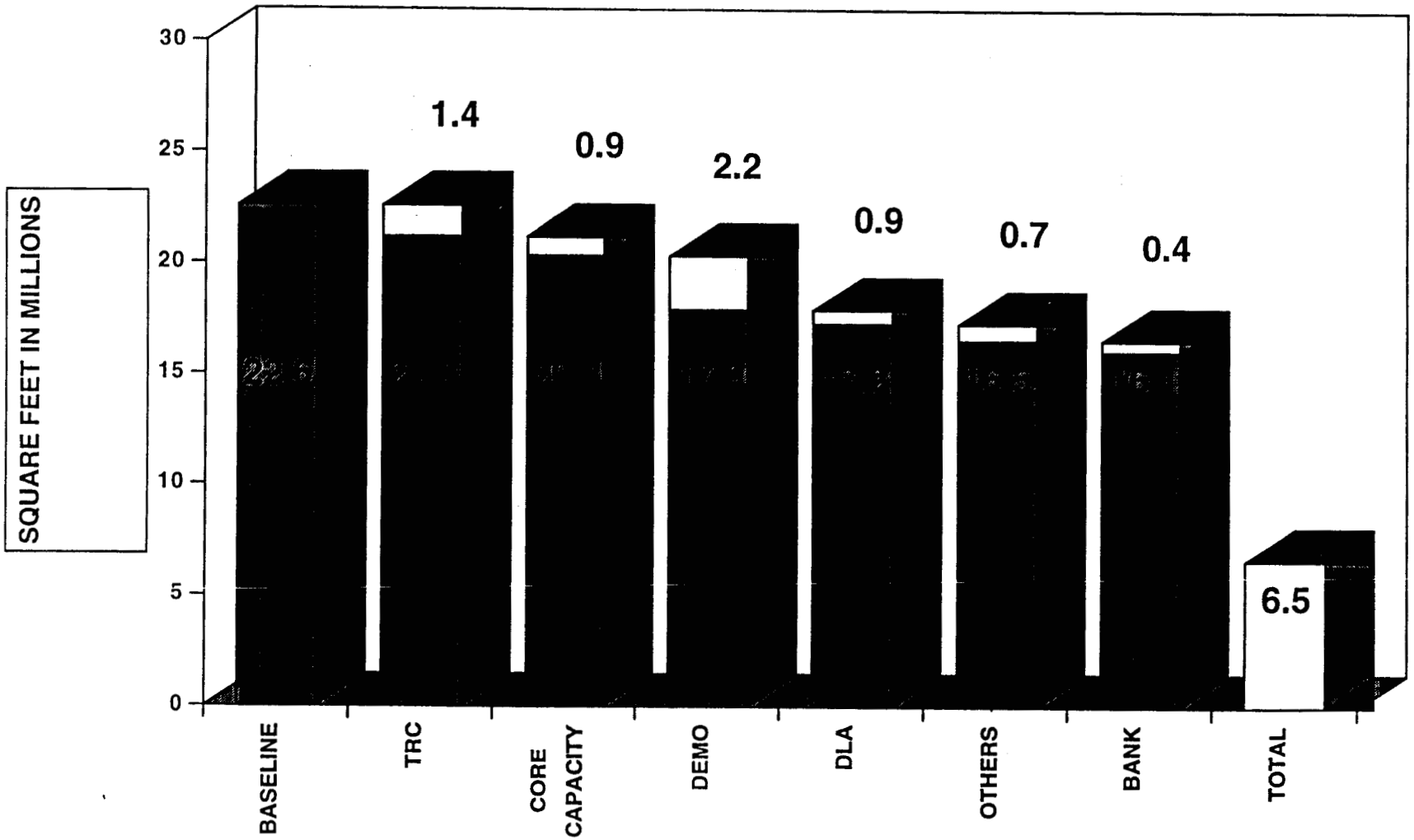
Recap

	Infrastructure Reductions (Sq Ft)	Capacity Reductions (DLH)	Personnel Reductions
Elect Mfg (PWB)	1,300	74,920	7
Sheet Metal (Rpr/Mfg)	37,000	26,653	70
Instruments	(32,400)	(62,220)	43
Plating	(19,950)	16,470	(1)
Net	(14,050)	55,823	119

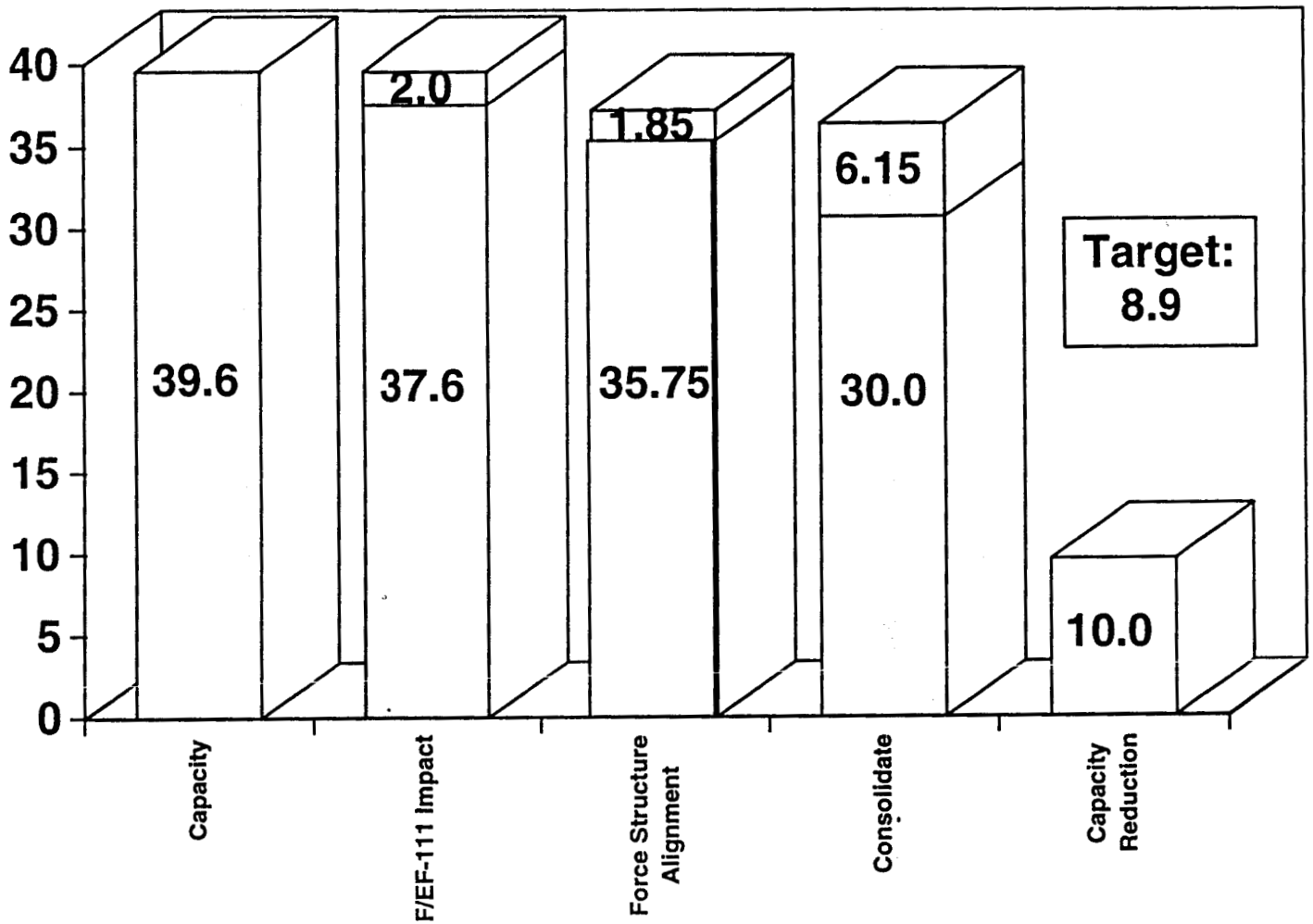
Personnel Savings - Improved BRAC Implementation (1832)

	OC	OO	SA	SM	WR	
Composites/Plastics	-26	-26	-12	+135	-106	
Hyd/Pneu	-3	-10	-4	-59	-3	
Tubing (Metal Mfg)	-5	-4	-1	-2	+1	
ATE Software (Avionics)	-88	-26	-46	-21	+73	
Machine (Metal Mfg)	+16	-63	-31	-50	+77	
Foundry		-2	+7	-7	-2	
Instrument/Display	**+64**	**-101**		**-221**	**+129**	
Abn Electronics	-39	-42		-108	-15	
Electronic Mfg (PWB)		**+29**		**-9**	**-41**	
Electro/Mech SE				-11	-3	
Injection Molding		-3		+2		
IPE Software (Engines)	-34		+6			
Plating	**-5**	**-10**	**-20**	**-5**	**-6**	
Engine Related	***-50***		***-112***			
Realignment Subtotals	**-170**	**-258**	**-213**	**-356**	**+104**	
Sheetmetal Repair / Mfg	**-43**	**-10**	**-16**	**-17**	**-71**	
Downsizing Subtotals	**-185**	**-127**	**-183**	**-148**	**-139**	
						Grand Totals
Revised Totals	**-398**	**-395**	**-412**	**-521**	**-106**	**-1832**
BRAC Implementation Totals	**-775**	**-65**	**-435**	**-118**	**-320**	**-1713**

Infrastructure Change (SQ Footage)



Capacity Change
(Millions of Direct Labor Hours)



DEPOT DOWNSIZING SUMMARY (BRAC AND NON-BRAC ACTIONS)

	ENDSTRENGTH REDUCTION	SQUARE FOOT REDUCTION (MILLIONS)	CAPACITY REDUCTION (MILLIONS OF HOURS)
ALL ACTIONS (INCLUDES 438 BOS SAVINGS)	4988	6.8M	8.9M
BRAC '95 (ORIGINAL BRAC PLANNING)	1706	2.0M	2.7M
BRAC '95 (REFINED BRAC IMPLEMENTATION)	1713	1.5M	3.75M
BRAC '95 (IMPROVED BRAC IMPLEMENTATION)	1832	1.4M	4.15M

078-05b What is the basis of support for $24 million in demolition costs

078-05d What is the basis for the $44 million cost for renovation of shop space?

079-10 Provide support data on 6.8 million square feet of space to be effected by downsizing.

080-01c Provide list of buildings and square footage to be disposed of or mothballed or used by others (indicate category)

080-07a Provide total square footage by depot in years 1991, 1993, and 1995

080-07b Provide total square footage to be mothballed by depot, by ALC, by installation

080-07c Provide total square footage to be demolished by depot, by ALC, by installation

080-07e Provide remaining useable square footage by depot, by ALC, by installation after implementation.

080-07f Identify funding currently programmed to be mothballed and demolished by depot, by ALC, by installation.

080-07g Identify funding currently programmed to be mothballed and demolished by depot, by ALC, by installation.

Question 078-05b:

Demolition cost of $22.00/SF (includes asbestos removal and disposal) provided by HQ USAF/CEP for use in figuring the cost of demolition for COBRA runs.

1.101MSF X $22/SF = $24.2M

Question 078-05d:

Figure based on a estimate that 75% of the 1.962 million square feet of shop space to be renovated could be accomplished at a cost of $10.00/SF for shop rearrangement while the remaining 25% would need more extensive work at $60.00/SF (approximently 60% of new construction for depot space).

1.962MSF X .75 = 1.47MSF X $10/SF = $14.7M
1.962MSF X .25 = .49MSF X $60/SF = $29.4M
$44.1M

Question 079-10:

Spreadsheet reflecting the 6.5 million square feet of downsizing is attached. The number was validated by site surveys conducted by during the past three weeks.

REVISED DEPOT DOWNSIZING

	OC	SA	OO	WR	SM	TOTAL
TRC	304	425	265	149	184	1,327
CORE CAPACITY	75	31	235	0	528	869
DEMO	666	499	553	225	302	2,245
DLA	40	505	174	45	179	943
OTHERS	45	232	0	152	315	744
BANK	119	8	47	122	73	369
TOTAL	1,249	1,700	1,274	693	1,581	6,497

Question 080-01c:

Attached is a spreadsheet for each of the five Air Logistic Centers reflecting demolition, mothballing and use by others.

REVISED

ALC DOWNSIZING
SM-ALC
BUILDING SUMMARY

TRC

BLDG#	SF	COMMENT
251	18,000	Avionics
251	3,000	ATE Software
640	4,000	Elect Mfg
243D	18,000	Foundry
243BC	34,000	Mach Mfg
243B	4,500	Sht Metal Mfg
243D	9,150	Sht Metal Rpr
243DEF	23,000	Composites
242/475	9,000	Elec/Mech SE
241	5,000	Hydraulics
Various	10,000	Mach Rpr
Various	9,000	Insp
Various	13,000	Software OFP
Various	1,000	Inj Mold
Various	11,000	PSL
Various	2,000	Harness/Cable
Various	5,000	Hyd/Pnue
362A	1,350	Tubing
243G	4,000	Plating
TOTAL	184,000	

TO CORE CAPACITY

BLDG#	SF	COMMENT
360	73,094	DLA
362	74,000	DLA
365	41,460	DLA
721	21,600	DLA
722	21,600	DLA
772	53,160	DLA
765	3,600	DLA
767	4320	DLA
378	2610	DLA
723	1,806	DLA
732	7,800	DLA
733	12,600	DLA
734	15,800	DLA
735	8,400	DLA
762	3,240	DLA
763	4,320	DLA
764	3,600	DLA
475A-F	133,823	DLA
475	8,320	DLA
652	32,624	DLA
TOTAL	527,777	

DEMO

BLDG #	SF	COMMENT
431	52,301	7-Apr-95
623	168,383	7-Apr-95
253	180	7-Apr-95
255	1,536	7-Apr-95
259	1,200	7-Apr-95
606	1,440	7-Apr-95
607	1,440	7-Apr-95
608	1,440	7-Apr-95
609	1,440	7-Apr-95
639	1,440	7-Apr-95
660	8,188	7-Apr-95
695	384	7-Apr-95
726	800	7-Apr-95
		7-Apr-95
371	100	7-Apr-95
372	297	7-Apr-95
781	768	7-Apr-95
350	6,420	7-Apr-95
381	1440	7-Apr-95
382	720	7-Apr-95
458	14627	7-Apr-95
6661	1440	7-Apr-95
6662	1440	7-Apr-95
411	21,774	7-Apr-95
355	3,461	7-Apr-95
6663	1,440	7-Apr-95
6664	1,440	7-Apr-95
6665	320	7-Apr-95
412	5,333	7-Apr-95
672	800	7-Apr-95
674	400	7-Apr-95
TOTAL	302,392	

DLA

BLDG #	SF	COMMENT
441	9,072	Demo
632	2,047	Demo
633	2,047	Demo
7600	14,796	Demo
7604	12,663	Demo
458	14,627	Bank
360	0	(73,094/Core/Bank)
362	0	(74,000/Core/Bank)
365	0	(41,460/Core/Bank)
721	0	(21,600/Core/Demo)
722	0	(21,600/Core/Demo)
772	0	(53,160/Core/Demo)
765	0	(3,600/Core/Demo)
767	0	(4,320/Core/Demo)
378	0	(2,610/Core/Demo)
723	0	(1,806/Core/Demo)
732	0	(7,800/Core/Demo)
733	0	(12,600/Core/Demo)
734	0	(15,800/Core/Demo)
735	0	(8,400/Core/Demo)
762	0	(3,240/Core/Demo)
763	0	(4,320/Core/Demo)
764	0	(3,600/Core/Demo)
475A-F	0	(133,823/Core/Demo)
475	0	(8,320/Core/Demo)
652	0	(32,624/Core/Bank)
251	3,388	Demo
250M	4,500	Bank
250N	4,000	Bank
1871	56,000	Bank
250K	34,236	Bank
250L	21,600	Bank
TOTAL	178,876	

USE FOR OTHERS

AGENCY	BLDG #	SF	COMMENT
129th	29	10,000	3-5 Apr 95
	96	79,200	3-5 Apr 95
	362C	37,000	3-5 Apr 95
	444/5	9,562	3-5 Apr 95
	1010	3,356	3-5 Apr 95
	1016	3,200	3-5 Apr 95
	1017	4,800	3-5 Apr 95
	1019	3,200	3-5 Apr 95
	1020	12,073	3-5 Apr 95
	1021	12,073	3-5 Apr 95
	1022	12,073	3-5 Apr 95
	1025	1,832	3-5 Apr 95
	1026	2,568	3-5 Apr 95
	1030	2,560	3-5 Apr 95
	1041	2,788	3-5 Apr 95
	1042	16,160	3-5 Apr 95
	1043	2,788	3-5 Apr 95
	1045	2,832	3-5 Apr 95
	1046	6,883	3-5 Apr 95
	1048	28,658	3-5 Apr 95
	1104	17,233	3-5 Apr 95
ANG Comm	684	40,448	Site Survey
	1029	900	3-5 Apr 95
	1047	2,788	3-5 Apr 95
TOTAL		314,911	

BANKED

BLDG #	SF	COMMENT
351	34,043	Bank
1027	12,073	Bank
677	8,495	Bank
T-869	2,400	Bank
878	861	Bank
1038	12,073	Bank
364	960	Bank
768	92	Bank
725	437	Bank
728	800	Bank
736	396	Bank
TOTAL	72,630	

REVISED

ALC DOWNSIZING
OO-ALC
BUILDING SUMMARY

TRC		
BLDG #	SF	COMMENT
5MNP	13,000	Avionics
100PN	3,000	Software ATE
236/257	41,000	Composites
1915	2,000	Hydraulics
100C/214	23,000	Instruments
257	700	Inj Mold
510/214	63,000	Mach Man
265	5,000	Sht Metal Mfg
Various	11,000	Mach Rpr
Various	12,000	Insp
Various	8,000	Software OFP
1208	7,000	Harness Cable
507	3000	Foundry
238	66000	2 level engines
238	7,000	Sht Metal Rpr
TOTAL	264,700	

TO CORE CAPACITY		
BLDG #	SF	COMMENT
5P	22,000	(Bank)
100F	2,500	(Bank)
225	8,000	(Bank)
257	15,000	(Bank)
510	3,342	(Bank)
1916	2,247	(Bank)
100L	3,900	(Bank)
100K	21,000	(Bank)
1216	8,000	(Bank)
1917	4,000	(Bank)
100J	7,000	(Bank)
2014	9,171	(Bank)
2201	2,514	(Bank)
2204	2,400	(Bank)
2211	4,104	(Bank)
2212	4,104	(Bank)
2213	3,500	(Bank)
2408	6,997	(Bank)
2409	6,997	(Bank)
30023	6,006	(Bank)
30210	7,636	(Bank)
30220	7,636	(Bank)
30250	7,636	(Bank)
100M	11,500	(Bank)
1208	12,680	(Bank)
1621	12,290	(Bank)
1623	2,310	(Bank)
507	1,498	(Bank)
5A	1,515	(Bank)
214	5,096	(Bank)
5L	22,000	(BANKED)
TOTAL	234,557	

DEMO		
BLDG #	SF	COMMENT
229	4,148	Site Survey
272	39,792	Site Survey
1147	6,208	7-Apr-95
268	61,250	Site Survey
222	10,249	Site Survey
2143	152	Site Survey
2145	152	Site Survey
2147	152	Site Survey
2002	334	Site Survey
745	2,880	Site Survey
747	80	Site Survey
1532	10,920	7-Apr-95
1564	4,549	Site Survey
1580	4,549	Site Survey
805	18,862	Site Survey
809	240	Site Survey
267	15,104	Site Survey
2202	4,329	Site Survey
2127	127	Site Survey
2222	127	Site Survey
2115	2,088	Site Survey
936	3,024	Site Survey
1556	4,629	Site Survey
247	2,148	Site Survey
11	19,898	Site Survey
270	7,918	Site Survey
1146	7,184	7-Apr-95
Sub Total	228,088	
18	560	7-Apr-95
22	96	7-Apr-95
32	1,457	7-Apr-95
799	407	7-Apr-95
1140	1,400	7-Apr-95
1312	1,349	7-Apr-95
1544	6,781	7-Apr-95
2001	152	7-Apr-95
785	2,927	7-Apr-95
796	2,832	7-Apr-95
1554	4,549	7-Apr-95
1558	4,549	7-Apr-95
1560	4,549	7-Apr-95
1132	16,667	7-Apr-95
1136	1,340	7-Apr-95
1562	4,235	7-Apr-95
3303	2,545	7-Apr-95
405	1,568	7-Apr-95
569	3,600	7-Apr-95
273	43,544	7-Apr-95
840	217,432	7-Apr-95
2123	127	7-Apr-95
2124	264	7-Apr-95
179	1,750	7-Apr-95
TOTAL	552,795	

DLA		
BLDG #	SF	COMMENT
810	6,000	7-Apr-95
830	66,000	7-Apr-95
800	82,000	7-Apr-95
TOTAL	000000	

USE FOR OTHERS		
AGENCY BLDG #	SF	COMMENT
TOTAL	0	

BANKED		
BLDG #	SF	COMMENT
1102	10,000	31 Mar 95 fax
252	4,620	31 Mar 95 fax
298	1,350	31 Mar 95 fax
1379	1,950	31 Mar 95 fax
1600	2,827	31 Mar 95 fax
1622B	2,460	31 Mar 95 fax
1627	2,491	31 Mar 95 fax
2214	1,200	31 Mar 95 fax
1367	2,296	31 Mar 95 fax
2114	1,563	31 Mar 95 fax
1254	6,000	31 Mar 95 fax
2015	657	31 Mar 95 fax
849	6,150	31 Mar 95 fax
245	4,000	31 Mar 95 fax
5P	0	(22000, Core)
100F	0	(2500, Core)
225	0	(8000, Core)
257	0	(15000, Core)
510	0	(3342, Core)
1916	0	(2247, Core)
100L	0	(3900, Core)
100K	0	(21000, Core)
1216	0	(8000, Core)
1917	0	(4000, Core)
100J	0	(7000, Core)
2014	0	(9171, Core)
2201	0	(2514, Core)
2204	0	(2400, Core)
2211	0	(4104, Core)
2212	0	(4104, Core)
2213	0	(3500, Core)
2408	0	(6997, Core)
2409	0	(6997, Core)
30023	0	(6006, Core)
30210	0	(7636, Core)
30220	0	(7636, Core)
30250	0	(7636, Core)
100M	0	(11500, Core)
1208	0	(12680, Core)
1621	0	(12290, Core)
1623	0	(2310, Core)
507	0	(1498, Core)
5A	0	(1515, Core)
214	0	(5096, Core)
TOTAL	47,183	

GRAND TOTAL 1,273,225

REVISED

ALC DOWNSIZING
SA-ALC
BUILDING SUMMARY

TRC

BLDG#	SF	COMMENT
347	3,000	Hydraulics
329	5,000	Elec/Mech SE
375	3,150	Sht Metal Rpr
375	3,000	Compos
375	3,000	Sht Metal Mfg
303	6,000	Mach Mfg
375	1,000	Tubing
178	6,000	Software ATE
178	0	Software IPE
345/347/348	135,000	Eng Related
301	19,000	Plating
Various	9,000	Cleaning
Various	35,000	Mach Rpr
Various	26,000	Insp
Various	0	Software OFP
Various	7,000	PSC
Various	800	Harness
Sub Total	261,950	
Other Downsizing		
301/320/324/ 329/348/178/1420	22,793	Mach Shops
329/308/655	8,404	Component Paint
324/329/333/348	13,728	Chem Clean
329/348	2,986	Welding
Sub Total	47,911	
Compression		
328	4,971	Vacant
329	82,000	Compress to B331/B345
306	15,000	Vacant
650	13,245	Vacant
Sub Total	115,216	
TOTAL	425,077	

TO CORE CAPACITY

BLDG#	SF	COMMENT
305	30,819	(Demo)
TOTAL	30,819	

DEMO

BLDG #	SF	COMMENT
183	17,824	Site Survey
184	5,696	Site Survey
337	640	Site Survey
366	113,107	Site Survey
372	719	Site Survey
1566	20,000	(162,810/1 Bay)
59	2,585	Site Survey
207	10,807	Site Survey
340	42,685	Site Survey
343	1,533	Site Survey
305	0	(30,819/Core)
522	37,413	Site Survey
1500	27,148	Site Survey
1560	167,307	Site Survey
Sub Total	447,264	
143	8,138	7-Apr-95
144	7,059	7-Apr-95
180	13,275	7-Apr-95
259	4,000	7-Apr-95
2093	1,817	7-Apr-95
52	2,831	7-Apr-95
208	9,239	7-Apr-95
963	3705	7-Apr-95
973	1,703	7-Apr-95
Sub Total	51,767	
TOTAL	499,031	

DLA

BLDG #	SF	COMMENT
1530	60,000	Bank
3780	22,818	Demo
1556	40,000	Bank
3826	180,530	Bank
345/347/348	0	(135,000/TRC/Bank)
1564	50,000	Demo
170	80,801	Demo
172	91,122	Demo
TOTAL	505,271	

USE FOR OTHERS

AGENCY	BLDG #	SF	COMMENT
DNA	1562	151,727	Site Survey
AFIA/AFSA	169	80,000	Site Survey
TOTAL		231,727	

BANKED

BLDG #	SF	COMMENT
811	3,012	7-Apr-95
3505	1680	7-Apr-95
804	3296	7-Apr-95
TOTAL	7,968	

GRAND TOTAL 1,699,913

REVISED

ALC DOWNSIZING
OC-ALC
BUILDING SUMMARY

TRC

BLDG#	SF	COMMENT
230/3707	87,000	Inst
230/3707	6,000	Software ATE
3001/214/3234	3,000	IPIE
2211	11,000	Composites
2121	1,500	Sheet Metal
3001	3,000	Plating
230	32,000	Cab/Har(DLA)
Sub Total	143,500	

Other Downsizing

3001	63,000	Mach Repair
3001	6,000	PSC
3001	3,000	Harness Cable
3001	88,000	Eng Related
Sub Total	160,000	

TOTAL 303,500

TO CORE CAPACITY

BLDG#	SF	COMMENT
3108	75,000	(DLA)

TOTAL 75,000

DEMO

BLDG #	SF	COMMENT
3726	8,040	Site Survey
3728	8,040	Site Survey
3765	9,360	Site Survey
3770	11,506	Site Survey
3763	2,400	Site Survey
1005	1,584	Site Survey
1007	1,584	Site Survey
207	59,840	Site Survey
2105	2,618	Site Survey
2124	3,600	Site Survey
B1-B3 Dock	10,700	Site Survey
Sub Total	119,272	
236	273	7-Apr-95
239	786	7-Apr-95
1071	6,840	7-Apr-95
1072	4,600	7-Apr-95
101	123,295	7-Apr-95
203	25,837	7-Apr-95
414	15,728	7-Apr-95
1040	240	7-Apr-95
224	40,621	7-Apr-95
1013	417	7-Apr-95
1014	7,500	7-Apr-95
1018	3,718	7-Apr-95
3768	5,600	7-Apr-95
1100 Series	243000	7-Apr-95
3771	19,000	7-Apr-95
3773	19,000	7-Apr-95
3772	30,000	7-Apr-95

TOTAL 665,727

DLA

BLDG #	SF	COMMENT
3108	0	(75,000/Core/Bank)
230	0	(32,000/TRC/Bank)
265	14,000	7 Apr 95 Demo
2129	26,000	7 Apr 95 Demo

TOTAL 40,000

USE FOR OTHERS

AGENCY	BLDG #	SF	COMMENT
485th EIG	3333	45,000	Site Survey

TOTAL 45,000

BANKED

BLDG #	SF	COMMENT
1055	1,200	7Apr 95
1100	8,100	7Apr 95
3705	24,018	7Apr 95
3001	1,800	7Apr 95
418	5,800	7Apr 95
3001	4,418	7Apr 95
2210	824	7Apr 95
201	11,800	7Apr 95
3001	64,000	7Apr 95

TOTAL 118,860

GRAND TOTAL 1,248,087

REVISED

ALC DOWNSIZING
WR-ALC
BUILDING SUMMARY

TRC		
BLDG#	SF	COMMENT
140	1,100	Hydraulics
140	1,600	Foundry
140	-6,000	Mach Mfg
169	12,000	Comp
169/603/137	6,000	Sht Metl Rpr
605	3,000	Comp
640	19,300	PWB
140	3,500	Sht Mtl Mfg
670	9,000	Radomes
640/645	-15,000	Instr
640/645	30,000	Avionics
640/645	-8,000	Software
640/645	55,000	Avionics
181	13,000	NDI,Parachute Rpr
181	24,187	Paint,T&D(Ofv/Bank)
TOTAL	148,687	

TO CORE CAPACITY		
BLDG#	SF	COMMENT
		Included in TRC
	0	

DEMO		
BLDG #	SF	COMMENT
310	67,718	Site Survey
Sub Total	67,718	
605	0	(3,300/TRC)
975	2,700	7-Apr-95
176	387	7-Apr-95
206	600	7-Apr-95
267	1,400	7-Apr-95
268	968	7-Apr-95
270	17,100	7-Apr-95
271	100	7-Apr-95
317	968	7-Apr-95
353	256	7-Apr-95
245	1,600	7-Apr-95
91M1	3,360	7-Apr-95
91M2	3,360	7-Apr-95
10241	10,800	7-Apr-95
2152	1,660	7-Apr-95
310	111,727	7-Apr-95
TOTAL	224,702	

DLA		
BLDG #	SF	COMMENT
301	45,000	Bank
TOTAL	45,000	

USE FOR OTHERS			
AGENCY	BLDG #	SF	COMMENT
B-1B(SHOP)	845	18,000	Site Survey
B-1B(SHOP)	181	10,825	7-Apr-95
B-1B(SHOP)	148	2,911	Site Survey
B-1B(ADMIN)	850	10,737	Site Survey
B-1B(ADMIN)	852	11,700	Site Survey
B-1B(ADMIN)	85	800	Site Survey
B-1B(ADMIN)	282	30,853	Site Survey
B-1B(ADMIN)	327	12,000	Site Survey
B-1B(ADMIN)	155	27,318	Site Survey
B-1B(ADMIN)	58	10,438	Site Survey
B-1B(ADMIN)	46	5,700	Site Survey
B-1B(ADMIN)	110	2,800	Site Survey
B-1B(ADMIN)	125	7,500	Site Survey
TOTAL		152,413	

BANKED		
BLDG #	SF	COMMENT
361	3,860	Site Survey
300	62,960	7-Apr-95
301	20,640	7-Apr-95
215	4,800	7-Apr-95
378	3,600	7-Apr-95
860	2,541	7-Apr-95
111	1,000	7-Apr-95
181	0	(24,187/TRC)
227/228/230	22,772	7-Apr-95
TOTAL	122,193	

GRAND TOTAL 692,995

Question 080-07a:

Spreadsheet attached reflecting size of depots in 1991, 1993 and 1995.

Response to Question 080-07a			
	1991	1993	1995
OC-ALC	6.4	5.5	5.4
OO-ALC	3.8	4.3	4.9
SA-ALC	4	4.8	4.8
SM-ALC	3.8	3.6	3.4
WR-ALC	3.1	3.6	3.9
Total	21.1	21.8	22.4
FY91 & FY 93 data was obtained from the Depot Maintenance Annual Report			
FY95 data was obtained form the Joint Cross Service Group Questionaire 7.1			

Question 080-07b and c:

The attached spreadsheets provide the total square footage by "industrial" and "other" categories the will be demolished or mothballed.

[redacted]

FY	89-94	95	96	97	98	99	00	01	TOTAL
1. Industrial Facilities									
Demolished									
Arnold		0	812	0	0	0	0	0	812
Brooks		15,366	770	0	0	0	0	0	16,136
Edwards		34,853	1,540	1,500	8,541	21,336	0	0	67,770
Eglin		25,553	6,171	4,578	0	4,000	0	0	40,302
Hanscom		17,054	3,944	1,872	0	1,944	0	0	24,814
Hill		96,872	10,508	65,709	1,750	35,167	14,062	23,080	247,148
Kelly		36,025	77,471	55,314	58,253	32,801	0	9,726	269,590
Kirtland		24,799	21,839	0	698	0	0	0	47,336
LosAngeles		15,060	0	10,800	0	3,932	0	0	29,792
McClellan		42,387	54,471	26,110	13,109	64,496	30,151	0	230,724
Robins		63,269	0	3,888	18,567	119,272	2,682	0	207,678
Tinker		0	13,145	121,128	0	29,914	139,683	0	303,870
Wright-Patt		7,387	2,580	20,280	45,078	0	0	0	75,325
TOTAL	708,101	378,625	193,251	311,179	145,996	312,862	186,578	32,806	1,561,297
Banked									
Arnold	0	0	0	0	0	0	0	0	0
Brooks	0	0	0	0	0	0	0	0	0
Edwards	91,760	55,440	17,300	374,970	73,300	0	8,000	4,000	533,010
Eglin	33,878	35,786	20,865	65,184	4,000	0	0	0	125,835
Hanscom	5,270	82,132	87,305	0	0	0	0	0	169,437
Hill	70,000	61,000	56,000	25,000	214,000	23,000	7,000	7,000	393,000
Kelly	197,533	23,339	22,158	85,900	13,815	0	0	0	145,212
Kirtland	128,120	0	0	0	0	0	0	0	0
LosAngeles	0	0	0	0	0	0	0	0	0
McClellan	249,000	46,000	118,000	0	0	0	0	0	164,000
Robins	33,000	0	0	0	0	0	0	0	0
Tinker	415,934	15,000	32,864	18,728	1,620	0	0	0	68,212
Wright-Patt	0	46,112	28,022	0	0	0	0	0	74,134
TOTAL	1,224,495	364,809	382,514	569,782	306,735	23,000	15,000	11,000	1,672,840

Atch 2

APR-10-1995 14:44 513 476 2081

[redacted]

FY	89-94	95	96	97	98	99	00	01	TOTAL
2. Other									
Demolished									
Arnold		0	4,271	0	0	0	0	0	4,271
Brooks		34,658	20,039	14,274	34,777	0	0	0	103,748
Edwards		82,566	156,447	75,357	217,328	193,439	121,683	0	846,820
Eglin		69,506	28,318	958	8,981	42,015	24,624	24,624	199,026
Hanscom		29,491	113,737	0	0	64,765	0	0	207,993
Hill		354,148	121,800	42,370	0	464,205	0	22,500	1,005,023
Kelly		782,333	130,017	107,191	199,323	64,752	0	93,237	1,376,853
Kirtland		267,643	11,637	736	22,607	258,250	0	0	560,872
LosAngeles		1,179	0	560	0	40,853	0	0	42,592
McClellan		384,658	71,716	169,476	368,773	271,980	282,270	91,291	1,640,164
Robins		141,528	37,938	21,779	70,361	11,928	81,003	0	364,537
Tinker		0	94,005	0	0	74,146	691,371	67,632	927,154
Wright-Patt		88,841	93,991	152,930	162,559	111,297	3,394	49,128	662,140
TOTAL	1,762,594	2,236,551	883,916	585,630	1,084,709	1,597,630	1,204,345	348,412	7,941,193
Banked									
Arnold	0	0	0	0	0	0	0	0	0
Brooks	0	0	0	0	0	0	0	0	0
Edwards	5,010	116,530	0	95,560	18,090	0	0	0	230,180
Eglin	100,343	35,639	30,440	18,667	0	0	0	0	84,746
Hanscom	10,000	15,991	161,105	4,120	0	0	0	0	181,216
Hill	29,000	25,000	129,000	84,000	300	0	6,000	46,000	290,300
Kelly	964	0	4,976	0	0	0	0	0	4,976
Kirtland	0	0	0	0	0	0	0	0	0
LosAngeles	0	0	0	0	0	0	0	0	0
McClellan	129,000	115,000	53,000	0	0	0	0	0	168,000
Robins	0	10,000	0	0	0	0	0	0	10,000
Tinker	13,794	25,618	10,218	0	18,755	0	0	0	54,591
Wright-Patt	0	96,561	0	0	0	0	0	0	96,561
TOTAL	288,111	440,339	388,739	202,347	37,145	0	6,000	46,000	1,120,570

ATCH 2

Question 080-07e:

Information only available on total installation for calculating impact of the implementation of the revised downsizing plan.

	Hill	Kelly	McClellan	Robins	Tinker
Beginning SF	14,248	16,198	12,671	13,590	15,188
Less Downsizing	1,273	1,700	1,581	693	1,248
Remaining:	12,975	14,498	11,090	12,897	13,940

Question 080-07f:

No specific funds programmed for demolition or mothballing. Funds are included in projects that construct new facilities for demolition of buildings in the way of construction.

Question 080-07g:

See attached spreadsheet for listing of programmed mothballed and demolition space by installation.

[redacted]

FY	89-94	95	96	97	98	99	00	01	TOTAL
1. Industrial Facilities									
Demolished									
Arnold		0	812	0	0	0	0	0	812
Brooks		15,366	770	0	0	0	0	0	16,136
Edwards		34,853	1,540	1,500	8,541	21,336	0	0	67,770
Eglin		25,553	6,171	4,578	0	4,000	0	0	40,302
Hanscom		17,054	3,944	1,872	0	1,944	0	0	24,814
Hill		96,872	10,508	65,709	1,750	35,167	14,062	23,080	247,148
Kelly		36,025	77,471	55,314	58,253	32,801	0	9,726	269,590
Kirtland		24,799	21,839	0	698	0	0	0	47,336
LosAngeles		15,060	0	10,800	0	3,932	0	0	29,792
McClellan		42,387	54,471	26,110	13,109	64,496	30,151	0	230,724
Robins		63,269	0	3,888	18,567	119,272	2,682	0	207,678
Tinker		0	13,145	121,128	0	29,914	139,683	0	303,870
Wright-Patt		7,387	2,580	20,280	45,078	0	0	0	75,325
TOTAL	708,101	378,625	193,251	311,179	145,996	312,862	186,578	32,806	1,561,297
Banked									
Arnold	0	0	0	0	0	0	0	0	0
Brooks	0	0	0	0	0	0	0	0	0
Edwards	91,760	55,440	17,300	374,970	73,300	0	8,000	4,000	533,010
Eglin	33,878	35,786	20,865	65,184	4,000	0	0	0	125,835
Hanscom	5,270	82,132	87,305	0	0	0	0	0	169,437
Hill	70,000	61,000	56,000	25,000	214,000	23,000	7,000	7,000	393,000
Kelly	197,533	23,339	22,158	85,900	13,815	0	0	0	145,212
Kirtland	128,120	0	0	0	0	0	0	0	0
LosAngeles	0	0	0	0	0	0	0	0	0
McClellan	249,000	46,000	118,000	0	0	0	0	0	164,000
Robins	33,000	0	0	0	0	0	0	0	0
Tinker	415,934	15,000	32,864	18,728	1,620	0	0	0	68,212
Wright-Patt	0	46,112	28,022	0	0	0	0	0	74,134
TOTAL	1,224,495	364,809	382,514	569,782	306,735	23,000	15,000	11,000	1,672,840

Atch 2

[redacted]

FY	89-94	95	96	97	98	99	00	01	TOTAL
2. Other									
Demolished									
Arnold		0	4,271	0	0	0	0	0	4,271
Brooks		34,658	20,039	14,274	34,777	0	0	0	103,748
Edwards		82,566	156,447	75,357	217,328	193,439	121,683	0	846,820
Eglin		69,506	28,318	958	8,981	42,015	24,624	24,624	199,026
Hanscom		29,491	113,737	0	0	64,765	0	0	207,993
Hill		354,148	121,800	42,370	0	464,205	0	22,500	1,005,023
Kelly		782,333	130,017	107,191	199,523	64,752	0	93,237	1,376,853
Kirtland		267,643	11,637	736	22,607	258,250	0	0	560,872
LosAngeles		1,179	0	560	0	40,853	0	0	42,592
McClellan		384,658	71,716	169,476	368,773	271,980	282,270	91,291	1,640,164
Robins		141,528	37,938	21,779	70,361	11,928	81,003	0	364,537
Tinker		0	94,005	0	0	74,146	691,371	67,632	927,154
Wright-Patt		88,841	93,991	152,930	162,559	111,297	3,394	49,128	662,140
TOTAL	1,762,594	2,236,551	883,916	585,630	1,084,709	1,597,630	1,204,345	348,412	7,941,193
Banked									
Arnold	0	0	0	0	0	0	0	0	0
Brooks	0	0	0	0	0	0	0	0	0
Edwards	5,010	116,530	0	95,560	18,090	0	0	0	230,180
Eglin	100,343	35,639	30,440	18,667	0	0	0	0	84,746
Hanscom	10,000	15,991	161,105	4,120	0	0	0	0	181,216
Hill	29,000	25,000	129,000	84,000	300	0	6,000	46,000	290,300
Kelly	964	0	4,976	0	0	0	0	0	4,976
Kirtland	0	0	0	0	0	0	0	0	0
LosAngeles	0	0	0	0	0	0	0	0	0
McClellan	129,000	115,000	53,000	0	0	0	0	0	168,000
Robins	0	10,000	0	0	0	0	0	0	10,000
Tinker	13,794	25,618	10,218	0	18,755	0	0	0	54,591
Wright-Patt	0	96,561	0	0	0	0	0	0	96,561
TOTAL	288,111	440,339	388,739	202,347	37,145	0	6,000	46,000	1,120,570

ATCH 2

NEWARK AFB PLAN B

FM

TRANSPORTATION

ATTACHMENT 1

EQUIPMENT MOVEMENT

Air Force Logistics (ALCs) installations are unique in their diversity of functions. At each center you will find a mix of functions that can be generally divided into the following three categories: operational, administrative, and industrial operations. While the current base closure model estimates the cost of equipment movement for the first two categories it is the latter that drives a higher transportation cost.

While some operational installations may have some extensive repair capabilities they are not as extensive as those of depots. By design, operational capabilities are smaller and more mobile than those available at a depot. Operational installations repair capability is analogous to that of local garages performing a variety of functions with no particular speciality. While an Air Force depot is comparable to an automotive repair corporation that specializes in the rebuilding and repairing of specific classes of components in a center of excellence concept.

This unique difference drives an increase in the cost elements of:

Packaging, Crating, and Handling: Packaging, Crating, Handling includes cleaning and drying materials, preservatives, wraps, barriers, cushioning, containers, labels, tags, container closures, (tape, adhesive, steel strapping) Also included is the cost of procuring, storing, controlling, moving, protecting the material needed to pack and crate.

Transportation: It was assumed that the mode of transportation would be by motor vehicle. This transportation typically falls into two general categories: regular load and special Conveyance (Oversize and/or Air Ride). It should also be noted that shipments that are oversize and/or hazardous may have to use circuitous routes, which in turn will increase mileage. Other potential accessorial charges could be: Dual Driver, Constant Surveillance, and Armed Guard Service.

Removal and Reinstallation: Sacramento ALC performed a study that looked at 16,000 pieces of equipment in their inventory (average weight) of 1,000 lbs. and a cost of $ 200 per ton to dismantle (Means construction guide uses $ 100 to $ 1,000 per ton to install a piece of equipment). Using this formula the estimated cost was $ 1.6 million dollars which is approximately .5% of the dollar value of equipment. It was assumed that reinstallation would equal removal cost.

Materiel Damage Cost (MDC): MDC is computed in accordance with AFR 67-1 Volume 7 Chapter 10. Which states that the formula is the Total Value of Assets (TVA) multiplied by .0001 multiplied by the number of times handled (N). The number of times the shipment will be handled was divided into two categories:

Inventory Handling
1. Warehouse Processing
2. Shipment Preparation and Conveyance Loading
3. Gaining Site Receipt Process
4. Gaining Site Intra Depot Movement

Equipment Handling
1. Disassemble Equipment
2. Shipment Preparation
3. Interim Holding
4. Load Conveyance
5. Off-load Conveyance
6. Interim Holding
7. Unpack
8. Reassemble & Calibrate

In the case of Newark AFB, where the installed equipment and cabling have been in place for over 30 years this methodology may drive a significantly higher material damage cost.

Methodology Approaches

In the case of depots the equipment to be moved runs the gamut from large oversize loads like a 100,000 pound deadweight tester, to precision measurement equipment that requires special air ride vehicles to move.

Ideally, to relocate anything you would like to have the approximate weight and cubic volume and type or kind of the item(s) to be relocated. With this information an analyst may determine the packaging, handling, crating and transportation and routing requirements of the item(s).

However in this case there is not a complete database that provides the required information nor is there sufficient time to assess the installation within the time constraints of the analysis. Therefore, in the absence of complete data, our office has developed seven separate spreadsheets that estimate the cost of equipment movement based on a variety of techniques. For example: Often in the absence of cube and weight other agencies (private and public sector) use percentage of acquisition value to estimate the cost of equipment movement. Attached is a short description of the methodologies and a copy of each spreadsheet. Please advise our office NLT 23 Feb 95 on which would be the most appropriate for use in the case on Newark AFB.

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(MOVE-IT.XLW)TRANSSUM.XLS

	COST BASED ON		SPREAD SHEET
A.	POUNDS AND MILES	$156,801,603	TRANS1
	P,C, H (AFLCP 173-10)		
	TRANSPORATION(SAF/MII)		
	REMOVE AND REINSTALL (N/A)		
	MATERIAL DAMAGE (67-1)		
B	ACQUISTION COST	$123,035,344	TRANS2A
	P,C, H (WESTINGHOUSE MEDIAN)		
	TRANSPORTATION (AFMC/DSX)		
	REMOVE & REINSTALL (SM-ALC)		
	MATERIAL DAMAGE (67-1)		
C.	ACQUISTION COST	$313,683,730	TRANS3A
	P,C, H (JPCG STUDY)		
	TRANSPORTATION (JPCG STUDY)		
	REMOVE & REINSTALL (JPCG STUDY)		
	MATERIAL DAMAGE (67-1)		
D.	ACQUISTION COST	$235,245,537	TRANS4A
	P,C, H (GSA - DIPEC)		
	TRANSPORTATION (GSA-DIPEC)		
	REMOVE & REINSTALL (SM-ALC)		
	MATERIAL DAMAGE (67-1)		
E.	ACQUISTION COST	$272,285,794	TRANS5A
	P,C, H (GSA - DIPEC)		
	TRANSPORTATION (GSA-DIPEC)		
	REMOVE & REINSTALL (HILL AFB)		
	MATERIAL DAMAGE (67-1)		
F.	ACQUISTION COST	$253,765,666	TRANS6A
	P,C, H (COMPOSITE)		
	TRANSPORTATION (COMPOSITE)		
	REMOVE & REINSTALL (COMPOSITE)		
	MATERIAL DAMAGE (67-1)		
G.	COMPOSITE APPROACH	$168,328,984	TRANS7A
	PACKING MATERIAL (HQ AFMC/LGT)		
	TRANSPORATION(SAF/MII)		
	REMOVE & REINSTALL (HILL AFB)		
	MATERIAL DAMAGE (67-1)		
		$217,592,380	

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CATEGORY	LOWER	UPPER	MEDIAN	SOURCE	RECEIVE DATE	SOURCE DATE	QUALIFIER
TRANSPORTATION	3.0%	6.5%	4.8%	GSA	Feb-94	Sep-91	501 - 1,000 MILES
TRANSPORTATION	0.5%	0.5%	0.5%	AFMC/DSX	Jan-91	Jan-91	1st DESTINATION CHARGES
TRANSPORTATION	4.0%	4.0%	4.0%	JPCG DEPOT MAINT	Feb-95	Feb-83	JPCG AIRCRAFT, ENGINE, HELICOPTER STUDY
ROLE-UP	0.5%	6.5%	3.5%	COMPOSITE			
PACKING, CRATING, HANDLING	2.0%	4.0%	3.0%	WESTINGHOUSE	Jan-91	Jan-91	SENSITIVITY DEPENDENT
PACKING, CRATING, HANDLING	7.0%	11.0%	9.0%	GSA	Feb-94	Sep-91	ACQUISITION COST $ 5K AND GREATER
PACKING, CRATING, HANDLING	6.0%	6.0%	6.0%	JPCG DEPOT MAINT	Feb-95	Feb-83	JPCG AIRCRAFT, ENGINE, HELICOPTER STUDY
ROLE-UP	2.0%	11.0%	6.5%	COMPOSITE			
REMOVAL & REINSTALLATION	1.0%	1.0%	1.0%	SM-ALC	Jan-91	Jan-91	LOCAL STUDY RESULTS
REMOVAL & REINSTALLATION	4.4%	4.4%	1.0%	HILL AFB	Nov-94	Nov-94	AFMC 21 LOCAL STUDY EFFORT
REMOVAL & REINSTALLATION	12.0%	12.0%	1.0%	JPCG DEPOT MAINT	Feb-95	Feb-83	JPCG AIRCRAFT, ENGINE, HELICOPTER STUDY
ROLE-UP	1.0%	12.0%	6.5%	COMPOSITE			
TOTAL COMPOSITE RATE	3.5%	29.5%	16.5%				

1 ACCOUNTABLE EQUIPMENT IN LBS BY TYPE	REGULAR	SPECIAL	TOTAL
HILL	3,508,572	2,675,244	6,183,816
TINKER	2,019,524	573,292	2,592,816
ROBINS	438,881	132,503	571,384
KELLY	236,680	22,122	258,802
METROLOGY	4,660,713	1,825,209	6,485,922
TOTAL	10,864,370	5,228,370	16,092,740
1991 SITE SURVEY BRIEFING			
2 MILEAGE RATES	REGULAR	SPECIAL	
a. SAF MII MILEAGE RATES (FY 94$)	$1.50	$2.50	
b. INFLATION INDICE FY 94$ TO FY 96$	1.058	1.058	
c. 1996 MILEAGE RATE (a*b)	$1.59	$2.65	
3 PACKAGING HANDLING AND CRATING			
a. AFMC 173-10 (FY 92$)	$3.00		
b. INFLATION INDICE FY 92$ TO FY 96$	1.108		
c. 1996 PACKING RATE RATE (a*b)	$3.32		
4 JTR DISTANCE FROM NEWARK TO			
HILL AFB	1,724		
KELLY AFB	1,345		
McCLELLAN AFB	2,377		
ROBINS AFB	717		
TINKER	966		
LOCATION 1	TBD		
LOCATION 2	TBD		
LOCATION 3	TBD		
LOCATION 4	TBD		
LOCATION 5	TBD		
5 LBS PER TRUCK - SAF/MIII INSTRUCTION	24,000		

36	WORKLOAD DISTRIBUTION %							
	HILL AFB	100%						
	KELLY AFB	0%						
	McCLELLAN AFB	0%						
	ROBINS AFB	0%						
	TINKER	0%						
	LOCATION 1	0%						
	LOCATION 2	0%						
	LOCATION 3	0%						
	LOCATION 4	0%						
	LOCATION 5	0%						
37	REDISTRIBUTED ACCOUNTABLE EQUIP	REGULAR	SPECIAL	TOTAL				
	HILL AFB	10,864,370	5,228,370	16,092,740				
	KELLY AFB	0	0	0				
	McCLELLAN AFB	0	0	0				
	ROBINS AFB	0	0	0				
	TINKER	0	0	0				
	LOCATION 1	0	0	0				
	LOCATION 2	0	0	0				
	LOCATION 3	0	0	0				
	LOCATION 4	0	0	0				
	LOCATION 5	0	0	0				
	DELTA	0	0	0				
38	NON-ACCOUNTABLE WEIGHT 50% OF ACCOUNTABLE WEIGHT - SAF MR INSTRC							
	HILL AFB	8,046,370						
	KELLY AFB	0						
	McCLELLAN AFB	0						
	ROBINS AFB	0						
	TINKER	0						
	LOCATION 1	0						
	LOCATION 2	0						
	LOCATION 3	0						
	LOCATION 4	0						
	LOCATION 5	0						
	NOTE: THIS WILL BE ADDED TO REGULAR WEIGHT CATEGORY FOR SHIPMENT PURPOSES							

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10 INVENTORY WEIGHT TO MOVE 5% OF ACCOUNTABLE WEIGHT	
HILL AFB	804,637
KELLY AFB	0
McCLELLAN AFB	0
ROBINS AFB	0
TINKER	0
LOCATION 1	0
LOCATION 2	0
LOCATION 3	0
LOCATION 4	0
LOCATION 5	0
NOTE: THIS WILL BE ADDED TO REGULAR WEIGHT	
CATEGORY FOR SHIPMENT PURPOSES	

10 REGULAR ITEMS TO MOVE	A REGULAR (7,869)	B # TRUCKS (A/24,000)	C MILES	D MILEAGE RATE	E TRANPORT (B*C*D)	F PC&H RATE	G P.C. & H (F*A)	H TOTAL (E+G)
HILL AFB	19,715,377	821	1,724	$1.59	$2,250,492	$3.32	$65,455,052	$67,705,544
KELLY AFB	0	0	1,345	$1.59	$0	$3.32	$0	$0
McCLELLAN AFB	0	0	2,377	$1.59	$0	$3.32	$0	$0
ROBINS AFB	0	0	717	$1.59	$0	$3.32	$0	$0
TINKER	0	0	966	$1.59	$0	$3.32	$0	$0
LOCATION 1	0	0	0	$1.59	$0	$3.32	$0	$0
LOCATION 2	0	0	0	$1.59	$0	$3.32	$0	$0
LOCATION 3	0	0	0	$1.59	$0	$3.32	$0	$0
LOCATION 4	0	0	0	$1.59	$0	$3.32	$0	$0
LOCATION 5	0	0	0	$1.59	$0	$3.32	$0	$0
								$67,705,544

11 SPECIAL ITEMS TO MOVE	A REGULAR (7,869)	B # TRUCKS (A/24,000)	C MILES	D MILEAGE RATE	E TRANPORT (B*C*D)	F PC&H RATE	G P.C. & H (F*A)	H TOTAL (E+G)
HILL AFB	5,225,370	218	1,724	$2.65	995,955	$3.32	$17,358,188	$18,354,143
KELLY AFB	0	0	1,345	$2.65	0	$3.32	$0	$0
McCLELLAN AFB	0	0	2,377	$2.65	0	$3.32	$0	$0
ROBINS AFB	0	0	717	$2.65	0	$3.32	$0	$0
TINKER	0	0	966	$2.65	0	$3.32	$0	$0
LOCATION 1	0	0	0	$2.65	0	$3.32	$0	$0
LOCATION 2	0	0	0	$2.65	0	$3.32	$0	$0
LOCATION 3	0	0	0	$2.65	0	$3.32	$0	$0
LOCATION 4	0	0	0	$2.65	0	$3.32	$0	$0
LOCATION 5	0	0	0	$2.65	0	$3.32	$0	$0
								$18,354,143

(MOVE-IT.XLW)TRANS1A.XLS

12 EQUIPMENT VALUATION	
a. FY 92$ VALUE OF EQUIPMENT	$1,260,551,867
b. INFLATION INDICE	1.108
c. FY 96$ VALUE OF EQUIPMENT	$1,396,691,469
d. PERCENT OF EQUIPMENT TO EXCESS	17%
e. PERCENT OF EQUIPMENT TO CTRS	78%
f. PERCENT TO REPURCHASE VS MOVE	5%
g. DOLLAR VALUE OF EXCESS EQUIP	$237,437,550
h. DOLLAR VALUE TO CTRS	$1,089,419,346
i. DOLLAR VALUE OF REPURCHASE	$69,834,573
13 INVENTORY VALUATION	
a. FY 92$ VALUE OF EQUIPMENT	$1,615,851,712
b. INFLATION INDICE	1.108
c. FY 96$ VALUE OF EQUIPMENT	$1,790,363,697
d. PERCENT OF INVENTORY TO MOVE	5%
e. DOLLAR VALUE TO MOVE TO CTRS	$89,518,185
SOURCE: HQ AFMC/LG - TRIXIE BREWER	
14 MATERIAL DAMAGE	
a. EQUIPMENT VALUE TO CTRS	$1,089,419,346
b. NUMBER OF TIMES HANDLED	8
c. MATERIAL DAMAGE FACTOR	0.0001
d. EQUIPMENT MATERIAL DAMAGE $	$871,535
e. EQUIPMENT VALUE TO EXCESS	$237,437,550
f. NUMBER OF TIMES HANDLED	4
g. MATERIAL DAMAGE FACTOR	0.0000
h. EQUIPMENT MATERIAL DAMAGE $	$0
g. INVENTORY VALUE TO CTRS	$89,518,185
h. NUMBER OF TIMES HANDLED	4
i. MATERIAL DAMAGE FACTOR	0.0001
j. INVENTORY MATERIAL DAMAGE $	$35,807
k. TOTAL MATERIAL DAMAGE	$907,343
15 TRANSPORTATION ROLL-UP	
a. REGULAR	$67,705,544
b. SPECIAL	$18,354,143
c. REPURCHASE VS MOVE	$69,834,573
d. MATERIAL DAMAGE	$907,343
e. TOTAL	$156,801,603

EQUIPMENT TRANSFER	NEWARK		FY 96 $
EQUIPMENT			
WEAPON SYSTEM SUPPORT EQUIPMENT			$0
APPROPRIATED FUND	FY 92 $	INFL INDICE	
OVER 5K	$1,145,956,243	1.108	$1,269,718,517
UNDER 5K (50% OF ACCOUNTABLE)			$126,971,952
TOTAL			$1,396,691,469
EXCESS EQUIPMENT		PERCENT	
WEAPON SYSTEM SUPPORT EQUIPMENT		17.00%	$0
APPROPRIATED FUND		17.00%	$0
NON APPROPRIATED FUND		17.00%	$216,852,318
OTHER		17.00%	$21,585,232
TOTAL			$237,437,550
REPURCHASE VS MOVE			
WEAPON SYSTEM SUPPORT EQUIPMENT		5.00%	$0
APPROPRIATED FUND		5.00%	$0
NON APPROPRIATED FUND		5.00%	$63,485,976
OTHER		5.00%	$6,348,598
TOTAL			$69,834,573
COST TO RELOCATE EQUIPMENT			
REMAINING EQUIPMENT VALUE			$1,089,419,346
P.C.H (WESTINGHOUSE)		3.00%	$32,682,580
TRANSPORTATION (HQ AFMC/DPX)		0.50%	$5,447,097
REMOVE AND REINSTALL (SM-ALC)		1.0%	$10,894,193
TOTAL COST TO MOVE			$49,023,871
COST TO DISPOSE OF EQUIPMENT (DRMO)			
EQUIPMENT VALUE			$237,437,550
DISPOSAL COST REMOVE AND TRANSPORT		1.00%	$2,374,375
TOTAL EQUIPMENT COST			
RELOCATE			$49,023,871
DISPOSE			$2,374,375
BUY			$69,834,573
(A) TOTAL			$121,232,820
INVENTORIES D033, G072, G402A	FY 92 $	INFL INDICE	
STOCK FUND	1,615,851,712	1.108	$1,790,363,697
OTHER			$0
TOTAL			$1,790,363,697
AMOUNT TO MOVE	5.00%		$89,518,185
COST TO RELOCATE	1.00%		$895,182
MATERIAL DAMAGE			
EQUIPMENT			$1,089,419,346
(TVA EQUIPMENT)*TIMES HANDLED*0.0001		TIMES HANDLED 8	$871,535
INVENTORY			$89,518,185
(TVA INVENTORY)*TIMES HANDLED*.0001		TIMES HANDLED 4	$35,807
TOTAL COST			$907,343

TOTAL TRANSPORTATION COST	NEWARK
EQUIPMENT RELOCATION	$49,023,871
EQUIPMENT DISPOSAL	$2,374,375
PURCHASE VS MOVE	$69,834,573
INVENTORY	$895,182
MATERIAL DAMAGE	$907,343
TOTAL	$123,035,344

9 of 10

EQUIPMENT TRANSFER	NEWARK		FY 96 $
EQUIPMENT			
WEAPON SYSTEM SUPPORT EQUIPMENT			$0
APPROPRIATED FUND	FY 92 $	INFL INDICE	
OVER 5K	$1,145,956,243	1.108	$1,269,719,517
UNDER 5K (50% OF ACCOUNTABLE)			$126,971,952
TOTAL			$1,396,691,469
EXCESS EQUIPMENT		PERCENT	
WEAPON SYSTEM SUPPORT EQUIPMENT		17.00%	$0
APPROPRIATED FUND		17.00%	$0
NON APPROPRIATED FUND		17.00%	$216,852,318
OTHER		17.00%	$21,585,232
TOTAL			$237,437,550
REPURCHASE VS MOVE			
WEAPON SYSTEM SUPPORT EQUIPMENT		5.00%	$0
APPROPRIATED FUND		5.00%	$0
NON APPROPRIATED FUND		5.00%	$63,485,975
OTHER		5.00%	$6,348,598
TOTAL			$69,834,573
COST TO RELOCATE EQUIPMENT			
REMAINING EQUIPMENT VALUE			$1,089,419,346
P,C,H (JPCG DEPOT STUDY)		6.00%	$65,365,161
TRANSPORTATION (JPCG DEPOT STUDY)		4.00%	$43,576,774
REMOVE AND REINSTALL (JPCG DEPOT STUDY)		12.0%	$130,730,321
TOTAL COST TO MOVE			$239,672,256
COST TO DISPOSE OF EQUIPMENT (DRMO)			
EQUIPMENT VALUE			$237,437,550
DISPOSAL COST REMOVE AND TRANSPORT		1.00%	$2,374,375
TOTAL EQUIPMENT COST			
RELOCATE			$239,672,256
DISPOSE			$2,374,375
BUY			$69,834,573
(A) TOTAL			$311,881,205
INVENTORIES D033, G072, G402A	FY 92 $	INFL INDICE	
STOCK FUND	1,615,851,712	1.108	$1,790,363,697
OTHER			$0
TOTAL			$1,790,363,697
AMOUNT TO MOVE	5.00%		$89,518,185
COST TO RELOCATE	1.00%		$895,182
MATERIAL DAMAGE			
EQUIPMENT			$1,089,419,346
		TIMES HANDLED	
(TVA EQUIPMENT)*TIMES HANDLED*0.0001		8	$871,535
INVENTORY			$89,518,185
		TIMES HANDLED	
(TVA INVENTORY)*TIMES HANDLED*.0001		4	$35,807
TOTAL COST			$907,343

TOTAL TRANSPORTATION COST	NEWARK
EQUIPMENT RELOCATION	$239,672,256
EQUIPMENT DISPOSAL	$2,374,375
PURCHASE VS MOVE	$69,834,573
INVENTORY	$895,182
MATERIAL DAMAGE	$907,343
TOTAL	$313,683,730

EQUIPMENT TRANSFER	NEWARK		FY 96 $
EQUIPMENT			
WEAPON SYSTEM SUPPORT EQUIPMENT			$0
APPROPRIATED FUND	FY 92 $	INFL INDICE	
OVER 5K	$1,145,956,243	1.108	$1,269,719,517
UNDER 5K (50% OF ACCOUNTABLE)			$126,971,952
TOTAL			$1,396,691,469
EXCESS EQUIPMENT		PERCENT	
WEAPON SYSTEM SUPPORT EQUIPMENT		17.00%	$0
APPROPRIATED FUND		17.00%	$0
NON APPROPRIATED FUND		17.00%	$216,852,318
OTHER		17.00%	$21,585,232
TOTAL			$237,437,550
REPURCHASE VS MOVE			
WEAPON SYSTEM SUPPORT EQUIPMENT		5.00%	$0
APPROPRIATED FUND		5.00%	$0
NON APPROPRIATED FUND		5.00%	$63,485,976
OTHER		5.00%	$6,348,598
TOTAL			$69,834,573
COST TO RELOCATE EQUIPMENT			
REMAINING EQUIPMENT VALUE			$1,089,419,346
P,C,H (GSA-DIPEC MEDIAN)		9.00%	$98,047,741
TRANSPORTATION (GSA-DIPEC MEDIAN)		4.80%	$52,292,129
REMOVE AND REINSTALL (SM-ALC)		1.0%	$10,894,193
TOTAL COST TO MOVE			$161,234,063
COST TO DISPOSE OF EQUIPMENT (DRMO)			
EQUIPMENT VALUE			$237,437,550
DISPOSAL COST REMOVE AND TRANSPORT		1.00%	$2,374,375
TOTAL EQUIPMENT COST			
RELOCATE			$161,234,063
DISPOSE			$2,374,375
BUY			$69,834,573
(A) TOTAL			$233,443,012
INVENTORIES DO33, GO72, G402A	FY 92 $	INFL INDICE	
STOCK FUND	1,616,851,712	1.108	$1,790,363,697
OTHER			$0
TOTAL			$1,790,363,697
AMOUNT TO MOVE	5.00%		$89,518,185
COST TO RELOCATE	1.00%		$895,182
MATERIAL DAMAGE			
EQUIPMENT			$1,089,419,346
(TVA EQUIPMENT)*TIMES HANDLED*0.0001		TIMES HANDLED 8	$871,535
INVENTORY			$89,518,185
(TVA INVENTORY)*TIMES HANDLED*.0001		TIMES HANDLED 4	$35,807
TOTAL COST			$907,343

TOTAL TRANSPORTATION COST	NEWARK
EQUIPMENT RELOCATION	$161,234,063
EQUIPMENT DISPOSAL	$2,374,375
PURCHASE VS MOVE	$69,834,573
INVENTORY	$895,182
MATERIAL DAMAGE	$907,343
TOTAL	$235,245,537

11 of 6

MOVE IT VS WITDAMSKA VLS

EQUIPMENT TRANSFER	NEWARK		FY 96 $
EQUIPMENT			
WEAPON SYSTEM SUPPORT EQUIPMENT			$0
APPROPRIATED FUND	FY 92 $	INFL INDICE	
OVER 5K	$1,145,956,243	1.108	$1,269,719,517
UNDER 5K (50% OF ACCOUNTABLE)			$126,971,952
TOTAL			$1,396,691,469
EXCESS EQUIPMENT		PERCENT	
WEAPON SYSTEM SUPPORT EQUIPMENT		17.00%	$0
APPROPRIATED FUND		17.00%	$0
NON APPROPRIATED FUND		17.00%	$216,852,318
OTHER		17.00%	$21,585,232
TOTAL			$237,437,550
REPURCHASE VS MOVE			
WEAPON SYSTEM SUPPORT EQUIPMENT		5.00%	$0
APPROPRIATED FUND		5.00%	$0
NON APPROPRIATED FUND		5.00%	$63,485,976
OTHER		5.00%	$6,348,598
TOTAL			$69,834,573
COST TO RELOCATE EQUIPMENT			
REMAINING EQUIPMENT VALUE			$1,089,419,346
P,C,H (GSA-DIPEC MEDIAN)		9.00%	$98,047,741
TRANSPORTATION (GSA-DIPEC MEDIAN)		4.80%	$52,292,129
REMOVE AND REINSTALL (SM-ALC)		4.4%	$47,934,451
TOTAL COST TO MOVE			$198,274,321
COST TO DISPOSE OF EQUIPMENT (DRMO)			
EQUIPMENT VALUE			$237,437,550
DISPOSAL COST REMOVE AND TRANSPORT		1.00%	$2,374,375
TOTAL EQUIPMENT COST			
RELOCATE			$198,274,321
DISPOSE			$2,374,375
BUY			$69,834,573
(A) TOTAL			$270,483,270
INVENTORIES D033, G072, G402A	FY 92 $	INFL INDICE	
STOCK FUND	1,616,851,712	1.108	$1,790,363,697
OTHER			$0
TOTAL			$1,790,363,697
AMOUNT TO MOVE	5.00%		$89,518,185
COST TO RELOCATE	1.00%		$895,182
MATERIAL DAMAGE			
EQUIPMENT			$1,089,419,346
		TIMES HANDLED	
(TVA EQUIPMENT)*TIMES HANDLED*0.0001		8	$871,535
INVENTORY			$89,518,185
		TIMES HANDLED	
(TVA INVENTORY)*TIMES HANDLED*.0001		4	$35,807
TOTAL COST			$907,343

TOTAL TRANSPORTATION COST	NEWARK
EQUIPMENT RELOCATION	$198,274,321
EQUIPMENT DISPOSAL	$2,374,375
PURCHASE VS MOVE	$69,834,573
INVENTORY	$895,182
MATERIAL DAMAGE	$907,343
TOTAL	$272,285,794

MOVE-IT.XLW]TRANSBA.XLS

EQUIPMENT TRANSFER	NEWARK			FY 96 $
EQUIPMENT				
WEAPON SYSTEM SUPPORT EQUIPMENT				
APPROPRIATED FUND	FY 92 $		INFL INDICE	$0
OVER 5K		$1,146,966,243	1.108	$1,269,718,517
UNDER 5K (50% OF ACCOUNTABLE)				$126,971,952
TOTAL				$1,396,691,469
EXCESS EQUIPMENT				
WEAPON SYSTEM SUPPORT EQUIPMENT			PERCENT	
APPROPRIATED FUND			17.00%	$0
NON APPROPRIATED FUND			17.00%	$0
OTHER			17.00%	$216,862,318
TOTAL			17.00%	$21,585,232
				$237,437,550
REPURCHASE VS MOVE				
WEAPON SYSTEM SUPPORT EQUIPMENT				
APPROPRIATED FUND			5.00%	$0
NON APPROPRIATED FUND			5.00%	$0
OTHER			5.00%	$63,485,978
TOTAL			5.00%	$6,348,598
				$69,834,573
COST TO RELOCATE EQUIPMENT				
REMAINING EQUIPMENT VALUE				
P,C,H (COMPOSITE)				$1,089,418,346
TRANSPORTATION (COMPOSITE)			3.50%	$38,129,677
REMOVE AND REINSTALL (COMPOSITE)			6.50%	$70,812,257
TOTAL COST TO MOVE			6.50%	$70,812,257
				$178,754,192
COST TO DISPOSE OF EQUIPMENT (DRMO)				
EQUIPMENT VALUE				$237,437,550
DISPOSAL COST REMOVE AND TRANSPORT			1.00%	$2,374,375
TOTAL EQUIPMENT COST				
RELOCATE				$178,754,192
DISPOSE				$2,374,375
BUY				$69,834,573
(A) TOTAL				$251,963,141
INVENTORIES D033, G072, G402A	FY 92 $		INFL. INDICE	
STOCK FUND		1,616,851,712	1.108	$1,790,363,697
OTHER				$0
TOTAL				$1,790,363,697
AMOUNT TO MOVE		5.00%		$89,518,185
COST TO RELOCATE		1.00%		$895,182
MATERIAL DAMAGE				
EQUIPMENT				
(TVA EQUIPMENT)*TIMES HANDLED*0.0001			TIMES HANDLED	$1,089,418,346
INVENTORY			8	$871,535
				$89,518,185
(TVA INVENTORY)*TIMES HANDLED*.0001			TIMES HANDLED	
TOTAL COST			4	$35,807
				$907,343
TOTAL TRANSPORTATION COST	NEWARK			
EQUIPMENT RELOCATION			$178,754,192	
EQUIPMENT DISPOSAL			$2,374,375	
PURCHASE VS MOVE			$69,834,573	
INVENTORY			$895,182	
MATERIAL DAMAGE			$907,343	
TOTAL			$253,765,666	

(MOVE-IT.XLW)TRANS7A.XLS

1	ACCOUNTABLE EQUIPMENT IN LBS BY TYPE							
		REGULAR	SPECIAL	TOTAL				
	HILL	3,508,572	2,675,244	6,183,816				
	TINKER	2,019,524	573,292	2,592,816				
	ROBINS	438,881	132,503	571,384				
	KELLY	236,680	22,122	258,802				
	METROLOGY	4,460,713	1,825,209	6,485,922				
	TOTAL	10,864,370	5,228,370	16,092,740				
	1991 SITE SURVEY BRIEFING							
2	MILEAGE RATES							
		REGULAR	SPECIAL					
	a. SAF MII MILEAGE RATES (FY 94$)	$1.60	$2.50					
	b. INFLATION INDICE FY 94$ TO FY 96$	1.058	1.058					
	c. 1996 MILEAGE RATE (a*b)	$1.69	$2.65					
3	PACKAGING HANDLING AND CRATING - FRAGILITY GROUPS							
	NOMENCLATURE	FRAGILITY GROUP	PACKING FY 91$	UNITATION FY 91$	TOAL	INFL INDICE	FY 96$ RATE	% OF EQUIPMENT	COMPOSITE RATE
	Gyroscopes and sub assmblies ...	0-14 Gs	$21.80	$0.33	$22.13	1.139	$25.21	50%	$17.67
	Flight Instruments	15-25 Gs	$17.25	$0.33	$17.58	1.139	$20.02	10%	$12.61
	Small Computers ...	26-39 Gs	$7.47	$0.33	$7.80	1.139	$8.88	16%	$2.00
	Typewriters, Cameras ...	40-59 Gs	$6.03	$0.33	$6.36	1.139	$7.24	16%	$1.42
	Oscilloscopes, Electric Test Sets....	60-84 Gs	$5.04	$0.33	$5.37	1.139	$6.12	5%	$1.16
	Motor Assemblies, Transmissions....	85-110 Gs	$4.12	$0.33	$4.45	1.139	$5.07	0%	$0.31
	Floor Assemblies.....	Over 110 Gs	$2.70	$0.33	$3.03	1.139	$3.45	0%	$0.00
	SMALL ASSETS 24" OR UNDER	85-110 Gs	$1.33	$0.33	$1.66	1.139	$1.89	3%	$0.06
	UNITATION COST ONLY	INVENTORY	$0.00	$0.33	$0.33	1.139	$0.38	30%	$0.11
4	AIR DISTANCE FROM NEWARK TO							
	HILL AFB	1,724						
	KELLY AFB	1,345						
	McCLELLAN AFB	2,377						
	ROBINS AFB	717						
	TINKER	966						
	LOCATION 1	TBD						
	LOCATION 2	TBD						
	LOCATION 3	TBD						
	LOCATION 4	TBD						
	LOCATION 5	TBD						
5	LBS PER TRUCK - SAF/MII INSTRUCTION	24,000						
	a. CUBIC FEET AVAILABLE PER 45FT TRUCK	2,937						
	b. TYPICAL % OF CUBIC FEET FILLED	80%						
	c. CUBIC FEET PER TRUCK (a*b)	2,350						

16	WORKLOAD DISTRIBUTION %								
	HILL AFB	100%							
	KELLY AFB	0%							
	McCLELLAN AFB	0%							
	ROBINS AFB	0%							
	TINKER	0%							
	LOCATION 1	0%							
	LOCATION 2	0%							
	LOCATION 3	0%							
	LOCATION 4	0%							
	LOCATION 5	0%							
17	REDISTRIBUTED ACCOUNTABLE EQUIP	REGULAR	SPECIAL	TOTAL					
	HILL AFB	10,864,370	5,228,370	16,092,740					
	KELLY AFB	0	0	0					
	McCLELLAN AFB	0	0	0					
	ROBINS AFB	0	0	0					
	TINKER	0	0	0					
	LOCATION 1	0	0	0					
	LOCATION 2	0	0	0					
	LOCATION 3	0	0	0					
	LOCATION 4	0	0	0					
	LOCATION 5	0	0	0					
	DELTA	0	0	0					
18	NON-ACCOUNTABLE WEIGHT 50% OF ACCOUNTABLE WEIGHT - SAF MII INSTRC								
	HILL AFB	8,046,370							
	KELLY AFB	0							
	McCLELLAN AFB	0							
	ROBINS AFB	0							
	TINKER	0							
	LOCATION 1	0							
	LOCATION 2	0							
	LOCATION 3	0							
	LOCATION 4	0							
	LOCATION 5	0							
	NOTE: THIS WILL BE ADDED TO REGULAR WEIGHT								
	CATEGORY FOR SHIPMENT PURPOSES								

10 INVENTORY WEIGHT TO MOVE 5% OF ACCOUNTABLE WEIGHT								
HILL AFB	804,637							
KELLY AFB	0							
McCLELLAN AFB	0							
ROBINS AFB	0							
TINKER	0							
LOCATION 1	0							
LOCATION 2	0							
LOCATION 3	0							
LOCATION 4	0							
LOCATION 5	0							
NOTE: THIS WILL BE ADDED TO REGULAR WEIGHT								
CATEGORY FOR SHIPMENT PURPOSES								
10 REGULAR ITEMS TO MOVE	A	B	C	D	E	F	G	H
	REGULAR	TRUCKS	MILES	MILEAGE	TRANPORT	PC& H RATE	P,C, & H	PCH TOTAL
	(7,8,9)	(A/24,000)		RATE	(B*C*D)	COMPOSITE	CU FT	
HILL AFB	19,715,377	821	1,724	$1.59	$2,250,492	$17.67	1,929,022	$34,085,812
KELLY AFB	0	0	1,345	$1.59	$0	$17.67	0	$0
McCLELLAN AFB	0	0	2,377	$1.59	$0	$17.67	0	$0
ROBINS AFB	0	0	717	$1.59	$0	$17.67	0	$0
TINKER	0	0	966	$1.59	$0	$17.67	0	$0
LOCATION 1	0	0	0	$1.59	$0	$17.67	0	$0
LOCATION 2	0	0	0	$1.59	$0	$17.67	0	$0
LOCATION 3	0	0	0	$1.59	$0	$17.67	0	$0
LOCATION 4	0	0	0	$1.59	$0	$17.67	0	$0
LOCATION 5	0	0	0	$1.59	$0	$17.67	0	$0
					$2,250,492			$34,085,812
11 SPECIAL ITEMS TO MOVE	A	B	C	D	E	F	G	H
	SPECIAL	TRUCKS	MILES	MILEAGE	TRANPORT	PC& H RATE	P,C, & H	PCH TOTAL
		(A/24,000)		RATE	(B*C*D)		CU FT	
HILL AFB	5,228,370	218	1,724	$2.65	$995,955	$17.67	512,213	$9,050,800
KELLY AFB	0	0	1,345	$2.65	$0	$17.67	0	$0
McCLELLAN AFB	0	0	2,377	$2.65	$0	$17.67	0	$0
ROBINS AFB	0	0	717	$2.65	$0	$17.67	0	$0
TINKER	0	0	966	$2.65	$0	$17.67	0	$0
LOCATION 1	0	0	0	$2.65	$0	$17.67	0	$0
LOCATION 2	0	0	0	$2.65	$0	$17.67	0	$0
LOCATION 3	0	0	0	$2.65	$0	$17.67	0	$0
LOCATION 4	0	0	0	$2.65	$0	$17.67	0	$0
LOCATION 5	0	0	0	$2.65	$0	$17.67	0	$0
					$995,955			$9,050,800

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(MOVE-IT.XLW)TRANS7A.XLS

12 EQUIPMENT VALUATION	
a. FY 92$ VALUE OF EQUIPMENT	$1,260,551,867
b. INFLATION INDICE	1.108
c. FY 96$ VALUE OF EQUIPMENT	$1,396,691,469
d. PERCENT TO REPURCHASE VS MOVE	5.0%
e. DOLLAR VALUE OF REPURCHASE	$69,834,573
f. PERCENT OF EQUIPMENT TO EXCESS	17%
g. DOLLAR VALUE OF EXCESS EQUIP	$237,437,550
h. CER FOR COST TO EXCESS	1%
i. COST TO EXCESS (g*h)	$2,374,375
j. PERCENT OF EQUIPMENT TO CTRS	78.0%
k. DOLLAR VALUE TO CTRS	$1,089,419,346
l. CER FOR COST TO EXCESS	4.4%
m. COST TO EXCESS (g*h)	$47,934,451
13 INVENTORY VALUATION	
a. FY 92$ VALUE OF EQUIPMENT	$1,615,851,712
b. INFLATION INDICE	1.108
c. FY 96$ VALUE OF EQUIPMENT	$1,790,363,697
d. PERCENT OF INVENTORY TO MOVE	5%
e. DOLLAR VALUE TO MOVE TO CTRS	$89,518,185
f. CER FOR COST TO EXCESS	1.0%
g. COST TO EXCESS	$895,182
SOURCE: HQ AFMC/LG - TRIXIE BREWER	
14 MATERIAL DAMAGE	
a. EQUIPMENT VALUE TO CTRS	$1,089,419,346
b. NUMBER OF TIMES HANDLED	8
c. MATERIAL DAMAGE FACTOR	0.0001
d. EQUIPMENT MATERIAL DAMAGE $	$871,535
e. EQUIPMENT VALUE TO EXCESS	$237,437,550
f. NUMBER OF TIMES HANDLED	4
g. MATERIAL DAMAGE FACTOR	0.0000
h. EQUIPMENT MATERIAL DAMAGE $	$0
g. INVENTORY VALUE TO CTRS	$89,518,185
h. NUMBER OF TIMES HANDLED	4
i. MATERIAL DAMAGE FACTOR	0.0001
j. INVENTORY MATERIAL DAMAGE $	$35,807
k. TOTAL MATERIAL DAMAGE	$907,343

(MOVE-IT.XLW)TRANS7A.XLS

1.1.6	TRANSPORTATION ROLE-UP								
	a. REGULAR TRANSPORTATION	$2,250,492							
	b. REGULAR PACKING MATERIAL	$34,085,812							
	c. SPECIAL TRANSPORTATION	$995,955							
	d. SPECIAL PACKING MATERIAL	$9,050,800							
	f. HANDLING, REMOVAL, REINSTALL								
	f1 EXCESS EQUIPMENT	$2,374,375							
	f2 EQUIPMENT TO CTRS	$47,934,451							
	f3 INVENTORY	$895,182							
	e. REPURCHASE VS MOVE	$69,834,573							
	f. MATERIAL DAMAGE	$907,343							
	g. TOTAL	$168,328,984							

130

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OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

To Dan Johnson	From Edwina Anderson
Dept./Agency AFMC/FMC	Phone # DSN 683-6642
Fax # DSN 787-6500	Fax # DSN 683-6940

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

CH 1
DIPECM 4140.1
9Sep91

APPENDIX C-2

PACKING, CRATING, HANDLING & TRANSPORTATION (PCH&T) COST

Transportation costs are based on the following percentage chart for acquisition cost and distance to be shipped.

TRANSPORTATION COST % -

ACQUISITION COST	UNDER 300 MILES	300-500 MILES	501-1,000 MILES	OVER 1,000 MILES
$ 5,000-$10,000	3	3.5	5	6.5
$10,001-$15,000	2.5	3	4.5	6
$15,001-$20,000	2	3	4	6
$20,001-$30,000	2	2.5	3.5	5.5
OVER $30,000	1.5	2	3	5

EXAMPLE

To ship a machine costing $13,750 a distance of 650 miles:
TRANS: $13,750 x 4.5% = $619

DEFENSE INDUSTRIAL PLANT Equipment Center

PACKING, CRATING AND HANDLING

Packing, crating and handling (PCH) costs are funded by DIPEC. Costs to be charged to PCH includes the cost of materials, preservation, wraps, cushioning materials, containers, equipment, labels, tags, strapping materials, blocking and bracing materials, lumber and skids. PCH does not include funds for any other work.

PCH cost is based on the net weight of the shipment. Net weight includes the basic item plus weight of accessories and auxiliary equipment. Weight is broken into six categories by tonnage: 0 - 2000, 2001 - 4000, 4001 - 8000, 8001 - 16,000, 16,001 - 32,000 and over 32,000.

APPENDIX C-2

PACKING, CRATING, HANDLING, & TRANSPORTATION (PCH&T) COST PERCENTAGE

ACQUISITION COST	PC & H COST %	TRANSPORTATION COST % UNDER 300 MILES	300-500 MILES	501-1,000 MILES	OVER 1,000 MILES
$5,000-$10,000	11	3	3.5	5	6.5
$10,001-$15,000	10	2.5	3	4.5	6
$15,001-$20,000	9	2	3	4	6
$20,001-$30,000	8	2	2.5	3.5	5.5
OVER $30,000	7	1.5	2	3	5

3-10. Packaging Cost. The direct labor and direct material cost associated with preparing material for shipment. The ratio of package item weight to unpackaged item weight is also presented. Since most items receive level B pack and level A preservation, the difference for CONUS and overseas is insignificant. Cost elements and weight elements are defined as follows:

a. Packaging Material Cost - The cost of preservatives, barriers, containers, cushioning and dunnage used to protect items during transportation and storage.

b. Packaging-Labor Cost - The wage paid to fabricate, assemble and apply protective shipping and storage measures up to, but not including shipment processing.

c. Unpackaged Item Weight - The bare weight of an unpackaged, unloaded, or unfueled item.

d. Packaged Item Weight - The combined weight of the unpackaged item and the weight of all packaging material required for shipment and storage.

e. Average Packaging Cost/Pound Factor - The average packaging material and labor cost per pound to prepare an unpackaged item for shipment and storage.

Avg Package Cost/Pound	$3.00
Packaged Weight/Item Weight Factor	1.941

The OPR for Packaging Cost is HQ AFMC/DSTP

928

APPENDIX

COMBINED AIRFRAME, HELICOPTER,
AND ENGINE STUDY

ARTMEN

APPENDIX 1

JOINT POLICY COORDINATING GROUP ON DEPOT MAINTENANCE INTERSERVICING (JPCG-DMI)

TASKING DIRECTIVE 83-0002

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY
TERIEL DEVELOPMENT AND READINESS COMMAND
01 EISENHOWER AVE., ALEXANDRIA, VA. 22333

HEADQUARTERS NAVAL MATERIAL COMMAND
WASHINGTON, DC 20360

DEPARTMENT OF THE AIR FORCE
QUARTERS AIR FORCE LOGISTICS COMMAND
WRIGHT-PATTERSON AFB, OHIO 45433

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SYSTEMS COMMAND
ANDREWS AFB, WASHINGTON, DC 20334

JOINT POLICY COORDINATING GROUP ON
DEPOT MAINTENANCE INTERSERVICING
(JPCG-DMI)

TASKING DIRECTIVE 83-0002

1. TASK: A joint JDMAG/Service posture study will be conducted of airframe, engine, and helicopter workloads, including consideration of all related workloads which may influence study results. The study will be based on the current data base (Service responses to the Nov 1981 Data Call), but will be updated as time permits. The study will be comprehensive in scope, and will not treat airframes, engines, or helicopters in isolation from one another, or from other workloads which affect mobilization supportability at the thirteen ADM depots and in the commercial sector.

2. OBJECTIVE: To complete a comprehensive mission-oriented assessment of airframe, engine, and helicopter workloads within the depot maintenance industrial base, and define the need or potential for reposturing those workloads in such a way as to improve peacetime efficiencies and economics of operation, while maintaining/enhancing the Services' ability to support mobilization surge requirements. A detailed study plan is attached as enclosure (1).

3. REQUIREMENTS:

a. The study director will be appointed by the JPCG-DMI.

b. The study will be completed and a final briefing presented to the JPCG-DMI by 25 May 1983.

c. A joint Study Concepts Boards, chaired by JDMAG, will be established at the O-6 or civilian equivalent level to provide formal senior level interface between the Service Logistics Staffs and the JDMAG. The board will define the scope and direction of the study, and provide input on Service plans and programs affecting the study.

d. The Service Logistics Staffs will identify a minimum of two personnel as project OPR's. These personnel will participate on a continuing basis from the beginning of the study. Additional resources (a minimum of three per Service) will be be required during Phase II of the study.

e. Progress reports will be provided to the JPCG-DMI on a monthly basis, commencing 4 Feb 1983, and to the JLC on a quarterly basis. The final study product, following approval by the JLC, will be published as a supplement to the 1982 Operational Master Plan.

136

21

RESOURCES: Service staff participation will be provided as required to complete this study.

JAMES S. WELCH
Major General, USA
Chairman, JPCG-DMI

C. J. MOORE
RADM, USN
Navy Member, JPCG-DMI

M. T. SMITH
Brigadier General, USAF
AFLC Member, JPCG-DMI

GRAHAM W. RIDER
Major General, USAF
AFSC Member, JPCG-DMI

W. G. CARSON, JR.
Brigadier General, USMC
Marine Corps Member-JPCG-DMI

DATE: 10 FEB 1983

137

32

V. Movement of Equipment

Each depot provided the total costs of fixed and variable industrial peculiar equipment (IPE) categorized by airframes, engines, and components. The factors used in the movement of direct workload will be applied to determine the costs of variable IPE, i.e., if 10 percent of the direct workload moves, then 10 percent of the variable equipment cost in the same category will be used to determine the cost of equipment. Specific moves will be detail priced, when appropriate. Fixed IPE does not move unless the complete shop moves.

The following table will be prepared for each depot:

Dollar Value Table of Equipment

Category	Fixed IPE	Variable IPE
Airframes	$ _____	$ _____
Engines	$ _____	$ _____
Components	$ _____	$ _____

Cost to transfer equipment

6% packing, crating, handling
4% transportation
2% disconnect
10% uncrating/unpacking, installation

22% X percentage of acquisition value tranferred to the gaining depot = transfer costs.

VI. Recruitment of Civilian Employees

_____ civilian positions transferred with the workload
_____ employees will accept transfer
_____ civilians will need to be recruited

The cost to recruit civilian employees includes advertising, interviewing, testing, selecting, processing, etc. Historical data indicates this to be approximately $150 per person. The historical cost data will be used for this study; however, it should be noted that highly specialized skills such

EQUIP.XLS

DISASSEMBLY/REASSEMBLY

	COMMODITY GROUP	NUMBER HOURS	TOTAL COST	AVG HRLY	INFL INDICE	FY 96 $ COST
LI	MUNITIONS	124,989	$10,063,363	$80.51	1.041	$83.82
TI	TECH/INDUSTIRAL BACKSHOPS NDI, TOMOGRAPHY, SOFTWARE, TPS	932,812	$50,664,326	$54.31	1.041	$56.54
LA	AIRCRAFT	99,550	$8,268,640	$83.06	1.041	$86.47
LM	MISSILE WORKLOAD	414,220	$24,640,914	$59.49	1.041	$61.93
	TOTAL	1,571,571	93,637,243	$59.58	1.041	$62.02

SOURCE: HILL AFB STUDY DURING AFMC 21. THIS IS A COMBINATION OF ORGANIC AND CONTRACTUAL EFFORTS. INCLUDED IN THE ESTIMATE IS CRANE TIME, EPQ TANK RINSE REQUIREMENTS, ETC.

THIS EQUATED TO 4.4% OF THE DOLLAR VALUE OF HILL AFBs EQUIPMENT

CATEGORY	LOWER	UPPER	MEDIAN	SOURCE	RECEIVE DATE	SOURCE DATE	QUALIFIER
TRANSPORTATION	3.0%	6.5%	4.8%	GSA	Feb-94	Sep-91	501 - 1,000 MILES
TRANSPORTATION	0.5%	0.5%	0.5%	AFMC/DSX	Jan-91	Jan-91	1st DESTINATION CHARGES
TRANSPORTATION	4.0%	4.0%	4.0%	JPCG DEPOT MAINT	Feb-95	Feb-83	JPCG AIRCRAFT, ENGINE, HELICOPTER STUDY
ROLE-UP	0.5%	6.5%	3.5%	COMPOSITE			
PACKING, CRATING, HANDLING	2.0%	4.0%	3.0%	WESTINGHOUSE	Jan-91	Jan-91	SENSITIVITY DEPENDENT
PACKING, CRATING, HANDLING	7.0%	11.0%	9.0%	GSA	Feb-94	Sep-91	ACQUISITION COST $ 5K AND GREATER
PACKING, CRATING, HANDLING	6.0%	6.0%	6.0%	JPCG DEPOT MAINT	Feb-95	Feb-83	JPCG AIRCRAFT, ENGINE, HELICOPTER STUDY
ROLE-UP	2.0%	11.0%	6.5%	COMPOSITE			
REMOVAL & REINSTALLATION	1.0%	1.0%	1.0%	SM-ALC	Jan-91	Jan-91	LOCAL STUDY RESULTS
REMOVAL & REINSTALLATION	4.4%	4.4%	1.0%	HILL AFB	Nov-94	Nov-94	AFMC 21 LOCAL STUDY EFFORT
REMOVAL & REINSTALLATION	12.0%	12.0%	1.0%	JPCG DEPOT MAINT	Feb-95	Feb-83	JPCG AIRCRAFT, ENGINE, HELICOPTER STUDY
ROLE-UP	1.0%	12.0%	6.5%	COMPOSITE			
TOTAL COMPOSITE RATE	3.5%	29.5%	16.5%				

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Dan,

Included is a summary of estimates to disassemble and reassemble Ogden ALC equipment. Each directorate had the equipment users and equipment OPRs estimate the cost of disassembling the common equipment (not just sitting on the table so to speak). The unique equipment was estimated for disassembly and reassembly. Included is crane time, EPA tank rinse requirements, etc. Many of the hours are estimates from people helped install the equipment and some hours are best estimates. When recent contracts were readily available, we used the costs from the contract. I obtained the sustaining engineering rates currently negotioated with the contractors who maintain the ICBM facilities (Test Silos, Little Mountain, and UTTR). The estimate is not perfect, it is as good as it gets for an entire installation.

We are anticipating using approximately 4.4% factor for all options

Thanks for you help.

Richard Swan

ICBM Sustaining Engineering Contract Rates

	Rate	Composite Rate
Rockwell International		
Ogden ALC	$57.85	$74.43
Anahiem	$91.00	
(PCO, Don Leonhardt/LMK/DSN 458-4894)		
Boeing Aerospace		
Ogden ALC	$62.46	$99.31
Seattle	$136.15	
(PCO, Richard Heinz/LMK/DSN 458-4891)		
TRW		
Ogden ALC (Senior Eng)	$129.09	$112.53
Ogden ALC (Eng Tech)	$95.97	
(PCO, Sherrie Simmons/LMK/DSN 458-4891)		
KT Enterprises 7369 Biscayne Dr SLC, UT 84121		
Range Engineering	$117.35	$117.35
(Propellant Lab) MTS System Corp 14000 Technology Dr Eden Prairie, MN 55344		
Propellant Engineering	$135.00	$107.50
Fanic-Robotics 2000 S. Adams Auburn Hills, MI		
Robotics Engineering	$80.00	

EQUIPMENT DISASSEMBLY/REASSEMBLY/CALIBRATION

ACCOUNT	HOURS DIS-ASSY	HOURS RE-ASSY	TYPE	HOURS TOTAL	ORGANIC RATE	CONTRACT RATE	TOTAL COST
LAO							
100DE	1	1	O	1	$56.23		$56
100JJ	1	2	O	3	$56.23		$169
100KK	4	7	O	11	$56.23		$590
100NN	9	14	O	22	$56.23		$1,237
100RR	2	3	O	5	$56.23		$281
100TT	1	2	O	3	$56.23		$169
113JJ	12	12	O	24	$56.23		$1,350
113KK	30	62	O	92	$56.23		$5,173
113MM	24	25	O	49	$56.23		$2,755
113NN	10	12	O	22	$56.23		$1,237
113VF	2	4	O	6	$56.23		$337
100GG	8	16	O	24	$56.23		$1,350
100MM	2	4	O	6	$56.23		$337
100VD	3	3	O	6	$56.23		$337
100VI	4	8	O	12	$56.23		$675
100FF	2	4	O	6	$56.23		$337
113VG	32	32	O	64	$56.23		$3,599
LAO							
100DD	2	2	C	4		$90.00	$360
100KK	2	3	C	5		$90.00	$450
100MI	3	4	C	7		$90.00	$630
100MR	4	6	C	10		$90.00	$900
100TT	1	2	C	3		$90.00	$270
113HH	4,896	9,792	C	14,688		$90.00	$1,321,920
113KK	40	80	C	120		$90.00	$10,800
113MM	23,575	26,590	C	50,165		$90.00	$4,514,850
113GG	128	256	C	384		$90.00	$34,560
LAR							
102CB	364	631	O	995	$56.23		$55,949
102KA	38	44	O	82	$56.23		$4,611
115KA	768	960	O	1,728	$56.23		$97,165
115CA	2,595	3,892	O	6,487	$56.23		$364,764
102CA	236	236	O	472	$56.23		$26,541
102KE	118	154	O	272	$56.23		$15,266
115KE	118	118	O	235	$56.23		$13,214
MISC	370	389	O	759	$56.23		$42,679
115CB	318	627	O	945	$56.23		$53,137
LARP							
102DI	384	1,200	O	1,584	$56.23		$89,068
102DP	336	1,120	O	1,456	$56.23		$81,871
102KC	264	1,110	O	1,374	$56.23		$77,260
102KB	420	1,120	O	1,540	$56.23		$86,594
104EJ	32	32	O	64	$56.23		$3,599
104PK	194	194	O	388	$56.23		$21,817
104RS	3	3	O	6	$56.23		$337
104SA	919		O	919	$56.23		$51,647
104SB	426		O	426	$56.23		$23,954
117EJ	41		O	41	$56.23		$2,305

EQUIPMENT DISASSEMBLY/REASSEMBLY/CALIBRATION

ACCOUNT	HOURS DIS-ASSY	HOURS RE-ASSY	TYPE	HOURS TOTAL	ORGANIC RATE	CONTRACT RATE	TOTAL COST
117SA	47		O	47	$56.23		$2,643
117SC	1,710	1,710	O	3,420	$56.23		$192,307
MINI	21	30	O	51	$56.23		$2,868
R14	1,973	1,973	O	3,946	$56.23		$221,884
MISC	99	112	O	211	$56.23		$11,865
102KB	22	35	O	57	$56.23		$3,205
117PK			C				
117SA			C				$85,000
R14	3,116	3,116	C	6,232			$165,000
115KC	33	39	C	72		$90.00	$560,880
						$90.00	$6,480
LA TOTAL				99,550			$8,268,640
LIWA							
CAS-B	204	493	O	697	$63.85		$44,502
BLDG 1642	523	1,369	O	1,891	$63.85		$120,752
CAS-B	36	87	C	123		$90.00	$11,070
BLDG 1642	92	242	C	334		$90.00	$30,038
MOBILE COM	182	554	C	736		$90.00	$66,240
LIWP							
Test Equip & Stands only.	5,654	16,926	O	22,580	$63.85		$1,441,679
Eval. one 8 bay station							
LIW SUB-TOTAL				26,361			$1,549,026
LIT							
Support equip	7,080	24,133	O	31,213	$73.39		$2,290,744
LIT							
Support equip	5,318	24,151	C	29,469		$60.00	$1,768,128
LIL							
TANKS:							
17 CHROME			C				
125 MISC			C				$102,000
128XX_	1,802		O	1,802	$73.39		$437,500
Support Equip	3,558	8,770	C	12,328			$132,249
Support Equip	8,416	15,400	O	23,816	$73.39	$60.00	$739,680
Special (Quote)			C				$1,747,856
							$1,296,180
LI TOTAL				124,989			$10,063,363
LM							
COMMON	52,671		O	52,671	$52.02		$2,739,945
UNIQUE							
166PA/166AL			O	7,972	$52.02		$414,703
166PD/158PD			O	96	$52.02		$4,994
			C	352		$125.00	$44,000

124

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EQUIPMENT DISASSEMBLY/REASSEMBLY/CALIBRATION

ACCOUNT	HOURS DIS-ASSY	HOURS RE-ASSY	TYPE	HOURS TOTAL	ORGANIC RATE	CONTRACT RATE	TOTAL COST
166				1,200	$52.02		$62,424
167PB/167PC			O	3,380	$52.02		$175,828
			O	1,200		$125.00	$150,000
168MT			O	1,632	$52.02		$84,897
173__/165__			O	794	$52.02		$41,304
			O	2,004		$107.50	$215,430
172AD/164AD			O	13,000	$52.02		$676,260
172AF/153AF			O	20,000	$52.02		$1,040,400
			O*	4,160		$117.35	$488,176
33CM			O	220	$52.02		$11,444
			O	480		$90.00	$43,200
SMIC			O	105,040	$52.02		$5,464,181
			O**	52,020		99.31	
			O***	52,020	-	$112.53	$5,853,811
SVIC			O****	87,300		$74.43	$6,497,739
CALIBRATION			O	8,679	$72.84		$632,178
LM TOTAL				414,220			$24,640,914
*KT ENTERPRISES							
**BOEING							
***TRW							
****ROCKWELL							
TI							
COMMON/ UNIQUE							
TIEL							
TIP	473,544	33,480	O	507024	$52.32		$773,828
TIU	1,500	1,500	O	3000	$52.32		$26,527,496
TIW	341,880	232	O	342112	$52.32		$156,960
TIS	60,504	20,172	O	80676	$52.32		$17,899,300
CT EQUIP	(CLIN 0020 F42610-92-R-61269)						$4,220,968
CALIB							$442,752
TI TOTAL				932,812			$643,022
							$50,664,326
HAFB TOTAL				1,571,571			$93,637,243

NEWARK AFB PLAN B

FM

TRANSPORTATION

ATTACHMENT 2

146 240

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE OHIO

28 FEB 1995

MEMORANDUM FOR HQ AFMC/XPX

FROM: HQ AFMC/LGT

SUBJECT: Transportation of Newark AFB Equipment Methodology (Your Ltr, 21 Feb 95)

1. We have reviewed the seven options and recommend the use of Acquisition Cost Option B to relocate AGMC to Air Force or Navy logistics centers.

2. Based on conversations with ALC Packaging personnel and recency of cost data, Option B provides the most accurate transportation and packaging costs.

3. Our POC for questions is Ms. Dorothy Tuck, LGTT, 74814.

GEORGE R. RANEY, Colonel, USAF
Chief, Transportation Division
Directorate of Logistics

NEWARK AFB PLAN B

FM

TRANSPORTATION

ATTACHMENT 3

QUESTIONS FOR 27 February, 1995
NEWARK AFB

1. Current UMD data shows Newark AFB assigned authorizations to be:

Officer:	23
Enlisted:	45
Civilian:	1482
Total:	1550

a. Does this include?

OL-2, USAF Hospital	No
Air Force Office of Special Investigation	No
Defense Contract Management Command	No
Defense Finance and Accounting Service	No
Navy Representation	No

b. If not, what is Newark's assigned population excluding NAF employees:

Officer:	23
Enlisted:	49
Civilian:	1523
Total:	1595

Note: The above answer addresses assigned authorizations, including tenants, and excluding nonappropriated fund (NAF) civilians. If the above questions is intended to address assigned personnel; i.e., faces instead of spaces, the following information is provided: (As of 31 Jan 95)

Officer:	14	
Enlisted:	45	
Civilians:	1422	(Not included; NAF = 27)
Total:	1481	

2. In 1991 Newark AFB provided the following training information: Is this still appropriate; if so, can Newark provide a source for course cost. If not, what is your estimate of required training and the source for the course costs.

Your training costs have been replaced with the costs in atch 1.

3. Is demolition required to vacate the facilities? For example, removal of wall to allow removal of one of a kind equipment that is not more economical to buy. If so, what areas would be effected and what would the cost be to demolish and then return the area to a safe reusable condition for the re-use committee.

See Atch 2

4. Estimated cost to disassemble, reassemble and calibrate the equipment.

See Atch 3

5. Estimated cost of first article test(s)?

The requirement to prove proficiency on each weapon system component prior to or in conjunciton with depot transfer has not been fully described to date. Our recommended sequence of training is as follows:

a. As facility is being constructed at receiving base, send individuals from that base to AGMC for training. The total cost for this requirement was provided in the answer to question 2.

b. Once the equipment is moved , cost for which is computed in the equipment transfer section of the closure model, there should be a confirmation that the new facility be certified. The detailed requirement for each workload must be developed. We anticipate that the certification of each production line will require that each operation be demonstrated. To calculate the labor hour requirement for this, take the individual operation labor standard (hours) X 1.0 (occurance factor) X 1.0 (quantity for the unit) X the accellerated labor rate for the cost center. Since these operations must be partially observed, the product would be increased by 50%.

AGMC expects to have the estimated man hours developed for this requirement by 3 Mar 95.

6. Interim Production Support

Defer to Single Managers to provide. The estimate you provided was good data and can be updated by OO-ALC.

We are preparing a transition scenario for each workload, taking into consideration the number on Test Stations, age, one-of-a-kind, etc. We will have that available this week.

7. What workloads have been transferred from Newark AFB IAW as a direct result of the BRAC 93 law and what is the total cost of that movement? For example: TMDE, Sexuns, and FSS.

No workloads have been transferred at this time.

8. From your Management Product Number 1, what is the average annual leave balance for employees that are not eligible for retirement?

Estimated at 312 hours.

Estimated average 31 Dec. 94:	178 Hrs
Accumulation at 50% rate, 156 Hrs per year category: CY95	78 Hrs
Only 18.5 pay periods, CY 95	56 Hrs
Estimated Average Balance	312 Hrs

150

44

9. The joint forces with Air Staff recommendations for determining the number of people that will take retirement. Their assumptions are:

a. 70% of the people eligible to retire will retire.

Yes, we agree with this figure.

b. 50% of the people who are early-out eligible will accept early-out retirement.

Yes, we agree with this figure

10. AFMC is currently experiencing a turnover rate of 1% per year. Do you feel this turnover rate would be applicable to the modeling of Plan B? If not, what percentage do you feel is more appropriate? Please provide rationale, supporting documentation and source.

No. Based on figures for 1992 and 1993; adjusted for transfer of function to DFAS and the Mar 1993 Incentive program, turnover averaged 5.90%. Even with the Plan B approach, employees are confronted with leaving Newark, Ohio and will continue to seek local federal, state, or private sector employment. Newark AFB employees are enrolled in the Priority Placement Program (PPP) and it is expected jobs will continue to be offered and accepted. We feel 5% turnover per year is a better estimate.

11. Currently Air Staff is assuming that 60% of the personnel are willing to transfer with the job. What is the Newark AFB assessment of the percentage willing to PCS with the workload. However, the times and conditions of those moves is quite different than today's soci-economic environment. Please provide a brief rationale for your assessment

Based on recent transfer of function from Rickenbacker Air National Guard Base, Ohio to Wright-Patterson AFB, Ohio; this transfer was within the state-more desirable that an out-of-state transfer; we would estimate 40% would transfer or reassign to an out-of-state location.

12. Given the attached description of item Nomenclatures and associated costs for packaging material costs, what is your macro assessment of the equipment at Newark AFB on a percentage basis? Please provide any rationale and methodology of assigning categories. For example moving a whole class of workstations equipment into a different category based on on-site knowledge of age, uniqueness, et, et cetera based on the expert opinion of a team of Newark AFB employees. POC for the group is:

0-14 Gs	Gyroscopes and sub assemblies
15-25 Gs	Flight instruments
25-39 Gs	Small Computers
40-59 Gs	Typewriters, Cameras
60-84 Gs	Oscilloscopes, Electric Test Sets
85-110 Gs	Motor Assemblies, Transmissions
Over 110 Gs	Floor Assemblies

We are reviewing the additional information that you have provided for question 12

Estimated Training Costs For Workload Transition

REF #	REF DESCRIPTION		
1	Direct personnel Equivalents (PE's) on board (FY95)		480
2	Attrition rate: (5%/year for 2 years)		45
3	PE's on board last day of FY96		435
4	PE's eligible to retire (36%)		157
5	PE's estimated to retire (50% of eligible)		78
6	PE's estimated to accept transfer (40%)		143
7	PE'S required for FY97		440
8	PE's requiring training (Required - Transfers)		297
9	TDY & labor cost to train/PE	$	6,643
10	Total TDY & labor cost to train	$	1,974,133
11	Total cost for trainers	$	162,800
12	**Total cost to train PE's**	**$**	**2,136,933**

Assumptions:

1) All non-AGMC technicians will be trained on-site at AGMC by existing personnel
2) Figures do not reflect training for Software and Product Engineers and Production Controllers
3) Each trainer can train 10 technicians at one time
4) Each course lasts 22 days (176 hours)

Information Sources:

Ref # 1: Manpower Specialist, Susan Storer, AGMC/MA(2), DSN 346-7162
Ref # 2: AGMC/DPR Letter, 21 Feb 95, Responses to Plan B Questions from HQ/FMC, Question 10
Ref # 4: Personnel Specialist, Edna Mercer, AGMC/DPE, DSN 346-7975
Ref # 5: AGMC/DPR Letter, 21 Feb 95, Responses to Plan B Questions from HQ/FMC, Question 9
Ref # 6: AGMC/DPR Letter, 21 Feb 95, Responses to Plan B Questions from HQ/FMC, Question 11
Ref # 7: Feb 95 PLA
Ref # 9: Special Study, 30 Aug 94, "Movement of Kearfott Workloads in General and Possibly OC-ALC" ($53,140 / 8 PE's = $6,643 / PE for 22 days training; includes airfare, labor, per diem and rental car)
Ref #11: 363 PE's / 10 = 36.3; 37 courses * 176 hours * $25/hr = $162,800

Preparer: Brad Morgan, AGMC/MABE, DSN 346-7891, 27 Feb 95

CONSTRUCTION COST ESTIMATE BREAKDOWN

OMB No. 0704-0193
Expires 31 October 1989

SUMMARY SHEET

CONTRACTOR: Plan "B" - Restoration AFTER Relocation

ADDRESS: NEWARK AFB, OHIO

CONTRACT FOR (Work to be performed):

PROPOSED TOTAL CONTRACT PRICE:

PURCHASE REQUEST NUMBER:

PROJECT NUMBER:

WORK LOCATION: BLDG 9 - VARIOUS AREAS

LINE NO.	ITEM (1)	UNIT OF MEASURE (2)	QUANTITY (3)	MATERIAL COST UNIT (4)	MATERIAL COST TOTAL (5)	LABOR COSTS MANHOURS MANDAYS (6)	LABOR COSTS AVERAGE RATE (7)	LABOR COSTS TOTAL (8)	OTHER DIRECT COSTS (9)	LINE TOTAL (10)
	PAGE 1									8,759
	Page 2									4,088
	Page 3									5,088
	Page 4									16,100
	Page 5									55,000
								GRAND TOTAL		$89,035

08/17/90 08:05 TO:CG 201 /340 88 CG/LMAAC 013

CONSTRUCTION COST ESTIMATE BREAKDOWN

OMB No. 0704-0193
Expires 31 October 1989

x 1

CONTRACTOR: PLAN "B" - RESTORATION AFTER RELOCATION

ADDRESS: * USED JAN 95 CE SHOP RATE

CONTRACT FOR (Work to be performed):

PROPOSED TOTAL CONTRACT PRICE:

PURCHASE REQUEST NUMBER:

PROJECT NUMBER:

WORK LOCATION: BLDG 4 - VARIOUS AREAS

LINE NO.	ITEM (1)	UNIT OF MEASURE (2)	QUANTITY (3)	MATERIAL COST UNIT (4)	MATERIAL COST TOTAL (5)	LABOR COSTS MANHOURS MANDAYS (6)	LABOR COSTS AVERAGE RATE (7)	LABOR COSTS TOTAL (8)	OTHER DIRECT COSTS (9)	LINE TOTAL (10)
001	AIRCRAFT AREAS -									
	- NONE -									
002	MISSILE AREAS									
002A	RM. 41M40 - LABOR									
	STRUCTURAL (CARPENTERS)	HR	4			14	28.26			1,582
	ELECTRIC (ELECTRICIANS)	HR	3			7	32.24			677
	MATERIAL									
	METAL SIDING									
	METAL STUDS									6,500
	WALL BOARD									
										8,759

48

CONSTRUCTION COST ESTIMATE BREAKDOWN

OMB No. 0704-0193
Expires 31 October 1989

1. 2 2

CONTRACTOR

ADDRESS

CONTRACT FOR (Work to be performed)

PROPOSED TOTAL CONTRACT PRICE

PURCHASE REQUEST NUMBER

PROJECT NUMBER

WORK LOCATION

LINE NO.	ITEM (1)	UNIT OF MEASURE (2)	QUANTITY (3)	MATERIAL COST UNIT (4)	MATERIAL COST TOTAL (5)	LABOR COSTS MANHOURS MANDAYS (6)	LABOR COSTS AVERAGE RATE (7)	LABOR COSTS TOTAL (8)	OTHER DIRECT COSTS (9)	LINE TOTAL (10)
002B	Rm. 91A22 - Facilitent Station									
	LABOR									
	STRUCTURAL	HR	2			7	28.26			395
	ELECTRICIANS	HR	2			3	32.24			193
	MATERIAL									
	WALL BOARD									
	METAL STUDS									
55	CONDUIT									3,500
	WIRING									
										4,088

CONSTRUCTION COST ESTIMATE BREAKDOWN

OMB No. 0704-0193
Expires 31 October 1989

p 3

CONTRACTOR

ADDRESS

CONTRACT FOR (Work to be performed)

PROPOSED TOTAL CONTRACT PRICE

PURCHASE REQUEST NUMBER

PROJECT NUMBER

WORK LOCATION

LINE NO.	ITEM (1)	UNIT OF MEASURE (2)	QUANTITY (3)	MATERIAL COST UNIT (4)	MATERIAL COST TOTAL (5)	LABOR COSTS MANHOURS MANDAYS (6)	LABOR COSTS AVERAGE RATE (7)	LABOR COSTS TOTAL (8)	OTHER DIRECT COSTS (9)	LINE TOTAL (10)
002C	Rm. 41A36 - SFIR V186									
	LABOR									
	STRUCTURAL	HR	2			7	28.26			395
	ELECTRICIANS	HR	2			3	32.24			193
	MATERIAL									
	WALL BOARD									
	METAL STUDS									4,500
	CONDUIT									
	WIRING									
										$5,088

CONSTRUCTION COST ESTIMATE BREAKDOWN

OMB No. 0704-0197
Expires 31 October 1987

4

CONTRACTOR

ADDRESS

CONTRACT FOR (Work to be performed)

PROPOSED TOTAL CONTRACT PRICE

PURCHASE REQUEST NUMBER

PROJECT NUMBER

WORK LOCATION

LINE NO.	ITEM (1)	UNIT OF MEASURE (2)	QUANTITY (3)	MATERIAL COST UNIT (4)	MATERIAL COST TOTAL (5)	LABOR COSTS MANHOURS MANDAYS (6)	LABOR COSTS AVERAGE RATE (7)	LABOR COSTS TOTAL (8)	OTHER DIRECT COSTS (9)	LINE TOTAL (10)
	Rm. 41#34									
202D	41G36, and 41J36									
	LABOR									
	STRUCTURAL									
	ELECTRICANS									3,500
	MATERIAL									
	WALLBOARD									
	METAL STUD	3	@	4,200						12,600
	CONDUIT									
	WIRING									
										$16,100

04/17/89 11:08 ☎513 257 7348 88 CG/MAAC 017

CONSTRUCTION COST ESTIMATE BREAKDOWN

OMB No. 0704-0193
Expires 31 October 1989

CONTRACTOR

ADDRESS

CONTRACT FOR (Work to be performed)

PROPOSED TOTAL CONTRACT PRICE

PURCHASE REQUEST NUMBER

PROJECT NUMBER

WORK LOCATION

LINE NO.	ITEM (1)	UNIT OF MEASURE (2)	QUANTITY (3)	MATERIAL COST UNIT (4)	MATERIAL COST TOTAL (5)	LABOR COSTS MANHOURS MANDAYS (6)	LABOR COSTS AVERAGE RATE (7)	LABOR COSTS TOTAL (8)	OTHER DIRECT COSTS (9)	LINE TOTAL (10)
003	METROLOGY –									
	Restoration of Rm. 4152A									
	(DEAD WEIGHT									
	TESTER)									$55,000

158

88 CG/IMAAC

40018

AGMC Equipment Disconnection, Installation and Calibration Labor Requirements

21-Feb-95 Teresa Hagans

Station	Complexity	Disassembly Hours per Statio	Installation*Cal Hours per Station	Quantity	$/hour cost - 100 Disassembly Assembly and Cal
Digita /Analog Module Test	High	160	350		$102,000
GIT1E Gyro Test	Low	16	80		$28,800
GIT1E Float Test	Low	16	80		$19,200
GIT1E Float Stop Test	Low	16	80	1	$9,600
GIT1B Balance	Low	16	80	2	$19,200
GIT1B Fluid Fill	Medium	40	160	2	$40,000
GIT1B Gas Fill	Medium	40	160	2	$40,000
GIT1B Float Unbalance	Low	16	80	1	$9,600
96 Hour Drift Test	High	160	350	2	$102,000
PIG Fluid Fill	Medium	40	160		$20,000
PIGA Fluid Fill	Medium	40	160	2	$40,000
PIG Temp Probe Cal	Low	16	80	2	$19,200
PIG Elect Align	Low	16	80	2	$19,200
PIG Torque Test	Low	16	80		$9,600
Alignment	Low	16	80	2	$19,200
PIGA 1800 Complex	High	160	350	2	$102,000
PIGA Slip Ring	Low	16	80	1	$9,600
Memory Assy TS	Low	16	80	2	$19,200
G6B4 Fill	Medium	40	160	2	$40,000
G6B4 Prefunct	Low	16	80	1	$9,600
G6B4 Auto Tumble	Low	16	80	1	$9,600
G6B4 Functional TS	Low	16	80	4	$38,400
F Cost TS	Exceptional	200	700	1	$90,000
Digital Resolver Test	None	8	40	1	$4,800
Digital Resolver Vibe	Low	16	80	1	$9,600
Fan Test	None	8	40	1	$4,800
D37 Fuctional Test	Medium	40	160	3	$100,000
D37 Leak Test/Fill	Medium	40	160	2	$40,000
D37 Vibe	High	160	350	1	$51,000
System/GSP 1800 Comple	High	160	350	3	$153,000
GCA Functional Test	Low	16	80	2	$19,200
Alignment Set Test	High	160	350	2	$102,000

159

88 CG/LMAAC

Minuteman Equipment Move

GSP Fine Balance	Medium	40	160	2	$40,000	
GSP Vibe	High	160	350	1	$51,000	
P82 Test/Vibe	Exceptional	200	700	1	$90,000	
MGSC Test/Vibe	Exceptional	200	700	1	$90,000	
GSP Leak Test	Medium	40	160	2	$40,000	
GSA FAT	High	160	350	2	$102,000	
GSP Test	Medium	40	160	5	$100,000	
System Test	Medium	40	160	5	$100,000	
GSP Vibe	Medium	40	160	1	$20,000	
MGSC/GSP Module Static	Low	16	80	3	$28,800	
Sumproduct (hours*#)		4752	14870	82	$1,962,300	
Average Hours		57.95	181.34	239.30		
There are 877 stations at AGMC to which this requirement applies.						
(from count of station listings for HQ AFMC/LGPW briefing)				239*877*100=	$20,960,300	
To distribute this cost across all equipment to be moved, the factor is:				21m/1089m	1.92%	
(acquisition cost from 21 Feb 95, trans3a.xl			$1,089,419,346			
Rational for these estimates comes from experience in relocating stations,						
and is based upon the relative difficulty expected in moving the equipment.						
The variety of stations in Minuteman is representative of all AGMC workloads.						
	Manhours					
Complexity	Disassemble	Assemble/Cal	Characteristics			
None	8	40	Bench top equipment			
Low	16	80	Manual Eq with few mechanical connections			
Medium	40	160	Semi automatic with cabling			
High	160	350	Automatic with cabling, some mechanical			
Exceptional	200	700	Automatic, extensive mechanical			

TRANSPORTATION

ATTACHMENT 4

FY92 BASE CLOSURE STUDY
LGDE DEPOT EQUIPMENT INPUT

SOR	$Value	$Replacement	% Excess	% Rebuy	%Move
AG	1,112,578,877	1,145,956,243	17%	5%	78%
OC	1,226,544,173	1,263,340,498	24%	5%	71%
OO	2,131,137,078	2,195,071,190	3%	5%	92%
SA	1,792,474,871	1,846,249,117	0%	5%	95%
SM	1,204,879,961	1,241,026,360	4%	5%	91%
WR	1,835,721,387	1,890,793,029	12%	5%	83%

% TO MOVE TIES DIRECTLY WITH % OF WORKLOAD TO MOVE

% TO MOVE

CLOSE	AG	OC	OO	SA	SM	WR
AG	xx	0	86	1	1	12
OC	0	xx	0	55	41	4
OO	0	11	xx	46	21	22
SA	5	71	2	xx	0	22
SM	0	33	18	19	xx	30
WR	2	1	0	48	49	xx

Trixie 777

162

56

NEWARK AFB PLAN B

FM

TRANSPORTATION

ATTACHMENT 5

DEPARTMENT OF THE AIR FORCE

BASE QUESTIONNAIRE

NEWARK AIR FORCE BASE

OHIO

March 1993

ewage) be increased without additional MILCON costs? Provide answer as percent increase over current requirement.

Telephone 33%

Local Area Network (LAN) 500%

The following additional questions will be used as supplemental data for decision makers.

J) I Does the base have a passenger terminal and aerial port? Any known facility/mission limitations?

No flying mission/no active runway

J.1) Does the base have a dedicated mobilization facility/center?

No flying mission/no active runway

K) K. Provide allowable load information or Pavement Classification Numbers (PCN) for the primary pavements and the most critical features.

No flying mission/no active runway

L) L Provide the number of military light vehicles and the number of heavy/special vehicles.

	Light Vehicles	Heavy/Special Vehicles
Gov't Owned	16	32
Leased	0	0
	16	32

M) M. Provide the percent of military families, both officer and enlisted, living on

as compared to the total number of military families assigned to the base. Newark AFB has no family housing or quarters.

N) N. What is the value of current contracts excluding mission RPMA or BOS. Note the

EQUIPMENT TRANSFER	NEWARK		FY 96 $
EQUIPMENT			
WEAPON SYSTEM SUPPORT EQUIPMENT			
APPROPRIATED FUND	FY 92 $	INFL INDICE	
OVER 5K	$1,145,956,243	1.106	$1,268,719,517
UNDER 5K (50% OF ACCOUNTABLE)			$634,959,759
TOTAL			$1,904,679,276
EXCESS EQUIPMENT		PERCENT	
WEAPON SYSTEM SUPPORT EQUIPMENT		17.00%	$0
APPROPRIATED FUND		17.00%	$0
NON APPROPRIATED FUND		17.00%	$215,852,318
OTHER		17.00%	$107,926,159
TOTAL			$323,778,477
REPURCHASE VS MOVE			
WEAPON SYSTEM SUPPORT EQUIPMENT		5.00%	$0
APPROPRIATED FUND		5.00%	$0
NON APPROPRIATED FUND		5.00%	$63,486,976
OTHER		5.00%	$31,742,988
TOTAL			$95,228,964
COST TO RELOCATE EQUIPMENT			
REMAINING EQUIPMENT VALUE			$1,485,571,835
F.C.H (WESTINGHOUSE)		3.00%	$44,567,155
TRANSPORTATION (HQ AFLC/DPX)		0.50%	$7,427,859
REMOVE AND REINSTALL (NEWARK AFB)		1.9%	$28,225,865
TOTAL COST TO MOVE			$80,220,879
COST TO DISPOSE OF EQUIPMENT (DRMO)			
EQUIPMENT VALUE			$323,778,477
DISPOSAL COST REMOVE AND TRANSPORT (1%)		1.00%	$3,237,785
TOTAL EQUIPMENT COST			
RELOCATE			$80,220,879
DISPOSE			$3,237,785
BUY			$95,228,964
(A) TOTAL			$178,687,628

INVENTORIES D033, G072, G402A	FY 92 $	INFL INDICE	
STOCK FUND	1,615,861,712	1.106	$1,790,363,897
OTHER	1,491,000,000		$0
TOTAL			$1,790,363,897
AMOUNT TO MOVE	33.00%		$590,820,020
NEWARK AFB RATIONALE			
COST TO RELOCATE	1.00%		$5,908,200

MATERIAL DAMAGE		
EQUIPMENT		$1,485,571,835
	TIMES HANDLED	
(TVA EQUIPMENT)*TIMES HANDLED*0.0001	8	$1,188,457
INVENTORY		$590,820,020
	TIMES HANDLED	
(TVA INVENTORY)*TIMES HANDLED*.0001	4	$236,328
TOTAL COST		$1,424,785

TOTAL TRANSPORTATION COST	NEWARK
EQUIPMENT RELOCATION	$80,220,879
EQUIPMENT DISPOSAL	$3,237,785
PURCHASE VS MOVE	$95,228,964
INVENTORY	$5,908,200
MATERIAL DAMAGE	$1,424,785
TOTAL	$186,020,613

TRANSPORTATION

ATTACHMENT 7

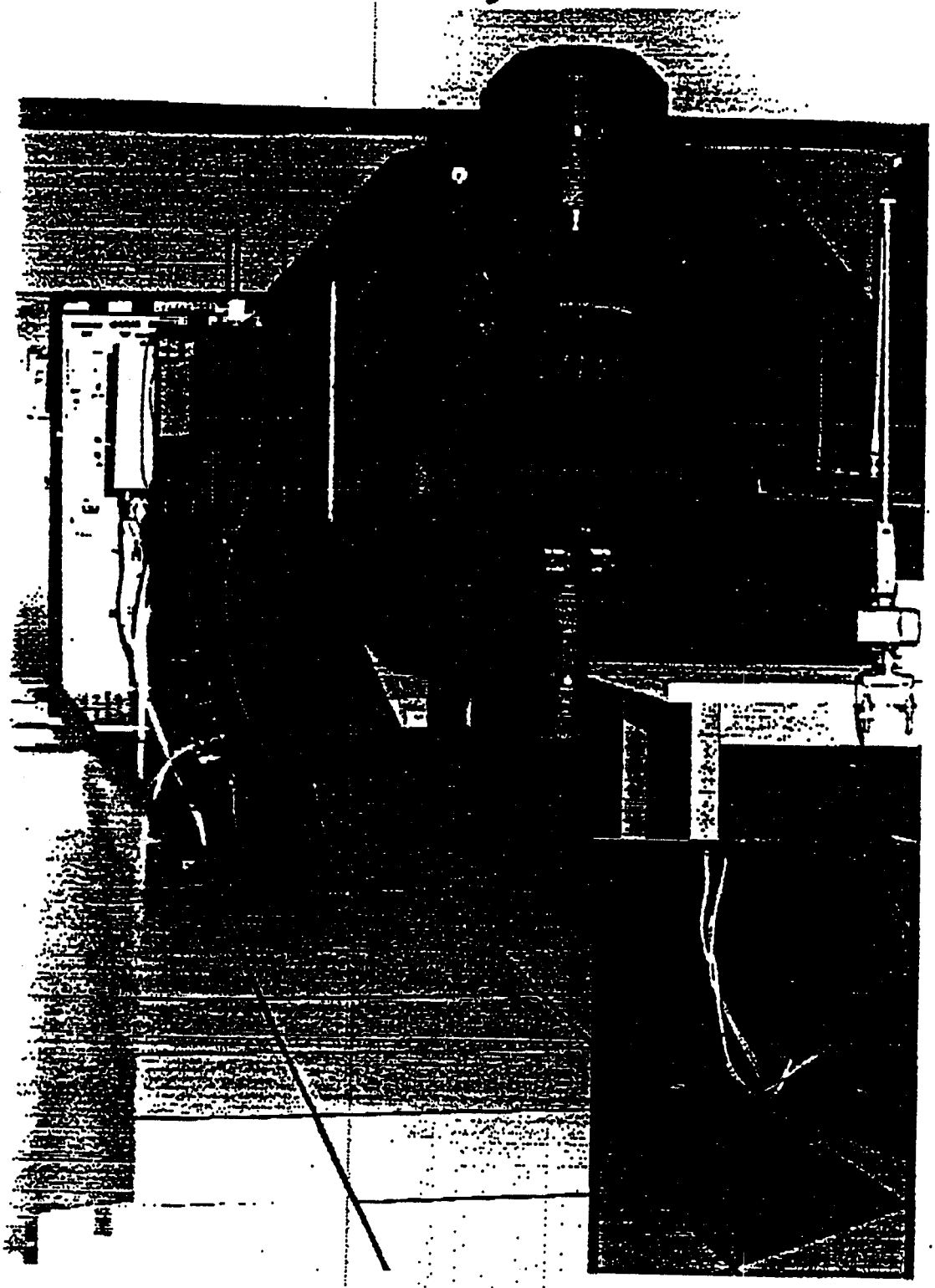
169

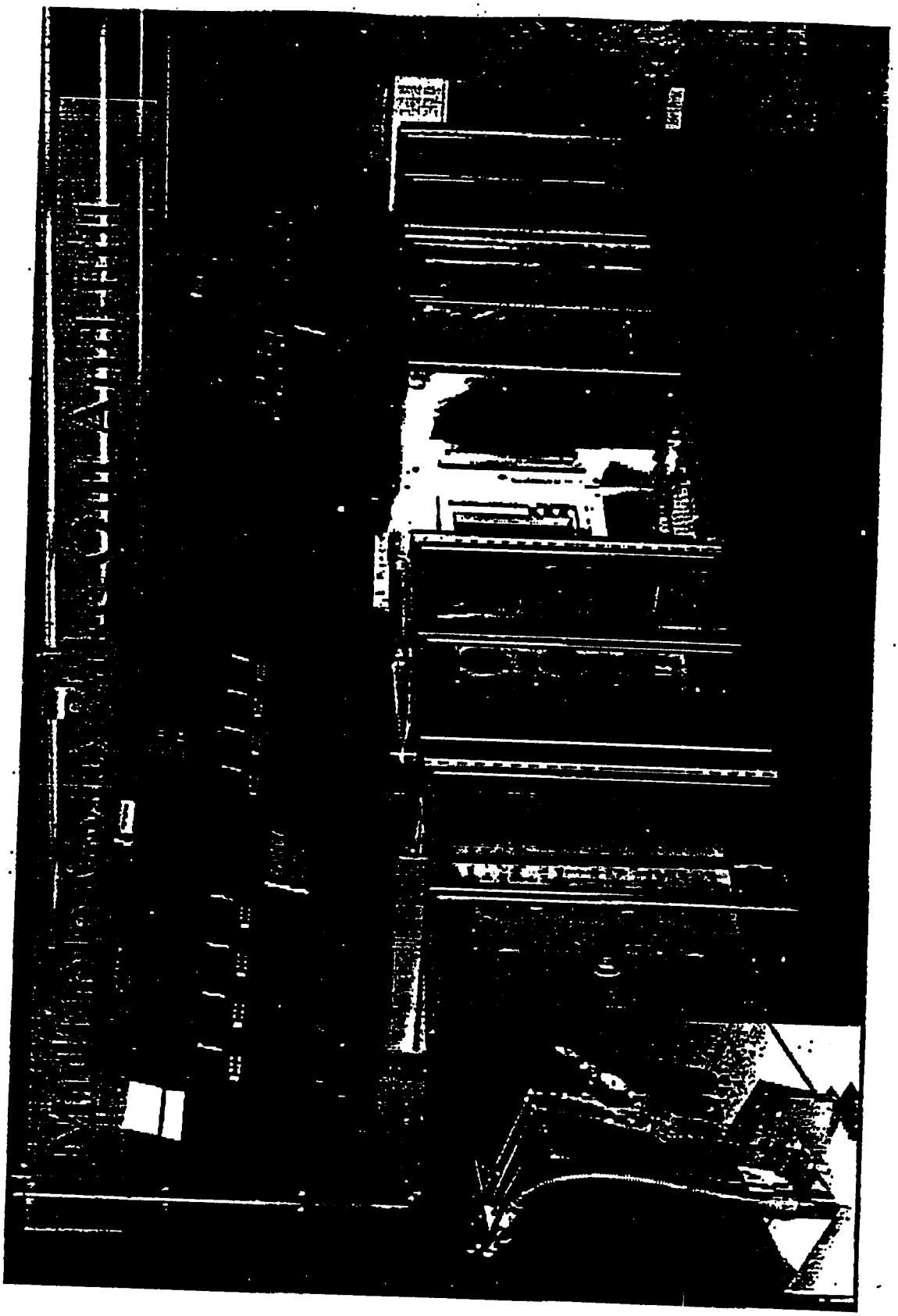
63

170

64

SPN-GEANS Gyro Test Table





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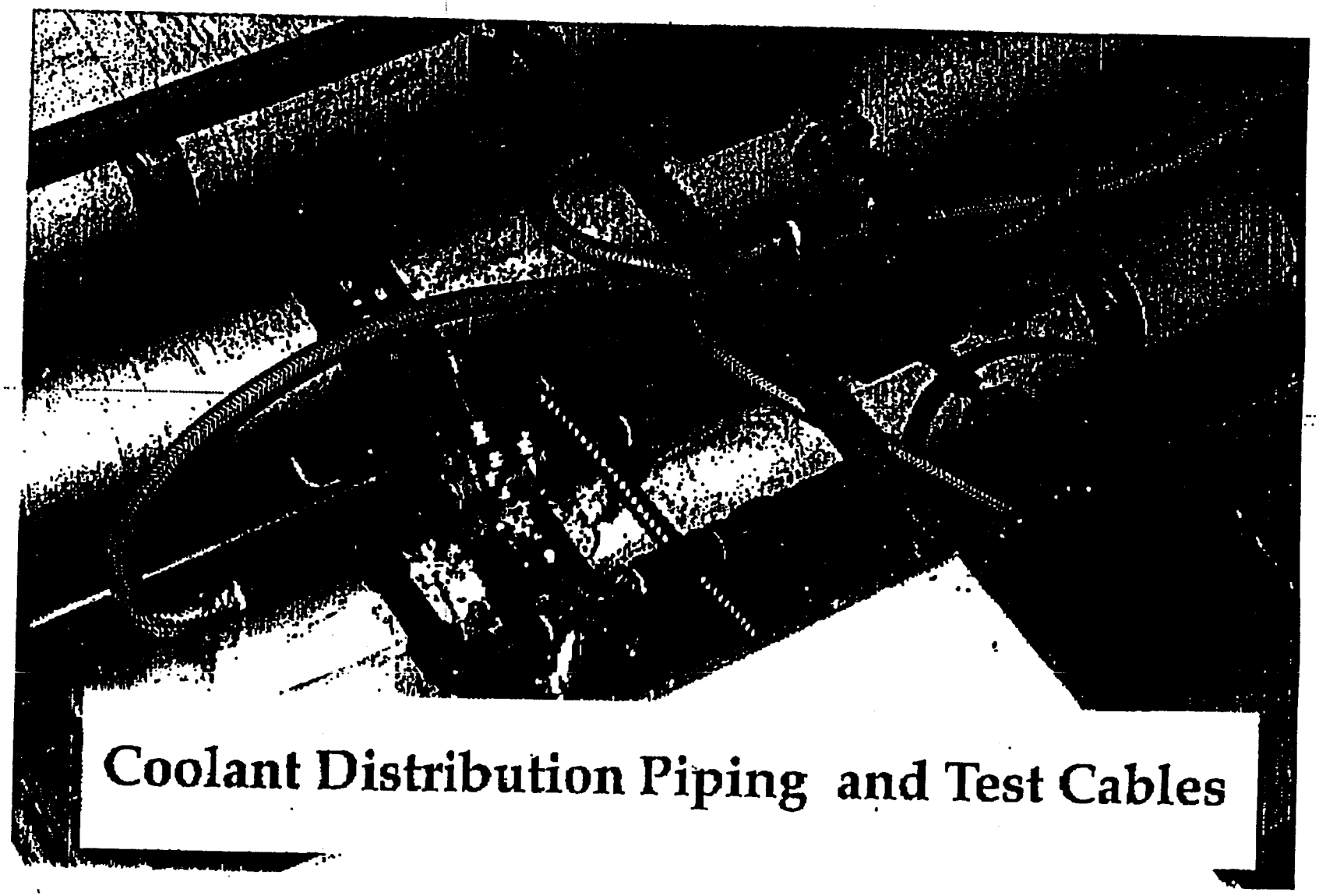
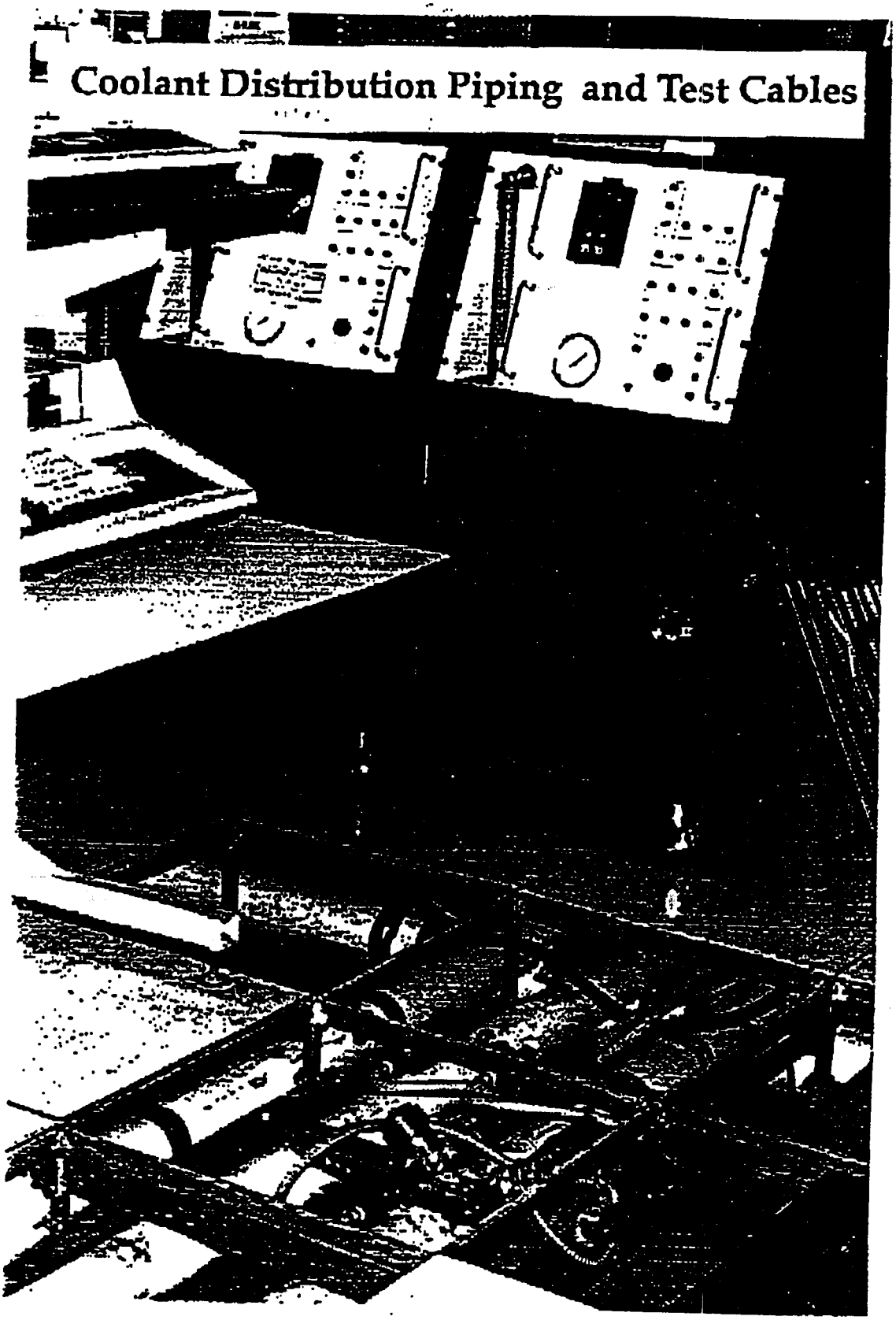


Coolant Distribution Piping and Test Cables

173

67



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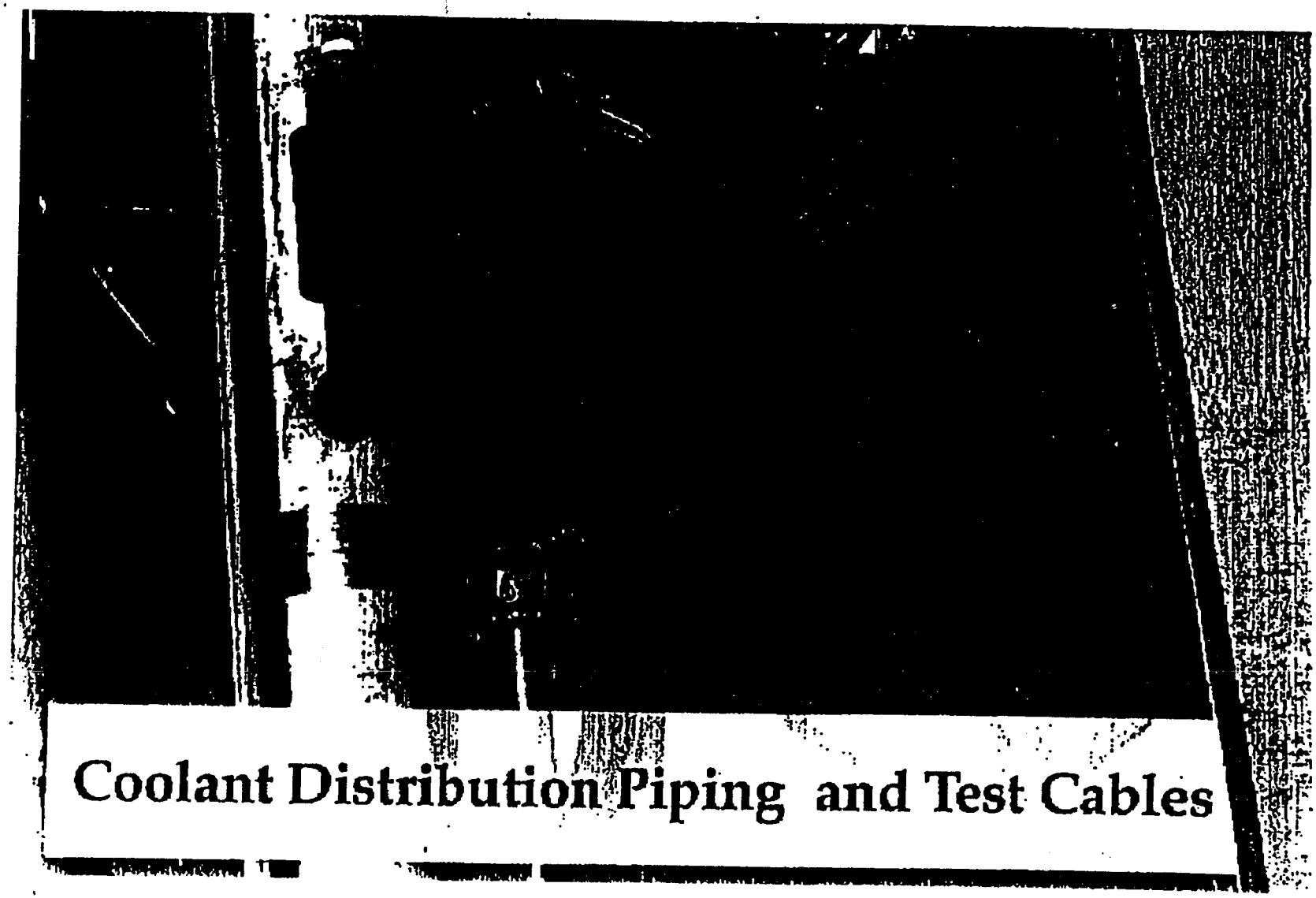
C8

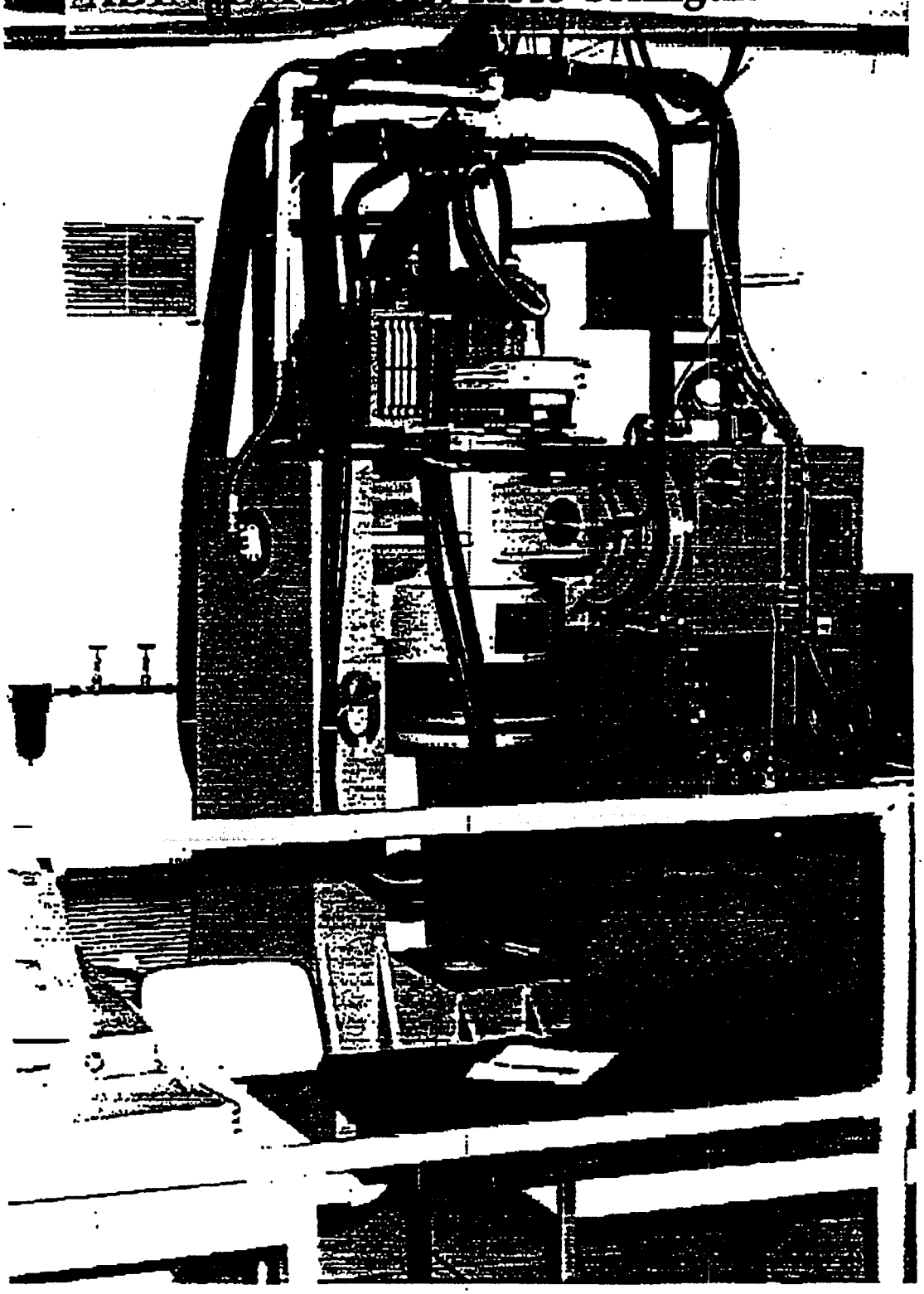


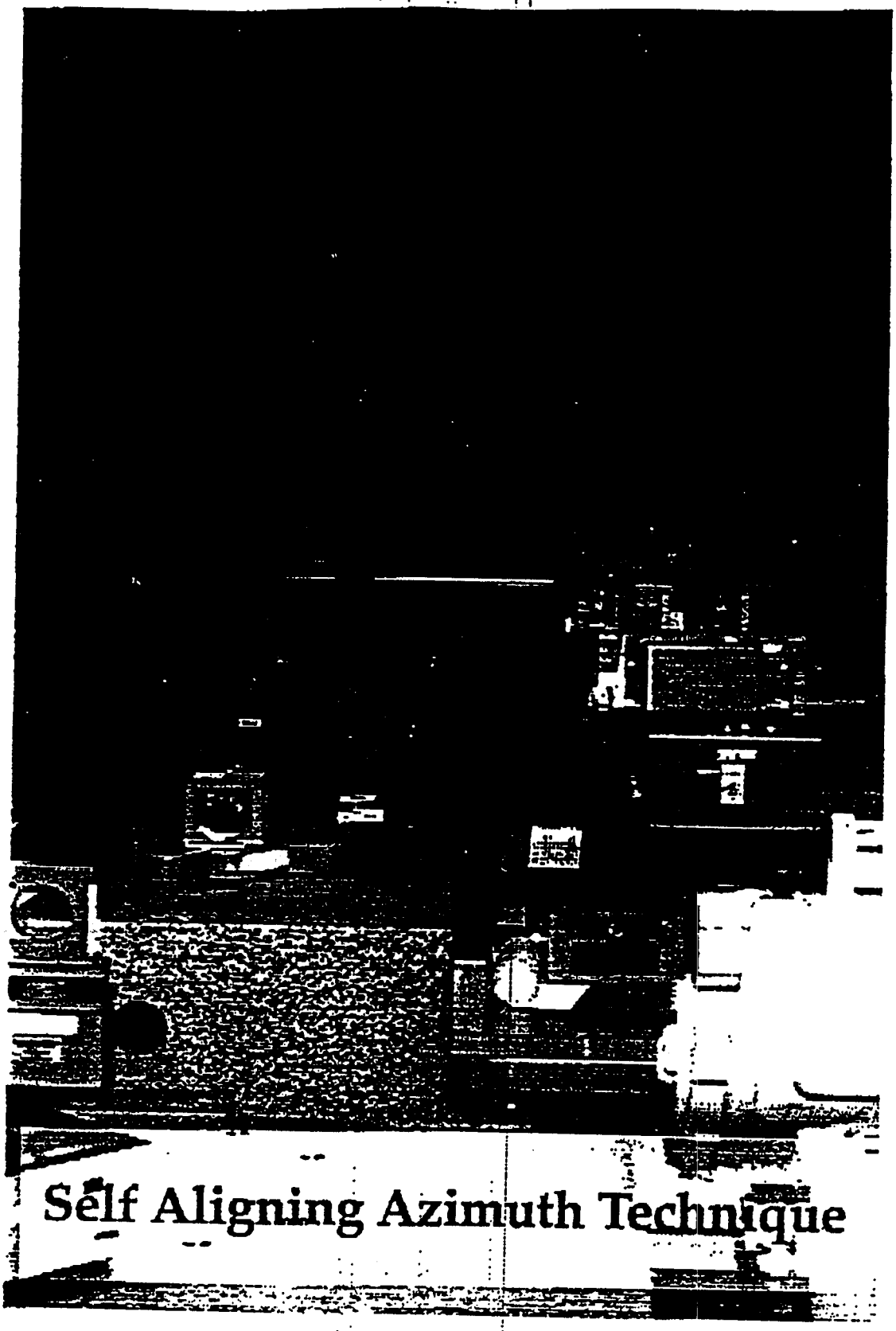
Coolant Distribution Piping and Test Cables

175

69

ADINTS ACM Test Table Configuration





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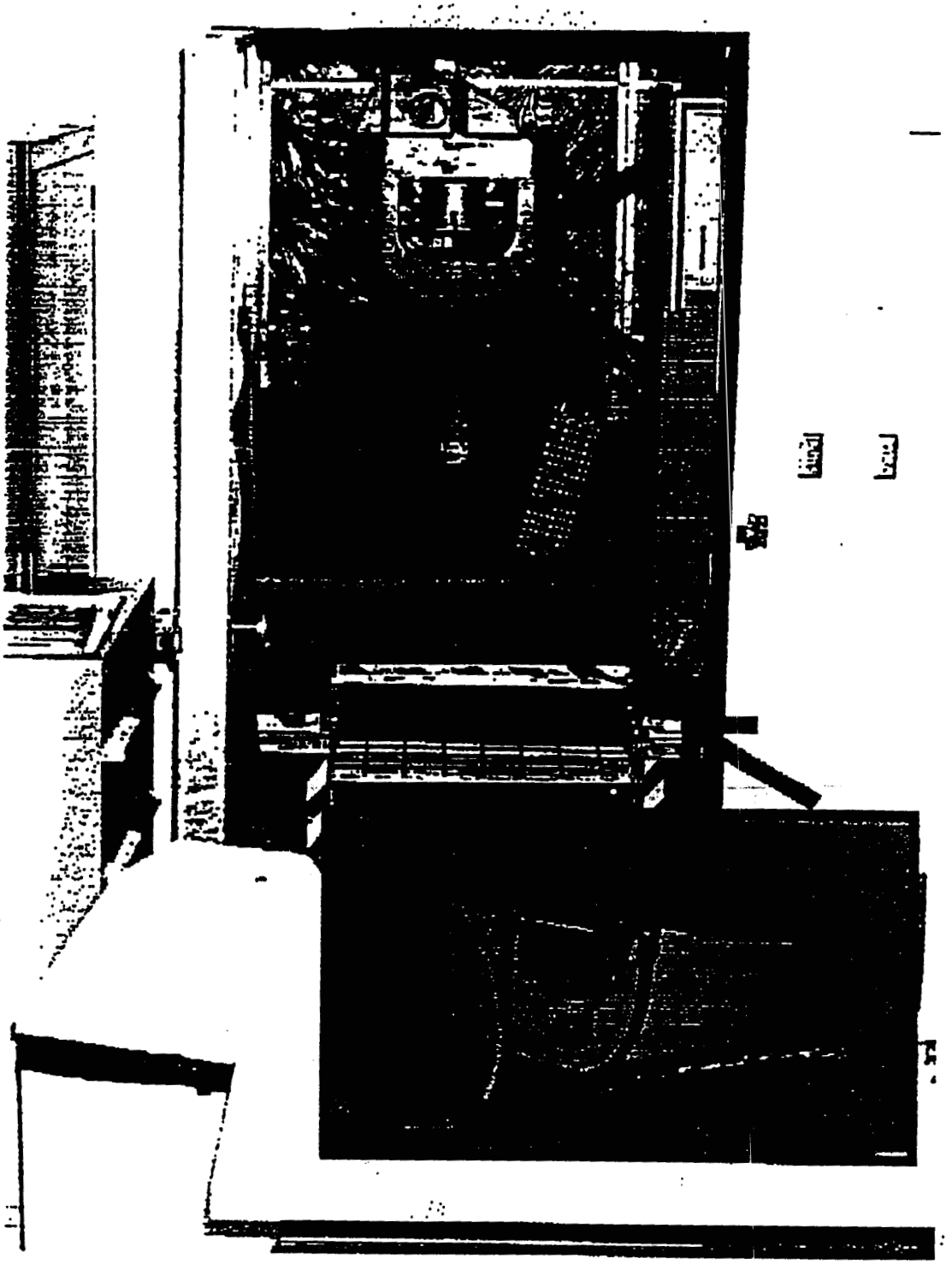
71

Missle Guidance Set Control Vibe



12 April 1995

MEMORANDUM FOR RECORD

Subject: Additional Data Regarding Equipment/Inventory Transportation Spreadsheet

1. During our 11 April discussions with the DBCRA, the Air Force was requested to provide supporting documentation for the equipment/inventory transportation spreadsheet. I contacted Dan Johnson, HQ AFMC/FMC, DSN 787-3165, who provided the attached information. The data came from a variety of sources; however, the intent is to identify several validation studies of this spreadsheet.

2. If any additional information is required, contact Capt Andy Coggins at DSN 225-5257.

GEORGE A. COGGINS, Captain, USAF
Cost Analyst

Attachment
Equipment/Inventory Spreadsheet Documentation

-1/1 FMCR
Mr W
cy: D. Johnson

DEPARTMENT OF THE AIR FORCE
AIR FORCE COST CENTER
WASHINGTON, DC

MAR 2 1992

REPLY TO ATTN OF: AFCAA/CC

SUBJECT: AFLC Air Logistics Center (ALC) Closure and Relocation Model

TO: HQ AFLC/FMC

1. The AFLC model is an acceptable methodology for estimating the costs of closing or relocating an ALC. We recommend its use for MAJCOM estimates. The cost element structure is more complete and appropriate to the logistics mission than the current OSD mandated Cost of Base Realignment Actions (COBRA) model. Specifically, your model calculates costs for productivity loss and interim production support and provides the cost of moving specialized industrial equipment, all shortcomings of COBRA.

2. Current OSD direction specifies that COBRA will be used for submissions to the Base Closure Commission, and designates the Army as lead service in upgrading the model. A key goal of this effort is to make COBRA the best estimating tool for all types of closure and relocation actions, not just for operational bases. In the event that an ALC were to be recommended for closure, the "Industrially Funded Facility" portion of COBRA could be used to transfer much of the data produced by the AFLC model. We have informally discussed incorporating features of the AFLC model into COBRA with the Army in their capacity as lead service. They are receptive to improving the capability of COBRA in estimating depot closures.

3. Thanks for your involvement and interest in improving estimates for base realignments and closures. Our POC, Steve Scovel, DSN 225-3621, will work with your analysts and other service personnel to incorporate the relevant features of the ALC model into COBRA.

Ronald S. Bowen

RONALD S. BOWEN, COL, USAF
Commander
Air Force Cost Center

NEWARK AFB PLAN B

FM

TRANSPORTATION

TRANSPORTATION

Air Force Logistics (ALCs) installations are unique in their diversity of functions. At each center you will find a mix of functions that can be generally divided into the following three categories: operational, administrative, and industrial operations. While the current base closure model estimates the cost of equipment movement for the first two categories it is the latter that drives a higher transportation cost.

While some operational installations may have some extensive repair capabilities they are not as extensive as those of depots. By design, operational capabilities are smaller and more mobile than those available at a depot. Operational installation's repair capability is analogous to that of local garages performing a variety of functions with no particular speciality. While an Air Force depot is comparable to an automotive repair corporation that specializes in the rebuilding and repairing of specific classes of components in a center of excellence concept.

This unique difference drives an increase in the cost elements of:

Packaging, Crating, and Handling: Packaging, Crating, and Handling includes cleaning and drying materials, preservatives, wraps, barriers, cushioning, containers, labels, tags, container closures, (tape, adhesive, steel strapping) Also included is the cost of procuring, storing, controlling, moving, protecting the material needed to pack and crate.

Transportation: It was assumed that the mode of transportation would be by motor vehicle. This transportation typically falls into two general categories: regular load and special Conveyance (Oversize and/or Air Ride). It should also be noted that shipments that are oversize and/or hazardous may have to use circuitous routes, which in turn will increase mileage. Other potential accessorial charges could be: Dual Driver, Constant Surveillance, and Armed Guard Service.

Removal and Reinstallation: The costs associated with dismantling, disconnecting, this equipment in preparation for shipment. This also includes the cost of unpacking, reinstalling, and calibrating the equipment prior to use at the gaining location.

Materiel Damage Cost (MDC): MDC is computed in accordance with AFR 67-1. Which states that the formula is the Total Value of Assets (TVA) multiplied by .0001 and multiplied by the number of times handled (N). The number of times the shipment will be handled was divided into two categories:

Inventory Handling

1. Warehouse Processing
2. Shipment Preparation and Conveyance Loading
3. Gaining Site Receipt Process
4. Gaining Site Intra Depot Movement

Equipment Handling

1. Disassemble Equipment
2. Shipment Preparation
3. Interim Holding
4. Load Conveyance
5. Off-load Conveyance
6. Interim Holding
7. Unpack
8. Reassemble & Calibrate

In the case of Newark AFB, where the installed equipment and cabling have been in place for over 30 years this methodology may drive a significantly higher material damage cost.

Methodology Approaches

In the case of depots the equipment to be moved runs the gamut from large oversize loads like a 100,000 pound deadweight tester, to precision measurement equipment that requires special air ride vehicles to move.

Ideally, to relocate anything you would like to have the approximate weight and cubic volume and type or kind of the item(s) to be relocated. With this information an analyst may determine the packaging, handling, crating and transportation and routing requirements of the item(s).

However in this case there is not a complete database that provides the required information nor is there sufficient time to assess the installation within the time constraints of the analysis. Therefore, in the absence of complete data, our office has developed seven separate spreadsheets that estimate the cost of equipment movement based on a variety of techniques. For example: Often in the absence of cube and weight other agencies (private and public sector) use percentage of acquisition value to estimate the cost of equipment movement.

Therefore, HQ AFMC/FMC identified seven basic methodologies that might be employed for this exercise. (Attachment 1) This information was provided to both Newark AFB and HQ AFMC/LGT for review. Based upon their review Option B was chosen. (Attachment 2)

The remove and reinstall percentage and the inventory to move percentages were provided by Newark AFB (Attachment 3)

Replacement Acquistion Value, percent of equipment to excess, percent of equipment to rebuy and the percent of equipment to move was provided by HQ AFMC/LG. (Attachment 4).

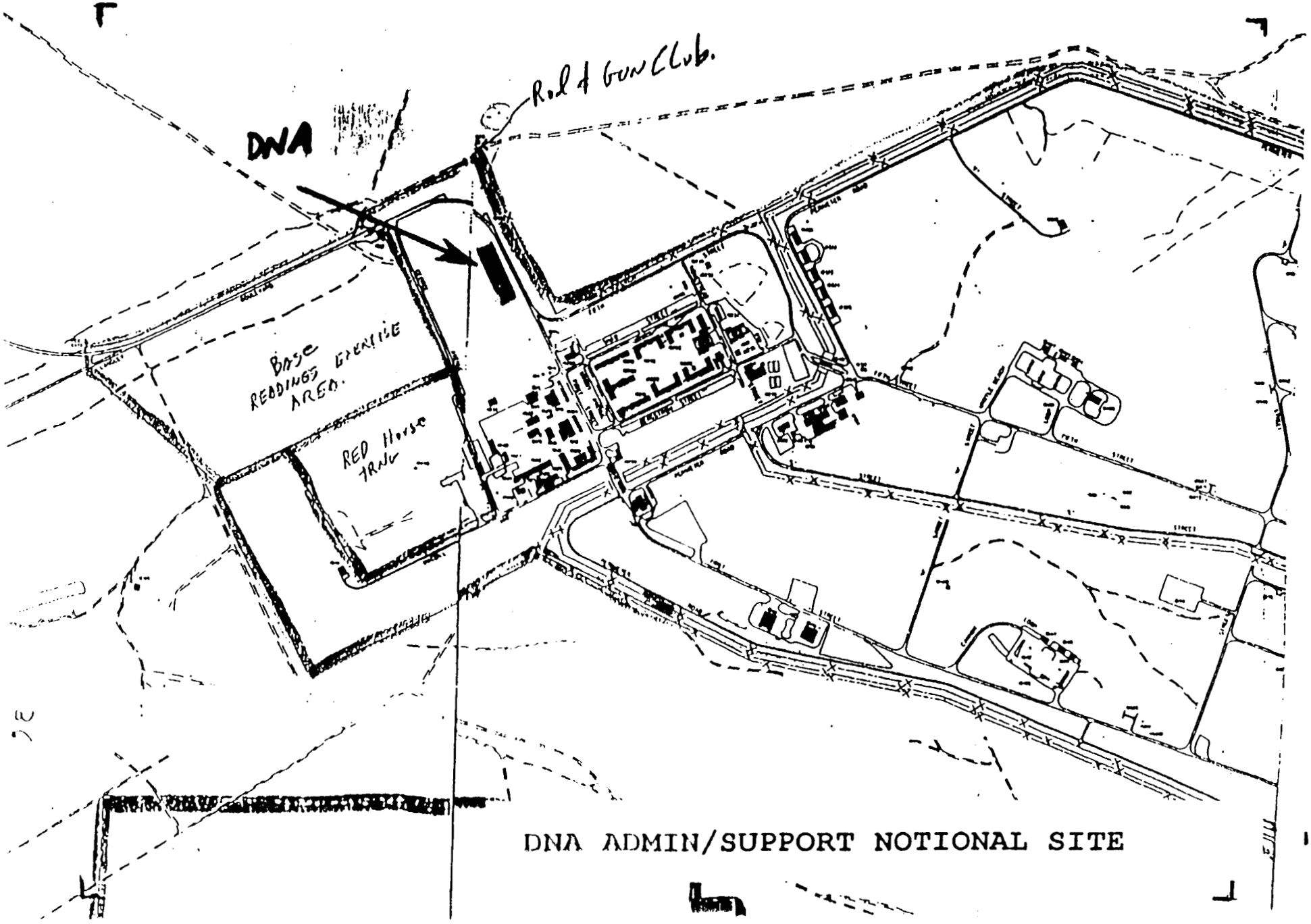
Number and kind of vehicles to move were extracted from the 1993 BRAC survey Attachment 5.

Attachment 6 contains the transportation computations.

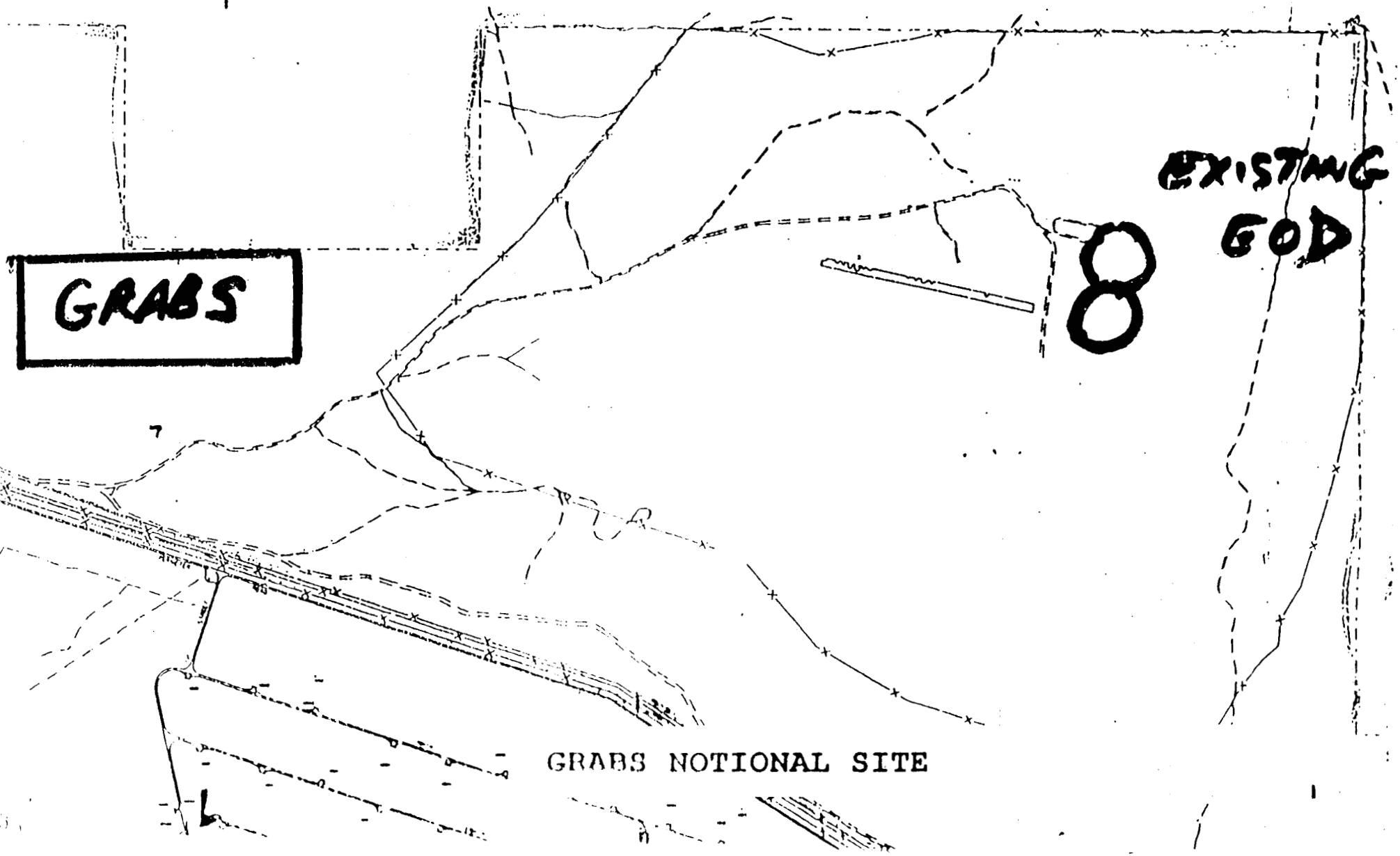
Attachment 7 contains photographs of representative types of equipment that will be relocated.

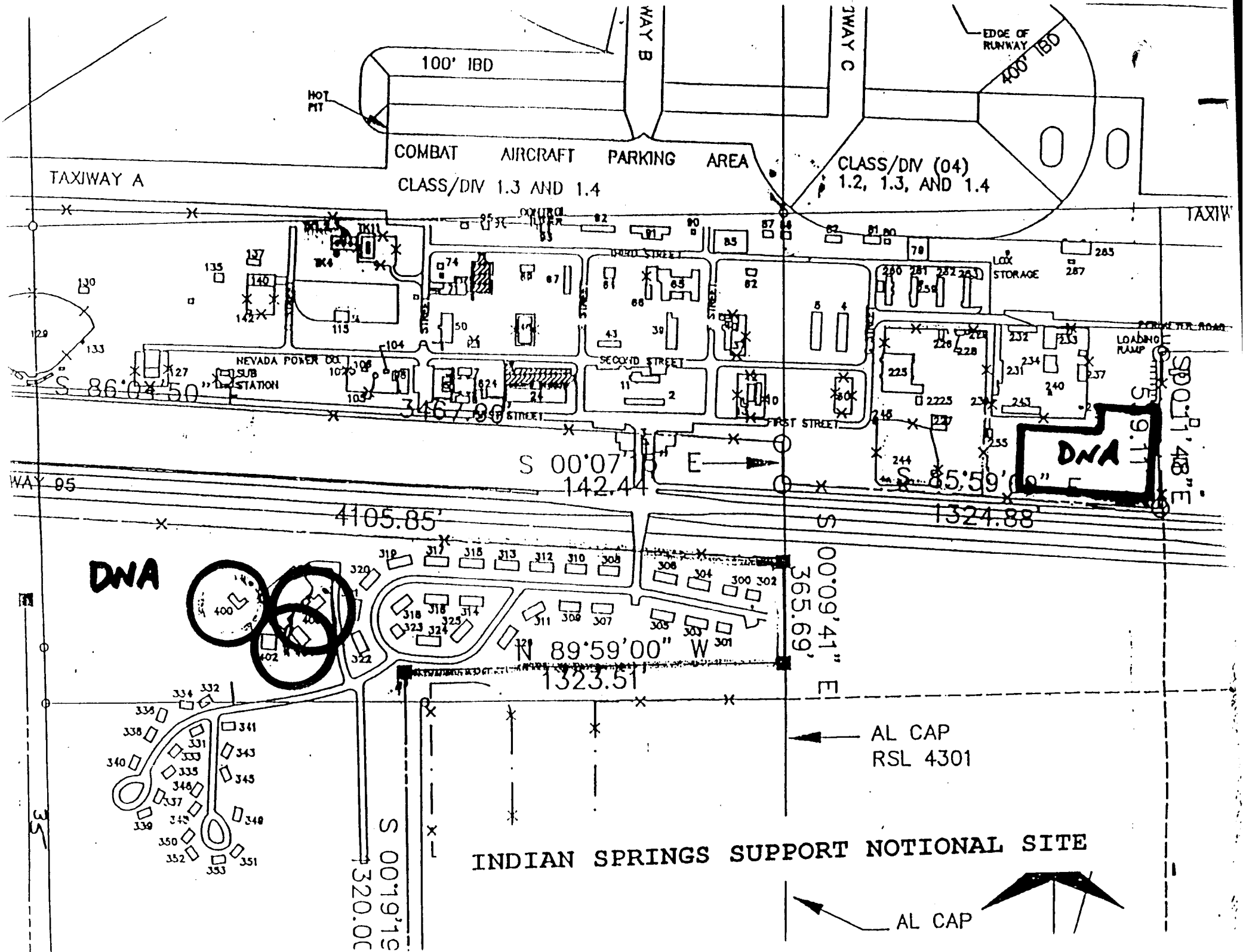
Document Separator

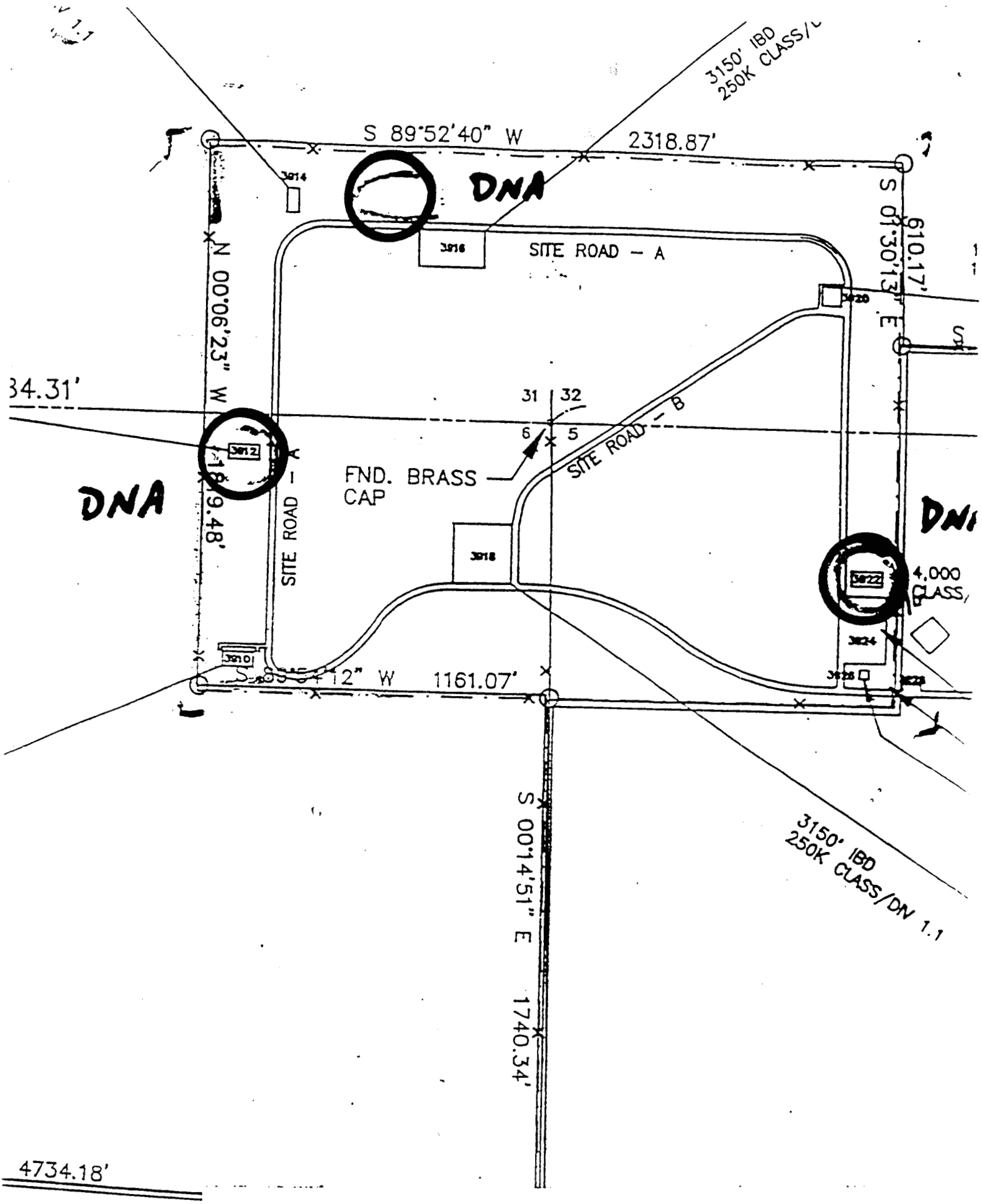
APPENDIX B



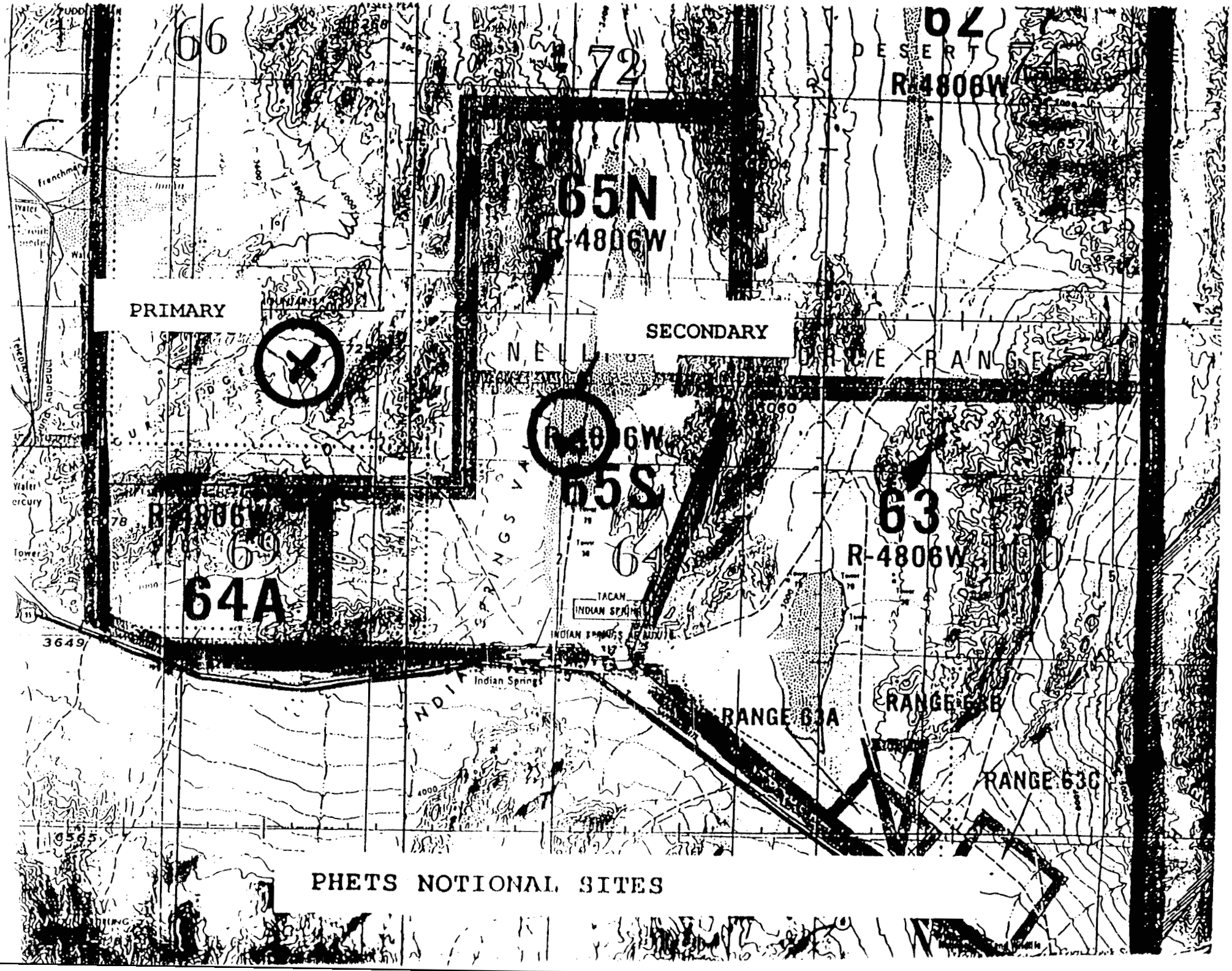
DNA ADMIN/SUPPORT NOTIONAL SITE


GRABS
8
EXISTING
GOD
GRABS NOTIONAL SITE

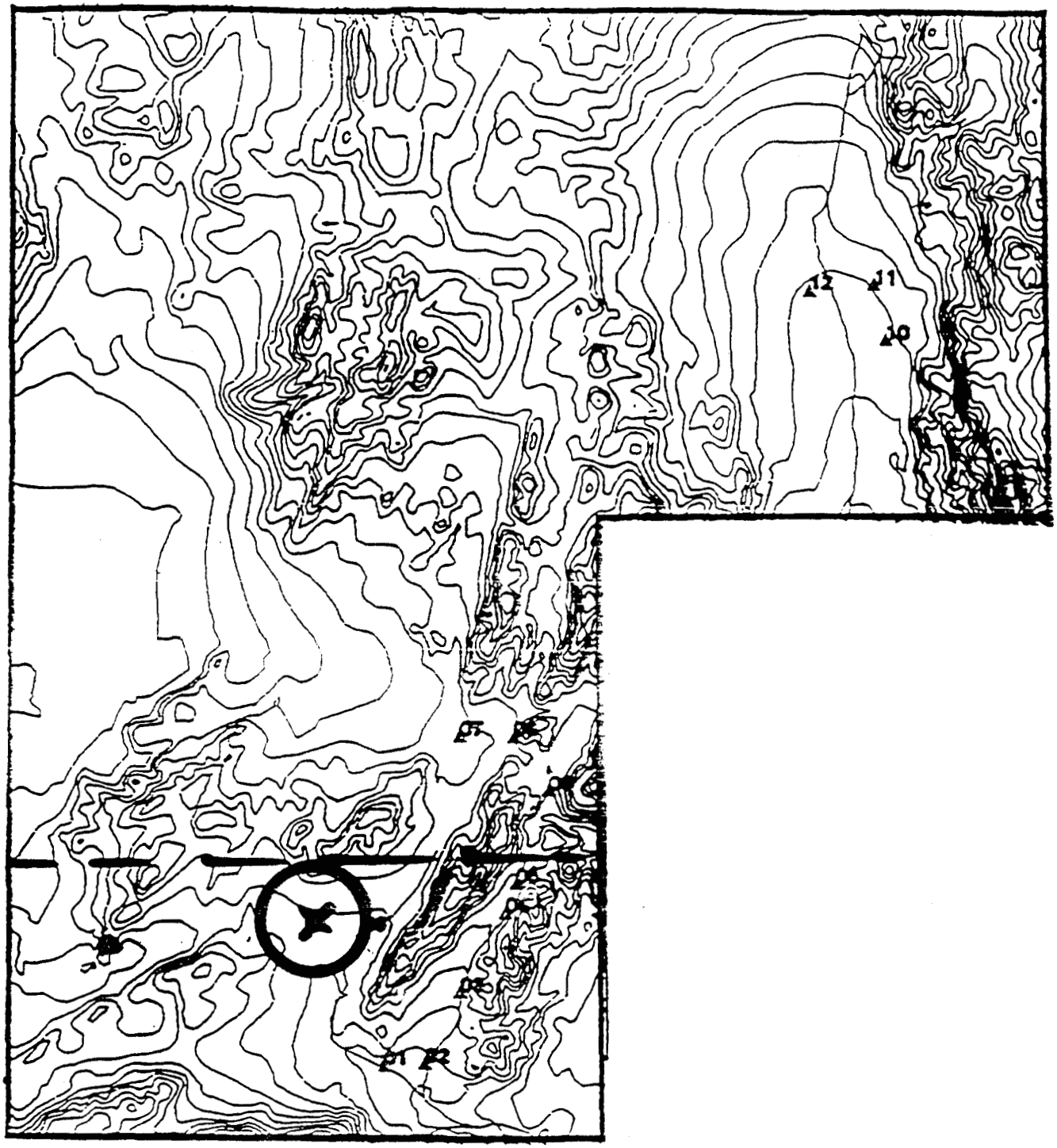

100' IBD
HOT PIT
COMBAT AIRCRAFT PARKING AREA
CLASS/DIV 1.3 AND 1.4
TAXIWAY A
CLASS/DIV (04)
1.2, 1.3, AND 1.4
EDGE OF RUNWAY
400' IBD
LOX STORAGE
LOADING RAMP
NEVADA POWER CO. SUB STATION
THIRD STREET
SECOND STREET
FIRST STREET
S 86°04'50"
3467.90'
S 00°07'15" E
142.44
4105.85'
S 85°59'00" E
1324.88'
S 00°11'48" E
S 00°09'41" E
365.69'
N 89°59'00" W
1323.51
S 00°19'19
320.00
DNA
DNA
AL CAP
RSL 4301
AL CAP
INDIAN SPRINGS SUPPORT NOTIONAL SITE



INDIAN SPRINGS SUPPORT NOTIONAL SITE

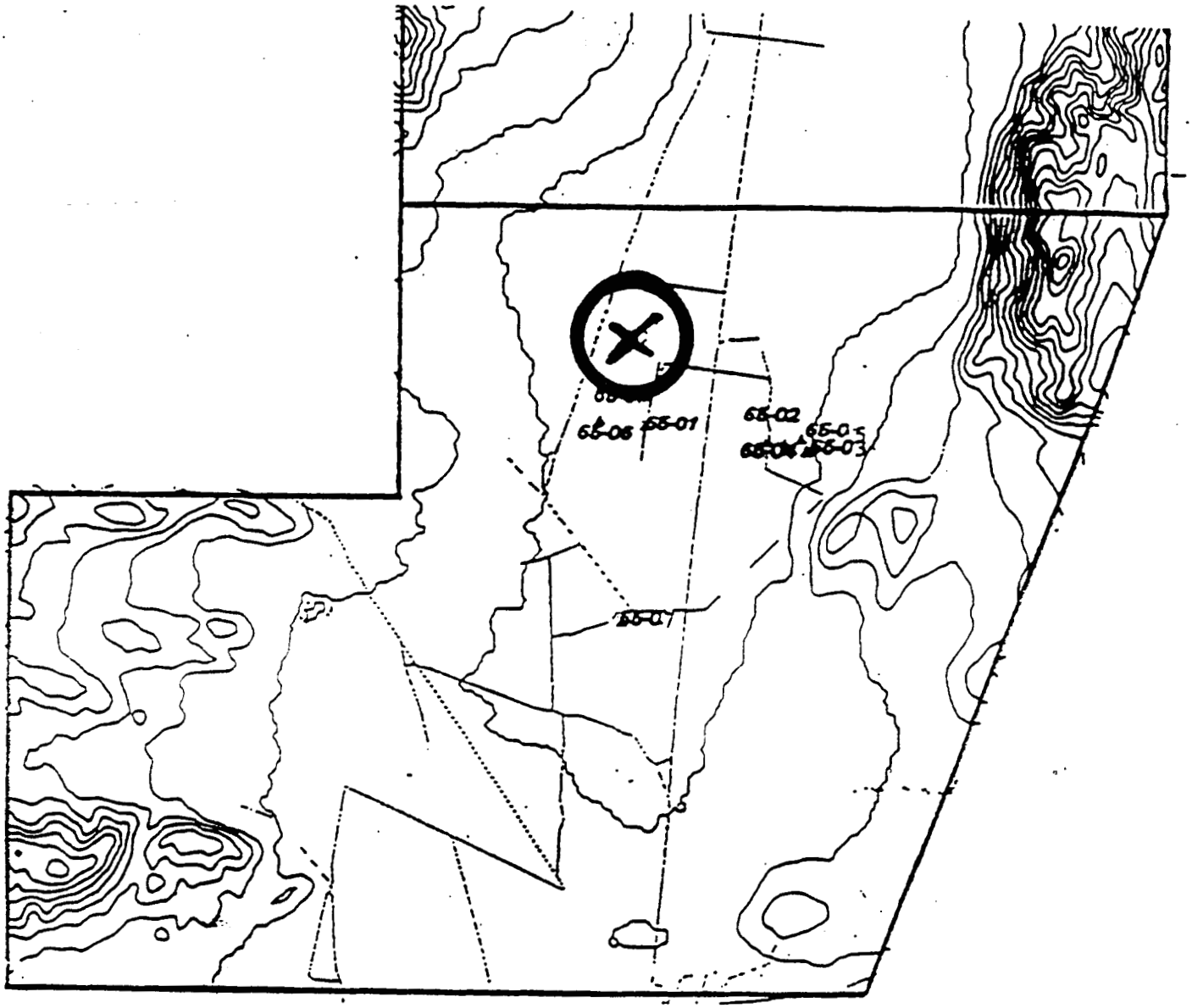

66
72
DESERT
R-4806W
65N
R-4806W
PRIMARY
SECONDARY
NELLIS
DRY LAKE RANGE
R-4806W
65S
R-4806W
69
64
63
R-4806W
64A
TACAN
INDIAN SPRINGS
Indian Springs
RANGE 63A
RANGE 63B
RANGE 63C
3649
PHETS NOTIONAL SITES

RANGE 64 TARGETS



PHETS NOTIONAL SITE-64S

RANGE 65 TARGETS



PHETS NOTIONAL SITE-65S

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HQ ACC/SCP/SCX 108 Benedict Ave STE 209 Langley AFB VA 23665-1993	2

ACC CES/ESW Crestar Bldg STE 500 11817 Canon Blvd Newport News VA 23606	2
HQ ACC/INA/INF 129 Andrews St. Ste 150 Langley AFB VA 23665-2767	2
FCDNA 1680 Texas St SE Kirtland AFB, NM 87117-5000	3
USAF AWC/CS 203 West D Avenue Rm 600 Eglin AFB FL 32542-6867	1
USAF WTC/CC/CS 4370 North Washington Blvd Ste 117 Nellis AFB NV 89191-7076	2
USAF WTC/XP 4370 North Washington Blvd, Ste 220 Nellis AFB, NV 89191-7076	5
Defense Nuclear Agency 6801 Telegraph Rd Alexandria, VA 22310	1
AFAA/FSS 5023 4th St March AFB CA 92518	2
HQ AFMC/XPX 4375 Chidlaw St, Ste B Wright-Patterson AFB, OH 45433-5006	1
Total	51

32

KIRTLAND AFB

SITE SURVEY

OUTBRIEF

AGENDA

- PURPOSE
- GUIDANCE
- SCHEDULE FOR KIRTLAND AFB BUDGET SUBMISSION
- SCHEDULE FOR SITE SURVEYS AFFECTING KIRTLAND AFB
- MILCON AT KIRTLAND AFB
- ISSUES
- CONCLUSION

PURPOSE

- COLLECT BUDGET QUALITY DATA TO PRESENT TO BASE CLOSURE EXECUTIVE GROUP (BCEG)
- VALIDATE THE COST NECESSARY TO REALIGN KIRTLAND AFB
- AFTER APPROVAL, SUBMIT TO THE 1995 BASE CLOSURE COMMISSION

GUIDANCE

- PHILLIPS LAB WOULD REMAIN IN A CANTONMENT AREA
- AIR NATIONAL GUARD AND AIR FORCE RESERVE WOULD REMAIN IN A CANTONMENT AREA
- KUMSC WOULD REMAIN IN A CANTONMENT AREA
- SELECTED UNITS WOULD REMAIN
- 377 ABW WOULD INACTIVATE
- TENANTS WOULD MOVE OR INACTIVATE
- TOTAL DOD ACTIVE DUTY MILITARY PRESENCE WOULD BE $\leq$ 100

SCHEDULE FOR BUDGET SUBMISSION FOR KIRTLAND AFB

- ON-GOING PROCESS
- CONSOLIDATED BY 377th CARE OFFICE
- COORDINATED THROUGH 377th & PL FM's

- 7 APR 95 - VALIDATED BY AFAA
- 10 APR 95 - BUDGET COMPLETED
- 12 APR 95 - BUDGET TO SMC
- 19 APR 95 - BUDGET TO HQ AFMC
- 26 APR 95 - MILCON BRIEFING TO HQ USAF/CE
- 1 MAY 95 - BRIEFING TO BCEG

SCHEDULE FOR SITE SURVEYS AFFECTING KIRTLAND AFB

- 20-24 MAR 95 - KELLY AFB/LACKLAND AFB
- 22-24 MAR 95 - EGLIN AFB
- 27-30 MAR 95 - NELLIS AFB
- 3-7 APR 95 - HOLLOMAN AFB

MILCON - PHILLIPS LAB

BC - INSTALL ELECTRIC METERS	$230K
BC - INSTALL GAS METERS	$16K
BC - ISOLATE/METER SANITARY SEWER SYSTEM	$2,600K
BC - RENOVATE HEAT PLANT	$430K
BC - ADD TO SECURITY FENCE	$2,200K
BC - CONSOLIDATED SUPPORT FACILITY	$1,400K
BC - ADVANCED WEAPONS LAB	$2,250K
BC - SPACE POWER LAB	$2,300K
BC - ALTER UTILITIES	$1,050K
BC - FACILITY MAINTENANCE OPERATIONS	$4,350K
BC - HIGH POWER MICROWAVE LAB	$1,550K
	$18,376K

MILCON - KUMSC

BC - ADMIN AREA ADDITION	$700K
BC - ADD TO AND ALTER SECURITY FENCE	$1,300K
BC - METER UTILITIES	$10K
BC - RESERVE FIRE TEAM FACILITY	$500K
BC - REMOTE ARMORY	$280K
	$2,790K

POTENTIAL REQUIREMENT

BC - KUMSC SUPPLY WAREHOUSE	$1,700K

(REQUIRED ONLY IF BLDG 1010 BECOMES UNAVAILABLE)

MILCON
AIR NATIONAL GUARD

BC - JET FUEL STORAGE	$1,875K
BC - ADD TO CIVIL ENGINEERING MAINTENANCE FACILITY	$240K
BC - ISOLATE/METER UTILITY SYSTEM	$100K
BC - CONSOLIDATED SUPPORT FACILITY	$1,350K
BC - CONSTRUCT SECURITY FENCE	$310K
BC - DINING HALL AND RESERVE FORCES GENERAL TRAINING FAC	$3,300K
	$7,675K

KIRTLAND AFB MILCON

$28,141K

ISSUES

- NUMBER OF ACTIVITY DUTY MILITARY REMAINING AT KIRTLAND AFB
- FIELD COMMAND DEFENSE NUCLEAR AGENCY (FCDNA) REMAINING AT KIRTLAND AFB
- ENVIRONMENTAL PERMITS FOR FCDNA AT KELLY AFB/NELLIS AFB
- COST FOR DOE TO MAINTAIN KIRTLAND AFB
- AIR FORCE RETENTION OF KIRTLAND SOUTH
- GROWTH POTENTIAL FOR KIRTLAND AFB
  - AIR QUALITY

CONCLUSION

- THE REALIGNMENT OF KIRTLAND AFB IS A SIGNIFICANT EMOTIONAL EVENT
- KIRTLAND AFB IS ON SCHEDULE
- LOT OF WORK STILL AHEAD
- PERSONAL "THANK YOU" TO BGEN PEREZ AND STAFF FOR OUTSTANDING SUPPORT

EGLIN AFB
SITE SURVEY
OUTBRIEF

AGENDA

- PURPOSE
- GUIDANCE
- SCHEDULE FOR EGLIN AFB BUDGET SUBMISSION
- SCHEDULE FOR KIRTLAND AFB BUDGET SUBMISSION
- SCHEDULE FOR SITE SURVEYS AFFECTING EGLIN AFB
- MILCON AT EGLIN AFB
- CONCLUSION

PURPOSE

- COLLECT BUDGET QUALITY DATA TO PRESENT TO BASE CLOSURE EXECUTIVE GROUP (BCEG)
- ~~VALIDATE THE COST NECESSARY FOR~~ EGLIN AFB
- VALIDATE THE COSTS NECESSARY FOR KIRTLAND AFB
- AFTER APPROVAL, SUBMIT TO THE 1995 BASE CLOSURE COMMISSION

GUIDANCE

- AFOTEC WILL MOVE TO EGLIN AFB FROM KIRTLAND AFB
- 505TH COMMAND CONTROL EVALUATION GROUP (CCEG) WILL MOVE TO HURBURT FIELD FROM KIRTLAND AFB
- THREAT SIMULATORS WILL MOVE TO NELLIS COMPLEX FROM EGLIN AFB

SCHEDULE FOR BUDGET SUBMISSION FOR EGLIN AFB

- ON-GOING PROCESS
- CONSOLIDATED BY AFDTC/XP
- COORDINATED THROUGH AFDTC/DRP

- 7 APR 95 - MILCON VALIDATED BY AFAA
- 10 APR 95 - BUDGET COMPLETED
- 19 APR 95 - BUDGET VALIDATED BY HQ AFMC
- 26 APR 95 - MILCON BRIEFING TO HQ USAF/CE
- 1 MAY 95 - BRIEFING TO BCEG

SCHEDULE FOR BUDGET SUBMISSION FOR KIRTLAND AFB

- ON-GOING PROCESS
- CONSOLIDATED BY 377th CARE OFFICE
- ~~COORDINATED THROUGH 377th & PL FM's~~

- 7 APR 95 - MILCON VALIDATED BY AFAA
- 10 APR 95 - BUDGET COMPLETED
- 12 APR 95 - BUDGET TO SMC
- 19 APR 95 - BUDGET TO HQ AFMC
- 26 APR 95 - MILCON BRIEFING TO HQ USAF/CE
- 1 MAY 95 - BRIEFING TO BCEG

SCHEDULE FOR SITE SURVEYS AFFECTING EGLIN AFB

- 27-30 MAR 95 - NELLIS AFB
- ~~29 MAR 95 - BUFFALO, NY~~
- 5 APR 95 - FT WORTH, TX

MILCON - AFOTEC

- THREE PART PROCESS
  - PART 1 - AREAS IN AGREEMENT
  - PART 2 - AREAS REQUIRING ADDITIONAL RESEARCH
  - PART 3 - AREAS REQUIRING COMMANDER INVOLVEMENT
- PAPERWORK WILL BE ATTACHED TO DD 1391 IDENTIFYING AREAS WHERE REQUIREMENTS ARE NOT YET VALIDATED
  - ACTIONS ITEMS, POCs, AND SUSPENSES WILL BE IDENTIFIED
  - ALL SUSPENCES CLOSED BY 31 MAR 95
- PROPOSED COST OF MILCON - $20.177M
- TOTAL SQ FT - 132,000
- ADDITIONAL BRAC COMM REQUIREMENTS - $972K

PART 2

- POTENTIAL SHARED CAPABILITIES
  - QUALITY IMPROVEMENT TRAINING
  - OT&E AND COMPUTER TRAINING
  - WAREHOUSE
  - HQ PRESENTATION CENTER
  - AUDIO VISUAL SUPPORT
  - GRAPHICS SUPPORT
  - TS/SAR VTC
- 162 SQ FT PER PERSON VS 134 SQ FT PER PERSON
- ACC COMMITMENT TO SUPPORT 31 TES FUNCTION
- SCIF/SAR SPACE
- CONSOLIDATING DET 2, AFOTEC WITH HQ AFOTEC
- EGLIN'S CAPABILITY TO MEET ELECTRICAL POWER DEMANDS

MILCON - 505 CCEG

- HURLBURT FIELD
  - SCOPE ($6.9M)
    - ~~39,600 SQ ST~~
    - 139 PERSONNEL

MILCON
ELECTRONIC WARFARE

- ESTIMATED COSTS - $4M
- ~~COSTS VALIDATED DURING FUTURE SITE~~ SURVEY

EGLIN AFB MILCON

$28.1M - ON-BASE

CONCLUSION

- BRAC IS A SIGNIFICANT EMOTIONAL EVENT
- EGLIN AFB IS ON SCHEDULE

- LOT OF WORK STILL AHEAD
- PERSONAL "THANK YOU" TO MGEN CRANSTON AND STAFF FOR OUTSTANDING SUPPORT

HEADQUARTERS AIR COMBAT COMMAND

DIRECTOR OF PLANS & PROGRAMS

BRAC 95
FIELD COMMAND
DEFENSE NUCLEAR AGENCY

NELLIS AFB, NEVADA

27-30 MAR 95

HQ ACC/XPPB

30

TABLE OF CONTENTS

		PAGE
TABLE OF CONTENTS		2
INTRODUCTION		3
EXECUTIVE SUMMARY		4
PERSONNEL ROSTER		6
I.	OPERATIONS	8
II.	COMMUNICATIONS	21
III.	FACILITIES	25
IV.	ENVIRONMENTAL	38
V.	EXPLOSIVE ORDNANCE DISPOSAL (EOD)	40
VI.	LOGISTICS	43
VII.	ELECTROMAGNETIC TEST ENVIRONMENT (EMTE)	49
VIII.	APPENDIX A	50
IX.	APPENDIX B	64
X.	DISTRIBUTION	72

21

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B35w) RECORDS AND FORMS FLIGHT MANAGEMENT	1. Complete air crew resource management data system for all standard functions as prescribed in AFI 11-401, *Flight Management* and AFI 11-210, *Instrument Refresher Course.*	
(B35x) SEARCH AND RESCUE	1. Make provisions to include aircraft, surface craft, submarines, specialized rescue teams, and equipment to search for and rescue personnel in distress on land or at sea.	
(B35y) SHIPS AND VESSELS	1. Make provisions to include the supply, maintenance, and repair of ships and vessels, including when applicable the armament, electronics, communications, and any other equipment that are an integral part of the ships and vessels.	
(B35z) SUGGESTION PROGRAM	1. Provide assistance as necessary and complies with host directive and budgets for cash awards.	
(B35aa) SYNTHETIC TRAINER	1. Make provisions to include installing, maintaining and where appropriate, operates synthetic trainers, except air crew training devices.	
(B35ab) TEST AND EVALUATION	1. Provide testing items of material, systems, or techniques under a simulated or actual operational conditions to determine whether the specific military requirements or characteristics are satisfied.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B35l) GEODETIC SUPPORT	1. Provide for aeronautical charts, maps, flight information publications, and associated air navigation materials used in planning and conducting of air and ground operations.	
(B35m) INTELLIGENCE COLLECTION	1. Provide intelligence support and related facilities.	
(B35n) LIFE SUPPORT EQUIPMENT	1. Provide the supply, maintenance, and repair of any equipment, either mechanical or manual, or substance, designed to keep individuals alive.	
(B35o) LOGISTICS AIR SUPPORT	1. Provide support by air landing or air drop including air supply, movement of personnel, evacuation of casualties and prisoners of war, and recovery of designated resources.	
(B35p) MAINTENANCE CONTROL	1. Provide maintenance control and material control services.	
(B35q) MISSILES	1. Provide the supply maintenance, and repair of missile systems and associated equipment. Includes mechanical, electronic, and communication equipment which is an integral part of a missile system.	
(B35r) MISSILES EQUIPMENT AND COMPONENTS	1. Provide the supply, maintenance, and repair of missile equipment and components when they are not an integral part of the missile system.	
(B35s) OFF-EQUIPMENT	1. Provide on-equipment maintenance support, ensures proper recovery equipment and plan is available.	
(B35t) SURVIVAL EQUIPMENT MAINTENANCE	1. Provide maintenance and repair of survival equipment (including parachutes, flight clothing, flotation equipment, survival kits, etc.).	
(B35u) PRECISION MEASUREMENT EQUIPMENT LABORATORY (PMEL)	1. Provide precision measurement laboratory support.	
(B35v) QUALITY ASSURANCE	1. Provide quality assurance, inspection, and related support.	

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B35d) AIRFIELD BASE OPERATIONS	1. Manage airfield support activities and facilities. Provide service for preflight planning and flight plan processing.	
(B35e) AMMUNITION	1. Provide for the supply, maintenance, and repair of devices charged with explosives, propellants, pyrotechnics, initiating composition of nuclear, biological, or chemical material for use in connection with defense or offense including demolitions, ceremonial, or non-operational purposes.	
(B35f) AVIONICS MAINTENANCE	1. Provide off-equipment maintenance of avionics equipment and components. On-equipment maintenance of avionics equipment and systems when size or mission of the RECEIVER does not warrant such capability within the tenant unit.	
(B35g) BASE PLANS	1. When a base plans function is identified and authorized, develops and monitors the application of base-level operations and contingency plans not specifically assigned by directive to other functional areas. Provides personnel for on-base emergency contingencies where the RECEIVER does not have a capability.	
(B35h) CLOTHING AND TEXTILE	1. Provide for the supply, maintenance, and repair of organizational clothing, equipment footwear, and other material suitable for wearing.	
(B35i) CONSOLIDATED COMMAND POST	1. Provide command and control facilities and services for RECEIVER units. SUPPLIER is responsible for command post consolidation and coordination of operations.	
(B35j) ELECTRICAL EQUIPMENT AND COMPONENTS	1. Provide for the supply, maintenance, and repair of general or special purpose electrical equipment and their components.	
(B35k) FLIGHT OPERATIONS	1. Manage support aircraft resources as stated in AFR 60-1 and operates a centralized air crew life support equipment and their components.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B29) REFUSE COLLECTION AND DISPOSAL	1. Provide collection and disposal of trash and waste materials, to include operation of incinerators and other facilities and equipment intended for the transportation, disposal, or destruction of waste materials.	
(B30) RESOURCE MANAGEMENT	1. Provide funds management, cost analysis services, and formulation, reporting and execution of operating budgets. Provide reports of survey actions.	
(B31) TRAINING SERVICES	1. Provide instructions and use of target ranges, simulators and other training facilities.	
(B32) TRANSPORTATION SERVICES	1. Provide travel office services, and other transportation services related to both commercial and government owned transportation of personnel and materiel, to include shipment planning, packing and crating, port clearance, scheduling, processing of transportation documents, and provision of related transportation services for both personnel and personal property.	
(B33) UTILITIES	1. Provide for procurement, production and distribution of utilities, heating, and air conditioning. Also provide energy consumption and conservation programs.	
(B34) WEATHER SERVICES	1. Advise and provide timely notification of weather conditions that may affect planned activities.	
(B35) OTHER SUPPORT	1. Provide services as outlined below.	
(B35a) AERIAL PHOTOGRAPHY	1. Provide photographs taken from the air.	
(B35b) AERIAL PORT OPERATIONS	1. Manage and operate the military air terminal facility and provides air terminal services. Provide custom, drug, anti smuggling inspection, and examination of aircraft, and passengers.	
(B35c) AIRCRAFT MAINTENANCE	1. Provide all aspects of aircraft maintenance (e.g., corrosion control, machine, AGE, NDI, repair and reclamation, structural repair, etc.) not previously addressed.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B19) HOUSING AND LODGING SERVICES	1. Provide accommodations and housing referral services for authorized personnel. Also provide transient accommodations.	
(B20) INFORMATION SERVICES	1. Provide technical and legal libraries and services that provide limited reference information for specific purposes.	
(B21) INSTALLATION RETAIL SUPPLY AND STORAGE OPERATIONS	1. Provide storage and distribution of commodities, materials, equipment and fuels, to include all operations from receipt of material and equipment into storage to issue and shipment of items from storage.	
(B22) LAUNDRY AND DRY CLEANING	1. Provide cleaning, storage, and delivery.	
(B23) LEGAL SERVICES	1. Provide advice and services on all legal matters pertaining to legal assistance, military justice, initial claims processing, line-of-duty investigation reports, property utilization, and personnel matters such as conflicts of interest, standards of conduct, and grievance hearings/reviews.	
(B24) MILITARY PERSONNEL SUPPORT	1. Provide passport, forces stamp, social security, and other personal affairs services for military personnel, to include processing of identification cards, testing of individuals, casualty assistance reporting, relocation assistance, and transient assistance.	
(B25) MOBILIZATION SUPPORT	1. Provide planning, provisioning and support for mobilization of reserve and guard forces.	
(B26) MORTUARY SERVICES	1. Provide, CONUS, port, and overseas mortuary services.	
(B27) PRINTING AND REPRODUCTION	1. Provide the operation of centralized printing and duplication services.	
(B28) PURCHASING AND CONTRACTING SERVICES	1. Provide acquisition and contract administration services for procurement of property, equipment, services, and supplies.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B9) CUSTODIAL SERVICES	1. Provide janitorial and cleaning services for offices, common use areas, shops, and storage areas.	
(B10) EDUCATION SERVICES	1. Provide instruction, counseling, and testing.	
(B11) ENGINEERING SUPPORT	1. Provide planning, design and programming functions necessary to the construction, fabrication, and repair of facilities and equipment.	
(B12) EQUIPMENT OPERATION, MAINTENANCE, AND REPAIR	1. Provide motor pool operations, maintenance and repair services, to include maintenance and repair of industrial equipment, electronic equipment, and office equipment.	
(B13) EXPLOSIVE ORDNANCE	1. Provide services and facilities for explosive ordnance storage, disposal and training.	
(B14) FACILITIES AND REAL PROPERTY SUPPORT	1. Provide facilities and real property, to include construction of new facilities and structures, addition to existing facilities, and alterations that change the use of existing facilities.	
(B15) FACILITY MAINTENANCE AND REPAIR	1. Provide maintenance and repair of real property, installed equipment, structures, roads, grounds, railroads and surfaced areas. Includes entomology and pest control.	
(B16) FINANCE AND ACCOUNTING	1. Provide expense, reimbursement, working fund, payroll and leave accounting, to include disbursing, voucher and invoice examination, financial reporting, and the development of accounting systems.	
(B17) FOOD SERVICES	1. Provide preparation and serving of food to authorized personnel, and the operation of dining facilities.	
(B18) HEALTH SERVICES	1. Provide outpatient testing, treatment, rehabilitation, and associated professional services and medical support; may also include inpatient services. Also provide environmental health inspections, quality assurance services, and veterinarian services.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(A10) SAFETY	1. Operate safety programs, educational support, and promotional efforts.	
(A11) SHUTTLE SERVICES	1. Operate common use taxies, vans and bus transportation services.	
(B1) ADMINISTRATIVE SERVICES	1. Provide records management, personnel locator, document control and handling, forms and publications, copying services, Armed Forces Courier Service Support, and maintenance of official publications reference libraries. Also includes mail sorting, routing, and delivery services not provided by the United States Postal Service.	
(B2) AUDIO/VISUAL SERVICES	1. Provide still photography, graphics, presentation services, films, microfilms, micrographic services, video tapes, and other visual media information services.	
(B3) AUTOMATED DATA PROCESSING/AUTOMATION SERVICES	1. Provide data processing services and systems analysis design, development, execution, and life cycle maintenance.	
(B4) CIVILIAN PERSONNEL SERVICES	1. Provide employment, placement, classification, employee management, labor relations, employee development, and equal employment opportunity services related to civilians and local nationals.	
(B5) CLUBS	1. Provide officer, enlisted, all hands, aero, community, and other recreational clubs. Also includes golf courses, bowling alleys, campgrounds, marinas, and related services.	
(B6) COMMUNICATION SERVICES	1. Provide base communications facilities, telephone equipment and services. May also include leasing of communication equipment, lines, and special communications-electronics equipment services.	
(B7) COMMUNITY SUPPORT SERVICES	1. Provide child development and care programs, youth services, family support center activities, hobby shops, and craft centers.	
(B8) CONFINEMENT AND DETENTION CENTERS	1. Provide personnel confinement and detention services.	

40

SPECIFIC PROVISIONS

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(A1) CHAPEL AND CHAPLAIN SERVICES	1. Provide pastoral ministry, worship services, religious pastoral rites, pastoral visits, spiritual counseling and religious education.	
(A2) COMMAND ELEMENT	1. Provide command activities necessary to the accomplishment of mandatory reimbursable support services. Also includes installation wide public affairs services and social-action counseling services.	
(A3) COMMON USE FACILITY OPERATIONS, MAINTENANCE, REPAIR AND CONSTRUCTION	1. Provide operation, maintenance, repair and minor construction or alteration of common use infrastructure, roads, ground, surfaced areas, structures, real property and installed equipment. Also includes common benefit signs, energy consumption, snow removal and beautification projects.	
(A4) DISASTER PREPAREDNESS	1. Operate disaster preparedness programs and related services, equipment, and facility support for emergencies and wartime operations.	
(A5) ENVIRONMENTAL COMPLIANCE	1. Provide administration of programs for the control and disposal of hazardous materials and other forms of pollution. Also includes recycling and resource recovery programs. 2. Provide administrative and legal response to federal, state or local regulatory agencies notices of violations of environmental laws and regulations arising out of RECEIVER's activities conducted under this agreement.	
(A6) FIRE PROTECTION	1. Provide fire fighting, protection, and prevention programs.	
(A7) LIBRARIES	1. Provide recreational and general reference library service.	
(A8) MORALE AND FITNESS SUPPORT	1. Provide theaters, parks, recreational centers, gyms, fitness centers, athletic fields, and related services.	
(A9) POLICE SERVICES	1. Provide guards, security protection, maintenance of law and order, and crime prevention measures.	

DISTRIBUTION

OFF BASE

HQ ACC LGXCA
130 DOUGLAS ST STE C-117
LANGLEY AFB, VA 23665-2791

DEFENSE NUCLEAR AGENCY
P.O. BOX 98539
LAS VEGAS, NV 89193

ON BASE

554 SG/SGAM
554 CPTS/FMA
554 MSS/MSIX
554 SVS/SVXM
554 SPS/SPPX
554 SUPS/LGSPP
554 TRNS/LGTR
554 TRNS/LGTL
554 MSS/MSM-1
WTC/JA
WTC/MO
DAO-DE/NEFS

SPECIFIC PROVISIONS (Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B26) MORTUARY	1. Arrange for handling and disposition of bodies of deceased Armed Forces personnel in accordance with current directives and when requested by Commander, FCDNA, or his designated representative.	1. Provide the Commander, Nellis AFB, with handling and disposition instructions for deceased personnel.
(B31) TRAINING SERVICES	1. Provide range facilities, instructors, weapons and ammunition as needed for required small arms training and weapons qualification.	1. Request small arms training support in writing from the Commander, 554 GCTF, at least 30 days prior to desired training dates(s).
(B32) TRANSPORTATION SERVICES	1. Provide inbound and outbound household goods and hold baggage type service and support for Armed Forces personnel assigned to FCDNA.	1. Provide the necessary information as required.

SPECIFIC PROVISIONS (Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B19) HOUSING AND LODGING SERVICES (Cont.)	2. Provide family housing for Armed Forces personnel assigned to FCDNA activities on an equal basis with those assigned to the supplying activity.	2. Provide personnel housing information as required.
(B21) INSTALLATION RETAIL SUPPLY	1. Provide common, generally expendable material or equipment.	1. Request supplies IAW Nellis AFB directives.
	2. Provide POL for FCDNA-owned and/or FCDNA assigned vehicles.	2. Acquire POL products IAW Nellis AFB directives.
(B23) LEGAL SERVICES	1. Render legal assistance to military personnel and their dependents assigned to FCDNA.	1. General, Special, and Summary Courts Martial jurisdiction and Article 15, UCMJ authority over FCDNA personnel assigned to NTS will be retained by Commander, FCDNA.
	2. Provide Claims Service.	2. Provide the required information IAW legal's directives and procedures.
(B24) MILITARY PERSONNEL SUPPORT	1. Provide the following Mission Support Services for Air Force personnel assigned to the Nevada Test Site: Forward all rosters requiring verification by the Commander directly to NTS. Nellis MPF will furnish information of all retirement applications to Field Commmand, DNA.	1. Furnish required information for the preparation of initial Data Change Worksheets and AF Forms 2096 and 2098 to Nellis Mission Support Squadron. All applicables for release from active duty, reassignment or extension/curtailment will be processed by NTS directly to Field Command, DNA; FCDNA will furnish all other personnel information as required.
	2. Process and issue Armed Forces Identification Cards for Air Force Personnel as outlined in AFR 30-20 and for Army and Navy personnel as requested by the Chief, Test Construction Division.	2. Complete and verify applications for issuances of Armed Forces Identification Cards for Army and Navy personnel assigned to NTS. Verification will be made by the Chief, Test Construction Division.
	3. Process and issue Uniformed Services Identification and Privilege Cards for dependents of Air Force personnel as outlined in AFR 30-20 and for dependents of Army and Navy personnel as requested by the Chief, Test Construction Division.	3. Complete and verify application Cards for Army and Navy personnel assigned to NTS. Verification will be made by the Chief, Test Construction Division
	4. The MPF will provide the same outbound assignment relocation processing service to AF personnel stationed at NTS that is afforded to the SUPPLIER at Nellis AFB.	4. Notify SUPPLIER when support is required.

SPECIFIC PROVISIONS

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(A8) MORALE AND FITNESS SUPPORT	1. Provide athletic, recreation, morale and welfare services to Armed Forces personnel assigned to FCDNA on an equal basis with those assigned to the SUPPLIER's activity.	1. Comply with all applicable SUPPLIER directives.
(A9) POLICE SERVICES	1. Provide security for classified shipments routed to NAFB for loading or off-loading during the period the shipment is on Nellis AFB, Nevada.	1. Provide normal base security and provide security guards for classified shipments during the periods the shipment is enroute to or from Nellis AFB.
(B1) ADMINISTRATIVE SERVICES	1. Furnish distribution of such Air Force Publications forms as may be pertinent.	1. Keep the supply activity advised as to required publications and blank forms, and comply with applicable Air Force and NAFB administrative directives.
	2. Provide duplicating services as defined in AFR 6-1 on a mutual support basis as required to supplement existing capabilities.	2. Comply with all applicable SUPPLIER directives.
(B7) COMMUNITY SUPPORT	1. Provide site exchange activity at Camp Mercury through the Army and Air Force Exchange Service.	1. Provide space, utilities, and sales for the exchange activity at Camp Mercury.
	2. Provide Red Cross assistance to Armed Forces personnel as authorized in current regulations and as requested by the Field Command Test Directorate.	2. Request support.
(B16) FINANCE AND ACCOUNTING	1. Provide finance services for Armed Forces and civilian personnel assigned or attached to Field Command, DNA as required.	1. Provide required information on personnel assigned to FCDNA as required by the SUPPLIER.
(B18) HEALTH SERVICES	1. Provide medical and dental care for active duty and dependent military personnel. Care provided to dependent personnel will be limited to capabilities of USAF Hospital as determined by the Hospital Commander. Upon request, obtain bacteriological and chemical analysis of dairy products.	1. Follow procedures set forth by SUPPLIER.
(B19) HOUSING AND LODGING SERVICES	1. Provide enlisted billeting space as required for FCDNA personnel. Military unit integrity will be maintained.	1. Provide personnel billeting information as required.

11. **GENERAL PROVISIONS** *(Complete blank spaces and add additional general provisions as appropriate: e.g., exceptions to printed provisions, additional parties to this agreement, billing and reimbursement instructions.)*

a. The receiving components will provide the supplying component projections of requested support. *(Significant changes in the receiving component's support requirements should be submitted to the supplying component in a manner that will permit timely modification of resource requirements.)*

b. It is the responsibility of the supplying component to bring any required or requested change in support to the attention of FCDNA Attn: FCRPI, 1680 Texas St SE, Kirkland AFB, NM 87117-5669 prior to changing or cancelling support.

c. The component providing reimbursable support in this agreement will submit statements of costs to: FCDNA Attn: FCRPI, 1680 Texas St SE, Kirkland AFB, NM 87117-5669.

d. All rates expressing the unit cost of services provided in this agreement are based on current rates which may be subject to change for uncontrollable reasons, such as legislation, DoD directives, and commercial utility rate increases. The receiver will be notified immediately of such rate changes that must be passed through to the support receivers.

e. This agreement may be cancelled at any time by mutual consent of the parties concerned. This agreement may also be cancelled by either party upon giving at least 180 days written notice to the other party.

f. In case of mobilization or other emergency, this agreement will remain in force only within supplier's capabilities.

g. The Test Construction Division, Test Directorate is a tri-service unit of the Field Command, DNA located at the Department of Energy's Nevada Test Site, Mercury, NV. They provide engineering, logistical, and administrative support for Field Command, Defense Nuclear Agency and FCDNA sponsored agencies in on-site weapons effect tests and off-site weapons effects as directed.

h. This agreement will terminate NLT Jan 2005 unless otherwise extended

i. This agreement will remain in effect during wartime.

j. This agreement may be modified by mutual consent of both parties.

k. An annual budget review will be conducted to revise reimbursable costs as necessary.

l. All direct and indirect incremental costs for provided support are reimbursable to the Supplying Activity. all reimbursement costs identified in Atch 1 of this agreement are estimates only.

ADDITIONAL GENERAL PROVISIONS ATTACHED: [ ] YES [X] NO

12. **SPECIFIC PROVISIONS** *(As appropriate: e.g., location and size of occupied facilities, unique supplier and receiver responsibilities, conditions, requirements, quality standards, and criteria for measurement/reimbursement of unique requirements.)*

The DNA consists of 2 officers, 7 enlisted, and 11 civilians.

Attachments:
1. Funding Annex
2. Specific Provisions
3. Manpower Annex
4. Distribution

ADDITIONAL SPECIFIC PROVISIONS ATTACHED: [X] YES [ ] NO

SUPPORT AGREEMENT

1. AGREEMENT NUMBER (Provided by Supplier)	2. SUPERSEDED AGREE. NO. (If this replaces another agreement)	3. EFFECTIVE DATE (YYMMDD)	4. EXPIRATION DATE (May be "Indefinite")
	FB4852-87268-002		INDEFINITE

5. SUPPLYING ACTIVITY	6. RECEIVING ACTIVITY
a. NAME AND ADDRESS USAF Weapons and Tactics Center 554 TRNS/LGTL 6255 Depot Road Nellis AFB Nevada 89191-7224	a. NAME AND ADDRESS Field Command Defense Nuclear Agency (FCDNA) ATTN: FCRPI 1680 Texas St SE Kirkland AFB New Mexico 87117-5669
b. MAJOR COMMAND Air Combat Command (ACC)	b. MAJOR COMMAND HD1102

7. SUPPORT PROVIDED BY SUPPLIER

a. SUPPORT (Specify what, when, where, and how much)	b. BASIS FOR REIMBURSEMENT	c. ESTIMATED REIMBURSEMENT
Mandatory Support Categories: (See Attachment 1) Optional Support Categories: (See Attachment 1) Total Estimated Reimbursement:		
ADDITIONAL SUPPORT REQUIREMENTS ATTACHED: [X] YES	[ ] NO	

8. SUPPLYING COMPONENT		9. RECEIVING COMPONENT	
a. COMPTROLLER SIGNATURE CHARLES F. LATZKE, COl, USAF	b. DATE SIGNED	a. COMPTROLLER SIGNATURE	b. DATE SIGNED
c. APPROVING AUTHORITY		c. APPROVING AUTHORITY	
(1) Typed Name CARROL H. CHANDLER		(1) Typed Name	
(2) Organization Colonel, USAF Commander, 554 Support Group	(3) Telephone Number	(2) Organization	(3) Telephone Number
(4) Signature	(5) Date Signed	(4) Signature	(5) Date Signed

10. TERMINATION *(Complete only when agreement is terminated prior to scheduled expiration date.)*

a. APPROVING AUTHORITY SIGNATURE	b. DATE SIGNED	c. APPROVING AUTHORITY SIGNATURE	b. DATE SIGNED

DD FORM 1644, MAR 82 (EF-V4)

APPENDIX A

VII. ELECTROMAGNETIC TEST ENVIRONMENT (EMTE)

WORKING GROUP CHAIRPERSON: Col Wesley J. Heidenreich, 412 TW/EW, DSN 525-7610

BASE POC: Lt Col Wallace, WTC/RANS, DSN 682-3600

ANALYSIS:

EMTE was directed to move from Eglin AFB to the Nellis Range complex and Western Ranges under the SECDEF's recommendation to the Defense Base Closure and Realignment Commission. The impact EMTE customer TDY has on Nellis AFB proper has been assessed to be significant however MILCON expenditure is not required at this time.

II. EQUIPMENT TEAR-DOWN AND REINSTALLATION

A. GRABS - 20 ft dia	$5,050,000
2 ft dia	180,000
7 in dia	130,000
B. Instrumentation - 38 truckloads	190,000
C. PHETS (ANFO Plant, concrete plant, etc)	17,000,000
SUB TOTAL:	22,550,000

III. CIVILIAN PERSONNEL PCS COSTS

50 people @ $40,000	2,000,000
SUB TOTAL III	$ 2,000,000
TOTAL	$24,650,000

MATERIAL, EQUIPMENT AND PERSONNEL RELOCATION TO NELLIS AFB

I. OFFICE MATERIALS AND EQUIPMENT WEIGHT

A. Books, Files, etc 250 people x 400 lbs/person	100,000 lbs
B. Computer Equipment 140 stations x 100 lbs/station	14,000 lbs
C. Systems Furniture 36 stations x 800 lbs/station	28,800 lbs
D. Office Furniture 85 stations x 600 lbs/station	51,000 lbs
E. Conference Room Furniture	10,000 lbs
F. Safes and File Cabinets Safes 24 @ 1000 lbs ea Cabinets 500 @ 300 lbs ea	 24,000 lbs 150,000 lbs
G. Tech Library 165 cartons @ 50 lbs ea	8,250 lbs
	386,050 lbs

386,050 divided by 20,000 lbs/truck = 19.3 truck loads @ $5,000 per truck load = $100,000

Subtotal I $100,000

Attachment L-4

SUPPORTING DATA

TEST OPERATIONS VEHICLES

TYPE OF VEHICLE	# EA TYPE	# TO NELLIS	#TO INDIAN SPRINGS
Sedan	18	18	-
Station Wagon	4	4	-
Pick-up	38	38	-
Van	5	5	-
Stake truck	5	3	2
Truck tractor	3	1	2
Fork Lift	12	4	8
Backhoe	1	-	1
Trailers	28	-	28
Warehouse tug	1	-	1
Road roller	2	-	2
Trencher	2	-	2
Road grader	1	-	1
Scoop loader	2	-	2
Dump truck	3	-	3
Water sprinkler	3	-	3
Gasoline tanker	2	-	2
Trailer van	5	-	5
Drill rig	1	-	1
Crane	1	-	1
TOTAL	137	73	64

Attachment L-3

b. Explosive storage needs: Explosive storage at Nellis AFB proper will have to be provided to meet the following requirements:

TYPE	SQUARE FEET	NET EXPLOSIVE WT	COMMENT
Storage	100	1,000	Detonators
Storage	100	1,000	Pyrotechnics
Inert Storage	1,500	0	Shipping Containers
Storage	700	10,000	
Storage	700	10,000	

3. RECOMMENDATION:

a. Stop the excessing action at ISAFAF housing area.

b. Construct one 700SF storage magazine at Nellis proper to meet above requirements. These requirements are identified in the Facilities section of this report.

TRANSPORTATION

ISAFAF POC: Maj Roger Schofield, WTC RTI/DO DSN 682-0301
NELLIS POC: Capt Brooks Reese, 554 TRNS/LGTM DSN 682-5748

Vehicle Operations and Maintenance:

1. ANALYSIS: Attachment L-3 lists the vehicles and equipment which require support as well as the distribution between the ISAFAF site and the Nellis AFB site. There are sufficient existing vehicle maintenance facilities at ISAFAF for the sixty five vehicles to be based there. At Nellis there is presently insufficient manpower and space to adequately maintain assigned vehicles. The addition of seventy-three vehicles to the base work load will require construction of an additional 1,700 square foot vehicle maintenance facility.

2. RECOMMENDATION: Construct an additional 1,700 square feet of vehicle maintenance capacity.

Traffic Management

FCDNA POC: Lt Col Richard Grimes, DSN 246-8606; (Secondary: Col Richard Schutes, DSN246-7791)

1. ANALYSIS: Attachment L-4 lists the classifications, quantities, and preliminary estimated cost of the various items of material and equipment which requires shipment to Nellis AFB/ISAFAF. The preliminary estimated cost is $24,650,000. A final estimated cost is being prepared and is scheduled to be available after 10 Apr 95.

TEST SUPPORT

1. ANALYSIS:

a ISAFAF Facilities: At ISAFAF there are temporary lodging facilities for 250 people which can be used by FCDNA. (Adequacy of these quarters has not been assessed.) There are messing facilities also. In the community of Indian Springs proper there is a small motel, grocery store, restaurant and gas station. Across the highway from ISAFAF there is an old family housing area with mobile home hook-up facilities and inadequate housing facilities. This housing site has been declared excess to Air Force needs and is being disposed of by the Corps of Engineers, the Air Force's real property agent. The Air Force is in the process of stopping this excessing action, therefore, the trailer hook-up locations could be used to install temporary lodging/office facilities for foreign military customers on board for test set-up and the test event.

VI. LOGISTICS

WORKING GROUP CHAIRPERSON: Mr. Bruce E. Conklin, HQ DNA/LEEE, DSN221-1163; COM 703-325-1163

SUPPORT AGREEMENT

BASE POC: TSgt Connie Jenkins & Mr. Tom Hales, 554 TRANS/LGTL DSN 682-2034

1. ANALYSIS:

a. There presently is an Inter-service Support Agreement (ISSA) being finalized between Nellis AFB and FCDNA for support of FCDNA's geographically separated unit working at the Nevada Test Site (Appendix A/L-1 & L-2). This ISSA could be modified to incorporate any of the reimbursable services offered by Nellis. This range of services replicates the services presently available to FCDNA at Kirtland AFB.

b. The PHETS has a requirement for the collection of weather data for up to three days before, during and after a shot. This data is presently gathered by WSMR using a portable meteorological station. This type of measuring equipment is not available at Nellis AFB. What Nellis uses is computer simulation to provide weather data for their range missions. This is not suitable for PHETS requirements.

2. RECOMMENDATION:

a. Procure and provide portable weather station equipment for use during PHETS experiments.

b. Amplify ISSA item A5 Environmental Support, to have Nellis AFB provide assistance with permitting actions for land use through federal, state and local agencies.

MAINTENANCE/SUPPLY

BASE POC: TSgt Connie Jenkins, DSN 682-2034; TSgt Ronald Sinkfield, DSN 682-8322

FCDNA's mission related maintenance and supply storage functions will be accomplished in new facilities provided for their sole use with the following exceptions:

a. Supply receiving and shipping functions will be per ISSA.

b. Supply of vehicle fuels and fuels component of ANFO for PHETS will be per ISSA.

3. RECOMMENDATIONS:

a. Establish a joint use arrangement for use of the GRABS site in which the two organizations are geographically separated. An in-depth memorandum of understanding will need to be written as identified above.

b. Identify PHETS site at the earliest possible time in order to coordinate for EOD support for range clean-up.

of training the EOD flight required and the problems foreseen in scheduling the use of the range, a geographical sharing arrangement was determined to be better for both parties.

c. GRABS Site Discussion: The proposed arrangement was to leave the EOD operations where they were currently located on the range and site the GRABS project on another portion of the range. Since both EOD and the GRABS project normally detonate considerably less than 1,000 lb NEW, the location of the GRABS site was proposed to be 1,250 feet from the EOD detonation site. This is the minimum distance allowable by the base weapons safety office. This would allow both organizations to perform operations with less than 50 lb NEW without effecting the other's operation. When the GRABS project needed to set off a charge larger than 50 lb NEW, they would build their test facility near the EOD detonation site. This will cause some conflicts in joint usage, but with enough proper coordination can be accomplished. The EOD flight may also need to perform an emergency destruction operation which would require the GRABS personnel to evacuate the area. The primary conflict results from the people building the structures having a clear visual path to classified EOD procedures being conducted. Secondly, detonations that EOD sets off could damage the structures being built. A less than optimal solution for this would be to construct a block wall or berm behind which the EOD technicians could work. Another concern is the Clark County Air Pollution Control Board had limited the range to 4,000 lb NEW per month. The amount of detonations EOD performs and the GRABS project plans should not reach this limit. The maintenance and ownership of the range was also addressed and a MOU would need to be established.

d. PHETS Site Discussion: The group identified the costs for performing both a general surface and localized subsurface clearance on Range 64 South, Weapons and Tactics Range Complex, Nellis AFB NV 89191. The work required to perform a complete surface and localized subsurface clearance of twelve 500 ft by 500 ft sites plus 150 miles of trenching on Range 64 South.

Cost of range clearance operations
10 EOD personnel
60 days to perform work

TDY cost =	$40,000
Equipment expenditure =	$20,000
Total	$60,000

The EOD career field is becoming very small. At certain times during the year Nellis will not be able to get 10 EOD personnel to come in TDY and perform this clearance. Site excavation to support EOD operations will require work on 12 sites at a cost of $150K each. Total cost for this is $1.8M. Therefore, this clearance will need to be planned well in advance and its timing will also need to be flexible.

V. EXPLOSIVE ORDNANCE DISPOSAL (EOD)

Working Group Chairperson: Captain Thomas J. Svoboda, 558 CES/CED, DSN 682-1406

Base POC: MSgt Michael E. Jones, 558 CES/CED. DSN 682-1218

1. General: The FCDNA team surveyed the 558th Civil Engineering EOD Flight's proficiency range for possible use as a test location. Both complete take over of the range and a joint use plan were proposed. The implications of EOD clean-up of the PHETS site was also addressed.

2. ANALYSIS:

a. GRABS Site OPTION 1--FCDNA exclusive use of present EOD range.

1. The existing thermal treatment facility used to perform Ammunition Disposal Requests would need to be closed or relocated.

a. Unserviceable or excess munitions would need to be shipped to another site for disposal.

b. The environmental restoration required for a closure would need to be performed.

c. An alternative location would need to be sited and approved by the State EPA

2. The EOD flight would not have a place to conduct proficiency training.

a. Training involving ordnance or explosives must be performed on a sited training range.

b. Classified render safe procedures need to be performed in a remote location.

c. The existing runway used for Base Recovery After Attack training would be lost.

d. Flight members would have to go TDY to train incurring additional time and expense.

3. The base would be left without a place to perform emergency destruct operations on ordnance declared hazardous and unsuitable for storage or transport.

4. A suitable alternative to the proficiency range isn't available.

a. Range 63 is not sited for EOD training

b. Range 63A, Silver Flag Alpha, would require armed guard transportation of explosives

c. Travel times to Range 63 make it unsuitable

d. Going TDY to another base to obtain practical training is not practical

e. A thermal treatment facility would need to be sited in a new location

b. OPTION 2: FCDNA/558 CES/CED joint use arrangement. Both a time sharing arrangement and geography sharing arrangement were considered. Due to the extensive amount

3. RECOMMENDATIONS:

a. Develop an Inter-service Support Agreement (ISA) outlining environmental support requirements to include base and range activities.

b. Site GRABS activity in Area II next to the EOD OB/OD site.

c. Site HE test activity at the NTS. If the HE site location is selected at either 65S or 64S, immediately begin negotiations with the USFWS. Also, provide Nellis AFB full details of the proposed testing activity to allow them to formally request State and Federal Agency's approval.

IV. ENVIRONMENTAL

WORKING GROUP CHAIRPERSON: Mr. Jay McCain, USAFWTC/EMJ, DSN 682-4163

CO-CHAIRPERSON: Maj Brian Huizenga, USAFWTC/EM3, DSN 682-6107

BASE POC: N/A

1. GENERAL: Environmental Management reviewed the options of placing the GRABS and High Explosive (HE) test sites at and around Nellis AFB. A limited amount of information was available regarding HE test particulars. The Nevada Division of Environmental Protection was contacted for an opinion as to the feasibility of performing this operation on the Nellis Range Complex. A preliminary opinion from the Clark County Health District- Air Pollution Division indicated that Air Quality is not a show stopper at either location. However, they will require additional information and a formal request to investigate further and provide a formal response.

2. ANALYSIS:

a. GRABS testing located at Nellis AFB in Area II. Environmentally this does not appear to be a problem. The area discussed was out at the EOD OB/OD site. The Nevada Division of Environmental Protection- Bureau of Federal Facilities was contacted to solicit their option. This location is isolated from the general base populace, is not within an Installation Restoration Program (IRP) site. The Desert Tortoise does exist in this area and a tortoise fence would be required with United States Department of Fish and Wildlife Service (USFWS) approval. The client identified the need to perform earth work in the area, which is also acceptable. This type of work will require standard dust and storm water permits before earthwork commences. A small population of the Desert Poppy (Archomecon Californica) that is a candidate for the threatened/endangered species, inhabits this area and will require USFWS coordination to clear if required.

b. HE testing was proposed on the south 60 series ranges (64S and 65S). With limited information regarding HE testing particulars the environmental office contacted the Nevada Department of Environmental Protection (NDEP) to request their viewpoint on this action. From the State's perspective this type of action is acceptable. However, all of the 60 series ranges fall within a National Wildlife Refuge and it is doubtful the USFWS will agree with this type of activity without some type of mitigation.

c. Additionally the team was asked to consider the feasibility of moving the Thorium seeded training site from Kirtland AFB to Nellis AFB versus Kelly AFB. NDEP was against the proposal of developing thorium fields on the 60 series ranges and suggested this type of action take place within the boundaries of the Nevada Test Site (NTS).

REAL PROPERTY OFFICER Ms. Mary Ann Cox/558CES/CERR DSN 682-3302	\\Signed\\
CHIEF ENGINEER Ms. Kimberlee Benart/558CES/CEC DSN 682-6862	\\Signed\\
RESOURCE MANAGER Mr. Linard Harper/558CES/CERF DSN 682-8420	\\Signed\\
ENVIRONMENTAL ENGINEER Maj Brian Huizenga/USAFWTC/EM3 DSN 682-6107	\\Signed\\
DEPUTY BASE CIVIL ENGINEER Mr. Gene Rogers/558CES/CE2 DSN 682-4833	\\In Coordination\\

b. AUDITORS

(Print or Type Name/Office/DSN)	(Signature)
AIR FORCE AUDITORS John A. Williams, AFAA Det 918, Nellis AFB, DSN682-6915	\\Signed in Draft Form\\

Eight MILCON projects were identified at and estimated cost of $25.3M. See project summary below for detailed break-out of construction cost, see file copies of DD Form 1391 and AF Form 1178 parametric cost estimates.

13. **TOTAL ESTIMATED COST**: See project summary.

a. Facility Cost Breakout (line item scope/cost):

b. Source of Facility Cost for Each Line Item (AF Price Guide, Local Price Sources, etc.):

BRAC BUDGET PROGRAM OR _____
PROGRAM ELEMENT CODE _____

14. **COST ESTIMATE PREPARED BY:**

a. BASE REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
Mr. Dan Ocampo/558 CES/CECP, 682-3077 and Mr. Gordon Robertson, HQ ACC/CEPR, DSN574-3817	\\Signed\\

b. FCDNA REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
Mr Julian Paco/FCDNA/FCRPE DSN 246-8730	\\Signed\\

15. **COORDINATION**

a. BASE

(Print or Type Name/Office/DSN)	(Signature)
COMMUNITY PLANNER 1Lt Jason Ellis/558CES/CECP DSN 682-4153	In Coordination
BASE MILCON PROGRAMMER Mr. Stanley Fueller/558CES/CECP DSN 682-8451	\\Signed\\

PURPOSE/LOCATION: BRAC 95, FCDNA/FCT High Explosive Test Function from Kirtland AFB to Nellis AFB, NV

SURVEY CONTROL NUMBER (If Required) _____

1. **ACC/XP TEAM CHIEF** (Name/Office/Phone): Major Wade M. Palmore, ACC/XPPB, DSN 574-7159

2. **ACC/CE TEAM CHIEF** (Name/Office/Phone): Mr. Gordon J. Robertson, ACC/CEPR, DSN 574-3187

3. **BASE FUNCTIONAL EXPERT** (Name/Office/Phone): N/A New Mission. No Base Expertise.

4. **MAJCOM FUNCTIONAL EXPERT** (Name/Office/Phone): Col Harlan A. Lawson, FCDNA/FCT, DSN 246-5513

5. **TYPE OF CONSTRUCTION** (ADAL, New Construction, Renovation):

Primarily new construction and one renovation. See 1391's and 1178's on file 558 CES/CECP.

6. **CATEGORY CODE**: 610-287, Administrative; 319-946 Material Research Test Lab; 211-152 Gen Purpose Maint; 843-319 Infrastructure, 422-264 munitions storage, 442-758 warehouse storage.

7. **FUNCTION** (i.e., Maintenance Shops, Supply Warehouse, Squad Ops):

The FCDNA/FCT is an R&D mission which simulates and studies the effects on nuclear high explosions using conventional munitions.

10. **REQUIREMENTS** (i.e., AFR 86-2, Weapons Systems Requirements Plan, etc):

Reference ACC/XPPB Site Survey Report 27-30 Mar 95, Nellis AFB, NV. Actual personnel authorizations are 110 PN government and 125 PN contractor.

Special Purpose Space: Facility requirements summary and analysis are provided on tables 1.2 and 1.3 of the facilities section of this report

General Administrative Space: Same as above.

11. **ANALYSIS** (Requirement Compared to Existing Facilities):

See Facilities and Operations Analysis'.

12. **RECOMMENDATION**:

BRAC 95 MILCON PROJECT SUMMARY
FCDNA HIGH EXPLOSIVE TEST FUNCTION
AT
NELLIS AFB

NELLIS AFB PROPER

PROJ#	DESCRIPTION	SCOPE	COST ($000)
RKMF97-3009	Const FCDNA Admin Spt	23,100 SF	3,600.0
RKMF97-3010	Const FCDNA Ops & Test Spt	54,600 SF	7,700.0
RKMF97-3011	Const GRABS site	125 AC	3,000
RKMF97-3012	Infrastructure & Misc Spt	LS	1,550.0
		NELLIS AFB TOTAL:	$15,850.0

INDIAN SPRINGS

PROJ#	DESCRIPTION	SCOPE	COST ($000)
LKTC97-3013	Alter Admin Fac for FCDNA	7,500 SF	480.0
LKTC97-3014	Const FCDNA PHETS Fac	28,000 SF	3,850.0
LKTC97-3015	Const Munitions Storage Igloos	2,200 SF	610.0
INDIAN SPRINGS TOTAL:			$4,940.0

RANGE 64S

Proj #	DESCRIPTION	SCOPE	COST(000)
FKXF97-3016	CONST PHETS Site	10 sq mi	4,500
		RANGE TOTAL:	$ 4,500

FCDNA BEDDOWN TOTAL: $ 25,290

NOTE:

1. Facility costs do not include pre-wired work stations per HQ USAF/RTR.

2. Parametric cost estimates were accomplished using PDC, the Air Force pricing guide, 1995 Means Construction Cost Data and engineering experience. DD For 1391 and AF Form 1178 are on file with FCDNA. The base engineers raised concerns about the high bids -- historically experienced here at Nellis and specifically at Indian Springs.

3. Project costs are currently draft and still subject to review by FCDNA/FCT, HQ ACC/CE/XP and other agencies as required.

3. BEDDOWN ANALYSIS: The site survey team in conjunction with Air Staff, Nellis AFB and AFAA personnel evaluated the overall FCDNA/FCT facility requirements against the existing facility capacity on Nellis AFB. Specifically, the team explored the use of the old hospital and the facilities vacated as a result of the F-4G inactivation. However, after a close examination of existing base development plans as a result of on-going mission changes, these facilities were determined to be unavailable. Specifically, the F-4G facilities have been identified for the F-22 FOT&E and Fighter Weapons School new mission beddown projected for Nellis AFB. The F-22 program is budgeted and programmed based upon the use of these facilities. In reference to the old hospital, the base has an aggressive consolidation plan to demolish over 47,000SF of inadequate non-permanent type facilities, provide space for new and existing missions. (i.e. stand-up of the new Air Base Wing, Wellness Center, Services and other functions) and free-up mission essential flightline space. An analysis of the hospital indicated that approximately 7,000 SF could be made available for a portion of the FCDNA administrative requirements. However, based upon operational needs and no significant cost savings, it was determined that this was not a viable alternative. In summary, due to the unique requirements of the FCDNA high explosive test functions, Nellis AFB does not have adequate excess facilities to beddown the realigned FCDNA. Notional sitings are found at Appendix B.

4. MILCON COSTS: A total of eight MILCON projects were identified at an estimated cost of $25.3M to support this BRAC 95 realignment to Nellis AFB. Four projects at an estimated cost of $15.9M for Nellis AFB proper, three projects at an estimated cost of $4.9M at Indian Springs, and one project for 4.5M out on the Nellis Range 64S. FCDNA will review and validate MILCON documentation to include; Requirements, Current Situation and Impact if not provided, and parametric cost estimates. This documentation will be reviewed and validated by HQ AFMC. These projects are summarized on the following page:

FCDNA FACILITY REQUIREMENTS (RANGE)

Function	PN	Total Admin	Special Purpose	Remarks
PHETS Timing, Firing and Monitoring			2,500 SF	
Concrete Batch Plant				Vertical & Horizontal Concrete Const
ANFO Mixing Plant				Munitions
Quality Control			300 SF	
Power				
Site Power				
Access Road				
Concrete Material Storage				6 concrete
18 bunkers				Required to shelter Instrumentation

Table 1.34, Facility Requirements Analysis

FCDNA FACILITY REQUIREMENTS (INDIAN SPRINGS)

Function	PN	Total Admin	Special Purpose	Remarks
PHETS RQMNTS				
Admin space	50	7,500		Forward Location
PHETS warehouse	1		8,000	
Fab Shop			1,800	
Vehicle Maint			1,000	
Hydro Plus Storage			10,000	
Electronic shop	2		1,500	
Inst Calibration Shop	4		800	
Transducer Calibration	3		800	
Warehouse			3,000	
TOTAL		**7,500 GSF**	**25,900 GSF**	
COMBINED TOTAL			**33,400 GSF**	
MUNITIONS				
Munitions Storage			2,200 SF	
Charge Build-up pad			1,500 SF	
Inert Storage			1,500 SF	
TOTAL			**5,200 SF**	
MISCELLANEOUS				
GOV Compound			17,800 SY	200ftx800ft
Storage yard			35,600 SY	200ftx1600ft
Foreign Country			8,400 SY	
20 Mobile home hook-ups				

Table 1.33, Facility Requirements Analysis

Function	PN	Total Admin	Special Purpose	Remarks
GRABS RQMNTS			125 Acre	
20' Radius shocktube (relocated)				
Earth berms for shocktube				
Charge prep bunker				
2' Shock tube (relocated)				
Support facility (toilets/water/control)			500 SF	
Site work				
5 0HM grounding				
5000 KV				
Water				
Test chambers				
7" Shocktube (relocated)				

Table 1.32, Facility Requirements Analysis

54

FCDNA OPS AND TEST (NELLIS AFB)

Function	PN	Total Admin	Special Purpose	Remarks
FCTT (TOTTS)	20	3240	-	32 PN Assigned
Material Testing			1,160	
Instrumental shop			750	
Machine shop			5,700	
Carpenter shop			2,500	
Library			500	
Photo shop			750	
Instrumentation storage			1,000	
Warehouse			12,000	
Breakroom			300	
FCII TOTAL	20	3,240	24,560	
FCTI	22	3,564		Instrumentation Office
Storage warehouse			4,000	
GFE storage			8,000	
Instrument calibration			1,200	
Instrument assembly			1,200	
FCTI TOTAL	22	3,564	14,400	
FCT				Common use
Warehouse			8,800	
FCDNA OPS & Test Total		**6,804**	**47,760**	
Combined Total			**54,564 GSF**	
Rounded			**54,600 GSF**	
MUNITIONS				
Explosive Assembly pad			1,500	
Munitions storage			700	Class 1 1.1
Munitions storage			700	C-4
Munitions storage			100	Pyrotechnics
Muntions storage			100	Detonators
Munitions Total			**3,100SF**	

Table 1.31, Facility Requirements Analysis

FCDNA ADMIN (NELLIS AFB)

Function	PN	Total Admin	Special Purpose	Remarks
FCT	10	1,620		Command Section
Reception area			300	
100 PN Conf/Trng rm 35GSF/PN			3,500	Top SecretVideo Teleconfence ctr (VTC)
PC-3			75	Orderly room
Weigh-in			50	Orderly room
Personnel records			75	Orderly room
2 LAN systems			120	
FCT TOTAL	**10PN**	**1,620**	**4,120**	
FCTO	29	4,698		New Mexico Ops
Blue print storage			250	
Ozalid				
Reproduction area				
DRAFTING/CADD			100	
FCTO TOTAL	**29PN**	**4,698**	**350**	
FCTT	40	6,480		Test science &Tech off.
Tech library			250	
TS vault			500	
Computer rm			200	
Data storage			500	Graybeard computer data system
Planning rm (25PN)			625	25 GSF/PN
Seismic Ins shop			400	
FCTT TOTAL	**40PN**	**6,480**	**2,475**	
FCTM	12	1,944		Test management
Contract storage			100	
References			100	
FCTM TOTAL	**12**	**1,944**	**200**	
FCTC TOTAL	7	**1,134**		**Tech compliance**
Nellis Total		**15,876**	**7,145**	
Combined Total			**23,021 GSF**	
Rounded			**23,100 GSF**	

Table 1.3 FCDNA Facility Requirements Analysis

FCDNA FACILITY REQUIREMENT SUMMARY

Function	(NELLIS) Total Admin	(NELLIS) Total Purpose	(NELLIS) Total Rounded	(KIRTLAND) Existing Facilities	Remarks
FCDNA Admin	15,876SF	7,145SF	23,100SF	34,691SF	Nellis proper
FCDNA Ops & Test	6,804SF	47,760SF	54,600SF	68,287SF	Nellis proper
GRABS SITE			125 acres	155 acres	Nellis proper EOD area
Explosive assembly pad			1,500 SF	4,000SF	Nellis proper
Munitions Storage			1,600 SF	2,900SF	Nellis proper
PHETS Support	7,500SF	25,900SF	33,400SF	39,500SF	Indian Springs
Munitions Storage		2,200SF	2,200SF	2,200SF	Indian Springs
GOV Compound		17,800 SY	17,800 SY	open areas	Indian Springs
Storage		44,000 SY	44,000 SY	open areas	Indian Springs
Range		10 sq mi	10 sq mi	open areas	Range 64S
Timing & Firing Fac		2,500 SF	2,500 SF	3,600 SF	Range 64S

Table 1.2, Facility Requirements Criteria

FACILITY REQUIREMENTS CRITERIA

- AFH 32-1084 Standard Facility Requirements Handbook
- MIL-HDBK 1190
- ACC Design Standards
  - --- Open office space
  - --- System/Modular furniture (not part of project per HQ USAF/RTR)
  - --- Maintain flexibility for changing requirements
  - --- Reduce unusable space
- Space based upon authorized or assigned personnel, which ever is less
- Administrative space 162 GSF/PN. PER AFH 32-1084
- Special use space (Examples)
  - -- Video Teleconference (VTC)
  - -- Vaults
  - -- Planning and meeting rooms
  - -- Computer rooms
  - -- Maintenance/Fabrication shops
  - -- Labs
  - -- Supply/warehouse
  - -- GOV parking

Table 1.1, Facility Requirements Criteria

III. FACILITIES

WORKING GROUP CHAIRPERSON: Mr. Gordon J. Robertson, HQ ACC/CEPR, DSN 574-3187

BASE POC FOR FACILITIES WORKING GROUP: Mr. Dan Ocampo
558 CES/CECP, DSN 682-3077

1. GENERAL: HQ USAF/RTR requested HQ ACC to assist DNA in accomplishing a facility site survey to relocate the High Explosive Test function from Kirtland AFB to Nellis AFB as a BRAC 95 action. The team was chartered to analyze and validate FCDNA/FCT facility requirements, assess Nellis AFB facility capacity, evaluate beddown options, develop recommendations by taking into account all variables (i.e. environmental, Nellis mission, costs, etc), develop facility costs, and prepare draft DD Fm 1391/1391C programming documents and AF Fm 1178 parametric cost estimates.

2. FACILITY REQUIREMENTS:

a. Criteria: To develop and validate the overall facility requirements of the FCDNA/FCT High Explosive Test Function, DRAFT Air Force Handbook (AFH) 32-1084, Date 1 March 1995, Standard Facility Requirements Handbook was used per HQ USAF/RTR/CEC guidance. However, in light of the unique FCDNA Research and Development (R&D) mission the handbook could not be used to address specific areas. To determine requirements, the team accomplished a detailed analysis of FCDNA's mission (manning, existing facilities, equipment, etc), interviews with functional OPR's, and using applicable sections of AFH 32-1084. The team developed and validated FCDNA facility requirements. Table 1.1 summarizes facility requirements criteria used for FCDNA survey.

b. Facility Requirements Summary: An overall summary and detailed analysis of FCDNA/FCT total facility requirements associated with the BRAC 95 relocation from Kirtland AFB to Nellis AFB are summarized on Table 1.2 and 1.3.

36 strand single mode fiber optic cable -	$1,100,000.00
Data Terminating Equipment (DTE)	$100,000.00
Fiber Optic Cable Installation:	**$1,875,000.00**

7. PHETS Communications/Data Collection Costs: These are the cabling and installation costs associated with the replication of the PHETS data collection capabilities from WSMR to the Nellis Training Range. Real-time video capability is currently provided by the Army host at WSMR. Source is Allied Signal (FCDNA contractor).

Large Scale Test-bed	
Fiber Optic Cable (61,689ft)	$717,934.00
Fiber Optic Cable Installation (660 man-hours @ $30/hr)	$19,800.00
Trencher rental with operator ($14,000/mo @ 4 mos)	$56,000.00
Connectors	$9,326.00
Connector installation (722 hrs @$30/hr)	$21,660.00
Phenomenology and Intermediate Test-beds	
Fiber Optic Cable (11,553ft)	$111,877.00
Fiber Optic Cable Installation (116 man-hours @ $30/hr)	$3,480.00
Trencher rental with operator ($14,000/mo @ 1 mo)	$14,000.00
Connectors	$5,627.00
Connector installation (454 hrs @ $30/hr)	$13,620.00
Real-time Video Equipment	TBD
Total PHETS Comm Relocation Cost	**$973,324.00**

8. Total communications cost to provide the infrastructure necessary:

Administrative Telephone Cost	$84,000.00
Leased Comm Setup Costs	$9,000.00
VTC Facility and Connectivity	$256,261.00
Telephone Switch Upgrades	$860,000.00
Fiber Cable Connectivity	$1,875,000.00
PHETS Relocation	$973,324.00
Total Communications Infrastructure Costs****	**$4,057,585.00**

Note: The aforementioned costs do not include any Allied Support Costs. Refer to the DD Form 1391 associated with the building construction to determine Allied Support Costs.
**** Leased Comm Cost, First Year of $205.2K is not included in this number as it is not BRAC cost.

3. Leased Communications Circuit Startup Costs: These one time costs are required to initiate service. Source is 554CS/SCX and DITCO/RPC.

Circuit	Startup Cost
One 56KB line to Alexandria, VA area	$3,000.00
One T-1 to Los Alamos, NM	$3,000.00
One DCTN to VTC Scheduling Center, MD	$3,000.00
Total	**$9,000.00**

4. Video Teleconferencing Facility and Connectivity Cost: Video Teleconferencing Center costs include furniture, computer/communication equipment, audio/visual equipment, and installation - **$256,261.00** Source is FCDNA/FCC. FCDNA just completed the construction and installation of a VTC at Kirtland AFB in Mar 1995. The existing VTC is programmed to relocate with the FCDNA portion going to Kelly AFB.

5. Telephone Switch Upgrades Cost: Upgrades are required to support the personnel increases at the specified locations. Source is 38EIW/ESA.

Area 2:	
System 85 telephone switch upgrade -	$800,000.00
Indian Spring AFAF:	
System 85 telephone switch cabinet expansion -	$60,000.00
Total Telephone Switch Upgrade Cost:	**$860,000.00**

6. Fiber Optic Cable Connectivity Costs: New or expanded fiber is required to connect PHETS to Indian Springs AFAF, 554CS building P-6 to Area 2 new facility, and 554 RANS building 200 to 554CS building P-6. Source is 38EIW/ESA.

Nellis AFB 554 RANS to 554 CS Facility:	
36 strand single mode fiber optic cable -	$150,000.00
Data Terminating Equipment (DTE)	$100,000.00
Nellis AFB 554 CS to Area 2 Administrative Facility:	
36 strand single mode fiber optic cable -	$325,000.00
Data Terminating Equipment (DTE)	$100,000.00
Indian Springs AFAF to PHETS:	

ADP inventory, moving costs, and new procurements necessitated by the physical separation of a currently collocated command are being addressed in the relocation cost collection initiative managed by the 377 CSW, Kirtland AFB, NM.

c. Specific Communications Costs are categorized into the following areas:

Administrative Telephones
Leased Communications Circuits Rates
Leased Communications Circuits Startup
Video Teleconferencing Facility and Connectivity
Telephone Switch Upgrades
Fiber Optic Cable
PHETS Communications/Data Collection

1. Administrative Telephone Cost: Costs support 235 personnel at the administration facility and test sites. Assume voice, computer modem, and fax support. Circuit Packs Cards cost $101 each and support up to 4 digital telephone requirements. Source is 554CS/SCX.

Item	Cost
Phone Unit	$290.00
Circuit Pack (Card)	$25.00
Installation	$21.00
Total per phone =	$336.00
250 total phones =	**$84,000.00**

2. Leased Communications Circuit Cost: Communication circuits are to replace connectivity currently available and required at Kirtland AFB. Source is 554CS/SCX and DITCO/RPC, Scott AFB, IL.

Circuit	Cost/Month
One 56KB line to Alexandria, VA area	$5,700.00
One T-1 to Los Alamos, NM	$5,700.00
One DCTN to VTC Scheduling Center, MD	$5,700.00
Total Per Month =	**$17,100.00**
Total First Year =	**$205,200.00**

II. Communication & Computer Systems

Working Group Chairperson: Mr. Cote, HQ ACC/SCYA, DSN 574-3190

FCDNA (Kirtland AFB) POC: Col Schuetz, FCDNA/FCR, DSN 246-7791

FCDNA Comm/Computer POC:	Major Jerald Coleman, FCDNA/FCC, DSN 246-2225
554 CS (Nellis AFB) POC:	Mr. Lin Lee, 554CS/SCX, DSN 682-5824
554 RANS (Nellis AFB) POC:	Mr. Campbell, 554 RANS/RSXR, DSN 682-3740
38EIW (Tinker AFB) STEM-B:	Mr. Pham, 38EIW/ESA, DSN 884-9778

1. GENERAL: ACC was tasked to identify the communications requirements and cost associated with moving the Test Directorate of FCDNA to new facilities located on Nellis AFB and the associated Nellis Test Range.

2. ANALYSIS:

a. Communications: FCDNA/FCT currently consists of missions requiring communications support at three major locations: Kirtland AFB, NM; White Sands Missile Range (WSMR), NM; and Nevada Test Site (NTS), NV. Requirements at NTS should be unaffected by the proposed relocation of FCDNA. Support requirements at Kirtland AFB and WSMR will be reduced but not eliminated, as a result of the proposed relocation.

The proposed siting of FCT missions at Nellis AFB, Indian Springs, and the Nellis Training Range will require the creation and expansion of communications capabilities at those locations. The administrative function of FCT has a proposed siting of Area 2, Nellis AFB and the Permanent High Explosive Test Site (PHETS) has a proposed siting at location in the Nellis Training Range approximately 15 miles from Indian Springs AFAF.

Communications requirements internal to the administrative facility will consist of telephone voice, fax, and computer modem connectivity for up to 235 government and contractor personnel, unclassified LAN connectivity for 110 government personnel, and classified LAN connectivity for 50 government personnel. Communications requirements internal to the PHETS will include telephone connectivity for 15 units and extensive data collection connectivity for test sensors. These two sites require telephone connectivity with their respective telephone switches and data connectivity between each other. Finally, the administrative facility requires external leased data connectivity to HQ DNA, Alexandria, VA, Los Alamos National Laboratories, NM, and Video Teleconferencing Scheduling Center, MD.

b. Data Automation: Communications and computer facility requirements to support LAN servers and communications equipment have been submitted for inclusion in the facility planning.

MUNITIONS STORAGE AREA REQUIREMENTS ON NELLIS AFB PROPER

To accommodate the proposed FCDNA Range at Nellis AFB, ten igloos within the 896 MUNS area would require a reduction in class/division 1.1 NEW. While these reductions wouldn't be expected to reduce the 896 MUNS' capability, the unit has not fully coordinated the reductions through their command.

IGLOOS AFFECTED:

	From	To		From	To
11001 -	500K	130K	11015 -	500K	250K
11002 -	162K	130K	11026 -	384K	250K
11003 -	162K	145K	11029 -	500K	400K
11004 -	500K	200K	11030 -	500K	475K
11005 -	500K	225K	11044 -	500K	450K

FCDNA/FCT TEST SUPPORT CONTRACTS

CONSTRUCTION CONTRACTOR - 50

- Construct new test structures and targets for High Explosive Testing
- Repair or rehabilitate used structures to extend their usable life
- Maintain GFE construction equipment and unique support vehicles

INSTRUMENTATION SUPPORT CONTRACTOR - 40

- Calibrate gage and instrumentation
- Install gages, cabling, and data acquisition equipment
- Establish timing and firing sequence
- Record data from test events
- Provide instrumentation support to ionizing Radiation Simulators, Advanced Research Electromagnetic Pulse Simulator, Large Blast and Thermal Simulator, as well as high explosive testing.

TECHNICAL DOCUMENTATION CONTRACTOR - 3

- Support documentation efforts for Quick Look Data Reports, Test Execution Report, Test Result Report, and meeting minute reports
- Produce and coordinate test video reports

THE TOTTS CONTRACT - 36

Provides technology and test support in the areas of nuclear and precision weapons effects, survivable structures and systems, and systems safety assessments. This support includes all aspects of planning, operation,, maintenance, conducting, fabricating, modifying, fielding, testing, analyzing, and reporting of research, test, and development using the Defense Nuclear Agency (DNA) equipment and other specialized test support items, located at Kirtland AFB, New Mexico, and at other locations as directed by DNA The major end items of this acquisition are data, software, and technical reports, as required by individual technical instructions.

CURRENT FCT ASSETS -
PERMANENT HIGH EXPLOSIVE TEST SITE - WSMR

10 square miles (8.2 KT ANFO, airdrops)
27,000ft laboratories, workspace, warehouse
- 9,100SF environmentally controlled
- -3,200SF environmentally controlled plus UPS
- -- 2,400SF environmentally controlled, UPS, dust

7,500SF admin space
33 hydroplus trailers parking
35 vehicles (construction, EH, admin)
4 AMMO storage bunkers
1 charge assembly building
Access to large bunkers at WSMR
Concrete batch plants with liquid Nitrogen
ANFO mixing plant

150 miles of underground cable
18 instrumentation bunkers
- shock isolation
- bermed

2 each 150' towers
Misc test structures

Capability to hook-up 20 mobile homes: electricity and telephone

CURRENT FCT ASSETS - Kirtland AFB

34,600SF Admin space plus special needs
- 100 person conference room
- TS storage vault
- Library
- Seismic instrument workshop
- Computer room

63,600SF Laboratories, workspace, warehouse

16 Trailers 8'x40'
- Safeguard
- Equipment storage

75 Vehicles (admin, EH and construction)

GRABS (close-in Test site)
- 155 acres (1000 lbs HE)
- 20' shock tube
- 2' shock tube
- 7" shock tube in building
- Half space test chamber
- Misc test chambers
- 30 vehicles/trailers
- 4 AMMO bunkers
- 1 charge prep bunker

WEAPONS TESTED RECENTLY

AIR FORCE

GBU-27
GBU-28
AGM-142
Multiple weapons, single aim point
Smart fuze

NAVY

Multiple weapons, single aim point
Fuel Air Explosive

ARMY

High velocity penetrator

FOREIGN COUNTRY TESTS

MK-82

FUTURE THRUSTS OF TEST PROGRAMS

- Counterproliferation areas of interest

- Ionizing radiation simulations for space and wartime threat

- EMP

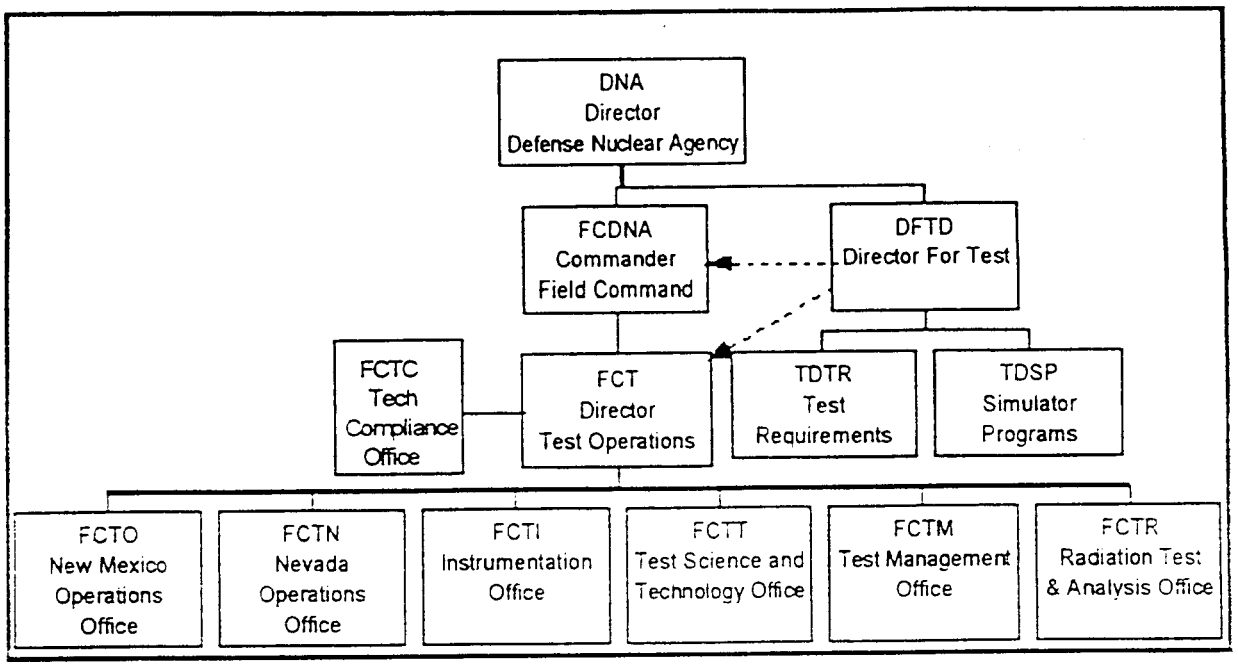
- Penetration weapons testing still growing

- Structural response of buried targets
  -- Hard Target Kill

- Weapons effects of new technologies

- Technology Transfer

DNA ORGANIZATION FOR TEST



f. SUPPORTING DATA:

FCT MISSION

- Conduct weapons effects tests in accordance with requirements established by HQ DNA/DFTD and customer needs.

- Nuclear weapons effects simulations
  - -- High explosive (blast and shock)
  - -- Thermal
  - -- EMP
  - -- Ionizing radiation

- Conventional Weapons
  - -- Weapons phenomenon
    (blast, shock, thermal, shrapnel)
  - -- Advanced conventional weapons
    (GBU-28, I-2000, I-800)
  - -- Hard Target Response
  - -- Support

Siting of the GRABS close-in test site near the EOD training and demolition pit as proposed by WTC/SEW is acceptable. The proposed site separates the FCDNA and EOD operations so that they do not interfere with one another. This site permits detonation of 86 lbs TNT equivalent throughout the site and up to 206 lbs TNT equivalent in the northern half of the site. However, this FCDNA site would not permit detonation of cased charges. Cased charges could be used (up to 500 lbs explosive weight) on the EOD range through scheduling coordination and possibly through exchange of ranges for periods requiring lengthy (up to a month) construction and target preparation times. A formalized MOA may be necessary to facilitate this downtime.

Existing explosives storage capacity at Nellis AFB will support FCDNA storage requirements for detonators, pyrotechnics and classified explosives. A new bunker (approx. 700 SF) must be constructed to provided adequate segregated storage for unclassified developmental explosive charges.

provide continuous access to Range 64S. Also, Range 64S site will require considerable EOD and target remnants clean-up. The estimate to clear 12 each 500 ft x 500 ft sites to 40 foot depth to support buried target construction at the proposed test-bed in area 64S is $2.0M.

The Test Control Center (TCC), the ANFO mixing plant, the concrete batch plants and 18 instrumentation bunkers will be constructed at the large test-bed. The TCC is a 2,400 SF, raised computer floors, humidity, temperature and dust controlled facility. This structure houses the $4M test control, timing and firing, and data collection systems as well as the PC-based quick look data reduction equipment.

d. GRABS/Admin: A potentially suitable location for the FCT administrative and test design/analysis functions and test support for the GRABS close-in test activities is in Area 2 at Nellis AFB. The only known negative issues are: 1.) possible low water pressure and impact on fire fighting and suppression and 2.) impact of security training operations in that areas. Area 3 at Nellis AFB should perhaps be considered as an alternate site for this activity.

e. Nellis AFB Facility availability

1. F-4G Squadron Facilities

No single F-4G facility contains enough suitable office or parking space for the entire FCDNA Test Directorate. Major renovation would be required to convert the maintenance units to office space. The existing F-4G facilities are located adjacent to flightline operations. Plans are being developed to locate future aircraft programs in these facilities. The F-4G aircraft maintenance facilities are a valuable flightline asset and should continue to function for aircraft related programs, not converted to general office space.

2. Building 4349 - "Old Hospital"

The existing facility requires major renovation to be utilized for administrative office space the majority of the space is being considered by Nellis AFB for housing other functions.

Approximately 7,000 SF of floor space has been considered for use by FCDNA. The current floorplan is uniquely designed for a hospital function and is not entirely suitable for office space. The wide hallways, individual patient room bathrooms and other specialized spaces leave approximately 50% net usable office space.

Current plans for occupying the hospital are to mix various Air Force functions. FCDNA requires secure, non-shared areas.

Locating only a portion of FCDNA personnel in the old hospital would separate them from the proposed new facility by approximately 5 miles. Fragmenting FCDNA personnel would hinder interaction and negatively impact our mission. Personnel located at the old hospital would be separated from classified and non-classified technical document storage areas, conference rooms and other administrative functions. Locating personnel in the old hospital is not a viable consideration.

4. A large test-bed permitted for 4.6 kilotons of explosives detonations with state-of-the-art data acquisition infrastructure. It would be preferable to have all these facilities located within allowable safety limits, but geographical constraints at Nellis AFB and Nellis Range preclude such siting. Since FCT High Explosive operations are presently split between Kirtland AFB and WSMR, we requested to site our present Kirtland AFB operations and facilities at Nellis AFB and our WSMR HE operations and facilities to the Nellis Range.

Nellis Range Area EC South was ruled out early because of the long distance (120 miles form Nellis AFB), the lack of support facilities nearby and sensitivity to having foreign experimenters and observers near the northern portion of the Nellis Range.

Indian Springs AFAF was visited and found suitable to house much of what is currently in the PHETS admin area at WSMR. Three buildings (Bldg 400, 404, 405) were offered near the chapel on the south side of Highway 95 which can be modified to satisfy the test group staffs, experimenters and other support staff (7,500 sq ft requirement).

b. Requirements: A large area is required to support the test operations such as are currently conducted at WSMR. Current support facilities at the PHETS site include 32,000SF of laboratories, workspace and warehouse. Laboratory space is 900SF of calibration lab and 800 SF of concrete testing lab. Workspace includes carpenter and fabrication shops (1,800 SF) vehicle maintenance shop (1,000 SF), cable configuration workshop (2,500 SF). Warehouse and storage facilities comprise the remaining 20,000 SF currently being used at WSMR. Three outdoor storage yards of 160,000 SF, 120,000 SF and 75,000 SF are required for construction materials, gauge mounts, camera towers and instrumentation cable storage. The 160,000 SF yard must be adjacent to the warehouse structure while the other two yards may be separated from the warehouse and test support area.

Explosive storage igloos (4 each) are required in the Indian Springs WSA: two each 1000 SF and two 100 SF.

Additionally, a 1500 SF charge build-up area with grounding, lightning protection and explosive proof lightening is required. Existing facilities at the WSA meet this need.

Fire protection, medical, security, vehicle maintenance for approximately 70 vehicles will be required at Indian Springs AFAF. During classified testing, 24-hour security at the test site will be required. This requirement may last from one hour to one week.

c. PHETS: Area 65S is a suitable location for large scale HE testing. It would require time and/or space separation from the Thunderbirds' practice airfield in 65S as well as relocating the A-10 strafing range. The entire area 65S would be required to provide adequate safe separation distances from Highway 95 and Indian Springs AFAF.

A site visit was made to the most southern portion of Range 64S, proposed location for FCDNA's Permanent High Explosive Test Site (PHETS). Although not as flat as the current PHETS location on White Sands Missile Range, NM, it appears that the area is suitable for FCDNA's test mission. A major concern is accessibility, because of USAF use of Range 65S. To access this area from Indian Springs AFB, one must traverse across Range 65S. Perhaps at some future date, operational arrangements can be made to

Element Commander. Functions supported by this office include classified control, command and control, counseling and orderly room functions.

c. Concerns:

1. Nellis AFB

- Low water pressure impacts
- Security training impacts on traffic movement
- Proposed GRABS site does not permit use of cased charges
- Proposed GRABS site limited to 86 lbs in southern half and 206 lbs in northern half. Desire up to 1000 lbs.
- Maintenance support for vehicles

2. Indian Springs AFAF

- Proposed changes to security operations and impact on protection of equipment, weapons storage area and classified material.
- Availability of space to site large storage yards
- Adequacy of firefighting capability for increased explosive storage
- Separation of FCDNA facilities by Highway 95

3. PHETS

- Environmental approval to site on 64S or 65S
- Clean-up of range to permit safe excavation in designated locations to 40 foot depth and for cable trenching operations
- Need designated access corridor through Range 65S to 64S
- Security for the test site, particularly for classified targets
- Lack of power at the test site
- Lack of mobile meteorological capability

2. ANALYSIS/RECOMMENDATION:

a. Siting: Sites offered by Nellis AFB for FCT to consider were carefully reviewed. Options ranged from everything at Indian Springs to various fragmenting of the functions between Nellis AFB, Indian Springs and area EC south. We were queried about not moving the explosive test program from White Sands Missile Range. The FCDNA position is to move everything but the Large Blast and Thermal Simulator from WSMR and everything but the ARES EMP test facility, the 6-foot shock tube and the shallow water test facility at Kirtland AFB if the Test Operations must leave New Mexico. In considering areas required to support the FCDNA Test Operations functions relocating to Nevada under the proposed '95 BRAC action, four principal functional areas are required:

1. The basic admin area to support 110-125 DoD personnel along with a Test Operation & Support Facility (laboratories, warehouse and maintenance shops);

2. A close-in test site (identified as 155 acre GRABS site at Kirtland AFB) for siting of shock tubes and small (less than 1,000 lbs) HE tests;

3. Administrative and test fielding integration and support facilities.

64

structures for live drops of aircraft delivered weapons, Davis Gun (explosive driven penetrator gun) and air gun inert penetrator tests, as well as other structured response and phenomenology tests. This test-bed presently consists of state-of-the-art data acquisition systems, timing and firing instrumentation systems, and command and control facilities to support testing throughout the 10 square miles of PHETS. The two concrete batch plants (80 cu yd and 200 cu yd per hour, meet a yearly requirement usually of monolithic pours 4 times per year between 2,000 and 10,000 cu yd per structure), the ANFO mixing plant, and two 150' high towers satisfy unique requirements of our OSD directed test programs. The administrative, test design and target preparation facilities, calibration labs and warehouse/storage spaces are essential to support the 30-60 tests conducted per year. See supporting data end of this section for a list of key elements at PHETS.

b. Organization: The Test Operations Directorate is organized into seven offices and the Director's office. The following is a brief description of the functions and responsibilities of these various organizations.

The New Mexico Operations Office (FCTO) provides the engineering and support functions that design and construct test targets and structures. FCTO provides the Test Group Directors who lead matrixed organizations from the various FCT offices through test preparation, fielding, execution and post-test operations. This office also provides the staffs for the ARES EMP simulator, Large Blast and Thermal Simulator (LB/TS) and the Thermal Radiation Source (TRS) simulators.

The Test Science and Technology Office (FCTT) designs the technical aspects of tests, provides technical liaison with customers, ensures technical objectives are achieved and conducts analysis of test data. FCTT is comprised primarily of doctoral (13) and other senior scientists (31) specializing in shock and blast phenomenon and geophysics. A classified library containing over 14,000 documents covering nuclear and advanced conventional test data history is also maintained by this office.

The Instrumentation Office (FCTI) provides instrumentation engineers who design the gauging and data acquisition systems required on each test. FCTI support all HE testing as well as the nuclear effects simulators; ionizing radiation, electromagnetic pulse, shock, blast and thermal.

The Test Management Office (FCTM) provides test coordination, cost analysis and scheduling functions for all testing assigned to FCT.

The Test Compliance Office (FCTC) ensures that Environmental, Safety & Health (ES&H), explosive safety and environmental regulations and policies are considered in all test planning operations. Both compliance for current and future tests and remediation of prior testing sites are supervised/managed by this office.

The Radiation Test and Analysis Office (FCTR) provides technical design and modernization for radiation simulators. FCTR will remain at Kirtland AFB.

The Nevada Operations Office (FCTN) maintains the DoD capability to resume underground nuclear testing, conducts conventional tunnel vulnerability testing and provides oversight for clean-up of DoD nuclear effects test sites. FCTN will remain at the Nevada Test Site.

The Director's office (FCT and FCT-A) provides over all leadership and integrating management. The Director for Test Operations is dual hatted as the Army

I. OPERATIONS

WORKING GROUP CHAIRPERSON: Col Harlan A. Lawson, FCDNA/FCT, DSN 246-5513

BASE POC: Lt Col Paul Haney, WTC/XP, DSN 682-3000 and Lt Col Jack Schofield, WTC/RSI, DSN 682-0301

1. GENERAL:

a. Overview: The Test Operations Directorate (FCT) of Field Command, Defense Nuclear Agency (FCDNA) conducts weapons effects tests in accordance with requirements established by HQ, Defense Nuclear Agency and customer needs. These effects tests include primarily nuclear weapons effects simulations, advanced conventional weapons effects and hardened target response. Other testing activities include new charge development, scaled structure testing and unique requirements for other U.S. government agencies and foreign nations.

The proposed BRAC realignment of Kirtland AFB, NM recommends that a large majority of the Test Operations Directorate facilities and functions relocate to Nellis AFB, NV (including the Nellis Range) prior to 2001. As currently envisioned, this move will bring 110-125 DoD personnel and 75 contractors (50 more construction contractors will be hired in Nevada) from Kirtland AFB to the Nellis AFB vicinity. Instrumentation, cabling, laboratories, workshops, vehicles, shock tubes, and test support equipment from Kirtland AFB and White Sands Missile Range (WSMR) essential to the High Explosive (HE) test functions will also relocate to the Nellis AFB vicinity.

The FCDNA Test Directorate and its general administrative, design and analysis functions are now collocated with FCDNA at Kirtland AFB. Of the 146 authorizations in FCT, 20 are located at the Nevada Test Site and the remaining 126 authorizations are located in New Mexico at Kirtland AFB and the WSMR. Specifically, high explosive tests conducted at Kirtland AFB contain less than 1,000 lbs of explosive. These tests are conducted at the Chestnut Range, owned by Phillip's Lab and cleared for up to 10,000 lbs HE, and at the Giant Reusable Air Blast Simulator (GRABS) site, 155 acres owned by FCT and cleared for up to 1,000 lbs HE since late 1994. Approximately 25 tests were conducted on these ranges in 1994. Other test facilities at Kirtland AFB, planned for relocation, include a Material Properties Lab, shock tubes (diameters of 20', 2' and 7"), Halfspace Test-bed, large gas gun for high speed scaled penetration testing, flyer-plate launch facility for hyper velocity impact shock testing, and shallow water shock test-bed.

Facilities remaining at Kirtland AFB include the Advanced Research Electromagnetic Research Simulator (ARES), the 6-foot diameter shock tube, and the Thermal Radiation Source (TRS) Test Site. See supporting data end of this section.

The PHETS at WSMR hosts the large scale test-bed (up to 8.2 kilotons of explosive charge, Ammonium Nitrate Fuel Oil - ANFO) and other test-beds supporting large scale nuclear effects simulation tests, advanced conventional weapons tests and unique HE tests for classified programs. The PHETS permits construction of large buried

SURVEY TEAM MEMBERS

NAME	RANK	OFFICE SYMBOL	DSN
Lippincott (DNA Leader)	CAPT (USN)	FCDNA/FCD	246-8613
Lawson	Col	FCDNA/FCT	246-5513
Heidenreich (EMTE)	Col	412 TW/EW	525-7627
Hetzel	Lt Col	FCDNA/FCTOE	246-6611
Donnalley	Lt Col	HQ USAF/RTR	225-4666
Neall	Lt Col	HQ USAF/RTR	225-4666
Palmore (Team Leader)	Maj	HQ ACC/XPPB	574-7159
Piekarczyk	Maj	HQ USAF/CEC	225-8177
Coleman	Maj	FCDNA/FCC	246-2225
Huizenga	Maj	USAFWTC/EM3	682-6107
Suoboda	Capt	558 CES/CED (EOD)	682-1218
Lu	GM-15	FCDNA/FCTI	505-846-2206
Conklin	GM-14	HQDNA/LEEE	703-325-1163
Ashbaugh	GM-14	FCDNA/Nevada	702-295-7067
Robertson	GS-13	HQ ACC/CEPR	574-3187
Paco	GM-13	FCDNA/FCRPE	246-8730
Barton	GS-13	AFAA/FSS	947-5548
Newburn	GS-12	AFAA/Eglin	872-3148
Cote	GS-11	HQ ACC/SCYN	574-3190

NELLIS BASE CONTACTS

Jones	Capt	554 MSS/DPM	682-9223
Reese	Capt	554 TRNS/LGTM	682-5748
Burditt	Capt	USAFWTC/SEY	682-2874
Ellis	1Lt	558CES/CECP	682-4153
Benart	GM-14	558CES/CERF	682-6862
Lee	GM-13	554 CS/SCX	682-5824
Williams	GS-12	AFAA/Nellis AFB	682-6915
Fueller	GS-12	558 CES/CECP	682-8451
Grantham	GS-12	USAFWTC/SEY	682-4045
Rodgers	GS-12	558CES/CE2	682-4833
Cox	GS-11	558CES/CERR	682-3302
Ocampo	GS-11	558 CES/CECP	682-3077
Hales	GS-11	554 TRNS/LGTL	682-2032
Harper	GS-09	558CES/CEC	682-8420
Carroll	MSgt	USAFWTC/SEW	682-1242
Ferguson	MSgt	558 CES/EOD	682-1503
Reymolds	MSgt	USAFWTC/SEW	682-4624
Jenkins	TSgt	554 TRNS/LGTL	682-3257
Sinkfield	TSgt	554 SUP/LGSF	682-8322

KEY NELLIS PERSONNEL

NAME	RANK	OFFICE SYMBOL	DSN
Wilcox	Col	USAFWTC/CV	682-5370
Ingram	Col	USAFWTC/CS	682-5371
Jaszczak	Col	USAF/DOE	295-1147
McFarlane	Col	57 WG/CV	682-7496
Warner	Col	57 WG/LG	682-4836
Barksdale	Col	57 WG/OG	682-4947
Brown	Col	554 MDG	682-2000
Chandler	Col	554 SPTG/CC	682-6550
Green	Col	554 SPTG/CD	682-6550
Rader	Col	554 SPS/CC	682-2566
Riggs	Col	558 CES/CC	682-4833
Carpenter	Col	554 RANS/CC	682-3600
Wallace	Lt Col	554 RANS/CD	682-3600
Dinkins	Lt Col	554 CS/CC	682-2069
Justet	Lt Col	554 MSS/CC	682-9229
Oehrli	Lt Col	554 CPTS/CC	682-2593
Costantini	Lt Col	USAFWTC/SE	682-7604
Haney	Lt Col	USAFWTC/XP	682-3000
Eldridge	Lt Col	554 CONS/CC	682-4003
Schofield	Lt Col	USAFWTC/RSI	682-0301
Finnegan	Lt Col	66 RQS/CC	682-6600
Uken	Lt Col	561 FS/CC	682-5381
Vendermarliere	Maj	554 TRNS/CC	682-4713
Fenoglio	Maj	USAFWTC/MO	682-5596
Hopper	GM-14	USAFWTC/EM	682-9367
Barton	GM-13	AFAA/FSS	947-5548
Williams	GS-12	AFAA/AAO	682-6915
Wilman	GS-12	USAFWTC/HO	682-9840
Cooper	GS-12	USAFWTC/RA	682-9843

6. EXPLOSIVE ORDNANCE DISPOSAL (EOD): FCDNA proposed operations affect two EOD aspects. The first EOD concern is the joint use of EOD range on Nellis AFB. A workable plan has been proposed for siting FCDNA functions in the vicinity of current EOD training site and will allow uninterrupted simultaneous operations. The second concern is EOD clearing of perspective PHETS site. This operation conducted by TDY military personnel will take between three to twelve months. Contractor utilization for this purpose would be cost prohibitive.

7. LOGISTICS: Logistical concerns fall in four areas:
a. Explosive storage capacity at Nellis AFB
b. Maintenance support capability at Nellis AFB
c. Security at ISAFAF
d. Water pressure to support firefighting and fire suppression at Nellis AFB. The concerns can be ameliorated through detailed coordination and infrastructure improvements. The standard Inter-service Support Agreement used at Nellis AFB is adequate with slight modifications to support the increased logistical requirements of this proposed relocation.

8. EMTE: The EMTE emitter move to the Nellis Range has no direct MILCON requirement at Nellis AFB. Nellis is impacted by TDY customer needs incurred due to the realignment of EMTE, however these needs can be met with existing facilities.

EXECUTIVE SUMMARY

1. GENERAL: The ACC team's mission was to assist FCDNA in the beddown of the High Explosive Test function from Kirtland AFB. FCDNA brings with it administrative, laboratory, and unique test requirements. The various functions include the Permanent High Explosive Test Site (PHETS), Giant Reusable Air Blast Simulator (GRABS), Joint Munitions Effects Manual (JMEMS) research and test support for counterproliferation programs. The most significant requirement is PHETS capability to detonate an Ammonium Nitrate/Diesel fuel (ANFO) charge of 4.6 Kilotons to simulate a nuclear airblast of 8.0 Kilotons. Environmental issues will be the biggest challenge to this beddown. On-base siting of other small test projects will likely face very little opposition. Options other than Nellis AFB are still being pursued by Air Staff as possible locations for FCDNA to include the Nevada Test Site (NTS) run by the Department of Energy (DOE).

2. OPERATIONS: The mission of this site survey was to assess various siting options for relocating the FCDNA high explosive testing operations from Kirtland AFB and White Sands Missile Range (WSMR) to Nellis AFB and Nellis Ranges. If state environmental and federal fish and wildlife approvals are obtained to use Range 64S or 65S for HE test operations, then the proposed siting plan is adequate. Consolidation of warehouse and workspace areas resulted in a 22% reduction in overall vertical storage and workspace from current usage.

3. COMMUNICATIONS: FCDNA have extensive communication requirements. These requirements include: Teleconferencing communications capability, T-1 lines, classified and unclassified LAN networks, fiber optic conductivity from Range Support functions to Range Operations. Teleconferencing security requirements are cleared to Top Secret/CNWDI. Possible expansion of Indian Springs Air Force Auxiliary Air Field (ISAFAF) and Nellis AFB telephone switch upgrades may be required.

4. FACILITIES: The facilities working group consisted of representatives from FCDNA/FCT, 558 CES, HQ ACC, HQ USAF and other base representatives. The working group assessed existing facility capacity and determined none were adequate or available for use. Eight MILCON projects were identified and validated at an estimated cost of $25.3M. Specifically, four projects at Nellis proper for $15.9M; three projects estimated at $4.9M at ISAFAF and one project at 64S RANGE for $4.5M.

5. ENVIRONMENTAL: After a review of the proposed actions, locating the GRABS testing on Nellis AFB near the existing EOD OB/OD sites does not pose any significant environmental difficulties. However, locating the PHETS within the 60 series ranges will probably be rejected/contested by the U.S. Department of Fish and Wildlife Service, due to the fact that this land is part of a National Wildlife Refuge. The environmental working group also inquired about the possible beddown of the Kelly operation at Nellis AFB. The Nevada Division of Environmental Protection (NDEP) was not receptive to the idea of developing thorium fields in this area and recommended these sites be located within the NTS.

INTRODUCTION

As a result of SECDEF BRAC 95 recommendation to the Base Closure Commission, Field Command Defense Nuclear Agency (FCDNA) - High Explosive Test will move to Nellis AFB. HQ AF/RTR requested HQ ACC/XPPB lead a composite site survey team from ACC, FCDNA and Nellis AFB. Our primary mission was to identify MILCON projects required to accommodate numerous FCDNA functions currently located at Kirtland AFB. The secondary mission of the ACC contingent was to identify MILCON requirements at Nellis AFB proper caused by the realignment of the Electromagnetic Test Environment (EMTE) from Eglin AFB. In addition to MILCON, the team considered issues such as logistics, environmental and base support.

HEADQUARTERS AIR COMBAT COMMAND

DIRECTOR OF PLANS & PROGRAMS

BRAC 95
DET4, 505 CCEG BEDDOWN

HURLBURT FLD, FLORIDA

21-24 MAR 95

HQ ACC/XPPB

TABLE OF CONTENTS

	PAGE
TABLE OF CONTENTS	1
INTRODUCTION	2
EXECUTIVE SUMMARY	3
SITE SURVEY TEAM ROSTER	4
POC ROSTER	5
I. OPERATIONS	6
II. COMMUNICATIONS	8
III. FACILITIES	11
IV. DISTRIBUTION	16

INTRODUCTION

HQ ACC/XPPB led an ACC team of selected functional area experts to identify MILCON projects to beddown Det 4, 505 CCEG at Hurlburt Fld. Det 4's movement is a result of the SECDEF recommendation to the Defense Base Closure and Realignment Commission to realign Kirtland AFB.

EXECUTIVE SUMMARY

The ACC site survey team was part of a larger team run by HQ AFMC/XPP. The ACC team's mission was to beddown Det 4, 505 CCEG at Hurlburt Field with its parent organization. Det 4's mission is to provide advanced distributed simulation emphasizing theater air defense. Det 4 is responsible for the development and operation of the Theater Air Command and Control Simulation Facility (TACCSF).

1. OPERATIONS: Det 4 is part of the 505 CCEG at Hurlburt Field and is an AWC unit. This unit supports numerous customers within DoD and other government agencies with a one of a kind, operator-in-loop air defense simulation facility. The plan is to unite Det 4 with its parent organization at Hurlburt Field. To move the 122 manpower positions to Hurlburt Field will require 40,900 SF of space.

2. COMMUNICATIONS: After review of the projected communications support required to beddown Det 4, 505th CCEG at Hurlburt Field, FL, the telecommunications authorizations in personnel and equipment are adequate, provided items stated in the C-CS working group report are utilized. The possible relocation will not impact on any collateral communications capabilities in a negative way. The base can support the relocation provided our inputs to the report are used as a positive source when implementing the relocation plan.

3. FACILITIES: The Facilities Working Group consisted of representatives from the 505 CCEG; 16 CES; HQ AFSOC; Det 4, 505 CCEG; 727 ACS; and HQ ACC. The working group toured the existing Blue Flag facility and determined it to be inadequate for alteration and addition for the Det 4, 505 CCEG. A new facility of 40,900 SF, $6.0M, is proposed for the 727 ACS communication/radar site. No other sites are available on Hurlburt Field due to vast wetland areas and future needs of the expanding 16 SOW mission.

SITE SURVEY TEAM ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Sirois	Lt Col	Det 4, 505 CCEG/CV	246-1471
Palmore	Maj (Leader)	HQ ACC/XPPB	574-7159
Akin	Capt	Det 4, 505 CCEG/ENS	246-1600
Thies	Mr	HQ ACC/CEPR	574-3187

HURLBURT TEAM ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Kelley	Lt Col (S)	USAFBTS/BTL	579-6121
Dean	Maj	HQ AFSOC/XP	579-4762
Jones	Maj	727 ACS(T)/LG	579-7273
Warnar	Capt	HQ AFSOC/SCP	579-2134
Franklin	Capt	505 TSS/MSF	579-5115
Rydland	1Lt	16 CS/SCP	579-4978
Nicholson	MSgt	16 CS/SCP	579-4977
Weshaga	TSgt	16 CS/SCP	579-2980
Allridge	SSgt	16 SPS/SPAIR	579-7252
Lewis	Mr	HQ AFSOC/CE	579-2260
Podich	Mr	16 CES/CD	579-7701
Hoffman	Mr	16 CES/CECP	579-6439
Meri-Akri	Mr	16 CES/CECP	579-5310

KEY HURLBURT PERSONNEL CONTACTED

NAME	RANK	OFFICE SYMBOL	DSN
Bailey	Brigadier General	16 SOW/CC	579-7782
Gilbert	Col	16 SPTG/CC	579-4446
Upson	Col	505 CCEG/CC	579-5054
Hawkins	Col	505 CCEG/CD	579-1802
Rohlfing	Col	USAFBTS/CC	579-7741
Davis	Col	USAFAGOS/CC	579-7611
Le Grande	Lt Col	16 CES/CC	579-7701
Reed	Lt Col (S)	16 SPS/CC	579-7620
Caldwell	Maj	16 CS/CC	579-6643

I. OPERATIONS

WORKING GROUP CHAIRPERSON: Lt Col Robert J. Sirois, Det 4, 505 CCEG, DSN 246-1472

CO-CHAIRPERSON: Maj Wade Palmore, HQ ACC/XPPB, DSN 574-7159

BASE POC: Col Carl Upson, 505 CCEG/CC, DSN 579-5054

1. GENERAL: The Operations (OPS) team surveyed the operations functions of Det 4, 505 CCEG, Theater Air Command and Control Simulation Facility (TACCSF). The OPS team mission was to assess facility space available to beddown Det 4, if the decision is made to move Det 4 to Hurlburt Field. Attention was focused on all options available to relocate Det 4 to Hurlburt with particular emphasis on locating Det 4 as close as possible to the 505 CCEG units. It was also assumed that the level of capability of Det 4 would not be degraded after the move.

2. ANALYSIS:

a. Det 4 provides advanced distributed simulation to a variety of joint agencies with a focus on theater air defense. Det 4 simulation efforts include a combination of constructive, virtual, and live operations. The unit uses Modeling and Simulation (M&S) for research, development, test, evaluation and training. The mission is accomplished through the use of high-fidelity, Distributed Interactive Simulation- (DIS) compliant, operator-in-the-loop, simulation systems and software. These systems include a variety of airborne weapons and sensor platforms along with several Army C4I and missile systems. In addition, Air Force Modular Control Equipment (MCE) and associated radar systems are modeled. These simulation efforts are distributed to joint agencies and their associated facilities worldwide over distributed networks to include SATCOM and dedicated T-1 connections, and the Defense Simulation Internet (DIS).

b. Det 4 requires a stand-alone facility to accomplish its mission. Due to the nature of the mission, scheduling, security, and diverse customer requirements, TACCSF could not share a facility within the constraints of available facilities currently in place at Hurlburt Field. The unit requires up to 40,900 square feet of space for 122 personnel, including 30 government military and civilian employees, and 92 contractors for technical support, and development, operations and maintenance (D,O&M). A test-bed on raised floor for the computer systems and simulators would require 21,100 square feet of space. Office and administrative support areas for the facility would require an additional 19,800 square feet. A potential site was located at Hurlburt Field in close proximity to the other 505 CCEG missions, which would facilitate linking of the facilities for communications and distributed simulation efforts. These efforts include a long-term goal of developing the Theater Battle Management Warfighting Center of Excellence to provide mission ready qualification for the Joint Forces Air Component Commander and his staff, which operate an AOC. The center of excellence concept would also provide operational test and evaluation and training for C4I systems and concepts in a more robust environment than is now possible.

c. The facility used to house the USAF Battlestaff Training School (USAFBTS), often referred to as "Blue Flag", was considered as a potential option. Due to the facility's architectural limitations and conflicts arising out of the diverse nature of USAFBTS and TACCSF missions, it was determined to be unacceptable. The current facility would require a major renovation in layout, electrical support requirements, and additional building requirements before it could be considered. Risk is extremely high.

3. RECOMMENDATIONS:

a. Det 4, 505 CCEG, TACCSF, should be located at Hurlburt Field in a stand-alone facility at one of two sites within close proximity to other 505 CCEG units. This will facilitate the unit's mission and future requirements for advanced distributed simulation efforts.

II. Communication & Computer Systems

Working Group Chairperson: Capt Franklin, 505th TSS

Base (Kirtland AFB) POC: TSgt Ray M. Owen, Det 4, 505 CCEG/TC

Hurlburt Field POC's: 1Lt John P. Rydland, 16 CS/SCP, DSN 579-4978
TSgt M. Wes Haga, 16 CS/SCPP, DSN 579-2980

1. GENERAL: The 16th Communications Squadron was tasked to identify the communications assets and cost associated with moving Det 4, 505th CCEG to a new facility located in close proximity to the existing 505th CCEG located at Hurlburt Fld

2. ANALYSIS: As a result of initial meetings with the Site Survey Team, 16 CS/SCP accepted the following items to research and cost.

- Identify the Administrative Telephone Cost
- Identify the Leased Communications Circuit Cost
- Identify the Administrative Local Area Network Connectivity Cost
- Identify the internal cabling cost associated with the war gaming/simulator network: 420 workstations
- Identify the external copper cable requirements

A. Identify the Administrative Telephone Cost:

Hurlburt Field operates administrative telephones under the single line concept which states that each individual phone is an individual line. This means there are no shared phone numbers For Det 4, the use of the M5312 P-phone will satisfy their large intercom and conferencing requirements which they utilize presently. The following is a list of associated costs:

Item	Cost
M 5312 P-Phone	$380.00
MT6X21AC (Card)	$117.00
Installation	$50.00
Total per phone =	**$547.00**
122 total phones =	**$66,734.00**

B. Identify the Leased Communications Circuit Cost

The leased communications costs include:

Circuit	Cost/Month
Three T-1s to Arlington, VA area	$5,800.00
One T-1 to San Diego, CA	$6,500.00
One T-1 to Colorado Springs, CO	$6,100.00
One T-1 to DSI node, Gunter AFB, AL	$6,000.00
Total per month =	**$24,400.00**

C. Identify Administrative Local Area Network Connectivity Costs

LAN connectivity costs for the new facility. See attached technical solution and costing in ACC/XPPB for exact equipment breakdown and associated costs. **($ 43,902.95)**

D. Identify Wide Area Lan Connectivity Cost (fiber):

Wide area network connectivity cost to utilize a new building will roughly total **$40,000** to connect the new building with the existing 505th buildings. The existing 505th building (90005), will be connected via fiber through the Air Force Superhighway 2000 program. The $40,000 covers the cost to lay additional fiber between the two buildings install the required end equipment. This cost comes from the Superhighway 2000 program and the Hurlburt Field STEM-B Mr Charles J Meyers, 485th EIG/ESC.

E. Identify cable costs for the 420 station war gaming and simulation area. This cost is based on a worst case cable estimate. Using a 100 x 200 ft open space, the longest single lateral cable run is 173 ft, excluding any vertical displacement.

420 stations x 173 ft = 72,660 feet of cable required

Plenum Ethernet Cable = $210.00 / 1000 ft., ($ .21/ft)

72,660 ft x ($.21 per ft) = $ 15,258.60

72

F. Identify Copper Cable Connectivity External Costs

A 400 pair copper cable is required for copper cable connectivity into the base copper infrastructure.

Cost Covers:	Cable & Hardware	$ 9,400.00
	Installation	$ 2,200.00
	Total	**$11,600.00**

3. Total communications cost to provide the infrastructure necessary:

Administrative Telephone Cost	$66,734.00
Leased Comm Cost	$24,400.00
LAN Connectivity Cost	$43,902.95
WAN Connectivity Cost	$40,000.00
Simulation Room Cable Cost	$15,258.60
Copper Cable Connectivity	$11,600.00
Total Communications Infrastructure Costs	**$201,895.55**

4. Note: The aforementioned costs do not include any Allied Support Costs. Refer to the DD Form 1391 associated with the building construction to determine Allied Support Costs.

III. Facilities

Facilities Working Group Chairperson: Mr. Gene Thies, HQ ACC/CEPR, DSN 574-3187

Base POC: Alex Meri-Akri, 16 CES/CEC, DSN 579-5310

General: The purpose of the site survey is to determine the construction required to accommodate Det 4, 505 CCEG at Hurlburt Fld, FL. The attached facility validation checklist contains all information pertaining to the proposed construction of a 40,900 SF facility on the 727 radar site on Hurlburt Field near the 505 CCEG compound. Actual DD Fm 1391s and 1178 are on file with ACC/XPPB and ACC/CEPR.

FACILITY VALIDATION CHECKLIST

DATE: 28-Apr-95

PURPOSE /LOCATION: BRAC 95 Det 4, 505 CCEG from Kirtland AFB to Hurlburt Field, FL.

SURVEY CONTROL NUMBER (If Required) _____

1. **ACC/XP TEAM CHIEF** (Name/Office/Phone): Major Wade Palmore, ACC/XPPB, DSN 574-7159

2. **ACC/CE TEAM CHIEF** (Name/Office/Phone): Gene Thies, ACC/CEPR, DSN 574-3187

3. **BASE FUNCTIONAL EXPERT** (Name/Office/Phone): Lt Col Robert Sirois, Det 4, 505 CCEG/CV, DSN 246-1471

4. **MAJCOM FUNCTIONAL EXPERT** (Name/Office/Phone): N/A

5. **TYPE OF CONSTRUCTION** (ADAL, New Construction, Renovation): New Construction

6. **CATEGORY CODE**: 171-623; Technical Training

7. **FUNCTION** (i.e., Maintenance Shops, Supply Warehouse, Squad Ops):

Theater Air Command and Control Simulation Facility for Air Defense simulation and training of aircrews and controllers.

10. **REQUIREMENTS** (i.e., AFR 86-2, Weapons Systems Requirements Plan, etc):

Reference ACC/XPPB Site Survey Report (pages 9 and 10), 13-16 Mar 95, Kirtland AFB NM. Actual personnel authorizations are 122 pn instead of the estimated 150 pn listed in the Kirtland report.

Special Purpose Space: 21,100 GSF; a unit unique requirement with no standard criteria. Secure Room criteria per DOD 5200.1-R Change 2, page V-2 and Appendix F.

General Administrative Space: 122 pn X 162 sf/pn equals 19,800 sf; per AF HDBK 32-1084, Chapter Eleven.

11. **ANALYSIS** (Requirement Compared to Existing Facilities):

The Facility Working Group considered two options: 1) Utilizing Bldg. 90005 and 2) constructing a new facility. The high bay of the Blue Flag Bldg (90005), 505 CCEG facility was initially considered. The high bay currently contains a two-story Blue Flag training structure. Three-story construction would provide 25,000 sf of Detachment 4 unit requirement, leaving 15,900 sf to be constructed outside the building. The high bay would normally accommodate a three-story administrative structure but Blue Flag requires high ceilings for briefing displays and equipment, eliminating the potential for three-story construction. Since a three-story structure inside of Blue Flag building is not feasible, a stand-alone facility for Det 4 will be required. Siting of a new facility was limited to two areas on Hurlburt Field due to extensive wetland areas and the growing 16 SOW mission: One site across from the Base Civil Engineering (BCE) complex on Independence Road and another site currently used by the 727 ACS for radar operations. The site across from the BCE complex is further from Bldg. 90005 and is used for Army deployments and 16 CES training. IAW the base long-range development plan (page 34), the site is designated for future 16 SOW administrative functions. The site of the 727 ACS radar operation is close to Bldg. 90005 but will require relocation of a communications tower and the radar. The radar hill will have to be leveled. Despite these relocations, the 727 ACS radar site is the optimum choice for the 16 SOW and 505 CCEG missions.

12. **RECOMMENDATION**:

Construct stand-alone 40,900 sf facility at the 727 ACS radar site. Relocate 727 ACS communications tower and radar.

13. TOTAL ESTIMATED COST: FY98

a. Facility Cost Breakout (line item scope/cost):

ITEM	U/M	QUANTITY	COST	($000)
AIR DEFENSE SIMULATION/TRAINING FACILITY	SF	40,900	95	3,886
SUPPORTING FACILITIES				1,485
UTILITIES	LS			(300)
PAVEMENTS	SY	6,400	46	(295)
SITE IMPROVEMENTS	LS			(300)
*RELOCATE RADAR/RADIO ANTENNAS	LS			(150)
*RAISED FLOOR, SECURE ROOMS	SF	16,300	22	(360)
*REMOVE RADAR MOUND	CY	20,000	4	(80)
SUBTOTAL				5,371
CONTINGENCY (5%)				269
TOTAL CONTRACT COST				5,640
SUPERVISION, INSPECTION AND OVERHEAD (6%)				338
TOTAL REQUEST				5,978
TOTAL REQUEST (ROUNDED)				6,000

b. Source of Facility Cost for Each Line Item (AF Price Guide, Local Price Sources, etc.):

All cost estimates were sourced from AF Price Guide in WIMS PDC except those marked by * which came from MEANS Construction Price Guide, 1994.

BRAC BUDGET PROGRAM OR _____
PROGRAM ELEMENT CODE _____

14. **COST ESTIMATE PREPARED BY:**

a. BASE REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
ALEX MERI-AKRI 16 CES/CEC 579-5310	\\SIGNED\\

a. ACC CES/ESP REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
SEBASTIAN REMICCI	\\SIGNED\\

15. **COORDINATION**

a. BASE

(Print or Type Name/Office/DSN)	(Signature)
COMMUNITY PLANNER CARL T. HOFFMAN	\\SIGNED\\
BASE MILCON PROGRAMMER ALEX MERI-AKRI	\\SIGNED\\
REAL PROPERTY OFFICER BECKY BARRETT	\\SIGNED\\
CHIEF ENGINEER THOMAS BALLASCH	\\SIGNED\\
RESOURCE MANAGER LT. PETER JENNESS	\\SIGNED\\

ENVIRONMENTAL ENGINEER MICHAEL GOLD	\\SIGNED\\
DEPUTY BASE CIVIL ENGINEER NICHOLAS PODICH	\\SIGNED\\

b. AUDITORS

(Print or Type Name/Office/DSN)	(Signature)
AIR FORCE AUDITORS BOB NEWBURN	\\SIGNED\\

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HQ ACC/DOR/DOS/DOT 205 Dodd Blvd. STE 101 Langley AFB VA 23665-2789	3
HQ ACC/DRB/DRC/DRF/DRM/DRSMO-2 204 Dodd Blvd. Ste 226 Langley AFB, VA 23665-7777	5
HQ ACC/FMA/FMF 216 Sweeney Blvd. Ste 212 Langley AFB VA 23665-2792	2
HQ ACC/LGC/LGF/LGS/LGT/LGX 130 Douglas St STE 210 Langley AFB VA 23665-2791	5
HQ ACC/XPM/XP-SAS/XPP (7) 204 Dodd Blvd. STE 202 Langley AFB VA 23665-2778	9

HQ ACC/SCP 108 Benedict Ave STE 209 Langley AFB VA 23665-1993	1
ACC CES/ESE Crestar Bldg STE 500 11817 Canon Blvd. Newport News VA 23606	2
HQ ACC/INA/INF 129 Andrews St. Ste 150 Langley AFB VA 23665-2767	2
USAF AWC/CC/CS 203 West D Avenue Rm. 600 Eglin AFB FL 32542-6867	2
HQ AFSOC/XP 100 Bartley St Hurlburt Field, FL 32544-5273	1
16 SOW/CC/CS 131 Bartley St Ste 315 Hurlburt Field, FL 32544-5273	2
505 CCEG/CC 142 Hartson St Hurlburt Field, FL 32544	1
Det 4, 505 CCEG/CC/CV 1655 First St., SE Kirtland AFB, NM 87117-5617	2
HQ AFMC/XPX 4375 Chidlaw St Ste 6 Wright Patterson AFB, OH 45433-5006	1
Total	45

HEADQUARTERS AIR COMBAT COMMAND

DIRECTOR OF PLANS & PROGRAMS

ACC FACILITIES ASSESSMENT

KIRTLAND AFB, NEW MEXICO

13-16 MAR 95

HQ ACC/XPPB

TABLE OF CONTENTS

	PAGE
TABLE OF CONTENTS	1
INTRODUCTION	2
EXECUTIVE SUMMARY	3
SITE SURVEY TEAM ROSTER	4
POC ROSTER	5
I. Det 4 505 CCEG	6
II. Det 1 31 TES	10
III. DEFENSE NUCLEAR AGENCY	11
IV. DISTRIBUTION	13

INTRODUCTION

HQ ACC/XPPB led an ACC team of selected functional area experts to identify facility requirements of ACC units currently located on Kirtland AFB. These units, Det 4, 505 CCEG and Det 1, 31 TES, will potentially relocate to other bases as a result of SECDEF recommendations to the Defense Base Closure and Realignment Commission. At Air Staff request, the ACC team looked at selected Field Command Defense Nuclear Agency (FCDNA) facilities requirements in preparation for their move to Nellis AFB.

EXECUTIVE SUMMARY

The ACC site survey team looked at areas that directly and indirectly affect ACC. The ACC units are: Det 4, 505 CCEG and Det 1, 31 TES. The unit action that indirectly affects ACC is FCDNA relocation to Nellis AFB.

1. Det 4, 505 CCEG: Det 4 is part of the 505 CCEG at Hurlburt Field and is an Air Warfare Center (AWC) unit. This unit supports numerous customers within DoD and other government agencies with a one of a kind, operator-in-loop air defense simulation facility. The unit is planned to be united with it's parent organization at Hurlburt Field. To move the 150 manpower positions to Hurlburt Field will require 41,000 SF of space.

2. Det 1, 31 TES: Det 1 is part of the 31 TES at Edwards AFB and is part of the 79 TEG. The 79 TEG is a unit of AWC. Det 1 accomplishes modeling and simulation in support of AFOTEC programs at Kirtland AFB. The plan is for Det 1 to move back to it's parent organization at Edwards AFB when current projects are completed FY 97/4. To move the 31 manpower positions to Edwards AFB will require 3,100 SF of space.

3. FCDNA: The Test Operations Directorate, FCDNA, is a DoD agency chartered to conduct nuclear and high explosive tests and evaluation. The functions than are to move to the Nellis AFB complex are located on Kirtland AFB and White Sands Missile Range (WSMR). The functions include the Blast Shock Test, Air Blast Simulator and Permanent High Explosive Test Site. Relocation of these functions and 226 associated personnel will require extensive facilities on Nellis AFB and the Nellis AFB Range Complex.

SITE SURVEY TEAM ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Brad Purvis	Maj	HQ ACC/XPPB	574-7159
Wade Palmore	Maj	HQ ACC/XPPB	574-7159
Jennie Dickover	Capt	HQ ACC/SCXP	574-4011
Bryon Rodriguez	2Lt	USAF WTC/XP	682-3138
Gene Theis	Civ	HQ ACC/CEPR	574-3187

POC ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Lester, Dennis L.	Lt Col	Det 4, 505 CCEG/CC	246-1472
Keppler, Darryl	Lt Col	Det 1, 31 TES/CC	246-2331
Lippincott, Lincoln H.	Capt (USN)	FCDNA/FCD	246-8613
Lawson, Harlan A.	Col	FCDNA/FCT	246-5513
Sirois, Robert J.	Lt Col	Det 4, 505 CCEG/CV	246-1471
Akin, Thomas	Capt	Det 4, 505 CCEG/ENS	246-1600
Owen, Ray M.	TSgt	Det 4, 505 CCEG/TC	246-0726
Pugh, Keith A.	Maj	Det 4, 505 CCEG/PD	246-1471

I. DET 4, 505TH COMMAND & CONTROL EVALUATION GROUP (CCEG)

A. Communication & Computer Systems

Working Group Chairperson: Capt Jennie E. Dickover, HQ ACC/SCXP, DSN 574-4011

Base POC: TSgt Ray M. Owen, Det 4, 505 CCEG/TC

1. GENERAL: The Communications Working Group (CWG) surveyed the communications infrastructures and manpower authorizations of the 505 CCEG.

2. ANALYSIS:

a. Base Communications Infrastructure.

(1) The 505th consists of 2 buildings (Bldg 20361 and 20360) connected with a T3 circuit. The main computer facility is 20,000 SF of space occupied with various computers and simulator necessary to perform the mission of the unit. There are 150 users in the unit. The communications infrastructure in both buildings is adequate.

(2) The communications infrastructure includes personal computer workstations, 3 separate LANs, and many computer simulation suites. The 3 LANs include one for the unit and one for each of two contractors. There is also a requirement for LAN connectivity to three other sites which is being accomplished by 6 T1 circuits. The unit can meet its needs with 2 pairs of fiber cable to the Base Communications Squadron. These cables should be run independently to prevent single point of failure. In addition, there is approximately 30 ft of fiber optic cable connecting the computers in the test-bed.

(3) The security requirements will be outlined for each system in the site survey from Eglin. The existing facility is operating under waivers and it will be necessary to house the equipment in a vault at the new location.

(4) There is a Video Teleconference Center located in one of the briefing rooms that will be moved. It is a point to point connection to Washington, DC.

(5) There are no satellite requirements for this unit.

b. Manpower Authorizations.

(1) There are a total of 150 manpower authorizations, however, there has been no breakdown by AFSC.

c. Data Automation Inventory Summary.

The data automation inventory list will be provided at the 20-24 March Site Survey at Eglin. Lt Col Sirois will attend to ensure the requirements of the unit are identified. The complete inventory will be listed in the Eglin report.

3. RECOMMENDATION: The unit is located in an inadquate, outdated facility. The new facility should allow the unit to contain the modeling and simulation function in a centralized location. Except for the fiber connectivity requirements to the Communications Squadron, the unit should not impact the operations of the base.

B. Facilities

Working Group Chairperson: Mr. Gene Thies, HQ ACC/CEPR, DSN 574-3187

Base POC: Capt Thomas Akin, Det 4, 505 CCEG/DE, DSN 246-1600

1. GENERAL: The purpose of this Facility Site Survey is to identify facility requirements for Det 4, 505 CCEG that is being considered for relocation from Kirtland AFB to Hurlburt Field, FL.

2. ANALYSIS: The unit presented a facility requirements plan based on their existing facilities. The team toured the facilities. The unit occupies 40,900 SF in two buildings. They occupy all of Building 20361, (36,300 SF), and a small portion of Building 20360, (4,600 SF). This facility utilization information came from base real property records. Most of the computer and terminal functions are maintained in secure areas. These areas must be secured to store computer systems that contain Top Secret classified information. Vault construction for these computer systems may be required and will depend on the facility location at Hurlburt Field. The working group performed a functional analysis of the unit plan. The facility requirement is broken down into two main categories; general administrative and special purpose space. Floor plans of current facility usage will be maintained in official ACC/CEPR files.

3. RECOMMENDATION: The following space requirements are the result of analysis and discussion with unit personnel and contractor representatives.

a. Facility Requirement Criteria: The following information provides the tools and guidelines to assist in the development of an organization total facility requirement.

(1) Facility Requirements Policy and Guidance

-- AF HDBK 32-1084, Standard Facility Requirements Handbook (Replaces AFM 86-2)

-- Space based upon authorized not assigned

(2) Facility Requirements Criteria Summary:

Computer Area (secure vault)	10,000 GSF
Node Terminals (secure vault)	5,000 GSF
Visitor Gallery (secure vault)	850 GSF
White Force Terminal (secure vault)	400 GSF
Communications/LAN Equipment	1,000 GSF
Maint, Storage, Shipping	1,000 GSF
Training/Briefing 150 PN	2,500 GSF
Break Room	350 GSF

Sub total	21,100 GSF *
General Administrative	
150 PN Admin Area with prewired	19,500 GSF
workstations 130 SF/PN	
Admin Mechanical Room	400 GSF
TOTAL	**41,000 GSF**

Table 1.2 -- Facility Requirements Criteria

* This 21,100 SF contains all common areas and mechanical systems.

II. DET 1, 31 TEST & EVALUATION SQUADRON

A. Communications & Computer Systems

Working Group Chairperson: Capt Jennie E. Dickover, HQ ACC/SCXP, DSN 574-4011

Base POC: TSgt Riley, DET 1, 31 TES, DSN 246-2331

1. GENERAL: The purpose of the communications site survey is to identify the existing communications requirements of the unit. The unit consists of 31 positions which support the AFOTEC test and evaluation mission. All of the assets, to include the computers and communication support, belong to AFOTEC.

2. ANALYSIS: The computers are old VAX machines, but fairly limited in number. The test-bed is completely self-contained and requires no outside connectivity. The unit is connected to the AFOTEC LAN, but if it moved to Edwards, may need to be connected to the new host unit. If the computers are moved to Eglin with the AFOTEC host, new processing capabilities may be necessary. This is not a stand alone unit, and may need outside communication support at its final location.

3. RECOMMENDATION: A true idea of the communications requirements beyond administrative computer and phone support will depend on the final location.

B. Facilities

Working Group Chairperson: Mr. Gene Thies, HQ ACC/CEPR, DSN 574-3187

Base POC: CMSgt Fain, Det 1, 31 TES, DSN 246-2331

1. GENERAL: The purpose of the facility study is to identify facility requirements for the Det 1, 31 TES that is being considered for relocation from Kirtland AFB.

2. ANALYSIS: The unit presented a brief description of their function and space. The team toured the facility. The unit occupies approximately 400 Net Square Feet (NSF) of general administrative space for 5 persons, and 2,500 NSF of secure vault area for 26 persons. The unit is fully contained in a portion of Building 20129 with AFOTEC functions. The computer systems used by the unit contain Top Secret information and must be secured in a SCIF.

3. RECOMMENDATION: In accordance with AF-HDBK 32-1084, Standard Facility Requirements Handbook, the unit requires approximately 650 NSF (130 SF/PN) of general administrative space and 2,500 NSF of secure vault space.

III. FIELD COMMAND, DEFENSE NUCLEAR AGENCY

Working Group Chairperson: Maj Wade Palmore, HQ ACC/XPPB, DSN 574-7159

Base POC: Col Harlan Lawson, FCDNA Test Directorate, DSN 246-5513

1. GENERAL: HQ AF/RTR requested ACC/XPPB steward the FCDNA's Test Directorate beddown at Nellis AFB. In this capacity XPPB will lead the site survey at Nellis AFB. XPPB will also provide guidance to FCDNA functional area experts to accomplish the necessary MILCON and cost data collection and validation for submission to the Base Closure Executive Group. The ACC Team attended a briefing by FCDNA to the AF Site Survey Team. FCDNA provided an extensive handout, covering detailed facility data. FCDNA indicated which functions would go to Kelly AFB, Nellis AFB and those remaining at White Sands Missle Range (WSMR).

2. ANALYSIS: The ACC Team toured the facilities and offices that were designated to go to Nellis AFB. Nellis AFB will gain 101 DoD employees plus 125 contract personnel. These people manage and direct the High Explosive Test functions under FCDNA. Major high explosive test facilities include two sizes of blast shock tubes, the thermal radiation test site, the Giant Reusable Air Blast Simulator (GRABS) on 155 acres (Kirtland AFB) and the Permanent High Explosive Test Site (PHETS) on 10 sq mi of WSMR.

a. Except for the PHETS all other high explosive test functions are located on Kirtland AFB, only minutes away from the main FCDNA offices. If these functions move to Nellis AFB, FCDNA must duplicate the physical proximity that exits at Kirtland AFB. The PHETS is approx. 100 miles south of Kirtland AFB, in the northern area of WSMR. PHETS would have to be sited on the Nellis AFB Range Complex isolated from other functions. The environmental impact of the PHETS operations on the Nellis AFB Range Complex will have to be assessed.

b. On Nellis AFB proper, FCDNA test operations will require a 35,000 SF administration/research facility and vehicle maintenance support for over 100 vehicles (over half are heavy equipment). Warehousing and R&D shops (approx. 40,000 SF) must also be accommodated on Nellis AFB.

c. FCDNA has significant communications infrastructure, serving 125 users with substantial security requirements; communication circuit connectivity to over 14 locations plus basic administration phones, STU III and multi-line requirements. Unit-wide LAN with a classified capability, utilizing fiber and unshielded twisted pair.

CURRENT FCDNA TEST DIRECTORATE FACILITIES

BUILDING #	EXISTING SF	DESCRIPTION
613	10083	R&D
614	5247	R&D
641	1000	STORAGE
730	2165	OFFICE
734	11513	R&D, 5K OFFICE
20362	34691	2120 CONF, 400 VAULT, 805 CALIB. LAB, OFFICE
20414	14196	LAB, 15OO OFFICE
20677	4559	INSTRUMENTATION
29022	700	EXPLOSIVES BUNKER
29023	700	EXPLOSIVES BUNKER
29025	700	EXPLOSIVES BUNKER
29026	700	EXPLOSIVES BUNKER
29024	100	EXPLOSIVES STORAGE BOX
57101	8220	WAREHOUSE/ASSEMBLY AREA

3. RECOMMENDATION: FCDNA produce a draft plan for Nellis AFB facilities that consolidates the numerous individual facilities currently on Kirtland AFB. This plan will be used on the Nellis AFB site survey, 27-31 Mar 95.

DISTRIBUTION

	NO OF COPIES
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HQ USAF/RTT/RTR 1670 AF Pentagon Washington DC 20330-1670	2
HQ ACC/CEP/CEV 129 Andrews St Ste 256 Langley AFB VA 23665-2773	3
HQ ACC/DOR/DOS/DOT 205 Dodd Blvd. STE 101 Langley AFB VA 23665-2789	3
HQ ACC/DRB/DRC/DRF/DRM/DRSMO-2 204 Dodd Blvd. Ste 226 Langley AFB, VA 23665-7777	5
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HQ ACC/SCP 108 Benedict Ave STE 209 Langley AFB VA 23665-1993	1

ACC CES/ESE Crestar Bldg STE 500 11817 Canon Blvd. Newport News VA 23606	2
HQ ACC/INA/INF 129 Andrews St. Ste 150 Langley AFB VA 23665-2767	2
USAF AWC/CC/CS 203 West D Avenue Rm. 600 Eglin AFB FL 32542-6867	2
USAF WTC/CS 4370 North Washington Blvd Ste 117 Nellis AFB NV 89191-7076	1
Det 4, 505 CCEG/CC 1655 First St., SE Kirtland AFB, NM 87117-5617	1
31 TES/CC 60 North Wolf Ave. Edwards AFB, CA 93524-6275	1 1
Det 1, 31 TES/CC 8500 Gibson Blvd., SE Kirtland AFB, NM 87117-5000	1
FCDNA 1680 Texas St SE Kirtland AFB, NM 87117-5000	3
Defense Nuclear Agency 6801 Telegraph Rd Alexandria, VA 22310	1
79 TEG/CC 203 West D Ave, Suite 400 Eglin AFB, FL 32542-6867	1
Total	47

BRAC 95
SITE SURVEYS

MAJOR TONY LOPER
BASES & UNITS BRANCH
PLANS & OPERATIONS
7 APRIL 1995

OVERVIEW

- OBJECTIVE
- ASSUMPTIONS
- MISSION LAY-IN
- COSTS
- WHAT'S NEXT

OBJECTIVE

- DETERMINE THE "BILL TO PAY" TO IMPLEMENT BRAC RECOMMENDATIONS
  - RELOCATE 58 SOW FROM KIRTLAND AFB TO HOLLOMAN AFB
  - RELOCATE DEFENSE NUCLEAR AGENCY FROM KIRTLAND AFB TO HOLLOMAN AFB

ASSUMPTIONS

- TAIWANESE AT-38 PROGRAM LEAVES AS PROGRAMMED
  - LOCKHEED CONSOLIDATES INTO BLDG 301
  - BLDG 500 BECOMES AVAILABLE
- 49 FW SJA & SOCIAL ACTIONS MOVES TO BLDG 318
  - BRAC FUNDS BLDG 318 ALTERATION
  - BLDG 302 BECOMES AVAILABLE

MISSION LAY-IN

- OUR APPROACH
  - EXISTING CAPACITY
  - O&M PROJECTS
  - MILCON PROJECTS

EXISTING CAPACITY
PAVEMENTS

ITEM	COST($M)
RUNWAY	0

EXISTING CAPACITY
MAINTENANCE

ITEM	COST($M)
PMEL	0
NDI	0
SUPPLY WAREHOUSE	0
VEHICLE MAINTENANCE	0

EXISTING CAPACITY
POL

ITEM	COST($M)
JP-8 STORAGE	0
MOGAS STORAGE	0
DIESEL STORAGE	0
LOX	0
NITROGEN	0

EXISTING CAPACITY
SUPPORT

ITEM	COST($M)
VOQ (48 ROOMS)	0
DORMITORY (73 BEDSPACES)	0
DINING HALL (277 MEALS)	0

O&M PROJECTS

ITEM	COST($M)
COVER SWIMMING POOL	0.30
BASE COMM INFRASTRUCTURE	2.23
INSTALL COMM EQUIPMENT	0.29
ADDITIONAL CIRCUITS	0.07
WEATHER SUPPORT	0.11
REMOTE SWITCH UPGRADE	0.55
ENGINEERING SITE SURVEYS	0.01
VOQ, VAQ, DORM FURNITURE	1.30
COMM FACILITY	0.19

MILCON
PAVEMENTS

PROJECT	COST($M)
AUX FIELD/ASSAULT STRIP/ HELIPADS	6.40
TAXIWAY W/ SHOULDER	5.50
APRONS/RAMP/HELIPADS	15.00

MILCON
MAINTENANCE

PROJECT	COST($M)
C-130 MAINTENANCE HANGAR (1 SPOT)/C-130 AMU	5.80
HELO MAINT HANGAR (4 SPOTS) H-53 AMU/H-1/H-60 AMU/FORWARD AREA SUPPLY TERMINAL	9.70
CORROSION CONTROL (1 SPOT)	3.90
FUEL CELL	4.25
AVIONICS/GEN PURPOSE MAINT/ GUN SHOP	10.20

MILCON
MAINTENANCE

PROJECT	COST($M)
AGE SHOP/COVERED STORAGE/ YARD	2.45
SURVIVAL EQUIP SHOP/AERIAL DELIVERY FACILITY	4.80
TEST CELL	0.40
ENGINE QUEEN BEE	4.75

MILCON
MUNITIONS

PROJECT	COST($M)
MULTICUBICLE MAGAZINE STORAGE	0.94

MILCON
OPERATIONS

PROJECT	COST($M)
WING/GROUP HQ/OSS	3.90
LSS	1.60
C-130, H-53, H-1/H-60 SQUAD OPS/ CCT/STORAGE	8.40
SIMULATOR FACILITY (11 W/ COMPUTER)	17.00
ACADEMIC CLASSROOMS	10.00
SIM W/O COMPUTER/TRNG AID FAB SHOP	1.05

MILCON
OPERATIONS

PROJECT	COST($M)
PARARESCUE & FTD (BLDG 302)	1.50

MILCON
SUPPORT

PROJECT	COST($M)
VOQ (40 ROOMS)	3.80
VAQ (144 ROOMS)	7.08
DORMITORY (176 PN)	8.40
ADAL CHILD DEV CENTER	0.98
ADAL YOUTH CENTER	0.90
ADAL HOSPITAL	3.10
FIRE STATION	1.25

MILCON
SUPPORT

PROJECT	COST($M)
BASE INFRASTRUCTURE	5.80
COMM SUPPORT	1.00
MFH (600 UNITS)	78.20
FY97 200 UNITS	
FY99 200 UNITS	
FY01 200 UNITS	
MILCON PLANNING & DESIGN	21.00

OTHER COMM COSTS

ITEM	COST ($M)
TRUNKED LAND MOBILE RADIO	1.22
REMOTE SWITCH UPGRADE	1.39

SURVEY COSTS

APPN	AMOUNT ($M)
3300	145.94
3400	4.86
3080	2.61
7040	78.20
600/700	0.00
TOTAL	231.61

UNDER REVIEW

PROJECT	COST($M)
TAXIWAY (33,300 SY)	5.90
BAI PARKING (24,200 SY)	2.95
RENOVATE VOQ	TBD

WHAT'S NEXT

- CALCULATE TOTAL PROGRAM COST
  - RESULTS OF HOLLOMAN SITE SURVEY
  - ADDITIONAL COSTS COMPUTED AT HQ AETC
- 14 & 17 APR 95 - XOP BRIEF AETC LEADERSHIP
- 20 APR 95 - AFMC BRIEF HOLLOMAN MILCON TO USAF/CEP
- 3 MAY 95 - AFMC BRIEF TOTAL PROGRAM TO AF BCWG

WHAT'S NEXT

- 4 MAY 95 - AFMC BRIEF TOTAL PROGRAM TO AF BCEG

FORCE STRUCTURE
FY97/4

MDS	PAA	BAI	TAI
MC-130	3	0	3
HC-130	4	0	4
TH-53	4	2	6
MH-53	4	0	4
HH-60	7	0	7
UH-1	4	2	6

MANPOWER
(FY97/4)

PERM PARTY

OFF	ENL	CIV	TOT
156	1025	80	1261

(CONTRACTORS: 246)

AVG DAILY STUDENT LOAD

OFF	ENL	CIV	TOT
100	220	0	320

58 SOW REQUIREMENTS

PAVEMENTS

ITEM	RQMT
RUNWAY (7,000 FT)	117,000 SY
TAXIWAY	32,500 SY
APRONS	127,600 SY
HELO PADS (4 W/ ASPHALT SHOULDER)	27,200 SY
RADAR BORE PAD	1,800 SY

MAINTENANCE

ITEM	RQMT
C-130 AMU	9,000 SF
H-53 AMU	8,500 SF
H-60/H-1 AMU	5,000 SF
C-130 MAINT HANGAR (1 SPOT)	20,000 SF
CORROSION CONTROL (1 SPOT)	18,200 SF
HELO MAINT HANGAR (4 SPOTS)	36,735 SF
GENERAL PURPOSE MAINT	25,000 SF
NONDESTRUCTIVE INSPECT	4,000 SF
FUEL CELL (INC BENSON TANKS)	23,000 SF
AVIONICS	40,000 SF
AGE SHOP	10,350 SF
AGE COVERED STORAGE	15,530 SF
AGE YARD	172 SY
SURVIVAL EQUIP SHOP	10,766 SF
SUPPLY WAREHOUSE	24,000 SF
FORWARD SUPPLY POINT (FAST)	8,062 SF
ENGINE QUEEN BEE	36,200 SF
GUN SHOP	7,158 SF
TEST CELL	7,418 SF
PMEL	1550 ITEMS
VEHICLE MAINTENANCE	96 VEHICLES

99

MUNITIONS

ITEM	RQMT
MUNITIONS STORAGE	4,000 SF

POL

ITEM	RQMT
JP-8 STORAGE	347,204 GAL/MO
MOGAS STORAGE	1,060 GAL/MO
DIESEL STORAGE	11,430 GAL/MO
LOX	1,760 GAL/MO
NITROGEN	2500 CU FT/MO

OPERATIONS

ITEM	RQMT
WING/GROUP HQ	18,106 SF
OPS SUPP SQ	5,312 SF
PARARESCUE FACILITY	30,789 SF
LOG SUPP SQ	9,038 SF
C-130 SQUADRON OPS	17,500 SF
H-53 SQUADRON OPS	12,931 SF
H-60/H-1 SQUADRON OPS	14,000 SF
FTD	10,600 SF
SIMULATOR (11 W/ COMPUTER & SUBSTATION)	74,680 SF
SIMULATOR (5 W/O COMPUTER)	35,875 SF
ACADEMIC FACILITIES	56,738 SF
AERIAL DELIVERY FACILITY	15,700 SF
TRNG DEVICE FAB SHOP	7,500 SF
DROP ZONES (3)	960 ACRES
AUXILARY FIELD (W/ 1200 SF FIRE STATION)	600 ACRES
ASSAULT STRIP	40,000 SY
COVERED POOL	LS
PJ CLIMBING WALL	LS

SUPPORT

ITEM	RQMT
VOQ (ROOMS)	88
VAQ (ROOMS)	144
DORMITORY (ROOMS)	356
DINING HALL (MEALS)	277
MFH (UNITS)	711
OTHER SUPPORT	

COMM-COMPUTER

ITEM

ENGINEERING & INSTALLATION
- TELEPHONE INSTALLATION
- COMM CABLE

CONTRACTOR SUPPORT
- LAN EQUIP INSTALL
- A-V EQUIP INSTALL
- VTC SYSTEM INSTALL

ADDITIONAL CIRCUITS
ATCALS
LAND MOBILE RADIO
UHF CIRCUIT
COMPUTER LINE MODULE
TELEPHONE SWITCH EXPANSION
FACILITY PREWIRING
COMM CONSTRUCTION SUPPORT

BRAC 95
SITE SURVEYS

MAJOR TONY LOPER
BASES & UNITS BRANCH
PLANS & OPERATIONS

OBJECTIVE

- DETERMINE THE "BILL TO PAY" TO IMPLEMENT BRAC RECOMMENDATIONS

HQ AETC
SURVEY TEAM

COL FOX	AXO	487-4527
MAJ LOPER	XOPU	487-3390
MAJ CANTOR	XOPU	487-3390
MAJ THOMPSON	XOPU	487-3390
MAJ HAMBLIN	XOPB	487-4411
MAJ TILLEMA	XOTS	487-5704
MAJ WINFIELD	XOTS	487-5704
TSGT BUTCHER	XOSF	487-5756

HQ AETC
SURVEY TEAM

CAPT FOGARTY	CEPR	487-6200
CAPT WINKLER	CEPR	487-6200
MS SPIVEY	CECB	487-4658
MAJ EDDINGTON	LGXP	487-4602
CAPT HENLEY	LGXP	487-4602
CMSGT HAUCH	LGXP	487-4602
MSGT MARTINEZ	LGMAT	487-3663
MR MCCURLEY	SCXX	487-6954

GUIDELINES

- SITE SURVEYS REFINE & VALIDATE MILCON/O&M REQUIREMENTS
- BRAC ONLY PAYS FOR WHAT IS REQUIRED OR WHAT CURRENTLY EXISTS, WHICHEVER IS LESS
  - MAKE MAXIMUM USE OF EXISTING FACILITIES
  - AFI 32-1024 WILL BE USED FOR SPACE REQUIREMENTS
  - SPECIAL-USE SPACE MUST BE JUSTIFIED
- BOS & OTHER COSTS MUST BE DEFINED

OUR APPROACH

- IDENTIFY ALL FACILITY REQUIREMENTS
  - OPS
  - MAINTENANCE/LOGISTICS
  - ADMIN
  - SPECIAL-USE
  - DORMS
  - MUNITIONS/WEAPONS STORAGE
  - PAVEMENTS
  - SECURITY
  - UTILITIES

OUR APPROACH

- MILCON
  - USE MILCON PRICING GUIDE
  - SHOW PLANNING & DESIGN SEPARATELY
    - AFI 32-1024 OR EXISTING SPACE
    - 8.5% OF PROJECT TOTAL
  - 1391s COMPLETED DURING SURVEY

OUR APPROACH

- OPERATIONS & MAINTENANCE (O&M)
  - ADD/ALTER CONSTRUCTION PROJECTS– SAME AS MILCON
  - CIVILIAN PERSONNEL
    - PCS
    - SEVERANCE
    - UNEMPLOYMENT

OUR APPROACH

- O&M (CONT.)
  - PACKING & SHIPPING
    - LG ESTIMATES NUMBER OF ITEMS & WEIGHT & CUBE TO SHIP
    - LG CALCULATES COST
      - PACKING
      - SHIPPING
      - DISASSEMBLY & ASSEMBLY

OUR APPROACH

- O&M (CONT.)
  - COMMUNICATIONS-COMPUTER COSTS
    - SWITCH EXPANSION
    - REHOMING CIRCUITS
    - EXPANSION OF COMM INFRASTRUCTURE
    - INSTALLATION, REMOVAL, & RELOCATION OF EQUIPMENT

OUR APPROACH

- MILITARY FAMILY HOUSING
  - AF/CEHH VALIDATES REQUIREMENT
  - ONLY IF NEEDED
- OTHER PROCUREMENT
  - COMMUNICATIONS
  - STORAGE TANKS
  - EQUIPMENT

WHAT'S NEXT

- CALCULATE TOTAL PROGRAM COST
  - RESULTS OF SITE SURVEYS
  - ADDITIONAL COSTS COMPUTED AT HQ AETC
- BRIEF AETC LEADERSHIP
- BRIEF MILCON RESULTS TO USAF/CE
- BRIEF TOTAL PROGRAM TO BCEG

BRAC 95
SITE SURVEYS

MAJOR TONY LOPER
BASES & UNITS BRANCH
PLANS & OPERATIONS
17 MARCH 1995

OVERVIEW

- OBJECTIVE
- CURRENT v. REQUIRED
- DETAILED REQUIREMENTS
- WHAT'S NEXT

OBJECTIVE

DETERMINE THE "BILL TO PAY" TO IMPLEMENT BRAC RECOMMENDATIONS

P-01
9:22
R 22-95 WED

MANPOWER
(FY97/4)

PERM PARTY

OFF	ENL	CIV	TOT
156	1025	80	1261

(CONTRACTORS: 246)

AVG DAILY STUDENT LOAD

OFF	ENL	CIV	TOT
100	220	0	320

R-22-95 WED 9:23 P-05

CURRENT v. REQUIRED

TITLE	CURRENT	REQUIRED
APRON	518,213 SY	115,100 SY
MAINTENANCE		
C-130 AMU	19,775 SF	19,775 SF
HELO AMUs	19,870 SF	19,870 SF
BACKSHOPS	275,574 SF	212,574 SF

R-22-95 WED 9:23 P.06

CURRENT v. REQUIRED

TITLE	CURRENT	REQUIRED
COVERED PARKING		
C-130	4	3
HELO	19	4
MUNITIONS	9600 CF	9600 CF

P.07
9:24
APR 22-95 WED

CURRENT v. REQUIRED

TITLE	CURRENT	REQUIRED
OPERATIONS		
WG/GP	21,000 SF	18,106 SF
SQ OPS	85,522 SF	71,193 SF
OSS	6,000 SF	5,312 SF
LSS	19,000 SF	18,800 SF

P-08
R-22-95 WED 9:24

PAVEMENTS

TITLE	RQMT (SY)
RUNWAY (7,000 FT)	117,000
TAXIWAY	87,500
APRONS	115,100
HELO-PADS (4)	23,500
RADAR BORE PAD	1,800
AUXILIARY FIELD (600 ACRES W/ 1200 SF FIRE STATION)	92,500

P-09
MAR-22-95 WED 9:25

MAINTENANCE

TITLE	RQMT (SF)
C-130 AMU	19,775
H-53 AMU	14,840
H-60/H-1 AMU	5,030
C-130 MAINT HANGAR (INC CORROSION CONTROL)	66,050
HELO MAINT HANGAR (4 SPACES)	36,735
GENERAL PURPOSE MAINT	25,500
NONDESTRUCTIVE INSPECT	4,000

MAINTENANCE
CONT.

TITLE	RQMT (SF)
FUEL CELL	23,000
AVIONICS	40,000
ACFT SUPP EQUIP SHOP (AGE)	19,200
SURVIVAL EQUIP SHOP	10,766
SUPPLY WAREHOUSE	35,750
ENGINE QUEEN BEE	36,200
GUN SHOP	7,158
TEST CELL	40,000

P-11
R 22-95 WED 9:25

MAINTENANCE
CONT.

TITLE	RQMT
AGE YARD	333 SY
PMEL	1550 ITEMS

P-12
R 22-95 WED 9:26

MUNITIONS

TITLE	RQMT (CF)
MUNITIONS STORAGE (IGLOOs)	9,600

POL

TITLE	RQMT
JP-8 STORAGE	347,204 GAL/MO
MOGAS STORAGE	1,060 GAL/MO
DIESEL STORAGE	11,430 GAL/MO
LOX	1,760 GAL/MO
NITROGEN	2500 CU FT/MO

P-14
R 22-95 WED 9:27

OPERATIONS

TITLE	RQMT (SF)
WING/GROUP HQ	18,106
OPS SUPP SQ	5,312
PARARESCUE FACILITY	30,789
LOG SUPP SQ	18,843
C-130 SQUADRON OPS	21,972
H-53 SQUADRON OPS	18,556
H-60/H-1 SQUADRON OPS	14,893
FTD	10,600

P.15
9:27
WED
22-95

OPERATIONS
CONT.

TITLE	RQMT (SF)
SIMULATOR (11 W/ COMPUTER)	74,680
ELECTRICAL SUBSTATION	TBD
SIMULATOR (5 W/O COMPUTER)	35,875
ACADEMIC FACILITIES	56,738
AERIAL DELIVERY FACILITY	15,700

P-16
9:28
22-95 WED

OPERATIONS
CONT.

TITLE	RQMT
PJ CLIMBING WALL	CONSTRUCT
DROP ZONES (3)	960 ACRES
ASSAULT STRIP	40,000 SY

P-17
9:28
2-95 WEA

SUPPORT

TITLE	RQMT
VOQ (ROOMS)	88
VAQ (ROOMS)	144
DORMITORY (ROOMS)	356
DINING HALL (MEALS)	277
MFH (UNITS)	709

P-18
9:29
WED
22-95

COMM-COMPUTER
LOSING BASE

TITLE	MAN HRS
ENGINEERING & INSTALLATION	302
COMM EQUIP REMOVAL	
CONTRACTOR SUPPORT	330
LAN EQUIP REMOVAL	
A-V EQUIP REMOVAL	
VTC SYSTEM REMOVAL	
CIRCUIT DEACTIVATION	

R-22-95 WED 9:29 P.19

COMM-COMPUTER
GAINING BASE

TITLE	MAN HOURS
ENGINEERING & INSTALLATION	5,527
TELEPHONE INSTALLATION	
COMM-CABLE	
CONTRACTOR SUPPORT	330
LAN EQUIP INSTALL	
A-V EQUIP INSTALL	
VTC SYSTEM INSTALL	
ADDITIONAL CIRCUITS	

P.20
9:30
22-05 WEA

COMM-COMPUTER
GAINING BASE

TITLE

ATCALS

REPLACE LAND MOBILE RADIO

REPLACE CREST UHF CIRCUIT

COMPUTER LINE MODULE

TELEPHONE SWITCH EXPANSION

FACILITY PREWIRING (MILCON)

COMM CONSTRUCTION SUPPORT (MILCON)

R 22-95 WED 9:30 P.21

PACKING & SHIPPING

TITLE

EQUIPMENT

SIMULATORS

STATIC DISPLAYS (12 ACFT; 5 HULKS)

P-22
K 22-95 WED 9:31

WHAT'S NEXT

- BEDDOWN SITE SURVEY AT HOLLOMAN
  - 3-7 APR 95
  - ATTENDEES
- CALCULATE TOTAL PROGRAM COST
  - RESULTS OF HOLLOMAN SITE SURVEY
  - ADDITIONAL COSTS COMPUTED AT HQ AETC

WHAT'S NEXT

- 17-19 APR 95 - XOP BRIEF AETC LEADERSHIP
- 26 APR 95 - AFMC BRIEF HOLLOMAN MILCON TO USAF/CE
- 1 MAY 95 - AFMC BRIEF TOTAL PROGRAM TO BCEG

Kirtland Organizations and Manpower Authorizations

AF Organizations (* indicates unit remains at Kirtland)

Organization	Officer	Enlisted	Civilian	Total	
Special Operations Training Forces	194	1,159	196	1,549	
AFOTEC	344	102	219	665	
AFIA, AFSC	141	48	111	300	
AF Office of the Security Police	16	31	20	67	
NCO Academy	0	14	1	15	
AF portion of DNA manpower	62	63	12	137	
Misc AF Tenants, Suppt Ret (Base X bound)	227	620	162	1,009	
Eliminations	42	705	-111	636	
BOS Support for AFRES/ANG units	0	0	37	37	*
Philips Lab (after civilianization)	190	47	1,049	1,286	*
SMC Test Group (after civilianization)	61	1	188	250	*
898th Munitions Squadron (after civilianization)	1	9	311	321	*
EOD Support for 898th	0	8	1	9	*
AFRES	0	2	4	6	*
ANG (F-16s)	19	61	276	356	*
Total (Active Duty Only)	**1,278**	**2,807**	**2,196**	**6,281**	
Total To Move	**984**	**2,037**	**721**	**3,742**	
Total To Eliminate	**42**	**705**	**-111**	**636**	
Total Active Duty to Remain	**252**	**65**	**1,586**	**1,903**	

Source: PE Data Sheet 5/4/95

DNA provided by DNA HQ (Col Summer) on 27 Jan 95, 29 Jan, 31 Jan

Non-AF Tenants (* indicates unit remains at Kirtland)

Organization	Officer	Enlisted	Civilian	Total	
AFB Seismological Lab	0	0	65	65	*
Corps of Engineers	4	0	301	305	*
DCMAO Phoenix Residency	1	0	40	41	*
Defense Printing Service	0	0	3	3	*
Defense Commissary Agency	0	7	84	91	
Def Reutilization & Marketing Office	0	0	15	15	
Defense Contract Mgt Ops Office	0	0	120	120	*
Defense Eval Support Activity	14	6	73	93	*
Def Finance & Accounting Service	0	11	57	68	
Defense Industrial Resource Service	0	0	4	4	*
Defense Investigative Service	0	0	13	13	*
Dept of Energy ABQ Ops	0	0	877	877	*
Drug Interdiction Program	6	24	0	30	*
Federal Aviation Agency	0	0	46	46	*
Defense Nuclear Agency Command	34	2	315	351	
DNA Tenant to Remain	6	6	12	24	*
Inhal. Toxicology Research Inst (DOE)	0	0	194	194	*
Naval Air Warfare Center Weapons Div	1	2	13	16	*
Navy Liaison Office	1	2	0	3	*
Sandia National Lab	0	0	7,506	7,506	*
US Coast Guard Reserve	4	16	0	20	*
US Customs ABQ	0	0	89	89	*
US Customs PE	0	0	10	10	*
US Navy Balloon Team	2	2	0	4	*
US Navy Personnel Support Det	1	9	4	14	*
Aeromedical Rsrch Lab (Blast Fac)	0	1	14	15	*
White Sands Missle Range Det	0	0	2	2	*
Total Tenants	**74**	**88**	**9,857**	**10,019**	
Total Tenants Moving	**34**	**20**	**471**	**525**	
Total to Eliminate	**0**	**0**	**0**		
Total To Remain	**40**	**68**	**9,386**	**9,494**	

Source: PE Data Sheet 5/4/95

DNA data provided by DNA HQ (Col Summer) on 27 Jan 95, 30, 31 January

Kirtland Realignment Movement Table (Phillips Lab Cantonment)

5/4/95 17:17

Manpower	Officers	Enlisted	Civilians	Total	Source
Current Force Structure (4Q94 Data)	1416	2962	11759	16137	COBRA Screen 4 Data
Adjusted Base Line Population (4Q97 Projection)	1436	3038	2769	7243	PE Data -- 5/4/95
Add Non-AF Tenants	74	88	9,857	10019	From "Population Wrksheet"
New Adjusted Base Line Population	1510	3126	12626	17262	Mathematical Sum
Civilianization Process	-139	-168	307	0	Derive from PE Data -- 5/4/95
New Base Line Population (Total to Move, Canton, or Eliminate)	1371	2958	12933	17262	Mathematical Sum
Move					
Move AETC (SOF) Forces to Holloman	194	1,159	196	1549	PE Data -- 5/4/95
Move Portion of DNA to Kelly	48	32	164	244	50/50 Split
Move portion of DNA to Nellis	48	33	163	244	50/50 Split
Move AFOTEC to Eglin	344	102	219	665	PE Data -- 5/4/95
AFIA/AFSC to Kelly	141	48	111	300	PE Data -- 5/4/95
Move AFOSP to Lackland	16	31	20	67	PE Data -- 5/4/95
Move NCO Academy to McChord	0	14	1	15	PE Data -- 5/4/95
Move Everybody Else (other mission/BOS/Non-AF) to Base X	227	638	318	1183	Derive from PE Data -- 5/4/95
Total Moves (Population Moving from Kirtland)	1018	2057	1192	4267	Mathematical Sum
Canton					
Phililps Lab remains	190	47	1,049	1286	PE Data -- 5/4/95
SMC Test Group	61	1	188	250	PE Data -- 5/4/95
898th Munitions Sq remains	1	9	311	321	PE Data -- 5/4/95
DNA Tenant to Remain	6	6	12	24	PE Data -- 5/4/95
EOD Support 898th	0	8	1	9	PE Data -- 5/4/95
AFRES Units	0	2	4	6	PE Data -- 5/4/95
ANG Units	19	61	276	356	PE Data -- 5/4/95
Retain BOS to support AFRES/ANG	0	0	37	37	PE Data -- 5/4/95
Cantonment Infrastructure	0	0	600	600	PE Data -- 5/4/95
Non-AF Tenants Remaining	34	62	9,374	9470	PE Data -- 5/4/95
Total Canton (Population Remaining at Kirtland)	311	196	11852	12359	Mathematical Sum
Positions Eliminated	42	705	-111	636	PE Data -- 5/4/95
Total Moves/Eliminations/Canton	1371	2958	12933	17262	Mathematical Sum
Force Structure Change (Delta from 4Q94 to 4Q97 Population)	94	164	867	1125	COBRA Assumption
Civilianization	-139	-168	307	0	Derive from PE Data -- 5/4/95
Total Force Structure Change	-45	-4	1174	1125	Mathematical Sum

KIRTLAND AFB MILCON

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 97	
• UTILITY ISOLATION	$4.0
• ISOLATE/METER SANITARY SEWER SYS	$2.7
• MOVE SPACE POWER LAB	$2.0
• ISOLATE/METER UTILITY SYSTEMS (ANG)	$0.4
• PLANNING AND DESIGN (9%)	$3.9
– SUBTOTAL	**$9.9**

KIRTLAND AFB MILCON
(CON'T)

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 98	
• ADAL PERIMETER SECURITY (PL)	$1.5
• PERIMETER SECURITY FENCE (ANG)	$0.3
• ADAL PERIMETER SECURITY FENCE (KUMSC)	$0.9
• ADD TO SECURITY OPS FACILITY	$0.7
• ARMORY/REMOTE ARMING FACILITY	$0.3
• RESERVE FIRE TEAM TRAINING	$0.5
• PLANNING & DESIGN (9%)	$0.5
– SUBTOTAL	**$4.6**

KIRTLAND AFB MILCON
(CON'T)

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 99	
• JET FUEL STORAGE COMPLEX (ANG)	$2.0
• RENOVATE TRAINING FACILITIES	$0.5
• PLANNING & DESIGN	$0.2
– SUBTOTAL	**$2.7**
– FY00	
• CONSOLIDATED SUPPORT FACILITY	$2.5
• ALTER SECURE FACILITY	$0.5
• FACILITY CLOSURE/PRESERVATION	$12.2
• PLANNING & DESIGN (9%)	$1.4
– SUBTOTAL	**$16.6**

KIRTLAND AFB O&M

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 98 - ANG	
• REFURB TWO BUILDINGS	$0.28
• CE MAINT STORAGE FACILITY	$0.25
• ISOLATE/METER UTILITIES	$0.15
– SUBTOTAL	**$0.68**
– FY 00 - PHILLIPS LAB	
• RENOVATE VEH MAINT FAC	$0.04
• INSTALL ELECTRIC METERS	$0.25
• INSTALL GAS METERS	$0.03
– SUBTOTAL	**$0.32**

KIRTLAND AFB

Estimates in FY 95 year dollars

• MILCON	$374.2
• Personnel	$6.6
– (Early Retirement, New Hires, RIF, Unemployment)	
• Prog Planning/Mothball	$15.1
• HAP/RSE, CIV Moving, Civilian PPS	$36.9
• Freight, One-Time Moving Cost	$43.0
• Total One Time Unique,	$43.8
– Comm, Equip, Purchased Services, Annual Lv)	
• Military Elim/Moving	$4.3
• **TOTAL**	**$523.9**

Draft I

AF CONTROLLED LANDS:

AIR FORCE FEE OWNED	24,148.15
PUBLIC DOMAIN (WITHDRAWN)	18,439.84
DONATED FROM CITY OF ALBUQUERQUE	1,344.00
PERPETUAL EASEMENT (Restrictive Easement on UNM Land for Ordnance Storage)	81.57
GENERAL USE PERMITS (Ingrants)	12.00
TOTAL	44,025.56

DOE FEE OWNED:	2,938
DOE WITHDRAWL	4,595
TOTAL	7,533

AF FEE-OWNED LAND UNDER PERMIT TO DOE 4,353.04 ACRES

AF WITHDRAWN LAND UNDER PERMIT TO DOE 3,471.11 ACRES

TOTAL LAND UNDER PERMIT TO DOE 7,834.15 ACRES

TOTAL AF BUILDING SPACE UNDER PERMIT TO DOE 666,326 SQUARE FEET

DOE F 1325.8

United States Government | Department of Energy

memorandum

Albuquerque Operations Office

DATE: APR 7 1995

REPLY TO ATTN OF: PASD

SUBJECT: Cost Impacts of Proposed Kirtland AFB Realignment

TO: Dr. Victor Reis, Assistant Secretary for Defense Programs, DP-1, HQ

At the April 3, 1995, hearings conducted by the Senate Appropriations Subcommittee on Energy and Water, Senator Bingaman asked for the estimate of costs, expressed in net present value, to be incurred by the Department of Energy (DOE) as a result of the proposed Kirtland realignment. We have evaluated and attached three cost scenarios which we believe are credible. Of these, Scenario 1 is the most reasonable, and indicates that the cost impact to DOE over the next 20 years will be $443 million. In calculating the cost estimates, we used the same 2.75 percent net present value discount rate as used by the U.S. Air Force (USAF). Please note that the variance of the other scenarios does not exceed $1 million. Therefore, there are no significant differences in the three scenarios. I would appreciate you formally providing this information to the Subcommittee.

On April 11, 1995, Albuquerque Operations Office staff will be meeting with Air Force Base Realignment and Closure personnel to discuss and compare DOE cost estimates vis-a-vis USAF projected savings.

Bruce G. Twining
Manager

3 Attachments

cc:
See page 2

cc:
Charles B. Curtis, Under Secretary
of Energy, US, HQ

Major General Jay D. Blume, Jr.
HQ USAF/RT
1670 Air Force Pentagon
Washington, DC 20330-1670

Scenario 1
Net Present Value
DOE Costs
(Millions of Dollars)

Fiscal Year	DOE/AL Annual Costs	DOE/AL Adjusted Ann. Costs	DOE/AL NPV Acc. Costs	Air Force NPV Costs Factors
1996	1.1	1.1	1.1	1.013657
1997	16.4	15.8	16.9	1.041532
1998	31.9	29.8	46.7	1.070174
1999	41.2	37.5	84.2	1.099604
2000	33.3	29.5	113.7	1.129843
2001	30.6	26.4	140.0	1.160914
2002	30.6	25.7	165.7	1.192839
2003	30.6	25.0	190.7	1.225642
2004	30.6	24.3	215.0	1.259347
2005	30.6	23.6	238.6	1.293979
2006	30.6	23.0	261.6	1.329564
2007	30.6	22.4	284.0	1.366127
2008	30.6	21.8	305.8	1.403695
2009	30.6	21.2	327.0	1.442297
2010	30.6	20.6	347.7	1.481960
2011	30.6	20.1	367.8	1.522714
2012	30.6	19.6	387.3	1.564589
2013	30.6	19.0	406.4	1.607615
2014	30.6	18.5	424.9	1.651824
2015	30.6	18.0	442.9	1.697250

Assumptions:

1) DOE annual operating costs are projected to be $30.6 million in FY 1995 dollars.
2) DOE one-time costs are projected to be $64.1 million in FY 1995 dollars.
3) DOE takes over operations at the same pace as the Air Force loses personnel. One-time costs phased in over four years begining in FY 1997.
4) Uses the same discount rates used by the Air Force.

Scenario 1A
Net Present Value
DOE Costs
(Millions of Dollars)

Fiscal Year	DOE/AL Annual Costs	DOE/AL Adjusted Ann. Costs	DOE/AL NPV Acc. Costs	Air Force NPV Costs Factors
1996	1.1	1.1	1.1	1.013657
1997	9.9	9.5	10.7	1.041532
1998	22.3	20.8	31.5	1.070174
1999	44.5	40.4	71.9	1.099604
2000	39.8	35.2	107.1	1.129843
2001	37.0	31.9	139.0	1.160914
2002	30.6	25.7	164.7	1.192839
2003	30.6	25.0	189.6	1.225642
2004	30.6	24.3	213.9	1.259347
2005	30.6	23.6	237.6	1.293979
2006	30.6	23.0	260.6	1.329564
2007	30.6	22.4	283.0	1.366127
2008	30.6	21.8	304.8	1.403695
2009	30.6	21.2	326.0	1.442297
2010	30.6	20.6	346.6	1.481960
2011	30.6	20.1	366.7	1.522714
2012	30.6	19.6	386.3	1.564589
2013	30.6	19.0	405.3	1.607615
2014	30.6	18.5	423.9	1.651824
2015	30.6	18.0	441.9	1.697250

Assumptions:

1) DOE annual operating costs are projected to be $30.6 million in FY 1995 dollars.
2) DOE one-time costs are projected to be $64.1 million in FY 1995 dollars.
3) DOE takes over operations at the same pace as the Air Force loses personnel. One-time costs phased in over five years begining in FY 1997.
4) Uses the same discount rates used by the Air Force.

Scenario 1B
Net Present Value
DOE Costs
(Millions of Dollars)

Fiscal Year	DOE/AL Annual Costs	DOE/AL Adjusted Ann. Costs	DOE/AL NPV Acc. Costs	Air Force NPV Costs Factors
1996	1.1	1.1	1.1	1.013657
1997	19.6	18.8	20.0	1.041532
1998	41.5	38.8	58.7	1.070174
1999	34.8	31.7	90.4	1.099604
2000	26.9	23.9	114.2	1.129843
2001	30.6	26.4	140.6	1.160914
2002	30.6	25.7	166.2	1.192839
2003	30.6	25.0	191.2	1.225642
2004	30.6	24.3	215.5	1.259347
2005	30.6	23.6	239.2	1.293979
2006	30.6	23.0	262.2	1.329564
2007	30.6	22.4	284.6	1.366127
2008	30.6	21.8	306.4	1.403695
2009	30.6	21.2	327.6	1.442297
2010	30.6	20.6	348.2	1.481960
2011	30.6	20.1	368.3	1.522714
2012	30.6	19.6	387.9	1.564589
2013	30.6	19.0	406.9	1.607615
2014	30.6	18.5	425.4	1.651824
2015	30.6	18.0	443.5	1.697250

Assumptions:

1) DOE annual operating costs are projected to be $30.6 million in FY 1995 dollars.
2) DOE one-time costs are projected to be $64.1 million in FY 1995 dollars.
3) DOE takes over operations at the same pace as the Air Force loses personnel. One-time costs phased in over three years begining in FY 1997.
4) Uses the same discount rates used by the Air Force.

Cost Impacts to DOE from the Proposed KAFB Realignment

Detailed Assumptions and Costing Formulas

by

the DOE/SNL Study Team

March 27, 1995

Cost Development Outline

- Assumptions
- Site Cantonment Considerations
- Cost Planning Scenario
- Activity Areas Considered
- Cost Summaries
- One Time Conversion Costs
- Annual Operating Costs

Global Assumptions:

1. Realignment occurs, requires 3-5 years to accomplish

2. DOE/SNL becomes landlord for their cantonment(s) only

3. DOE/SNL will minimize land and facilities holdings and the size of their cantonment(s) to the extent practicable, consistent with missions and populations

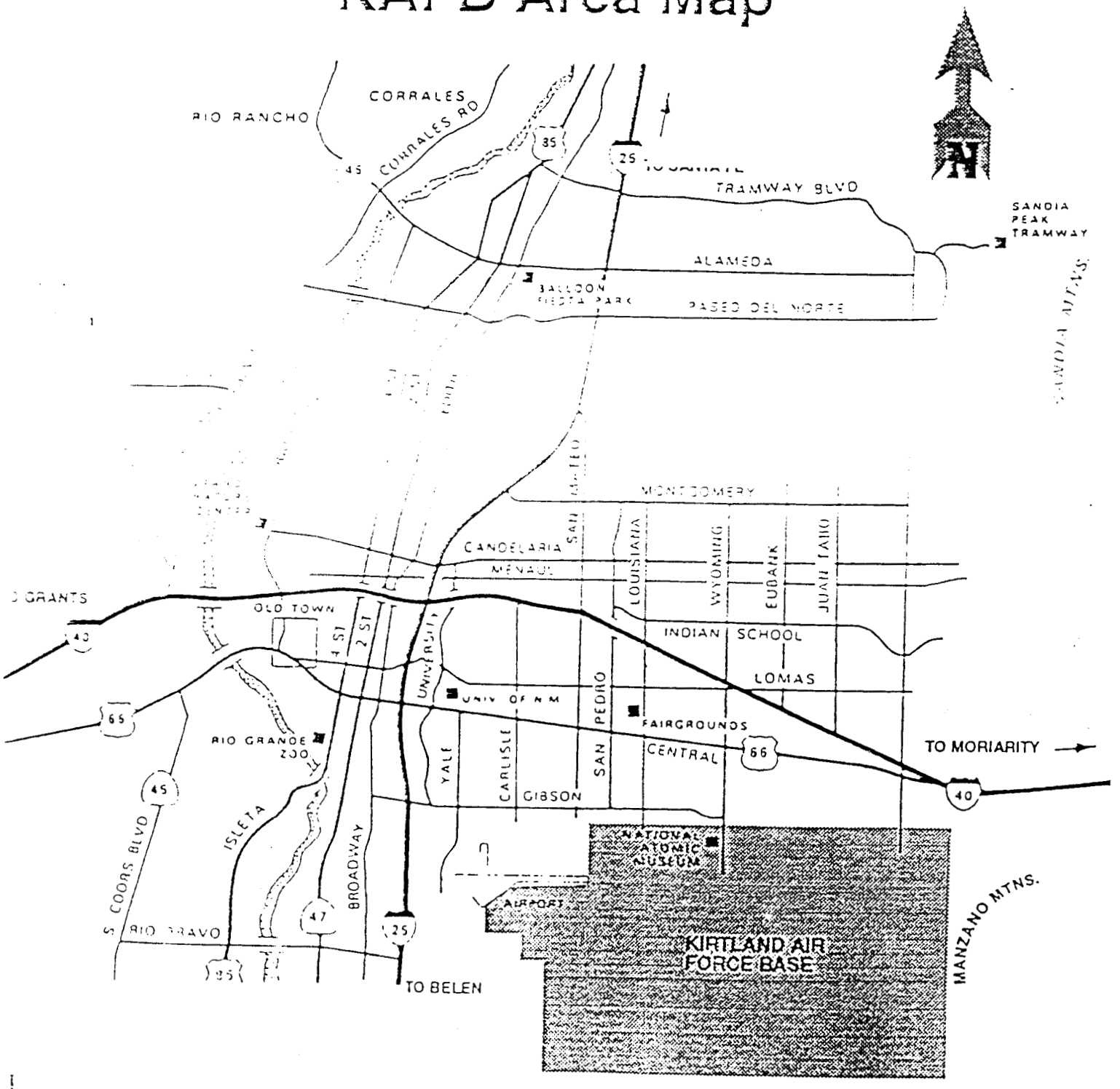
Detailed Assumptions

- Cost estimates are based on existing operations, not new facilities
- Estimates reflect increased costs to DOE due to:
  - Loss of services currently provided by USAF
  - Deferral or change in scope of planned USAF projects that directly affect DOE operations
  - Creation of DOE cantonment
- Costs are in FY95 dollars
- Most USAF property (and legal responsibility) will not be transferred to DOE; DOE will only manage these assets as a tenant
- The perimeter must be fenced and placarded as DOE managed property

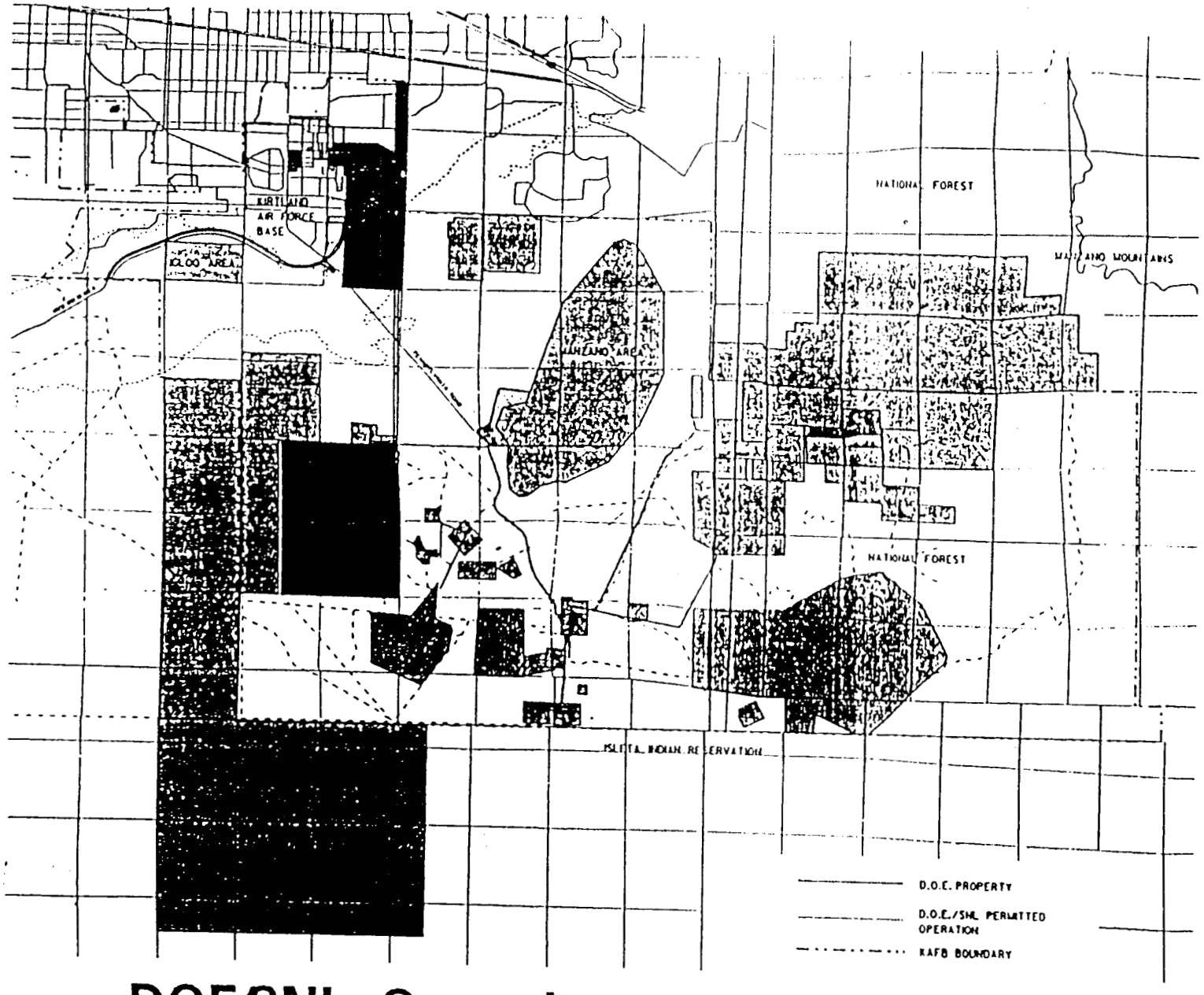
Detailed Assumptions con't.

- Utility service to other agencies within the DOE cantonment will be provided to their facility boundary and metered at that point
- The only USAF facilities under immediate consideration for reuse are the Air Force Safety and Inspection Center and the Brig and Confinement Facilities
- Estimates do not include costs of mothballing (pickling) or Decommissioning, Decontamination, and Demolition of USAF facilities encompassed by the new DOE cantonment area
- Estimates assume USAF is going to complete MILCON projects that have been recommended for completion by KAFB

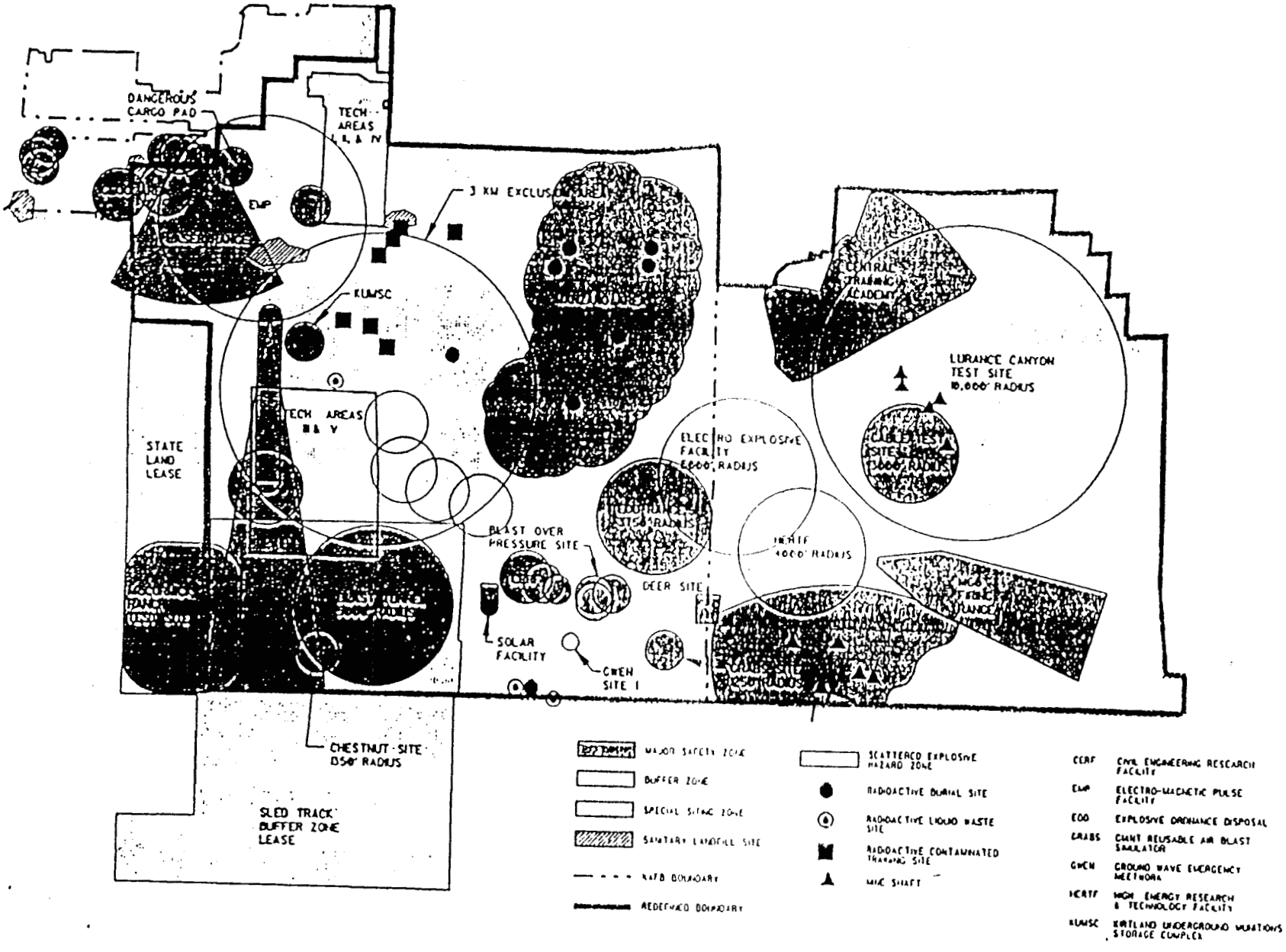
KAFB Area Map



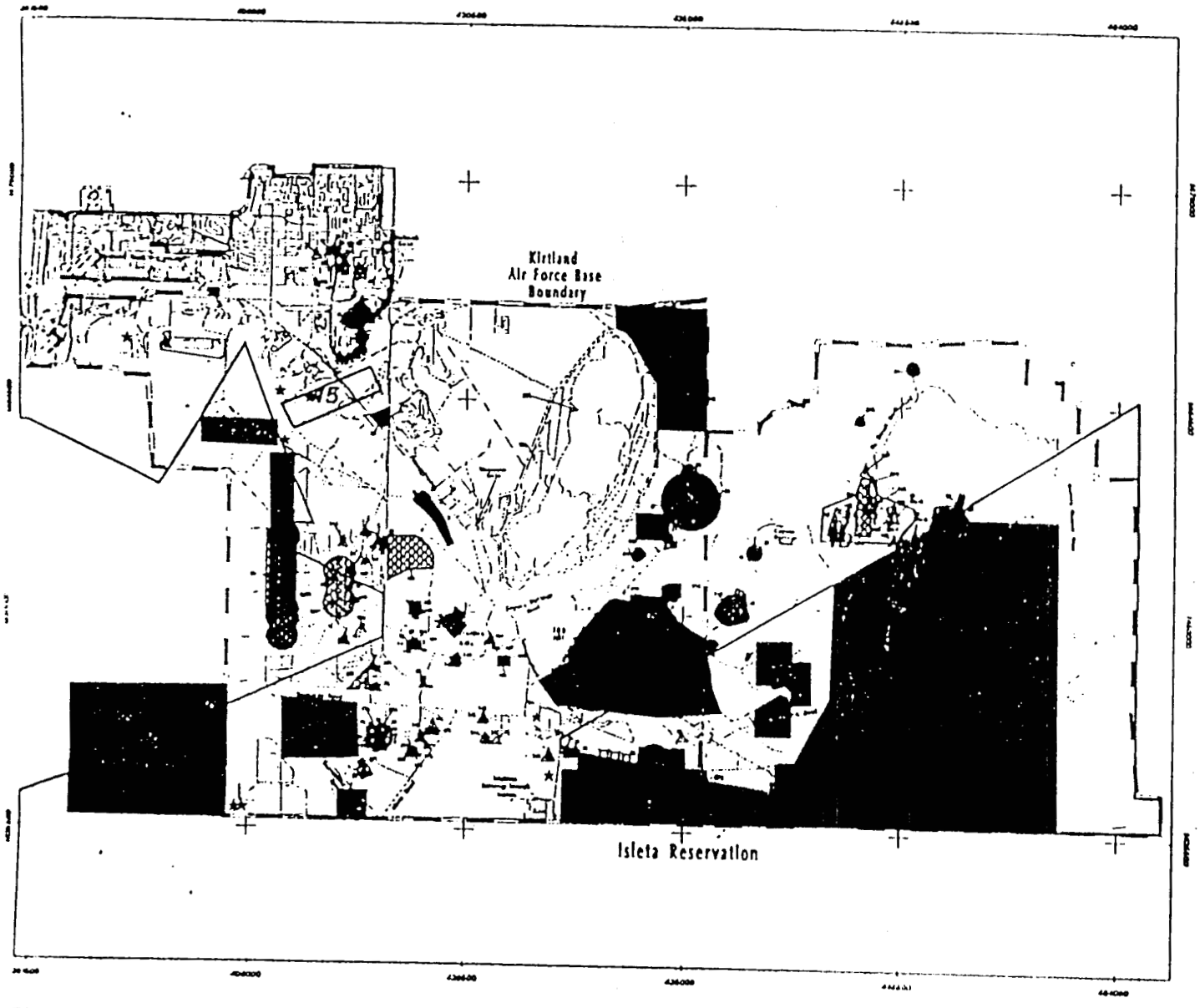
Albuquerque, New Mexico



DOE/SNL Owned and Permitted Lands



SNL/KAFB Hazard Zones



Legend

- KAFB Boundary
- Roadways (all types)
- ER Sites Greater Than 1 Acre
- ER Sites Less Than 1 Acre
- Has been visually surveyed, low amount of UXO.
- Has not been surveyed, within a gun fan of a known fire/launch site, or is within a known ordnance use area with moderate uxo hazard.
- Has been visually surveyed significant amount of UXO.
- Unassessed, hazard unknown
- High Explosives Removal Completed
- Low Level Radiation Pit
- Numbers in italics refer to Site Survey Report available by contacting the ER Program

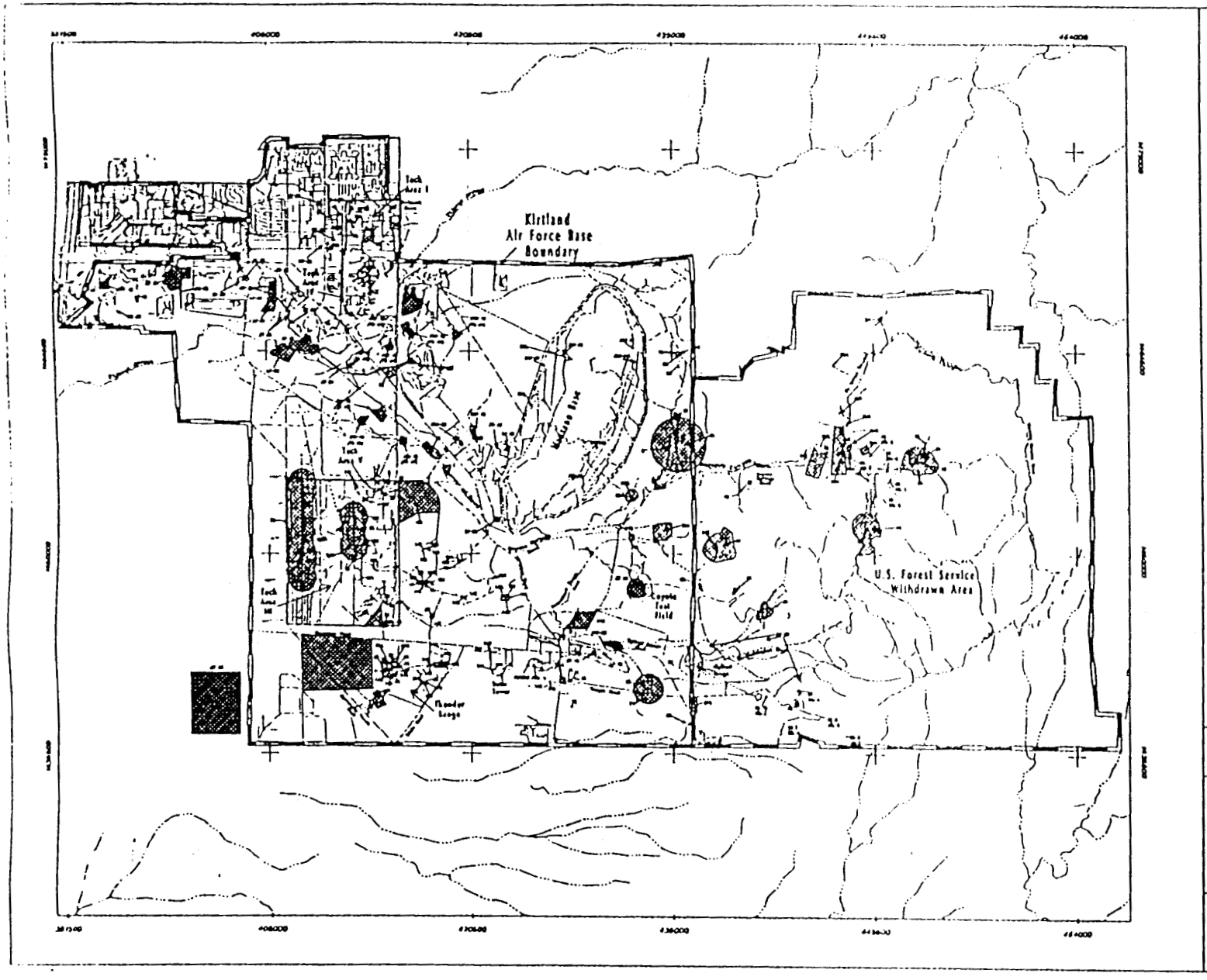
0 7000 14000
Scale in Feet

0 1680 3360
Scale in Meters

Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

Unexploded Ordnance Areas
KAFB - Sandia National Labs

1 in=7000	1:84000	MAPID=850711
Unclassified	DRAFT	SNL G/S ORG. 7512
ch.bmf	ch850711.aml	03/23/95



Legend

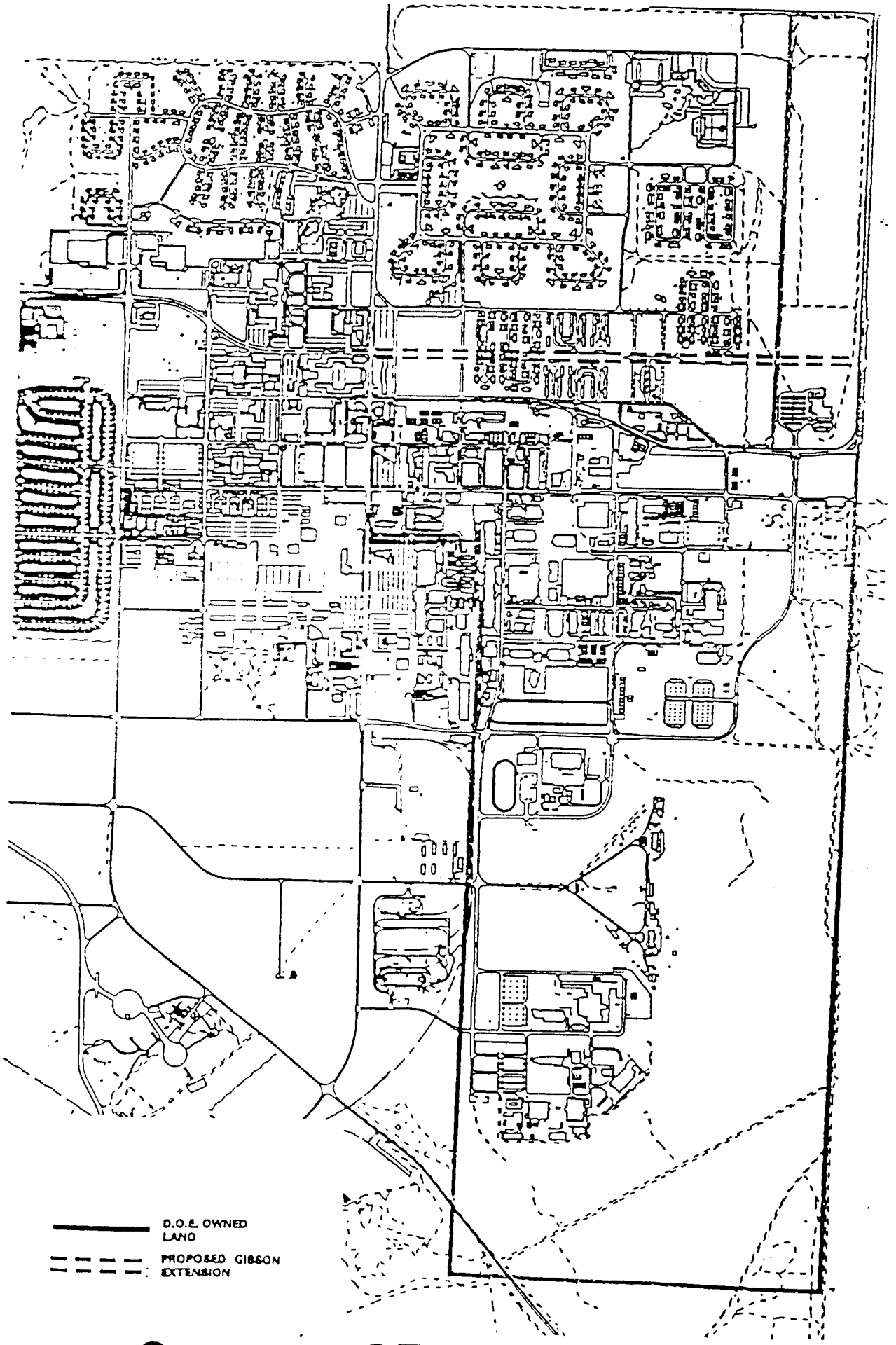
- Kirtland Air Force Base and U.S. Forest Service Withdrawn Area Boundaries
- Roadways (all types)
- Drainage Features
- SNL Technical Areas
- SNL Environmental Restoration Sites
- Installation Restoration Program Sites

0 7000 14000
Scale in Feet
0 1680 3360
Scale in Meters

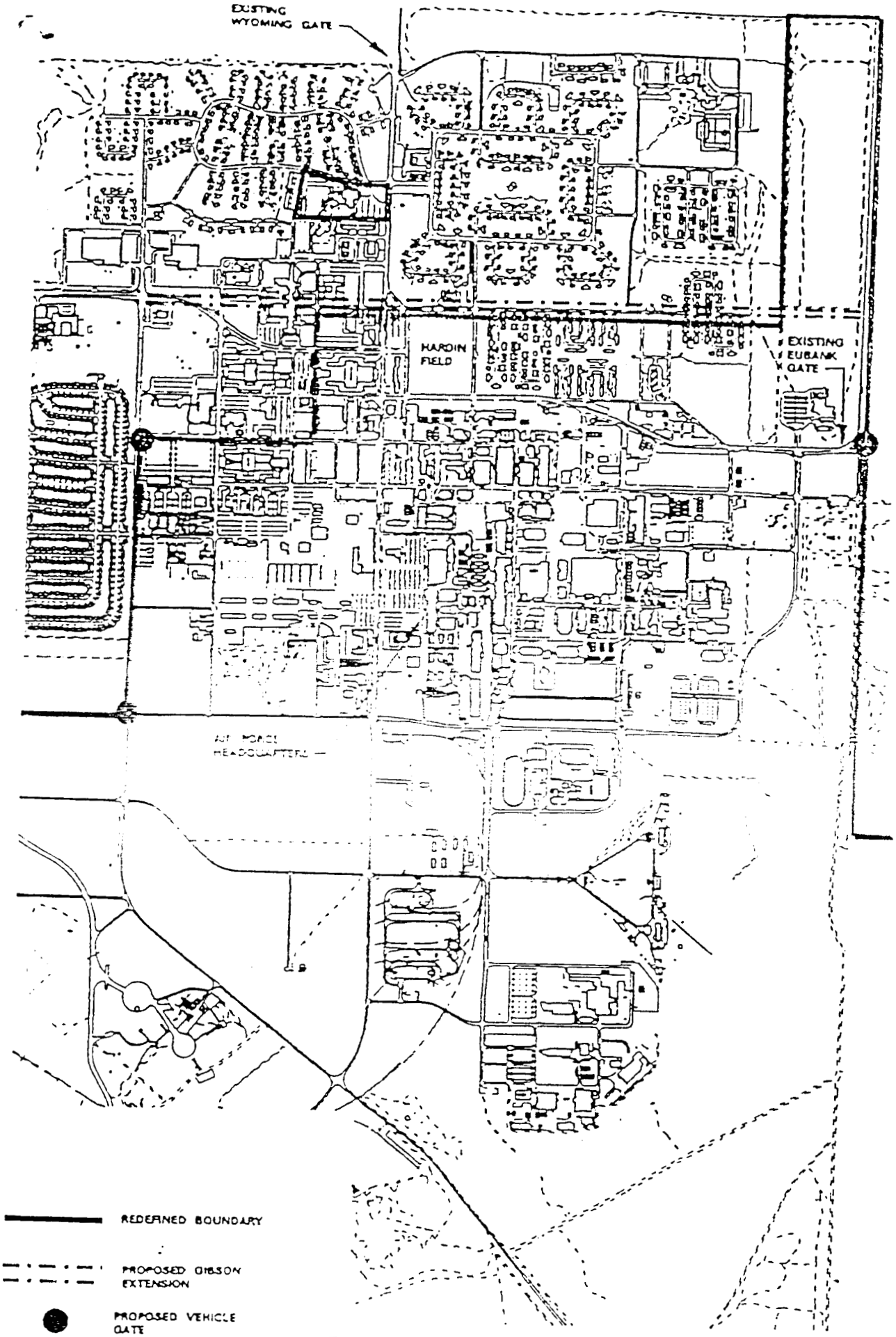
Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

SNL ER Sites
and Air Force
IRP Sites at KAFB

1" = 7000'	1:84000	MAPID-960400
Unclassified	DRAFT	SNL ORS ORG. 7512
dbleakly	bp94smand	01/27/98



Current DOE Ownership



Proposed DOE Cantonment

Planning Scenario

- Redefined Map
- Pickling Assumption
- Cost Comparisons (< 2 years)

Activity Areas Considered

- Public Safety
  - Security
  - Fire
  - Emergency Operations
- Physical Plant
  - Roads and Bridges
  - Traffic Lights and Controls
  - Gates, Intersections, Fencing and associated Demolition
  - Landscaping
- Utilities
  - Electrical Systems
  - Water Systems
  - Sanitary Sewer and Storm Drainage
  - Gas Lines
  - Steam System
  - Communications

GAO S / E Rev 3 21 95

Conversion Costs

- Review of USAF Construction Plans
- DOE reductions
- DOE Cantonment Costs
- Conversion Cost Summary

KAFB MILCON Utility/Physical Plant Projects and Recommendations

FY	Project	Cost ($M)	Recommendation (comments)
94	Upgrade Electrical Dist. Phase I	6.8	Complete
	Upgrade Utility Systems	8.0	Adjust (Completed demo of steam plant, will complete gas line, $5M in steam distribution deferred)
95	Upgrade Electrical Dist. Phase II	3.0	Defer (Aesthetic upgrade)
	Add to or Alter Base Water System	8.8	Complete
	Underground Storage Tank Removal	3.2	Complete
96	Upgrade Electrical Dist. Phase III	7.7	Defer (Aesthetic upgrade with replacement of Sub 22)
	Rebuild Manzano Bridge	3.9	Defer (Design complete, 0.5M of cost is for UXO removal)
97	Upgrade Electrical Dist. Phase IV	9.0	Defer (Enhancement and upgrade from Museum south)
98	Upgrade Steam & Gas Phase II	7.7	Defer (Steam and Gas west of Wyoming)
Total Estimated Construction Costs		58.1	
Total Recommended for Completion		24.8	
Total Deferred		33.3	

GAO 7 J.E. Rea 3.21.95

DOE Reductions to USAF Plans

FY	Project	DOE Requirement	Cost ($M)
94	Upgrade Utility Systems	Decommission steam distribution system, install package boilers where req'd: (Museum, AL, Brig, Coronado)	0.8
96	Upgrade Electrical Dist. Phase III	Modifications of Sub 22 only	0.6
96	Rebuild Manzano Bridge	Complete as described including UXO removals	6.3

NOTE: USAF MILCON list included construction costs only. Design, construction management, inspection, and acceptance, project management and contingency are not included. SNL average costs for these services add 37%.

Cost Summary

Dollars in Millions

	Conversion	Operating
Public Safety	15.1	14.9
Physical Plant	18.4	3.8
Utilities	28.6	10.1
DOE	2.0	0.4
Equipment O&M and Replacement		1.4
TOTAL COSTS	$64.1M	$30.6M

Sandia National Laboratories

GAO 151.E. Rev 3.22.95

One Time Conversion Cost - $ in thousands

Key		Construction /Renovation	Capital Equipment	Training & Non Capital	Allocated Costs	Subtotal
0	Public Safety					
01	Fire Protection	4,500	[illegible]	442	1,475	8,337
02	Security	[illegible]	[illegible]	1,321	987	5,575
03	Emergency Operations	[illegible]	[illegible]	142	169	954
04	Forest Operations	[illegible]	[illegible]	60	45	255
05	Public Safety Total	4,775	[illegible]	1,965	2,676	15,121
1	Physical Plant					
16	Roads	2,886	[illegible]	0	621	3,508
17	Bridges	5,213	[illegible]	0	1,121	6,333
18	Fencing	3,133	[illegible]	0	674	3,807
19	Entry Portals	800	[illegible]	0	172	972
20	Roads & Ground Maintenance	[illegible]	[illegible]	300	419	2,367
21	Geographic Data Conversion	[illegible]	[illegible]	50	191	1,081
22	Legal Survey	100	[illegible]	100	22	122
23	Administrative & Mgt Support	[illegible]	[illegible]	64	31	175
24	Physical Plant Total	[illegible]	[illegible]	414	3,250	18,365

	One Time Conversion Cost - $ in thousands	Construction /Renovation	Capital Equipment	Training & Non-Capital	Allocated Costs	Subtotal
	Utilities					
11	Electrical	3,765	[illegible]	558	1,342	7,585
12	Water	2,273	0	0	489	2,761
13	Sanitary Sewer	1,513	0	0	325	1,838
14	Storm Drainage	2,269	0	0	488	2,757
15	Gas	580	0	0	125	705
16	Steam	235	0	0	51	286
17	Water Plant	0	150	20	37	207
18	Alarm Communications	700	0	0	151	851
19	Telecommunications Eng.	7,900		100	1,720	9,720
11	Eng.Inc.Eng & Admin. Support					
22	HVAC System	0	30	46	16	92
23	Utility Maintenance & Support	420	150	10	125	705
24	Fire Protection Maintenance	200	168	258	135	761
	Utilities Total	200	120	14	72	406
		20,054	2,538	1,006	5,074	28,671
	DOE					
26	Energy Tech. Train. Complex	1,400	0	0	0	1,400
27	Allied Signal	10	10	0	0	20
28	DOE Complex Boiler	460	0	0	0	460
29	Other DOE Facility Boilers	71	0	0	0	71
	DOE Total	1,941	10	0	0	1,951
	Total	39,613	2,111	6,385	10,999	64,108

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Conversion Cost Summary

	Dollars in Millions
Public Safety	15.1
Physical Plant	18.4
Utilities	28.6
DOE	2.0
Equipment O&M and Replacement	
TOTAL COSTS	$64.1M

GAO 16 J E Rev 3 22 95

Sandia National Laboratories

Annual Operating Costs

- Personnel and Associated Personnel Costs
- Supplies and Materials
- Equipment Operations and Maintenance
- Equipment Replacement
- Other Allocable Costs

Operating Expenses Per Year - $ in thousands

Key		FTE #	Base & Printing	DB & DC	Training & Non-Capital	Allocated Costs	Subtotal
1	Public Safety						
2	Fire Protection	108	[illegible]	[illegible]	90	2,597	7,905
3	Security	73	[illegible]	[illegible]	190	1,174	4,335
4	Emergency Operations	14	[illegible]	[illegible]	25	505	1,460
5	Test Operations	7	[illegible]	[illegible]	100	341	1,236
6	Public Safety Total	202	[illegible]	[illegible]	405	4,618	14,956
7	Physical Plant						
8	Roads & Grounds Maintenance	31	[illegible]	[illegible]	0	1,104	2,427
9	Geographic Data Conversion	3	[illegible]	[illegible]	0	254	715
10	Administrative & Mgt Support	6	[illegible]	[illegible]	0	287	620
11	Extra Physical Plant Total	40	[illegible]	[illegible]	0	1,645	3,762

	Operating Expenses Per Year - $ In thousands	FTE #	Base + Fringe	DS & DO	Training & Non-Capital	Allocated Costs	Subtotal
	Utilities						
11	Electrical	4	192	1,860	50	576	2,678
17	Water Plant	9	432	16	18	380	845
19	Telecommunications Eng	2	132	1,290	0	353	1,775
11	Engineering & Admin Support	7	386	30	20	393	829
22	HVAC System	6	288	11	6	252	557
23	Utility Maintenance & Support	8	384	25	140	366	914
24	Fire Protection Maintenance	4	192	20	0	170	382
25	Infrastructure Maintenance	0	0	1,725	0	371	2,096
	Utilities Total	40	2,005	4,977	234	2,860	10,076
	DOE						
27	Ross Hangar	0	0	200	0	0	200
27	Allied Signal	6	210	0	0	0	210
	DOE Total	6	210	200	0	0	410
	Subtotal	288	12,887	6,555	639	9,124	29,204
	Annual Capital Equip Operations Maintenance - 10%	0	0	0	0	711	711
	Annual Capital Equip Replacement - 10%	0	0	0	0	711	711
	Total	288	12,887	6,555	639	10,546	30,626

Annual Operating Cost Summary

	Dollars in Millions	FTE's
Public Safety	14.9	202
Physical Plant	3.8	40
Utilities	10.1	40
DOE	0.4	6
Equipment O&M and Replacement	1.4	
TOTAL COSTS	$30.6M	288

Sandia National Laboratories

GAO 17 J E Rev 3 22 95

KAFB BRAC COST ELEMENT DATA SHEET

Estimators Name: Organization: Telephone Number:

SUMMARY CATEGORY:

SUMMARY ELEMENT:

ITEM:

BACKGROUND DESCRIPTION:

ASSUMPTIONS:

COST ANALYSIS:

ONE TIME COSTS:

Total Project Cost:
- Design/Title I&II:
- Construction:
- Contingency:
- Project Mngt/Inspection:

Capital Equipment:
- Items:
- One Time Remodeling Cost:

Training and Supplies:
- Training Costs:
- Other Personnel Costs:
- Equipment Purchases:

ANNUAL OPERATING & MAINTENANCE COSTS:

Number of Full Time Equivalents: Center:

Team Leaders: Average Direct Wage:

Journeymen/Operators: Average Direct Wage:

Laborers: Average Direct Wage:

Annual Cost of Consumable:

Other:

BENCHMARKING:

Thank you in advance for your assistance in preparing the SNL cost estimate to isolate itself from KAFB. If you have questions please contact Harry Gullett or Rick Gonzales in Org. 7256, or at the following telephone numbers: Harry - 844-9813, Rick - 844-9815, or FAX 844-0470. Please get the disk or a hard copy of your estimates to us by close of business Tuesday 21 March 1995. The summary must be delivered to senior management at 8 AM Thursday. These numbers will become the corporate cost to perform if KAFB is closed. Please be as realistic as possible when estimating the numbers of personnel and vehicles required, however ensure you have sufficient assets to actually accomplish the task or function.

One Time Capital Cost Worksheets

	0	1	2	3	4	5
A		Construction /Renovation	Capital Equipment	Training & Non-Capital	Allocated Costs	Subtotal
B		actual	actual	actual	sum of columns 1 to 3 x 0.215 corporate load	sum of columns 1 to 4
C	Subtotal	sum column 1	sum column 2	sum column 3	sum column 4	sum column 5
D	Annual Capital Equip. Operations Maintenance - 10%	-	-	-	-	-
E	Annual Capital Equip. Replacement - 10%	-	-	-	-	-
F	Total	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e

Operating Expense Per Year Worksheets

	6	7	8	9	10	11	12
		FTE #	Base + Fringe	DS & DC	Training & Non-Capital	Allocated Costs	Subtotal
		actual	center ave. base x 1.31 fringe	actual	actual	((column 2 x ave. center load) x 1.215 corporate load) + (sum of columns 9 to 10 x 0.215 corporate	sum of columns 8 to 11
C	Subtotal	sum column 7	sum column 8	sum column 9	sum column 10	sum column 11	sum column 12
D	Annual Capital Equip. Operations Maintenance - 10%	-	-	-	-	sum column 2 x 0.10	sum column 2 x 0.10
E	Annual Capital Equip. Replacement - 10%	-	-	-	-	sum column 2 x 0.10	sum column 2 x 0.10
F	Total	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e

172

Notes to Accompany the KAFB BRAC Cost Estimates.

The following presents the assumptions, global and detailed, used to estimate the cost of creating a "stand alone" DOE/SNL cantonment. First, this perimeter, see attached map, was created to provide the necessary safety buffers around the TA-1 industrial area and the field test facilities located throughout the cantonment. No effort, due to extreme time constraints, was made to establish a cooperative operating plan with the other remaining tenants. Thus the "economies of scale", available currently to the USAF, were not assumed by the estimators. Such an operating plan, if necessary, will be negotiated by DOE/SNL to achieve the best economy for DOE/SNL at a future time. Similarly environmental baselining and cleanup costs are assigned to the USAF by the 1994 Defense Appropriation Act and are therefore not included as DOE/SNL costs.

The second portion explains how the summaries of the One-Time Conversion Cost and Annual Operating Expenses per Year were derived. These costs are the engineer scoping estimate to create and operate a "stand alone" DOE/SNL cantonment encompassing the area east of Pennsylvania Avenue to the eastern edge of the withdrawal lands, North to Southern Blvd. and south to Isleta Pueblo lands. The sub-total includes all corporate overhead, gross receipts taxes, individual SNL center overhead loads, and the increased maintenance/capital equipment budget necessary to maintain DOE's expanded area of responsibility. The costs are only those which cannot be recovered by DOE/SNL from reimbursable (non-SNL) tenants remaining within the DOE/SNL cantonment.

GLOBAL ASSUMPTIONS:

1. The Realignment will occur over a 3-5 year period.

2. DOE/SNL becomes the landlord for their cantonment(s) only.

3. DOE/SNL will minimize land and facilities holdings and the size of their cantonment(s) to the extent practicable, consistent with missions and populations.

DETAILED ASSUMPTIONS:

1. Cost estimates are based on maintaining existing DOE/SNL facilities and operations, not new facilities (except as noted in assumption 9 below).

2. Estimates reflect increased costs to DOE due to:

- Loss of services currently provided by USAF.
- Deferral or change in scope of planned USAF projects that directly effect DOE operations.
- Creation of a DOE/SNL cantonment.

3. Costs are in FY95 dollars

4. The cantonment is limited to the area enclosed by the solid blue line on the attached map. It is generally the existing DOE property from the intersection of Southern Blvd. and Eubank, the KAFB northern perimeter east from TA-1 including the withdrawn lands, south to Isleta Pueblo west to the existing KAFB perimeter, north to the airfield, east (along Hardin Blvd.) to Pennsylvania, north to "G" street, east to one block west of Wyoming, north to the Gibson/"D" street alignment, and east to the DOE property line.

5. Most USAF property (and legal responsibility) will not be transferred to DOE; DOE will only manage these assets as a tenant of the USAF. Exceptions would include parking lots, currently under permit from the Air Force, that are direct;y associated with DOE operations.

6. The entire perimeter must be fenced and placarded as DOE managed property.

7. Utility service to other agencies within the DOE cantonment will be provided to their facility boundary and metered at that point. Services will be on a reimbursable, full cost recovery basis.

8. These reimbursable (recovered) costs are not included in the estimates, only SNL non-recoverable SNL costs are included.

9. The only USAF facilities under immediate consideration for reuse are the Air Force Safety and Inspection center, the BRIG and Confinement Facilities, the Manzano Base Fire Station, and the Fire Station at "F" street and Wyoming.

10. Estimates do not include costs of mothballing (pickling) or Decommissioning, Decontamination, and Demolition of USAF facilities encompassed by the new DOE cantonment.

11. Estimates assume USAF will complete MILCON projects on their current schedule that have been recommended for completion by KAFB.

12. The services are based on a population of approximately 10,000 employees (DOE, SNL, ITRI, Phillips Laboratory, KUMSC, and others) within the cantonment. All services provided to non-SNL facilities will be on a reimbursable, full cost recovery basis. Only non-recoverable SNL costs are included in the estimates.

13. DOE/SNL will not accept responsibility for the Installation Restoration (IR) Sites, Unexploded Ordnance (UXO) or other Kirtland Air Force Base Legacy Wastes. The administrative control and eventual cleanup of these sites will

forever remain the sole responsibility of the Department of Defense. No additional DOE Headquaters (Code EM) costs are included in these estimates.

THE SUMMARY OF THE COST WORKSHEETS:

These are the summaries of the One-time Conversion Cost and the Annual Operating Expenses per Year to create and operate a DOE Cantonment encompassing the area east of Pennsylvania Avenue to the eastern edge of the withdrawal lands, from Isleta on the south to Southern Blvd. on the north.

One Time Capital Cost Worksheets:

Column 1 -- Construction/renovation costs. These are the actual engineer scoping estimates to renovate former USAF space to DOE environmental standards. The need exists to provide work spaces and lunchrooms, for 288 additional employees. The chief differences include fiber-optic wiring for communications, installing intrusion devices and security sensors, the removal of all asbestos containing insulation, and the removals of all lead based paint.

Column 2 -- Capital Equipment. These are the actual costs to purchase the heavy earthmoving equipment, based on the USAF current equipment list, to maintain the mountain roads, and to clear ditches and culverts after rains/snow storms. Also to acquire Fire Fighting equipment (snorkel truck, structural hook & ladder, collapsed building rescue equipment, Hazardous Spill response vehicles, and woodlands brush-fire fighting vehicles), additional maintenance trucks for High Voltage Electrical repairs, and security vehicles for the extended patrol area.

Column 3 -- Training and Non-capital costs. These include the estimated costs of recruiting, training, certifying, obtaining security clearances, and purchasing equipment to perform the new functions. Weapons for the security force, radios, uniforms, and office equipment are included in this category.

Column 4 -- Allocated Costs. This is the first derived cost. It uses an arbitrary multiplier of 21.5%. This figure is used to estimate the Gross Receipts tax (5.5%), the Management fee of 1%, and 15% for Corporate overhead. This point estimator was provided by Ms. Jennifer Crooks of organization 10400 for use as an average cost for support functions. The totals in columns 1, 2, and 3 are multiplied by 0.215 to derive the value in column 4.

Column 5 -- Subtotal. This is the sum of columns 1,2,3, & 4 to estimate the total one time costs of assuming these functions.

Operating Expenses Per Year:

Column 1 -- FTE. This is the number of full time equivalent employees. By the definition provided by the Sandia Accounting Department Organization 10400 these employees

work a maximum of only 40 hours per week or 80 hours per pay period. This convention artificially increases the number of employees to provide Fire, Rescue, Hazardous material Spill, Security, and Emergency Management Services in the entire estimate.

Column 2 -- Base + Fringe. This is a derived cost for personnel. It is the average salary for employees in the Organization (Cost Work Center) times 31%. Fringe includes the costs of vacations, sick leave, and other benefits. **These estimates supersede all personnel cost figures in the engineering estimate roll-ups attached.**

Column 3 -- DS & DC. These stand for Direct Support and Direct Costs. Included in this column are the estimated infra-Sandia Center charges for cross departmental technical support (Environmental, Engineering, Industrial Safety, etc.), contractor support (Time and Material contracts for in-office performance of tasks), and general consumable supplies (non-property materials) to accomplish this function.

Column 4 -- Training and Non-Capital Equipment. These are the estimated annual training and equipment (property) purchases required to maintain proficiency and certifications to perform this function under DOE/SNL Procedures.

Column 5 -- Allocated costs. This is a derived cost using two equations. The first is the application of the Work Center Load, an overhead rate charged internally to Sandia to achieve full cost recovery -- this load varies by Center, to the derived average wages in column 2. The next step is to apply the Corporate Overhead rate of 21.5% to this figure by multiplying this "loaded rate" by 1.215. The second equation applies the Corporate Overhead, 21.5% to the DS&DC's and the Training Costs in columns 3 and 4. The EXCEL formula is: [{(column 2 * Cntr Load) * 1.215} + {(sum column 3 +4) * 0.215}] = Allocated Costs.

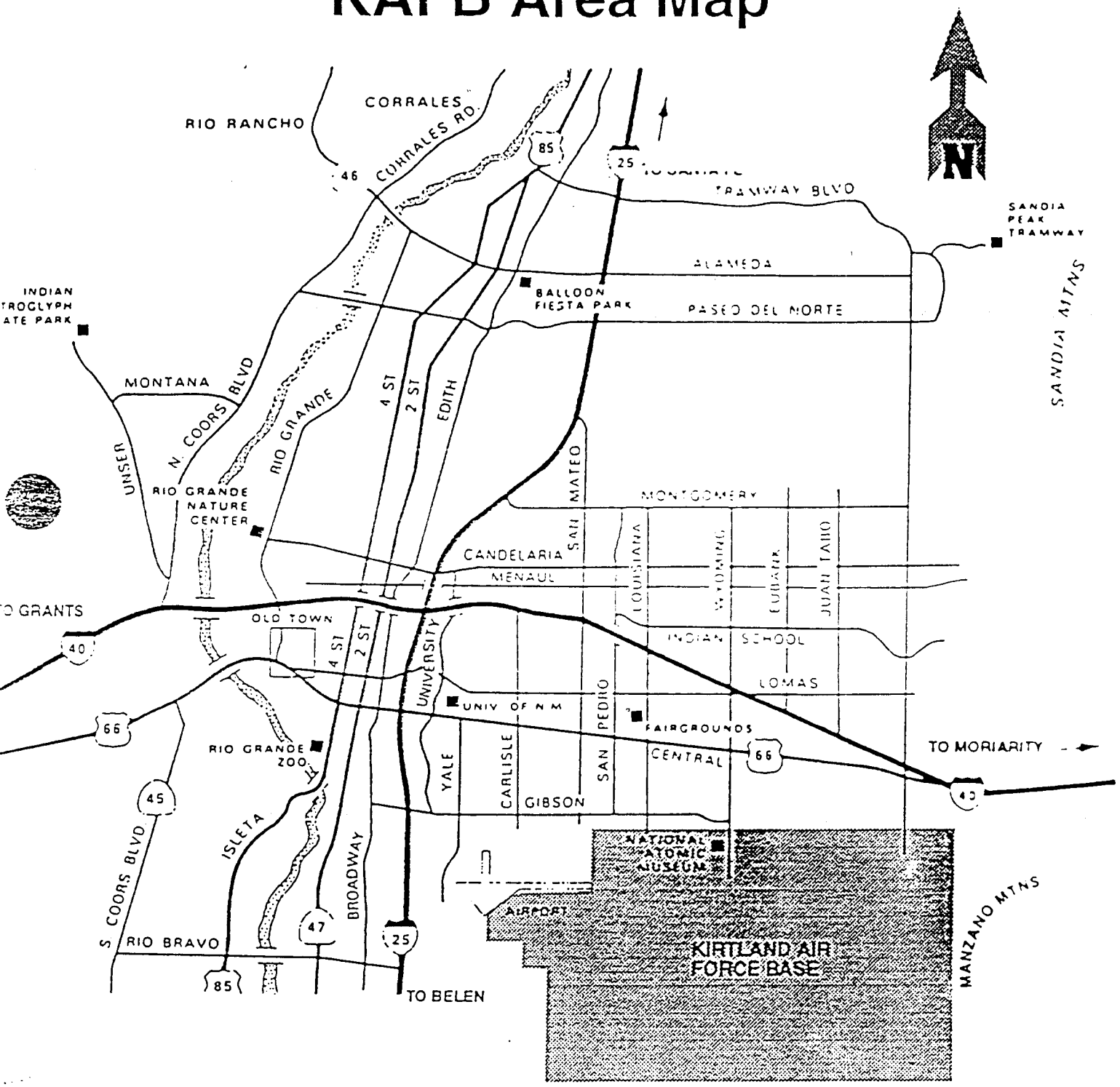
Rows D & E -- Annual Capital Equipment Maintenance and Replacement. These costs are estimated to be 10% each. They apply only to column 2 (Capital Equipment) from the One-time Conversion Costs.

Column 6 -- Subtotal. This is the sum of columns 2 + 3 + 4 + 5.

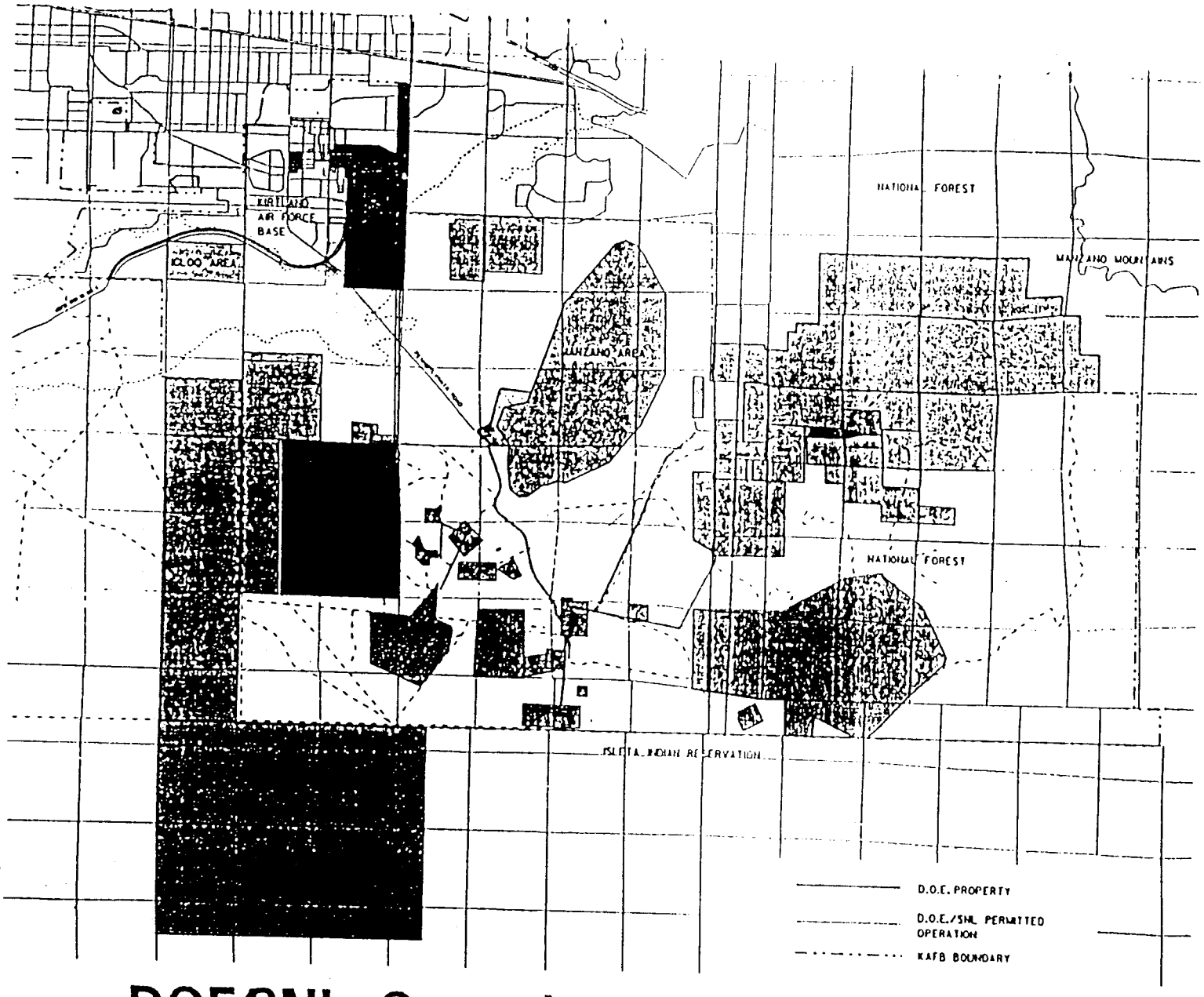
Cost Development Outline

- Assumptions
- Site Cantonment Considerations
- Cost Planning Scenario
- Activity Areas Considered
- Cost Summaries
- One Time Conversion Costs
- Annual Operating Costs

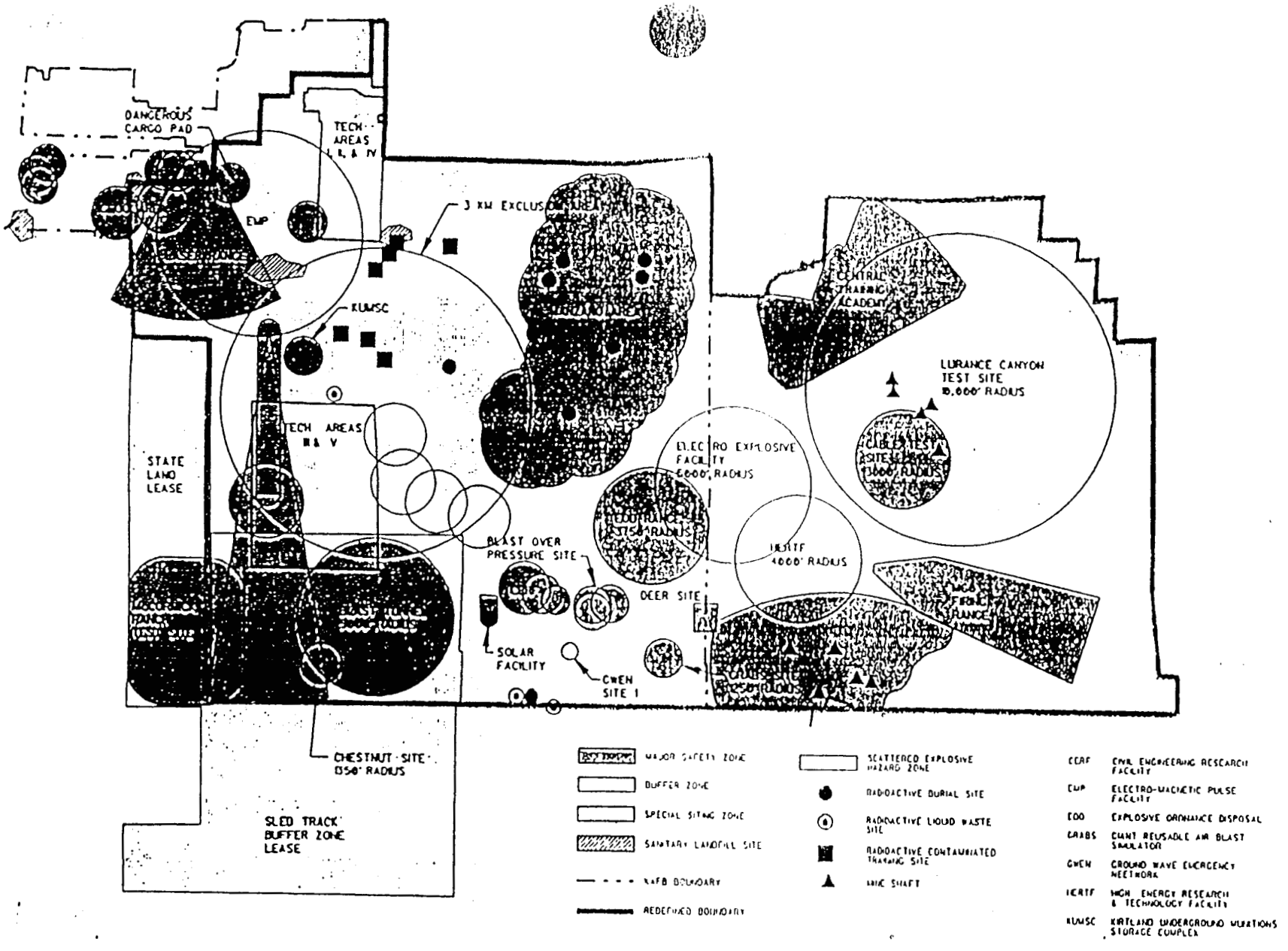
KAFB Area Map



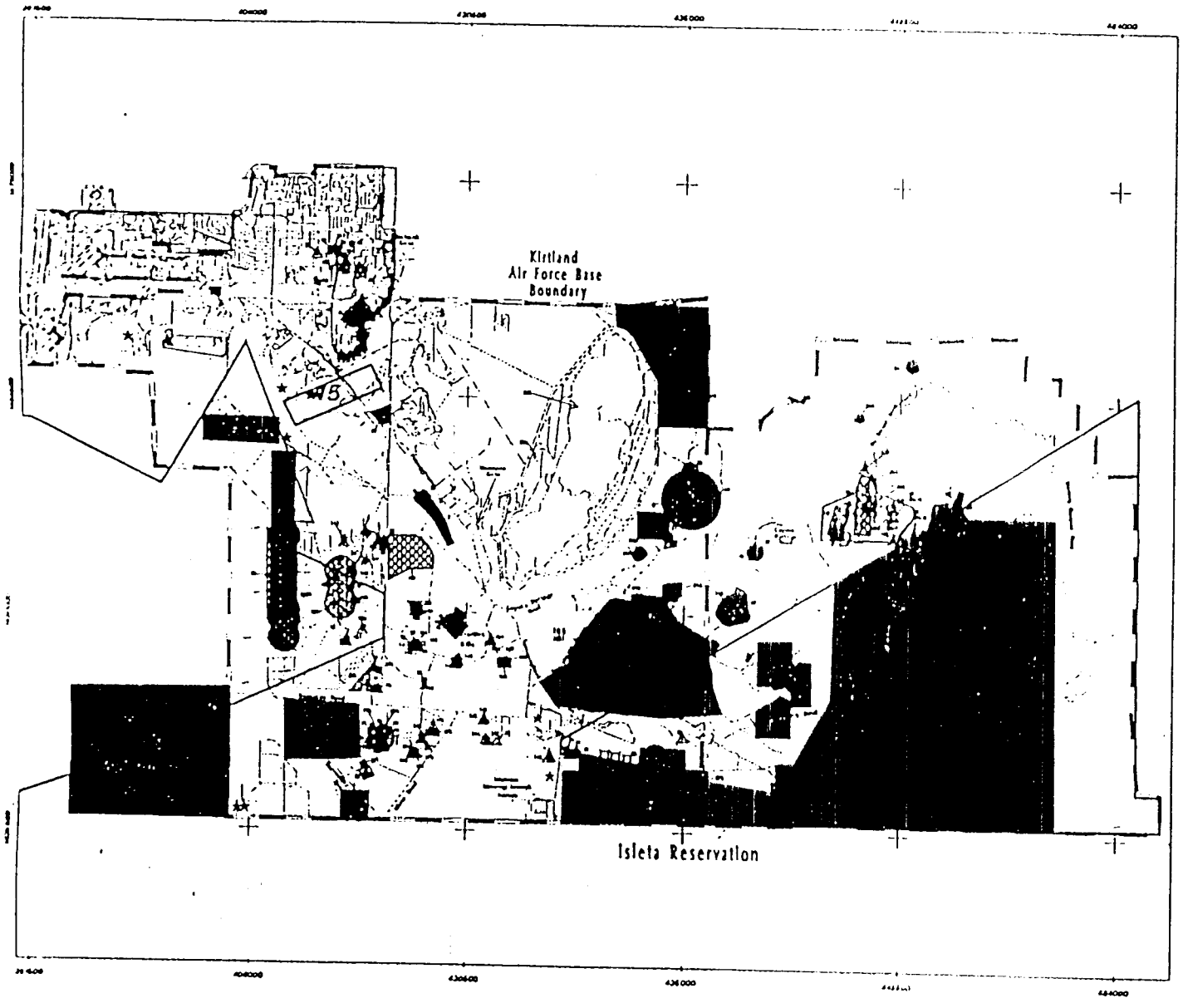
Albuquerque, New Mexico



DOE/SNL Owned and Permitted Lands



SNL/KAFB Hazard Zones



Legend

- KAFB Boundary
- Roadways (all types)
- ER Sites Greater Than 1 Acre
- ER Sites Less Than 1 Acre
- Has been visually surveyed, low amount of UXO.
- Has not been surveyed, within a gun fan of a known fire/launch site, or is within a known ordnance use area with moderate uxo hazard.
- Has been visually surveyed significant amount of UXO.
- Unassessed, hazard unknown
- High Explosives Removal Completed
- Low Level Radiation Pit

Numbers in italics refer to Site Survey Report available by contacting the ER Program

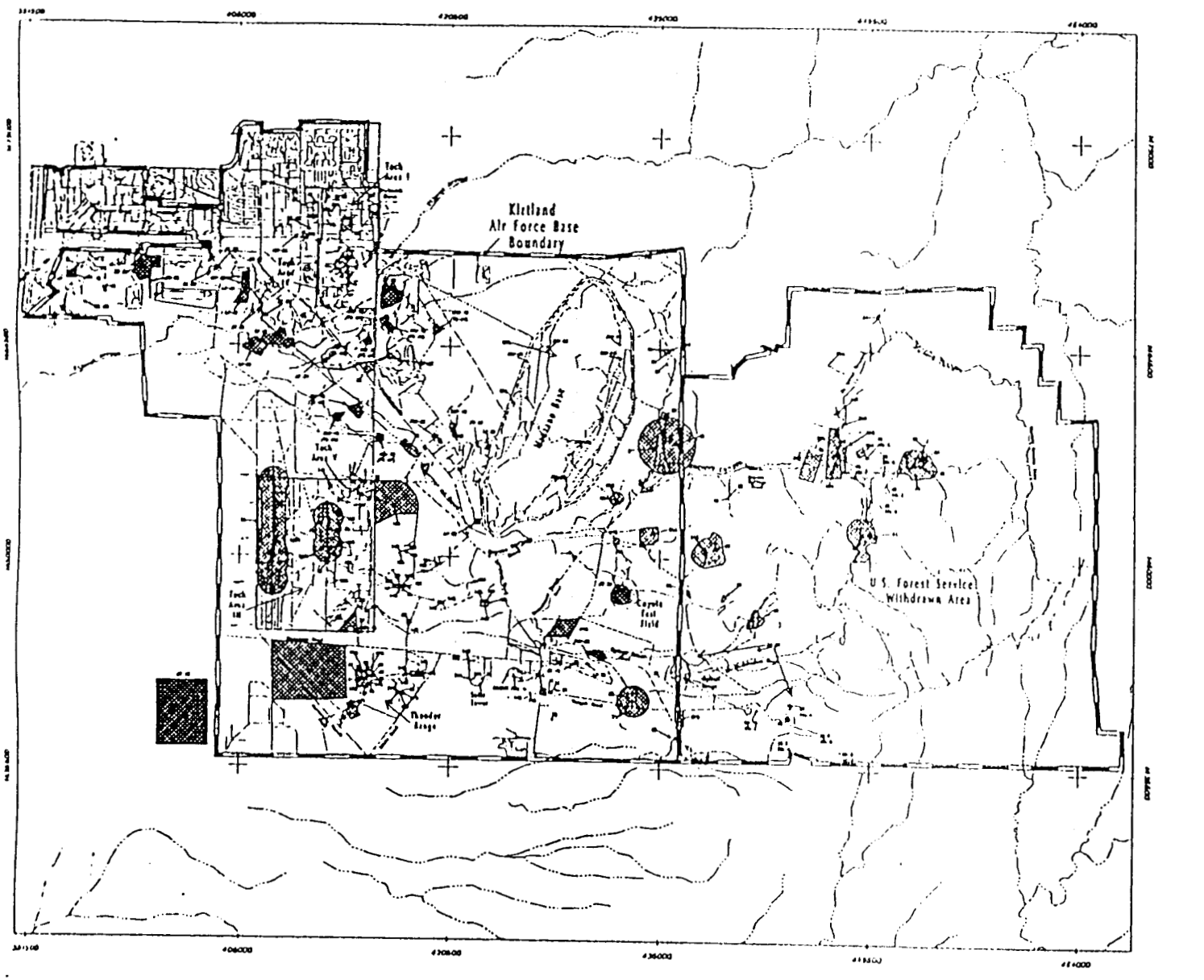
0 7000 14000
Scale in Feet

0 1680 3360
Scale in Meters

Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

Unexploded Ordnance Areas
KAFB - Sandia National Labs

1 in = 7000	1:84000	MAPID-850711
Unclassified	DRAFT	SNL GIS ORG. 7613
shebard	db850711.aml	03/23/95



Legend

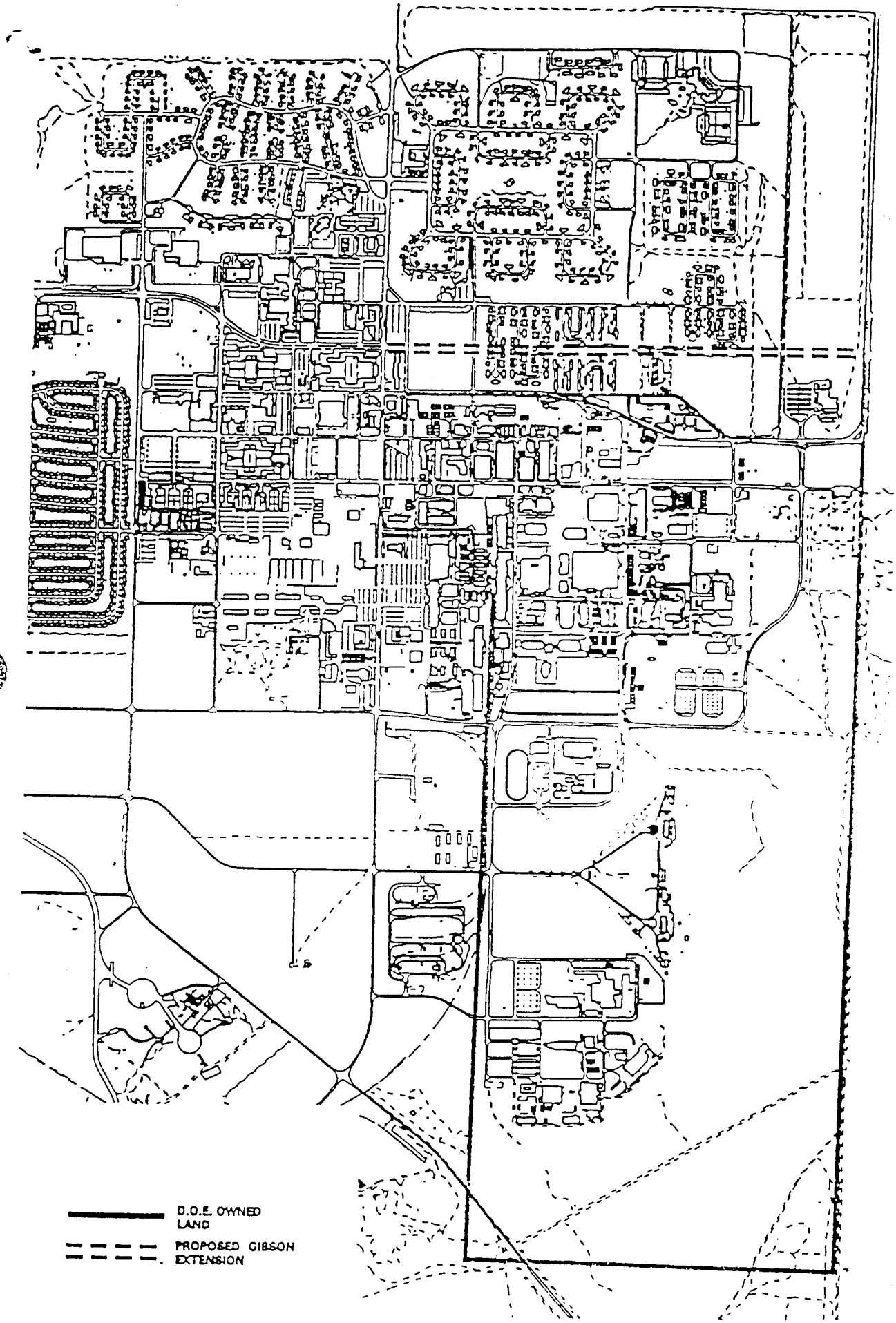
- Kirtland Air Force Base and U.S. Forest Service Withdrawn Area Boundaries
- Roadways (all types)
- Drainage Features
- SNL Technical Areas
- SNL Environmental Restoration Sites
- Installation Restoration Program Sites

0 7000 14000
Scale in Feet
0 1680 3360
Scale in Meters

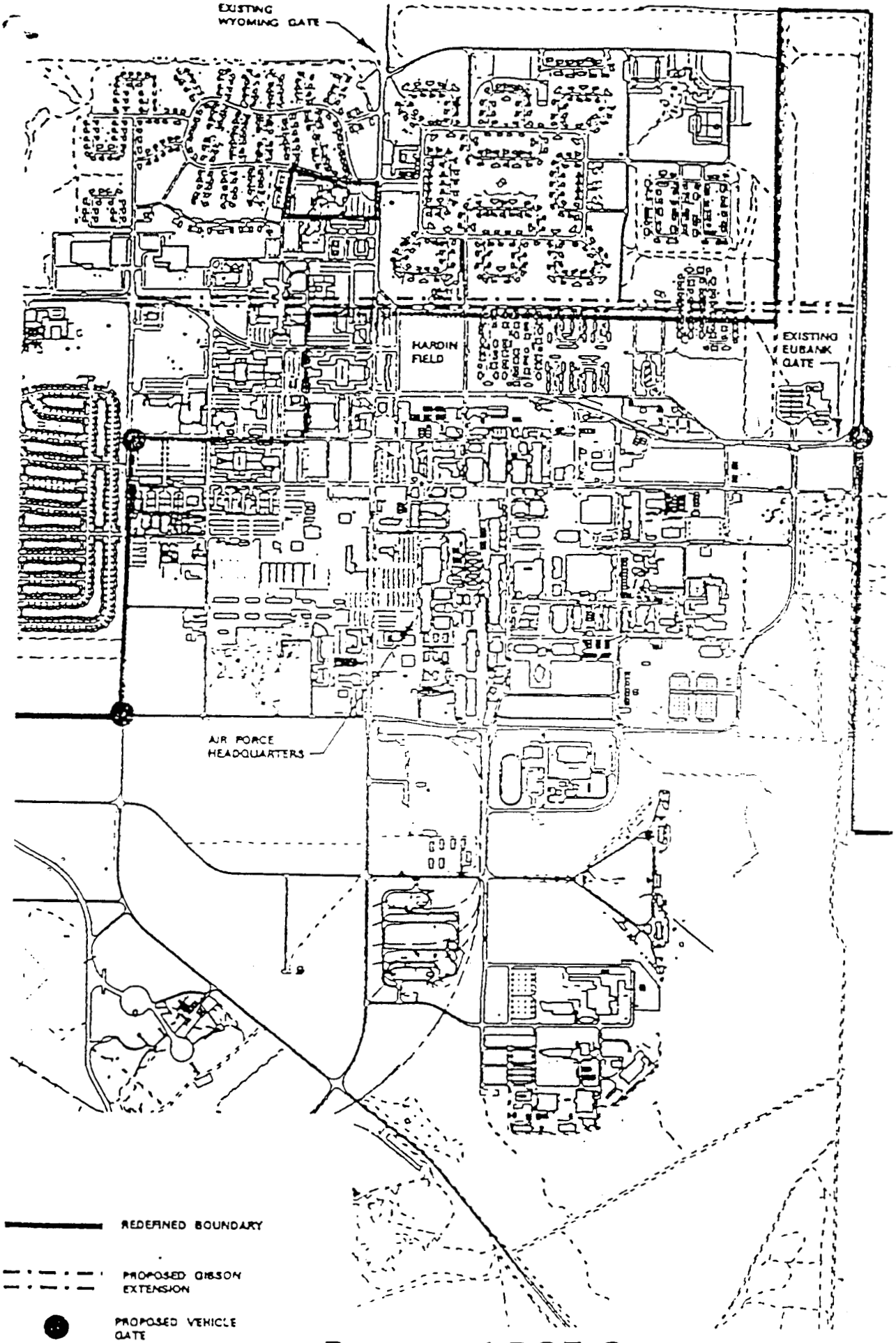
Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

SNL ER Sites
and Air Force
IRP Sites at KAFB

1" = 7000'	1:84000	MAPID = 550400
Unclassified	DRAFT	SNL GIS ORG. 7613
dfdeshly	krp94sm.aml	01/27/95



Current DOE Ownership



Proposed DOE Cantonment

Planning Scenario

- Redefined Map
- Pickling Assumption
- Cost Comparisons (< 2 years)

KAFB BRAC COST ELEMENT DATA SHEET

Estimators Name: Organization: Telephone Number:

SUMMARY CATEGORY:

SUMMARY ELEMENT:

ITEM:

BACKGROUND DESCRIPTION:

ASSUMPTIONS:

COST ANALYSIS:

ONE TIME COSTS:

Total Project Cost:
- Design/Title I&II:
- Construction:
- Contingency:
- Project Mngt/Inspection:

Capital Equipment:
- Items:
- One Time Remodeling Cost:

Training and Supplies:
- Training Costs:
- Other Personnel Costs:
- Equipment Purchases:

ANNUAL OPERATING & MAINTENANCE COSTS:

Number of Full Time Equivalents: Center:

Team Leaders: Average Direct Wage:

Journeymen/Operators: Average Direct Wage:

Laborers: Average Direct Wage:

Annual Cost of Consumable:

Other:

BENCHMARKING:

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One Time Capital Cost Worksheets

	0	1	2	3	4	5
A		Construction /Renovation	Capital Equipment	Training & Non-Capital	Allocated Costs	Subtotal
B		actual	actual	actual	sum of columns 1 to 3 x 0.215 corporate load	sum of columns 1 to 4
C	Subtotal	sum column 1	sum column 2	sum column 3	sum column 4	sum column 5
D	Annual Capital Equip. Operations Maintenance - 10%	-	-	-	-	-
E	Annual Capital Equip. Replacement - 10%	-	-	-	-	-
F	Total	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e

Operating Expense Per Year Worksheets

	6	7	8	9	10	11	12
A		FTE #	Base + Fringe	DS & DC	Training & Non-Capital	Allocated Costs	Subtotal
B		actual	center ave. base x 1.31 fringe	actual	actual	((column 2 x ave. center load) x 1.215 corporate load) + (sum of columns 9 to 10 x 0.215 corporate	sum of columns 8 to 11
C	Subtotal	sum column 7	sum column 8	sum column 9	sum column 10	sum column 11	sum column 12
D	Annual Capital Equip. Operations Maintenance - 10%	-	-	-	-	sum column 2 x 0.10	sum column 2 x 0.10
E	Annual Capital Equip. Replacement - 10%	-	-	-	-	sum column 2 x 0.10	sum column 2 x 0.10
F	Total	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e	sum rows c to e

Notes to Accompany the KAFB BRAC Cost Estimates.

The following presents the assumptions, global and detailed, used to estimate the cost of creating a "stand alone" DOE/SNL cantonment. First, this perimeter, see attached map, was created to provide the necessary safety buffers around the TA-1 industrial area and the field test facilities located throughout the cantonment. No effort, due to extreme time constraints, was made to establish a cooperative operating plan with the other remaining tenants. Thus the "economies of scale", available currently to the USAF, were not assumed by the estimators. Such an operating plan, if necessary, will be negotiated by DOE/SNL to achieve the best economy for DOE/SNL at a future time. Similarly environmental baselining and cleanup costs are assigned to the USAF by the 1994 Defense Appropriation Act and are therefore not included as DOE/SNL costs.

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GLOBAL ASSUMPTIONS:

1. The Realignment will occur over a 3-5 year period.

2. DOE/SNL becomes the landlord for their cantonment(s) only.

3. DOE/SNL will minimize land and facilities holdings and the size of their cantonment(s) to the extent practicable, consistent with missions and populations.

DETAILED ASSUMPTIONS:

1. Cost estimates are based on maintaining existing DOE/SNL facilities and operations, not new facilities (except as noted in assumption 9 below).

2. Estimates reflect increased costs to DOE due to:

- Loss of services currently provided by USAF.
- Deferral or change in scope of planned USAF projects that directly effect DOE operations.
- Creation of a DOE/SNL cantonment.

3. Costs are in FY95 dollars

4. The cantonment is limited to the area enclosed by the solid blue line on the attached map. It is generally the existing DOE property from the intersection of Southern Blvd. and Eubank, the KAFB northern perimeter east from TA-1 including the withdrawn lands, south to Isleta Pueblo west to the existing KAFB perimeter, north to the airfield, east (along Hardin Blvd.) to Pennsylvania, north to "G" street, east to one block west of Wyoming, north to the Gibson/"D" street alignment, and east to the DOE property line.

5. Most USAF property (and legal responsibility) will not be transferred to DOE; DOE will only manage these assets as a tenant of the USAF. Exceptions would include parking lots, currently under permit from the Air Force, that are direct;y associated with DOE operations.

6. The entire perimeter must be fenced and placarded as DOE managed property.

7. Utility service to other agencies within the DOE cantonment will be provided to their facility boundary and metered at that point. Services will be on a reimbursable, full cost recovery basis.

8. These reimbursable (recovered) costs are not included in the estimates, only SNL non-recoverable SNL costs are included.

9. The only USAF facilities under immediate consideration for reuse are the Air Force Safety and Inspection center, the BRIG and Confinement Facilities, the Manzano Base Fire Station, and the Fire Station at "F" street and Wyoming.

10. Estimates do not include costs of mothballing (pickling) or Decommissioning, Decontamination, and Demolition of USAF facilities encompassed by the new DOE cantonment.

11. Estimates assume USAF will complete MILCON projects on their current schedule that have been recommended for completion by KAFB.

12. The services are based on a population of approximately 10,000 employees (DOE, SNL, ITRI, Phillips Laboratory, KUMSC, and others) within the cantonment. All services provided to non-SNL facilities will be on a reimbursable, full cost recovery basis. Only non-recoverable SNL costs are included in the estimates.

13. DOE/SNL will not accept responsibility for the Installation Restoration (IR) Sites, Unexploded Ordnance (UXO) or other Kirtland Air Force Base Legacy Wastes. The administrative control and eventual cleanup of these sites will

Document Separator

Frank: Thanks Steve — I found it all but could not pick out the attachments. This is the letter to which these questions/responses pertain. I indexed the Site Survey. The "Point Paper" was included in the package. It ~~looks~~ does look Community. Steve

LIGNMENT COMMISSION
SUITE 1425
)9

ALAN J. DIXON, CHAIRMAN

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MG JOSUE ROBLES, JR., USA (RET)
WENDI LOUISE STEELE

Washington, D.C. 20330-1670

77

Please refer to this number when responding 950412-13

Dear General Blume:

In order to assist the Commission in its review of the DoD's recommendations concerning Kirtland Air Force Base, I am requesting the following:

1. Could you please provide us with copies of all site surveys associated with the proposed Kirtland Air Force Base realignment.

2. Could you please provide us with the following information broken out by officer/enlisted/civilian as appropriate:

a. The total number of DoD authorizations for Kirtland AFB broken out by organization.

b. The total number of DoD authorizations that will be reduced by organization.

c. The total number of DoD authorizations that will be realigned by organization, and to what installation they will be going.

d. The total number of DoD authorizations that will remain at Kirtland AFB by organization.

e. The total number of DoD authorizations that will be converted from military authorizations to civilian ones by organization.

f. The total number of contractors associated with Kirtland AFB.

3. Could you please provide us any updated information for all the costs associated with cantoning the activities that are scheduled to remain after Kirtland Air Force Base is realigned?

4. Does the Air Force own all the property which is currently considered part of Kirtland Air Force Base?

5. Could you please provide us with concept of operations of who will own the property after the base is realigned?

6. If the base is realigned and DOE owns the property now considered Kirtland AFB, has the Air Force calculated the costs for renting the property required to continue the activities that will remain at Kirtland AFB?

7. Has the Air Force calculated the costs associated with cantoning the activities associated with the Defense Nuclear Agency?

8. Could you please tell us how long 58th Special Operations Wing simulator operations will be "down" due to the relocation of the simulator?

9. We understand that the Air Force continues to have meetings with DOE concerning the additional costs to DOE if Kirtland AFB realigns. Could you please provide us with any additional information concerning the realignment of Kirtland AFB as a result of these meetings.

In order to assist the Commission in its review, I would appreciate this information no later than May 8, 1995. Thank you for your assistance in this matter.

Sincerely,

Francis A. Cirillo, Jr.
Air Force Team Leader

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, DC

05 MAY 1995

MEMORANDUM FOR BASE CLOSURE COMMISSION (Mr Frank Cirillo)

FROM: HQ USAF/RT
1670 Air Force Pentagon
Washington, DC 20330-1670

SUBJECT: Response to Your 12 April, 1995 Letter Reference Kirtland AFB Questions

The information at TAB 1 is the Air Force response to your 12 April, 1995 questions on Kirtland AFB. The Kirtland AFB costs are too high and will be reduced through prudent selection of other receiver locations. Additional work is ongoing.

JAY D. BLUME JR, Major General, USAF
Special Assistant to Chief of Staff
for Realignment and Transition

TAB
Commission Questions Answers w/attachments b

Copy to (letter)

FYC, Mark

Where is Atch #2 ek

Steve, FYC WHO's questions are these? OURS? communities? - if the Inter-Cee will need

Steve

I am not sure I have seen the complete package Attach 2-5 ??

Question 1: Could you please provide us with copies of all site surveys associated with the proposed Kirtland Air Force Base realignment?

Answer 1: The copies of the surveys are attachment 1

Question 2: Could you please provide us with the following information broken out by officer/enlisted/civilian as appropriate:

Question 2a:. The total number of DoD authorizations for Kirtland AFB broken out by organization.

.Answer 2a: All personnel numbers are at attachment 2

Question 2b: The total number of DoD authorizations that will be reduced by organizations.

Answer 2b: All personnel numbers are at attachment 2

Question 2c: The total number of DoD authorizations that will be realigned by organizations, and to what installation they will be going.

Answer 2c: All personnel numbers are at attachment 2

Question 2d: The total number of DoD authorizations that will remain at Kirtland AFB by organization

Answer 2d: All personnel numbers are at attachment 2

/

Question 2e: The total number of DoD authorizations that will be converted from military authorizations to civilian ones by organization.

Answer 2e: All personnel numbers are at attachment 2

Question 2f: The total number of contractors associated with Kirtland AFB.

Answer 2f: The numbers of contractor personnel used in the evaluation for Kirtland is done in contract manpower equivalents. Kirtland's contract manpower equivalent is 722.

Question 3: Could you please provide us any updated information for all the costs associated with cantoning the activities that are scheduled to remain after Kirtland Air Force Base is realigned?

Answer 3: Briefing slides containing the latest cantonment information are at attachment 4.

Question 4: Does the Air Force own all the property which is currently considered part of Kirtland Air Force Base?

Answer 4: Property listing is at attachment 5

Question 5: Could you please provide us with concept of operations of who will own the property after the base is realigned?

Answer 5: - Ownership of the retained Kirtland AFB property after realignment is under review. It is expected, due to legal and environmental reasons the property will remain under Air Force ownership.

Question 6: If the base is realigned and DOE owns the property now considered Kirtland AFB, has the Air Force calculated the costs for renting the property required to continue the activities that will remain at Kirtland?

Answer 6: The Air Force would retain any property it uses and not transfer it to DOE, thus no rent would be paid. The Air Force would pay a percentage of the infrastructure maintenance (roads, utilities, etc) if DOE maintained the property.

Question 7: Has the Air Force calculated the costs associated with cantoning the activities associated with the Defense Nuclear Agency?

Answer 7: The Air Force has not considered any costs to canton any additional part of DNA other than what has been proposed by the SECDEF (Radiation Simulator operations). The Air Force is currently evaluating the possibility of keeping DNA at Kirtland and will pass any appropriate information to the commission as it becomes available.

Question 8: Could you please tell us how long 58th Special Operations Wing Simulator operations will be "down" due to the relocation of the simulator?

Answer 8: No formal schedule has been created for the relocation of simulators and to transfer the training. Simulator transfer will be phased to maximize training

availability. In many instances additional temporary aircraft could be added to the unit to meet shortfalls associated with the loss of simulator training if required.

Question 9: We understand that the Air Force continues to have meetings with DOE concerning the additional costs to DOE if Kirtland AFB realigns. Could you please provide us with any additional information concerning the realignment of Kirtland AFB as a result of these meetings?

Answer 9: Copies of the DOE package and letter discussed between the Air Force and DOE is at attachment 6.

I guess this is a community paper??

POINT PAPER

Initial proposal to re-align Kirtland AFB has be

1. One-time cost estimates were underestimate were overestimated by 115%.

2. The wisdom of dispersing the nuclear surety proposed was re-evaluated and rescinded, at Command (others unknown)

3. The wisdom of civilianizing the security for ear storage center proposal was re-evaluated and resci.

4. The proposal for building several cantonments to s e the mission remaining is under revision, new configuration unknown.

5. Proposal to transfer the landlord functions to DOE has been rescinded.

With those rescissions, the number of active duty personnel to stay in place has now grown to approximately 1000 uniforms.

The Air Force is now proposing:

1. To transfer the 58th SOW at any location which can take the mission at less than 150 Mil beddown cost. Operational considerations are evidently no longer important.

2. To transfer the AFOTEC to any location which can accept them at zero MCP.

3. 100 smaller tenants are still going to base X.

4. To keep 1000 military at KAFB without housing, medical care, MWR, or any of the amenities associated with any location not a remote assignment. They will build housing elsewhere, yet displace people from it that is available here.

5. To support the remaining missions under the Phillips Lab command structure. The support structure will now outnumber the Lab assigned people by over half.

The result is:

1. The operational advantages of KAFB to the 58th SOW are being sacrificed to save a minimal sum of money and even that is problematical . The disruption of training in a system whose

simulators are highly integrated is not being calculated. If you take one simulator down, it degrades the whole system. That system will be degraded for up to 18 months. The additional flying hours which will be necessary cannot compensate and will erode the savings.

2. AFOTEC will bed down at a location less desirable than they have now for no savings in cost or increase in utility. The moving costs are investments in the same or less.

3. 1000 Air Force and Army will be cast out on a high cost(and scarce) rental economy with no medical care, MWR, etc.

4. The Air Force appears to be doing all the wrong things for all the wrong reasons, both to operations and to their people.

The time has come for:

1. Air Force senior leadership to realize that the initial proposal was arrived at hastily and was seriously flawed. All subsequent reactions to having this pointed out by the community are causing the consideration of alternatives which are totally bereft of military or management logic.

2. The Air Force to cease this mindless pursuit of the most trivial savings which is causing great hardship on the military members left behind and is taking missions away from their preferred location, which is why they were placed here to begin with, to locations less desirable militarily or otherwise.

3. The Air Force to withdraw this action which is inhibiting the consideration of hosting and consolidating other missions at Kirtland which the Air Force itself had planned before it embarked on this ill-considered venture.

4. The Air Force to admit that the dispersal of the nuclear surety mission, the cantonment(s) idea, the civilianizing the KUMSEC security force were not the only mistakes. The entire idea was a mistake and better to admit it now than have it displayed to the entire nation.

The late Lewis Carroll(Alice in Wonderland) and Kafka have now been surpassed by the Air Force in the inventive pursuit of absurdity.

KIRTLAND AFB

SITE SURVEY

OUTBRIEF

AGENDA

- PURPOSE
- GUIDANCE
- SCHEDULE FOR KIRTLAND AFB BUDGET SUBMISSION
- SCHEDULE FOR SITE SURVEYS AFFECTING KIRTLAND AFB
- MILCON AT KIRTLAND AFB
- ISSUES
- CONCLUSION

PURPOSE

- COLLECT BUDGET QUALITY DATA TO PRESENT TO BASE CLOSURE EXECUTIVE GROUP (BCEG)
- VALIDATE THE COST NECESSARY TO REALIGN KIRTLAND AFB
- AFTER APPROVAL, SUBMIT TO THE 1995 BASE CLOSURE COMMISSION

GUIDANCE

- PHILLIPS LAB WOULD REMAIN IN A CANTONMENT AREA
- AIR NATIONAL GUARD AND AIR FORCE RESERVE WOULD REMAIN IN A CANTONMENT AREA
- KUMSC WOULD REMAIN IN A CANTONMENT AREA
- SELECTED UNITS WOULD REMAIN
- 377 ABW WOULD INACTIVATE
- TENANTS WOULD MOVE OR INACTIVATE
- TOTAL DOD ACTIVE DUTY MILITARY PRESENCE WOULD BE $\leq$ 100

SCHEDULE FOR BUDGET SUBMISSION FOR KIRTLAND AFB

- ON-GOING PROCESS
- CONSOLIDATED BY 377th CARE OFFICE
- COORDINATED THROUGH 377th & PL FM's

- 7 APR 95 - VALIDATED BY AFAA
- 10 APR 95 - BUDGET COMPLETED
- 12 APR 95 - BUDGET TO SMC
- 19 APR 95 - BUDGET TO HQ AFMC
- 26 APR 95 - MILCON BRIEFING TO HQ USAF/CE
- 1 MAY 95 - BRIEFING TO BCEG

SCHEDULE FOR SITE SURVEYS AFFECTING KIRTLAND AFB

- 20-24 MAR 95 - KELLY AFB/LACKLAND AFB
- 22-24 MAR 95 - EGLIN AFB
- 27-30 MAR 95 - NELLIS AFB
- 3-7 APR 95 - HOLLOMAN AFB

MILCON - PHILLIPS LAB

BC - INSTALL ELECTRIC METERS	$230K
BC - INSTALL GAS METERS	$16K
BC - ISOLATE/METER SANITARY SEWER SYSTEM	$2,600K
BC - RENOVATE HEAT PLANT	$430K
BC - ADD TO SECURITY FENCE	$2,200K
BC - CONSOLIDATED SUPPORT FACILITY	$1,400K
BC - ADVANCED WEAPONS LAB	$2,250K
BC - SPACE POWER LAB	$2,300K
BC - ALTER UTILITIES	$1,050K
BC - FACILITY MAINTENANCE OPERATIONS	$4,350K
BC - HIGH POWER MICROWAVE LAB	$1,550K
	$18,376K

MILCON - KUMSC

BC - ADMIN AREA ADDITION	$700K
BC - ADD TO AND ALTER SECURITY FENCE	$1,300K
BC - METER UTILITIES	$10K
BC - RESERVE FIRE TEAM FACILITY	$500K
BC - REMOTE ARMORY	$280K
	$2,790K

POTENTIAL REQUIREMENT

BC - KUMSC SUPPLY WAREHOUSE	$1,700K

(REQUIRED ONLY IF BLDG 1010 BECOMES UNAVAILABLE)

MILCON
AIR NATIONAL GUARD

BC - JET FUEL STORAGE	$1,875K
BC - ADD TO CIVIL ENGINEERING MAINTENANCE FACILITY	$240K
BC - ISOLATE/METER UTILITY SYSTEM	$100K
BC - CONSOLIDATED SUPPORT FACILITY	
BC - CONSTRUCT SECURITY FENCE	
BC - DINING HALL AND RESERVE FORCES GENERAL TRAINING FAC	

DH Should not be required due to closeness & newness of existing

KIRTLAND AFB MILCON

$28,141K

ISSUES

- NUMBER OF ACTIVITY DUTY MILITARY REMAINING AT KIRTLAND AFB
- FIELD COMMAND DEFENSE NUCLEAR AGENCY (FCDNA) REMAINING AT KIRTLAND AFB
- ENVIRONMENTAL PERMITS FOR FCDNA AT KELLY AFB/NELLIS AFB
- COST FOR DOE TO MAINTAIN KIRTLAND AFB
- AIR FORCE RETENTION OF KIRTLAND SOUTH
- GROWTH POTENTIAL FOR KIRTLAND AFB
  - AIR QUALITY

CONCLUSION

- THE REALIGNMENT OF KIRTLAND AFB IS A SIGNIFICANT EMOTIONAL EVENT
- KIRTLAND AFB IS ON SCHEDULE
- LOT OF WORK STILL AHEAD
- PERSONAL "THANK YOU" TO BGEN PEREZ AND STAFF FOR OUTSTANDING SUPPORT

EGLIN AFB

SITE SURVEY OUTBRIEF

AGENDA

- PURPOSE
- GUIDANCE
- SCHEDULE FOR EGLIN AFB BUDGET SUBMISSION

- SCHEDULE FOR KIRTLAND AFB BUDGET SUBMISSION
- SCHEDULE FOR SITE SURVEYS AFFECTING EGLIN AFB
- MILCON AT EGLIN AFB
- CONCLUSION

PURPOSE

- COLLECT BUDGET QUALITY DATA TO PRESENT TO BASE CLOSURE EXECUTIVE GROUP (BCEG)
- ~~VALIDATE THE COST NECESSARY FOR~~ EGLIN AFB
- VALIDATE THE COSTS NECESSARY FOR KIRTLAND AFB
- AFTER APPROVAL, SUBMIT TO THE 1995 BASE CLOSURE COMMISSION

GUIDANCE

- AFOTEC WILL MOVE TO EGLIN AFB FROM KIRTLAND AFB
- 505TH COMMAND CONTROL EVALUATION GROUP (CCEG) WILL MOVE TO HURBURT FIELD FROM KIRTLAND AFB
- THREAT SIMULATORS WILL MOVE TO NELLIS COMPLEX FROM EGLIN AFB

SCHEDULE FOR BUDGET SUBMISSION FOR EGLIN AFB

- ON-GOING PROCESS
- CONSOLIDATED BY AFDTC/XP
- COORDINATED THROUGH AFDTC/DRP

- 7 APR 95 - MILCON VALIDATED BY AFAA
- 10 APR 95 - BUDGET COMPLETED
- 19 APR 95 - BUDGET VALIDATED BY HQ AFMC
- 26 APR 95 - MILCON BRIEFING TO HQ USAF/CE
- 1 MAY 95 - BRIEFING TO BCEG

SCHEDULE FOR BUDGET SUBMISSION FOR KIRTLAND AFB

- ON-GOING PROCESS
- CONSOLIDATED BY 377th CARE OFFICE
- ~~COORDINATED THROUGH 377th & PL FM's~~

- 7 APR 95 - MILCON VALIDATED BY AFAA
- 10 APR 95 - BUDGET COMPLETED
- 12 APR 95 - BUDGET TO SMC
- 19 APR 95 - BUDGET TO HQ AFMC
- 26 APR 95 - MILCON BRIEFING TO HQ USAF/CE
- 1 MAY 95 - BRIEFING TO BCEG

SCHEDULE FOR SITE SURVEYS AFFECTING EGLIN AFB

- 27-30 MAR 95 - NELLIS AFB
- ~~29 MAR 95 - BUFFALO, NY~~
- 5 APR 95 - FT WORTH, TX

MILCON - AFOTEC

- THREE PART PROCESS
  - PART 1 - AREAS IN AGREEMENT
  - PART 2 - AREAS REQUIRING ADDITIONAL RESEARCH
  - PART 3 - AREAS REQUIRING COMMANDER INVOLVEMENT
- PAPERWORK WILL BE ATTACHED TO DD 1391 IDENTIFYING AREAS WHERE REQUIREMENTS ARE NOT YET VALIDATED
  - ACTIONS ITEMS, POCs, AND SUSPENSES WILL BE IDENTIFIED
  - ALL SUSPENCES CLOSED BY 31 MAR 95
- PROPOSED COST OF MILCON - $20.177M
- TOTAL SQ FT - 132,000
- ADDITIONAL BRAC COMM REQUIREMENTS - $972K

PART 2

- POTENTIAL SHARED CAPABILITIES
  - QUALITY IMPROVEMENT TRAINING
  - OT&E AND COMPUTER TRAINING
  - WAREHOUSE
  - HQ PRESENTATION CENTER
  - AUDIO VISUAL SUPPORT
  - GRAPHICS SUPPORT
  - TS/SAR VTC
- 162 SQ FT PER PERSON VS 134 SQ FT PER PERSON
- ACC COMMITMENT TO SUPPORT 31 TES FUNCTION
- SCIF/SAR SPACE
- CONSOLIDATING DET 2, AFOTEC WITH HQ AFOTEC
- EGLIN'S CAPABILITY TO MEET ELECTRICAL POWER DEMANDS

MILCON - 505 CCEG

- HURLBURT FIELD
  - SCOPE ($6.9M)
    - ~~39,600 SQ ST~~
    - 139 PERSONNEL

MILCON
ELECTRONIC WARFARE

- **ESTIMATED COSTS - $4M**
- **~~COSTS VALIDATED DURING FUTURE SITE~~ SURVEY**

EGLIN AFB MILCON

$28.1M - ON-BASE

CONCLUSION

- BRAC IS A SIGNIFICANT EMOTIONAL EVENT
- EGLIN AFB IS ON SCHEDULE

- LOT OF WORK STILL AHEAD
- PERSONAL "THANK YOU" TO MGEN CRANSTON AND STAFF FOR OUTSTANDING SUPPORT

UNCLASSIFIED

HEADQUARTERS AIR COMBAT COMMAND

DIRECTOR OF PLANS & PROGRAMS

BRAC 95
FIELD COMMAND
DEFENSE NUCLEAR AGENCY

NELLIS AFB, NEVADA

27-30 MAR 95

HQ ACC/XPPB

UNCLASSIFIED

30

TABLE OF CONTENTS

		PAGE
TABLE OF CONTENTS		2
INTRODUCTION		3
EXECUTIVE SUMMARY		4
PERSONNEL ROSTER		6
I.	OPERATIONS	8
II.	COMMUNICATIONS	21
III.	FACILITIES	25
IV.	ENVIRONMENTAL	38
V.	EXPLOSIVE ORDNANCE DISPOSAL (EOD)	40
VI.	LOGISTICS	43
VII.	ELECTROMAGNETIC TEST ENVIRONMENT (EMTE)	49
VIII.	APPENDIX A	50
IX.	APPENDIX B	64
X.	DISTRIBUTION	72

31

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USAF AWC/CS 203 West D Avenue Rm 600 Eglin AFB FL 32542-6867	1
USAF WTC/CC/CS 4370 North Washington Blvd Ste 117 Nellis AFB NV 89191-7076	2
USAF WTC/XP 4370 North Washington Blvd, Ste 220 Nellis AFB, NV 89191-7076	5
Defense Nuclear Agency 6801 Telegraph Rd Alexandria, VA 22310	1
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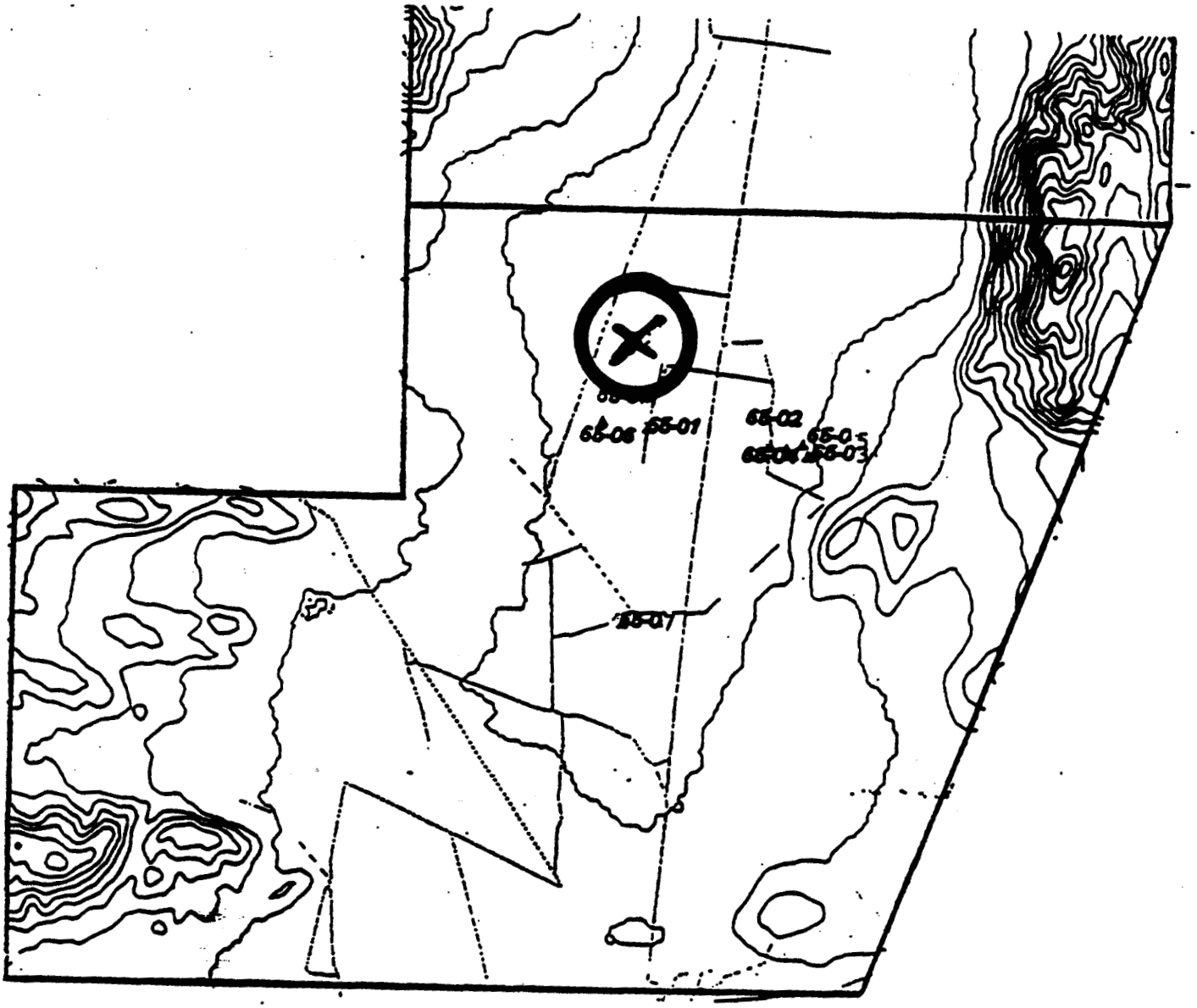

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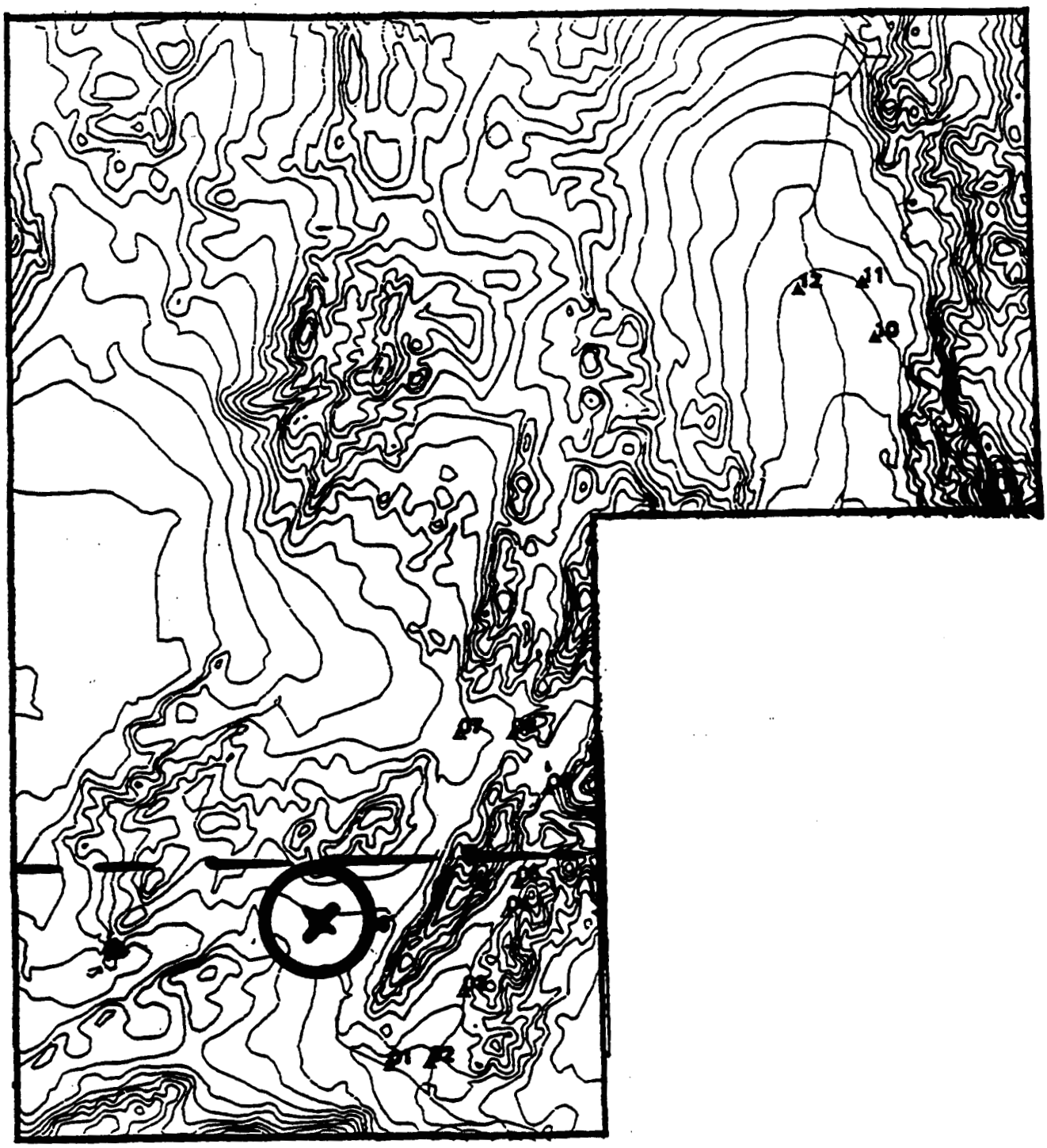

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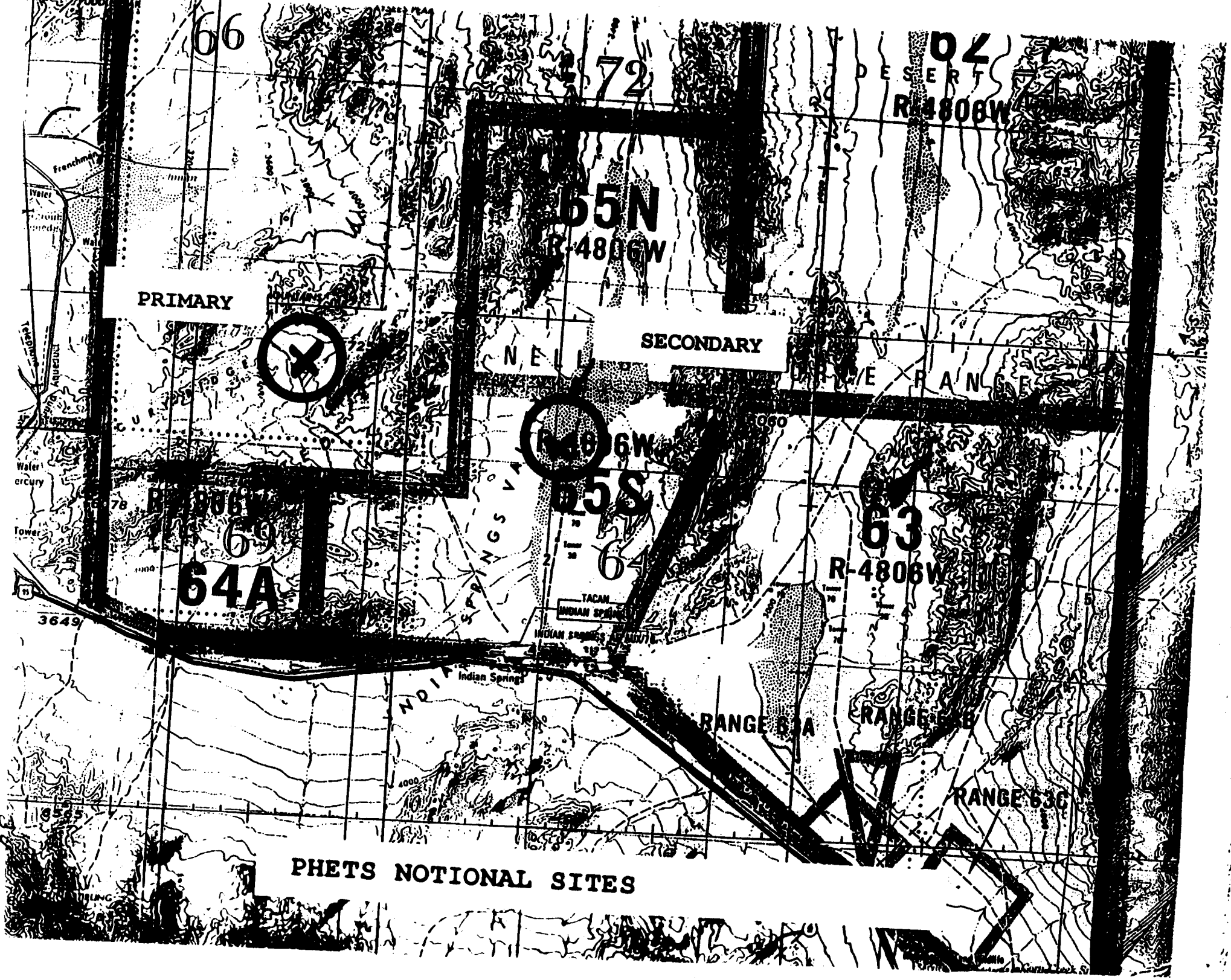
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RANGE 63C
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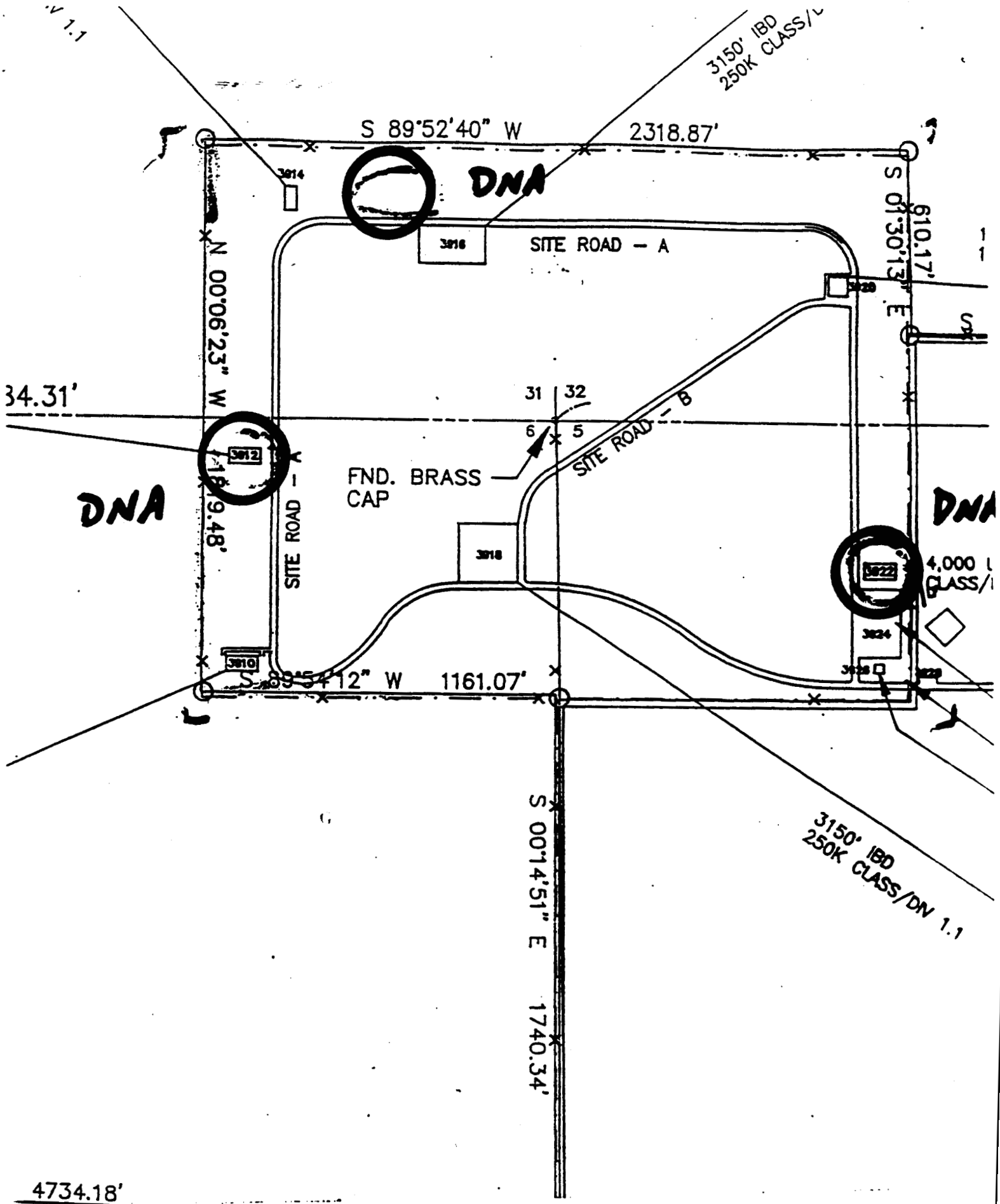
PHETS NOTIONAL SITES



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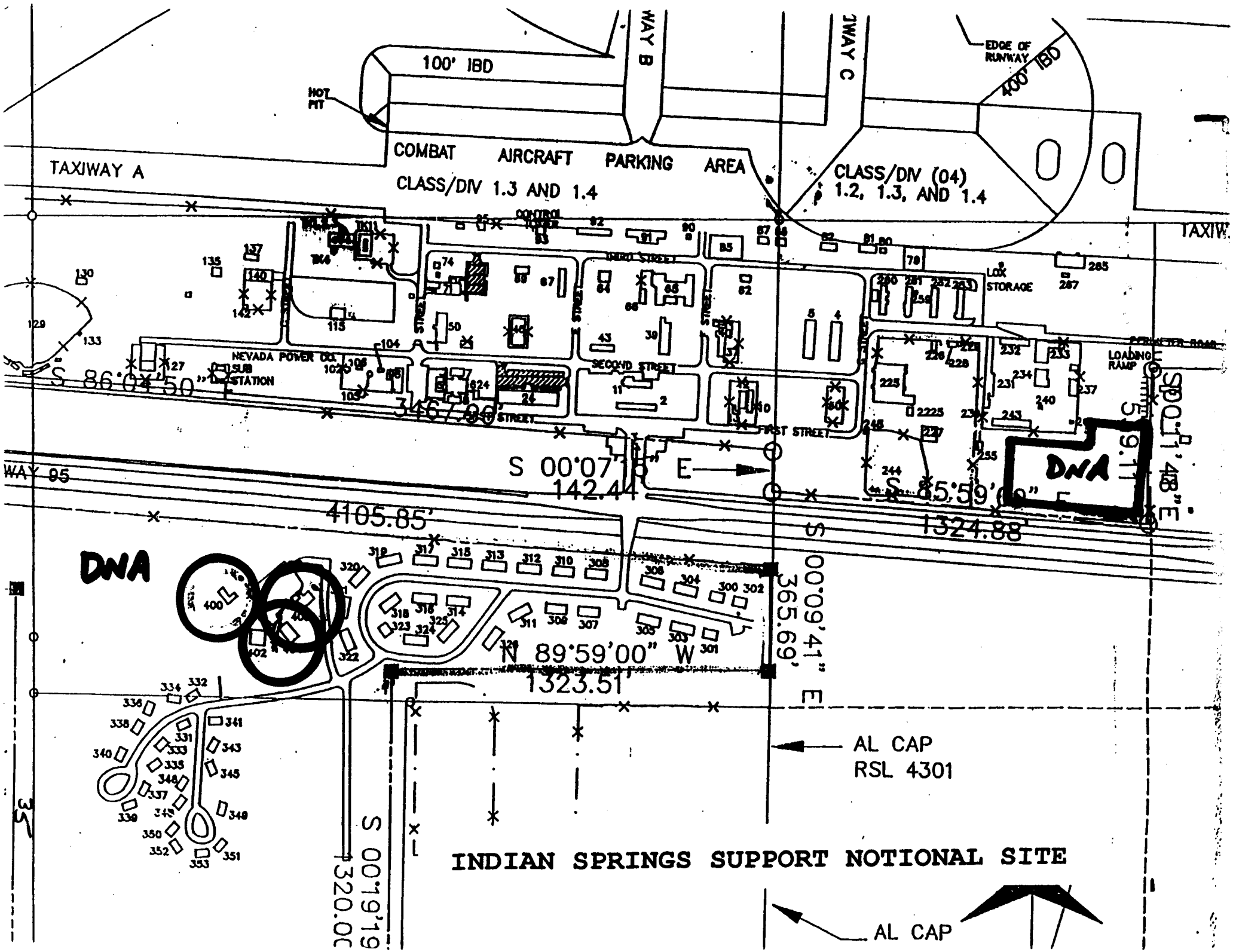
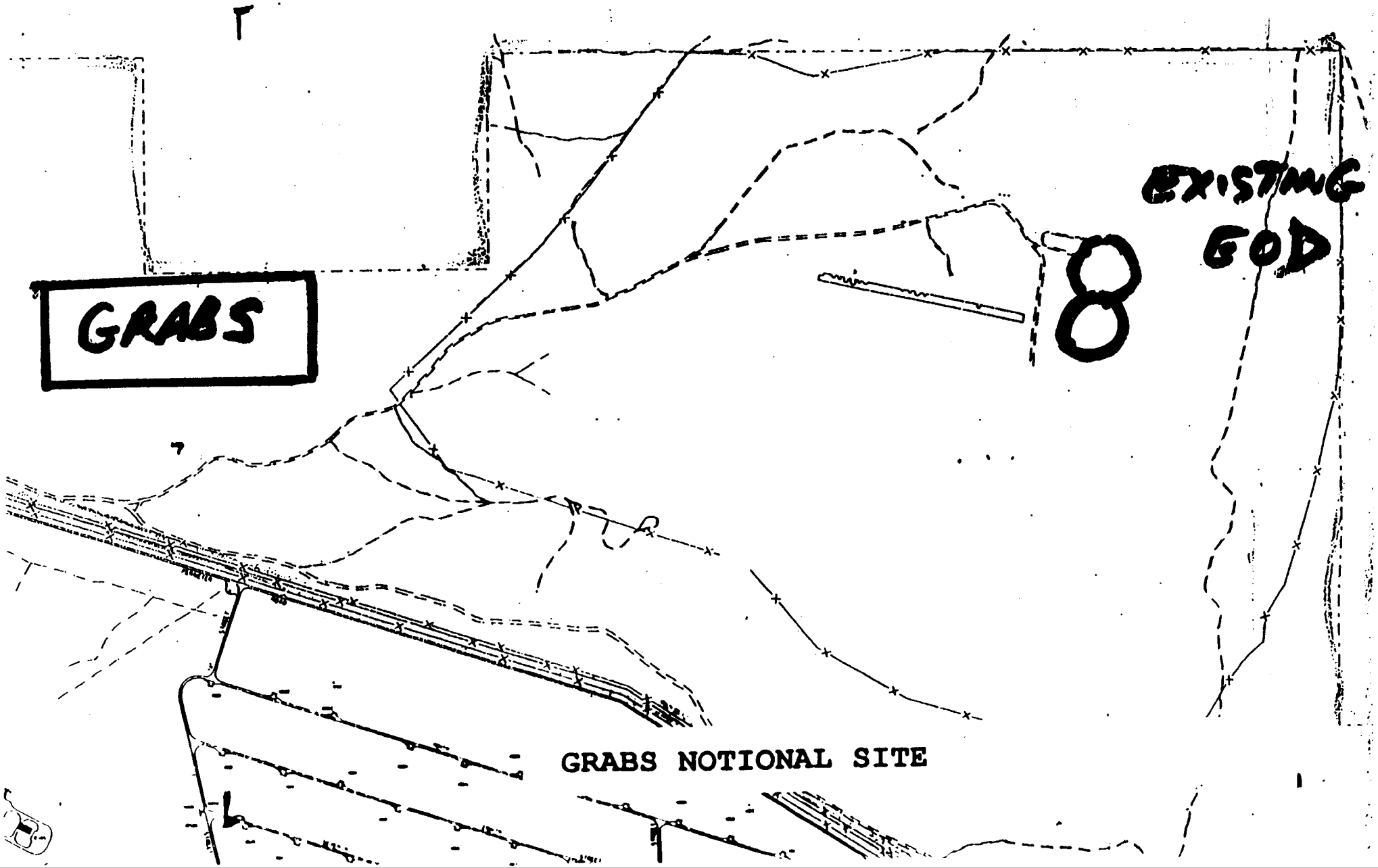
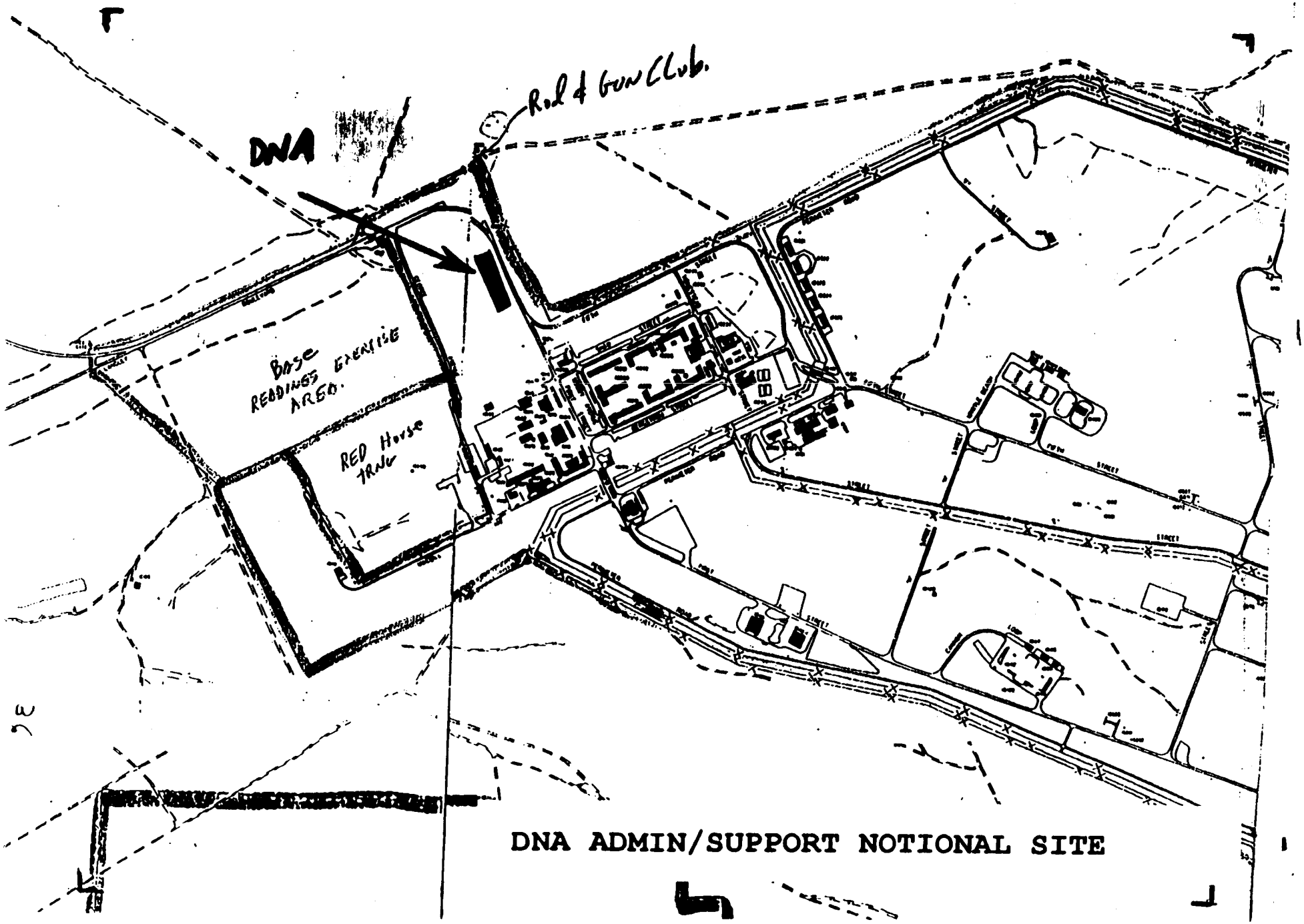

100' IBD
HOT PIT
COMBAT AIRCRAFT PARKING AREA
CLASS/DIV 1.3 AND 1.4
TAXIWAY A
WAY B
WAY C
EDGE OF RUNWAY
400' IBD
CLASS/DIV (04)
1.2, 1.3, AND 1.4
TAXIW
CONTROL TOWER
THIRD STREET
SECOND STREET
FIRST STREET
STREET
LOX STORAGE
LOADING RAMP
NEVADA POWER CO. SUB STATION
S 86°04'50"
346.96'
S 00°07'15" E
142.44'
4105.85'
S 85°59'00"
1324.88'
S 00°09'41" E
365.69'
N 89°59'00" W
1323.51'
S 00°19'19
1320.00
DNA
DNA
AL CAP
RSL 4301
AL CAP
INDIAN SPRINGS SUPPORT NOTIONAL SITE


GRABS
8
EXISTING
GOD
GRABS NOTIONAL SITE



DNA ADMIN/SUPPORT NOTIONAL SITE

APPENDIX B

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B35w) RECORDS AND FORMS FLIGHT MANAGEMENT	1. Complete air crew resource management data system for all standard functions as prescribed in AFI 11-401, *Flight Management* and AFI 11-210, *Instrument Refresher Course.*	
(B35x) SEARCH AND RESCUE	1. Make provisions to include aircraft, surface craft, submarines, specialized rescue teams, and equipment to search for and rescue personnel in distress on land or at sea.	
(B35y) SHIPS AND VESSELS	1. Make provisions to include the supply, maintenance, and repair of ships and vessels, including when applicable the armament, electronics, communications, and any other equipment that are an integral part of the ships and vessels.	
(B35z) SUGGESTION PROGRAM	1. Provide assistance as necessary and complies with host directive and budgets for cash awards.	
(B35aa) SYNTHETIC TRAINER	1. Make provisions to include installing, maintaining and where appropriate, operates synthetic trainers, except air crew training devices.	
(B35ab) TEST AND EVALUATION	1. Provide testing items of material, systems, or techniques under a simulated or actual operational conditions to determine whether the specific military requirements or characteristics are satisfied.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B35l) GEODETIC SUPPORT	1. Provide for aeronautical charts, maps, flight information publications, and associated air navigation materials used in planning and conducting of air and ground operations.	
(B35m) INTELLIGENCE COLLECTION	1. Provide intelligence support and related facilities.	
(B35n) LIFE SUPPORT EQUIPMENT	1. Provide the supply, maintenance, and repair of any equipment, either mechanical or manual, or substance, designed to keep individuals alive.	
(B35o) LOGISTICS AIR SUPPORT	1. Provide support by air landing or air drop including air supply, movement of personnel, evacuation of casualties and prisoners of war, and recovery of designated resources.	
(B35p) MAINTENANCE CONTROL	1. Provide maintenance control and material control services.	
(B35q) MISSILES	1. Provide the supply maintenance, and repair of missile systems and associated equipment. Includes mechanical, electronic, and communication equipment which is an integral part of a missile system.	
(B35r) MISSILES EQUIPMENT AND COMPONENTS	1. Provide the supply, maintenance, and repair of missile equipment and components when they are not an integral part of the missile system.	
(B35s) OFF-EQUIPMENT	1. Provide on-equipment maintenance support, ensures proper recovery equipment and plan is available.	
(B35t) SURVIVAL EQUIPMENT MAINTENANCE	1. Provide maintenance and repair of survival equipment (including parachutes, flight clothing, flotation equipment, survival kits, etc.).	
(B35u) PRECISION MEASUREMENT EQUIPMENT LABORATORY (PMEL)	1. Provide precision measurement laboratory support.	
(B35v) QUALITY ASSURANCE	1. Provide quality assurance, inspection, and related support.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B35d) AIRFIELD BASE OPERATIONS	1. Manage airfield support activities and facilities. Provide service for preflight planning and flight plan processing.	
(B35e) AMMUNITION	1. Provide for the supply, maintenance, and repair of devices charged with explosives, propellants, pyrotechnics, initiating composition of nuclear, biological, or chemical material for use in connection with defense or offense including demolitions, ceremonial, or non-operational purposes.	
(B35f) AVIONICS MAINTENANCE	1. Provide off-equipment maintenance of avionics equipment and components. On-equipment maintenance of avionics equipment and systems when size or mission of the RECEIVER does not warrant such capability within the tenant unit.	
(B35g) BASE PLANS	1. When a base plans function is identified and authorized, develops and monitors the application of base-level operations and contingency plans not specifically assigned by directive to other functional areas. Provides personnel for on-base emergency contingencies where the RECEIVER does not have a capability.	
(B35h) CLOTHING AND TEXTILE	1. Provide for the supply, maintenance, and repair of organizational clothing, equipment footwear, and other material suitable for wearing.	
(B35i) CONSOLIDATED COMMAND POST	1. Provide command and control facilities and services for RECEIVER units. SUPPLIER is responsible for command post consolidation and coordination of operations.	
(B35j) ELECTRICAL EQUIPMENT AND COMPONENTS	1. Provide for the supply, maintenance, and repair of general or special purpose electrical equipment and their components.	
(B35k) FLIGHT OPERATIONS	1. Manage support aircraft resources as stated in AFR 60-1 and operates a centralized air crew life support equipment and their components.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B29) REFUSE COLLECTION AND DISPOSAL	1. Provide collection and disposal of trash and waste materials, to include operation of incinerators and other facilities and equipment intended for the transportation, disposal, or destruction of waste materials.	
(B30) RESOURCE MANAGEMENT	1. Provide funds management, cost analysis services, and formulation, reporting and execution of operating budgets. Provide reports of survey actions.	
(B31) TRAINING SERVICES	1. Provide instructions and use of target ranges, simulators and other training facilities.	
(B32) TRANSPORTATION SERVICES	1. Provide travel office services, and other transportation services related to both commercial and government owned transportation of personnel and materiel, to include shipment planning, packing and crating, port clearance, scheduling, processing of transportation documents, and provision of related transportation services for both personnel and personal property.	
(B33) UTILITIES	1. Provide for procurement, production and distribution of utilities, heating, and air conditioning. Also provide energy consumption and conservation programs.	
(B34) WEATHER SERVICES	1. Advise and provide timely notification of weather conditions that may affect planned activities.	
(B35) OTHER SUPPORT	1. Provide services as outlined below.	
(B35a) AERIAL PHOTOGRAPHY	1. Provide photographs taken from the air.	
(B35b) AERIAL PORT OPERATIONS	1. Manage and operate the military air terminal facility and provides air terminal services. Provide custom, drug, anti smuggling inspection, and examination of aircraft, and passengers.	
(B35c) AIRCRAFT MAINTENANCE	1. Provide all aspects of aircraft maintenance (e.g., corrosion control, machine, AGE, NDI, repair and reclamation, structural repair, etc.) not previously addressed.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B19) HOUSING AND LODGING SERVICES	1. Provide accommodations and housing referral services for authorized personnel. Also provide transient accommodations.	
(B20) INFORMATION SERVICES	1. Provide technical and legal libraries and services that provide limited reference information for specific purposes.	
(B21) INSTALLATION RETAIL SUPPLY AND STORAGE OPERATIONS	1. Provide storage and distribution of commodities, materials, equipment and fuels, to include all operations from receipt of material and equipment into storage to issue and shipment of items from storage.	
(B22) LAUNDRY AND DRY CLEANING	1. Provide cleaning, storage, and delivery.	
(B23) LEGAL SERVICES	1. Provide advice and services on all legal matters pertaining to legal assistance, military justice, initial claims processing, line-of-duty investigation reports, property utilization, and personnel matters such as conflicts of interest, standards of conduct, and grievance hearings/reviews.	
(B24) MILITARY PERSONNEL SUPPORT	1. Provide passport, forces stamp, social security, and other personal affairs services for military personnel, to include processing of identification cards, testing of individuals, casualty assistance reporting, relocation assistance, and transient assistance.	
(B25) MOBILIZATION SUPPORT	1. Provide planning, provisioning and support for mobilization of reserve and guard forces.	
(B26) MORTUARY SERVICES	1. Provide, CONUS, port, and overseas mortuary services.	
(B27) PRINTING AND REPRODUCTION	1. Provide the operation of centralized printing and duplication services.	
(B28) PURCHASING AND CONTRACTING SERVICES	1. Provide acquisition and contract administration services for procurement of property, equipment, services, and supplies.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B9) CUSTODIAL SERVICES	1. Provide janitorial and cleaning services for offices, common use areas, shops, and storage areas.	
(B10) EDUCATION SERVICES	1. Provide instruction, counseling, and testing.	
(B11) ENGINEERING SUPPORT	1. Provide planning, design and programming functions necessary to the construction, fabrication, and repair of facilities and equipment.	
(B12) EQUIPMENT OPERATION, MAINTENANCE, AND REPAIR	1. Provide motor pool operations, maintenance and repair services, to include maintenance and repair of industrial equipment, electronic equipment, and office equipment.	
(B13) EXPLOSIVE ORDNANCE	1. Provide services and facilities for explosive ordnance storage, disposal and training.	
(B14) FACILITIES AND REAL PROPERTY SUPPORT	1. Provide facilities and real property, to include construction of new facilities and structures, addition to existing facilities, and alterations that change the use of existing facilities.	
(B15) FACILITY MAINTENANCE AND REPAIR	1. Provide maintenance and repair of real property, installed equipment, structures, roads, grounds, railroads and surfaced areas. Includes entomology and pest control.	
(B16) FINANCE AND ACCOUNTING	1. Provide expense, reimbursement, working fund, payroll and leave accounting, to include disbursing, voucher and invoice examination, financial reporting, and the development of accounting systems.	
(B17) FOOD SERVICES	1. Provide preparation and serving of food to authorized personnel, and the operation of dining facilities.	
(B18) HEALTH SERVICES	1. Provide outpatient testing, treatment, rehabilitation, and associated professional services and medical support; may also include inpatient services. Also provide environmental health inspections, quality assurance services, and veterinarian services.	

SPECIFIC PROVISIONS(Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(A10) SAFETY	1. Operate safety programs, educational support, and promotional efforts.	
(A11) SHUTTLE SERVICES	1. Operate common use taxies, vans and bus transportation services.	
(B1) ADMINISTRATIVE SERVICES	1. Provide records management, personnel locator, document control and handling, forms and publications, copying services, Armed Forces Courier Service Support, and maintenance of official publications reference libraries. Also includes mail sorting, routing, and delivery services not provided by the United States Postal Service.	
(B2) AUDIO/VISUAL SERVICES	1. Provide still photography, graphics, presentation services, films, microfilms, micrographic services, video tapes, and other visual media information services.	
(B3) AUTOMATED DATA PROCESSING/AUTOMATION SERVICES	1. Provide data processing services and systems analysis design, development, execution, and life cycle maintenance.	
(B4) CIVILIAN PERSONNEL SERVICES	1. Provide employment, placement, classification, employee management, labor relations, employee development, and equal employment opportunity services related to civilians and local nationals.	
(B5) CLUBS	1. Provide officer, enlisted, all hands, aero, community, and other recreational clubs. Also includes golf courses, bowling alleys, campgrounds, marinas, and related services.	
(B6) COMMUNICATION SERVICES	1. Provide base communications facilities, telephone equipment and services. May also include leasing of communication equipment, lines, and special communications-electronics equipment services.	
(B7) COMMUNITY SUPPORT SERVICES	1. Provide child development and care programs, youth services, family support center activities, hobby shops, and craft centers.	
(B8) CONFINEMENT AND DETENTION CENTERS	1. Provide personnel confinement and detention services.	

40

SPECIFIC PROVISIONS

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(A1) CHAPEL AND CHAPLAIN SERVICES	1. Provide pastoral ministry, worship services, religious pastoral rites, pastoral visits, spiritual counseling and religious education.	
(A2) COMMAND ELEMENT	1. Provide command activities necessary to the accomplishment of mandatory reimbursable support services. Also includes installation wide public affairs services and social-action counseling services.	
(A3) COMMON USE FACILITY OPERATIONS, MAINTENANCE, REPAIR AND CONSTRUCTION	1. Provide operation, maintenance, repair and minor construction or alteration of common use infrastructure, roads, ground, surfaced areas, structures, real property and installed equipment. Also includes common benefit signs, energy consumption, snow removal and beautification projects.	
(A4) DISASTER PREPAREDNESS	1. Operate disaster preparedness programs and related services, equipment, and facility support for emergencies and wartime operations.	
(A5) ENVIRONMENTAL COMPLIANCE	1. Provide administration of programs for the control and disposal of hazardous materials and other forms of pollution. Also includes recycling and resource recovery programs. 2. Provide administrative and legal response to federal, state or local regulatory agencies notices of violations of environmental laws and regulations arising out of RECEIVER's activities conducted under this agreement.	
(A6) FIRE PROTECTION	1. Provide fire fighting, protection, and prevention programs.	
(A7) LIBRARIES	1. Provide recreational and general reference library service.	
(A8) MORALE AND FITNESS SUPPORT	1. Provide theaters, parks, recreational centers, gyms, fitness centers, athletic fields, and related services.	
(A9) POLICE SERVICES	1. Provide guards, security protection, maintenance of law and order, and crime prevention measures.	

DISTRIBUTION

OFF BASE

HQ ACC LGXCA
130 DOUGLAS ST STE C-117
LANGLEY AFB, VA 23665-2791

DEFENSE NUCLEAR AGENCY
P.O. BOX 98539
LAS VEGAS, NV 89193

ON BASE

554 SG/SGAM
554 CPTS/FMA
554 MSS/MSIX
554 SVS/SVXM
554 SPS/SPPX
554 SUPS/LGSPP
554 TRNS/LGTR
554 TRNS/LGTL
554 MSS/MSM-1
WTC/JA
WTC/MO
DAO-DE/NEFS

SPECIFIC PROVISIONS (Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B26) MORTUARY	1. Arrange for handling and disposition of bodies of deceased Armed Forces personnel in accordance with current directives and when requested by Commander, FCDNA, or his designated representative.	1. Provide the Commander, Nellis AFB, with handling and disposition instructions for deceased personnel.
(B31) TRAINING SERVICES	1. Provide range facilities, instructors, weapons and ammunition as needed for required small arms training and weapons qualification.	1. Request small arms training support in writing from the Commander, 554 GCTF, at least 30 days prior to desired training dates(s).
(B32) TRANSPORTATION SERVICES	1. Provide inbound and outbound household goods and hold baggage type service and support for Armed Forces personnel assigned to FCDNA.	1. Provide the necessary information as required.

SPECIFIC PROVISIONS (Cont.)

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(B19)HOUSING AND LODGING SERVICES (Cont.)	2. Provide family housing for Armed Forces personnel assigned to FCDNA activities on an equal basis with those assigned to the supplying activity.	2. Provide personnel housing information as required.
(B21) INSTALLATION RETAIL SUPPLY	1. Provide common, generally expendable material or equipment.	1. Request supplies IAW Nellis AFB directives.
	2. Provide POL for FCDNA-owned and/or FCDNA assigned vehicles.	2. Acquire POL products IAW Nellis AFB directives.
(B23) LEGAL SERVICES	1. Render legal assistance to military personnel and their dependents assigned to FCDNA.	1. General, Special, and Summary Courts Martial jurisdiction and Article 15, UCMJ authority over FCDNA personnel assigned to NTS will be retained by Commander, FCDNA.
	2. Provide Claims Service.	2. Provide the required information IAW legal's directives and procedures.
(B24) MILITARY PERSONNEL SUPPORT	1. Provide the following Mission Support Services for Air Force personnel assigned to the Nevada Test Site: Forward all rosters requiring verification by the Commander directly to NTS. Nellis MPF will furnish information of all retirement applications to Field Commmand, DNA.	1. Furnish required information for the preparation of initial Data Change Worksheets and AF Forms 2096 and 2098 to Nellis Mission Support Squadron. All applicables for release from active duty, reassignment or extension/curtailment will be processed by NTS directly to Field Command, DNA; FCDNA will furnish all other personnel information as required.
	2. Process and issue Armed Forces Identification Cards for Air Force Personnel as outlined in AFR 30-20 and for Army and Navy personnel as requested by the Chief, Test Construction Division.	2. Complete and verify applications for issuances of Armed Forces Identification Cards for Army and Navy personnel assigned to NTS. Verification will be made by the Chief, Test Construction Division.
	3. Process and issue Uniformed Services Identification and Privilege Cards for dependents of Air Force personnel as outlined in AFR 30-20 and for dependents of Army and Navy personnel as requested by the Chief. Test Construction Division.	3. Complete and verify application Cards for Army and Navy personnel assigned to NTS. Verification will be made by the Chief, Test Construction Division.
	4. The MPF will provide the same outbound assignment relocation processing service to AF personnel stationed at NTS that is afforded to the SUPPLIER at Nellis AFB.	4. Notify SUPPLIER when support is required.

SPECIFIC PROVISIONS

CATEGORY OF SUPPORT	SUPPLIER WILL:	RECEIVER WILL:
(A8) MORALE AND FITNESS SUPPORT	1. Provide athletic, recreation, morale and welfare services to Armed Forces personnel assigned to FCDNA on an equal basis with those assigned to the SUPPLIER's activity.	1. Comply with all applicable SUPPLIER directives.
(A9) POLICE SERVICES	1. Provide security for classified shipments routed to NAFB for loading or off-loading during the period the shipment is on Nellis AFB, Nevada.	1. Provide normal base security and provide security guards for classified shipments during the periods the shipment is enroute to or from Nellis AFB.
(B1) ADMINISTRATIVE SERVICES	1. Furnish distribution of such Air Force Publications forms as may be pertinent.	1. Keep the supply activity advised as to required publications and blank forms, and comply with applicable Air Force and NAFB administrative directives.
	2. Provide duplicating services as defined in AFR 6-1 on a mutual support basis as required to supplement existing capabilities.	2. Comply with all applicable SUPPLIER directives.
(B7) COMMUNITY SUPPORT	1. Provide site exchange activity at Camp Mercury through the Army and Air Force Exchange Service.	1. Provide space, utilities, and sales for the exchange activity at Camp Mercury.
	2. Provide Red Cross assistance to Armed Forces personnel as authorized in current regulations and as requested by the Field Command Test Directorate.	2. Request support.
(B16) FINANCE AND ACCOUNTING	1. Provide finance services for Armed Forces and civilian personnel assigned or attached to Field Command, DNA as required.	1. Provide required information on personnel assigned to FCDNA as required by the SUPPLIER.
(B18) HEALTH SERVICES	1. Provide medical and dental care for active duty and dependent military personnel. Care provided to dependent personnel will be limited to capabilities of USAF Hospital as determined by the Hospital Commander. Upon request, obtain bacteriological and chemical analysis of dairy products.	1. Follow procedures set forth by SUPPLIER.
(B19) HOUSING AND LODGING SERVICES	1. Provide enlisted billeting space as required for FCDNA personnel. Military unit integrity will be maintained.	1. Provide personnel billeting information as required.

11. GENERAL PROVISIONS *(Complete blank spaces and add additional general provisions as appropriate: e.g., exceptions to printed provisions, additional parties to this agreement, billing and reimbursement instructions.)*

a. The receiving components will provide the supplying component projections of requested support. *(Significant changes in the receiving component's support requirements should be submitted to the supplying component in a manner that will permit timely modification of resource requirements.)*

b. It is the responsibility of the supplying component to bring any required or requested change in support to the attention of FCDNA Attn: FCRPI, 1680 Texas St SE, Kirkland AFB, NM 87117-5669 prior to changing or cancelling support.

c. The component providing reimbursable support in this agreement will submit statements of costs to: FCDNA Attn: FCRPI, 1680 Texas St SE, Kirkland AFB, NM 87117-5669.

d. All rates expressing the unit cost of services provided in this agreement are based on current rates which may be subject to change for uncontrollable reasons, such as legislation, DoD directives, and commercial utility rate increases. The receiver will be notified immediately of such rate changes that must be passed through to the support receivers.

e. This agreement may be cancelled at any time by mutual consent of the parties concerned. This agreement may also be cancelled by either party upon giving at least 180 days written notice to the other party.

f. In case of mobilization or other emergency, this agreement will remain in force only within supplier's capabilities.

g. The Test Construction Division, Test Directorate is a tri-service unit of the Field Command, DNA located at the Department of Energy's Nevada Test Site, Mercury, NV. They provide engineering, logistical, and administrative support for Field Command, Defense Nuclear Agency and FCDNA sponsored agencies in on-site weapons effect tests and off-site weapons effects as directed.

h. This agreement will terminate NLT Jan 2005 unless otherwise extended

i. This agreement will remain in effect during wartime.

j. This agreement may be modified by mutual consent of both parties.

k. An annual budget review will be conducted to revise reimbursable costs as necessary.

l. All direct and indirect incremental costs for provided support are reimbursable to the Supplying Activity. all reimbursement costs identified in Atch 1 of this agreement are estimates only.

ADDITIONAL GENERAL PROVISIONS ATTACHED: [ ] YES [X] NO

12. SPECIFIC PROVISIONS *(As appropriate: e.g., location and size of occupied facilities, unique supplier and receiver responsibilities, conditions, requirements, quality standards, and criteria for measurement/reimbursement of unique requirements.)*

The DNA consists of 2 officers, 7 enlisted, and 11 civilians.

Attachments:
1. Funding Annex
2. Specific Provisions
3. Manpower Annex
4. Distribution

ADDITIONAL SPECIFIC PROVISIONS ATTACHED: [X] YES [ ] NO

SUPPORT AGREEMENT

1. AGREEMENT NUMBER (Provided by Supplier)	2. SUPERSEDED AGREE. NO. (If this replaces another agreement)	3. EFFECTIVE DATE (YYMMDD)	4. EXPIRATION DATE (May be "Indefinite")
	FB4852-87268-002		INDEFINITE

5. SUPPLYING ACTIVITY	6. RECEIVING ACTIVITY
a. NAME AND ADDRESS USAF Weapons and Tactics Center 554 TRNS/LGTL 6255 Depot Road Nellis AFB Nevada 89191-7224	a. NAME AND ADDRESS Field Command Defense Nuclear Agency (FCDNA) ATTN: FCRPI 1680 Texas St SE Kirkland AFB New Mexico 87117-5669
b. MAJOR COMMAND Air Combat Command (ACC)	b. MAJOR COMMAND HD1102

7. SUPPORT PROVIDED BY SUPPLIER

a. SUPPORT (Specify what, when, where, and how much)	b. BASIS FOR REIMBURSEMENT	c. ESTIMATED REIMBURSEMENT
Mandatory Support Categories: (See Attachment 1) Optional Support Categories: (See Attachment 1) Total Estimated Reimbursement:		

ADDITIONAL SUPPORT REQUIREMENTS ATTACHED: [X] YES [ ] NO

8. SUPPLYING COMPONENT		9. RECEIVING COMPONENT	
a. COMPTROLLER SIGNATURE CHARLES F. LATZKE, COl, USAF	b. DATE SIGNED	a. COMPTROLLER SIGNATURE	b. DATE SIGNED
c. APPROVING AUTHORITY		c. APPROVING AUTHORITY	
(1) Typed Name CARROL H. CHANDLER		(1) Typed Name	
(2) Organization Colonel, USAF Commander, 554 Support Group	(3) Telephone Number	(2) Organization	(3) Telephone Number
(4) Signature	(5) Date Signed	(4) Signature	(5) Date Signed

10. TERMINATION *(Complete only when agreement is terminated prior to scheduled expiration date.)*

a. APPROVING AUTHORITY SIGNATURE	b. DATE SIGNED	c. APPROVING AUTHORITY SIGNATURE	b. DATE SIGNED

APPENDIX A

44

VII. ELECTROMAGNETIC TEST ENVIRONMENT (EMTE)

WORKING GROUP CHAIRPERSON: Col Wesley J. Heidenreich, 412 TW/EW, DSN 525-7610

BASE POC: Lt Col Wallace, WTC/RANS, DSN 682-3600

ANALYSIS:

EMTE was directed to move from Eglin AFB to the Nellis Range complex and Western Ranges under the SECDEF's recommendation to the Defense Base Closure and Realignment Commission. The impact EMTE customer TDY has on Nellis AFB proper has been assessed to be significant however MILCON expenditure is not required at this time.

II. EQUIPMENT TEAR-DOWN AND REINSTALLATION

A. GRABS - 20 ft dia	$5,050,000
2 ft dia	180,000
7 in dia	130,000
B. Instrumentation - 38 truckloads	190,000
C. PHETS (ANFO Plant, concrete plant, etc)	17,000,000
SUB TOTAL:	22,550,000

III. CIVILIAN PERSONNEL PCS COSTS

50 people @ $40,000	2,000,000
SUB TOTAL III	$ 2,000,000
TOTAL	$24,650,000

45

MATERIAL, EQUIPMENT AND PERSONNEL RELOCATION TO NELLIS AFB

I. OFFICE MATERIALS AND EQUIPMENT WEIGHT

A. Books, Files, etc 250 people x 400 lbs/person	100,000 lbs
B. Computer Equipment 140 stations x 100 lbs/station	14,000 lbs
C. Systems Furniture 36 stations x 800 lbs/station	28,800 lbs
D. Office Furniture 85 stations x 600 lbs/station	51,000 lbs
E. Conference Room Furniture	10,000 lbs
F. Safes and File Cabinets Safes 24 @ 1000 lbs ea Cabinets 500 @ 300 lbs ea	 24,000 lbs 150,000 lbs
G. Tech Library 165 cartons @ 50 lbs ea	8,250 lbs
	386,050 lbs

386,050 divided by 20,000 lbs/truck = 19.3 truck loads @ $5,000 per truck load = $100,000

Subtotal I $100,000

Attachment L-4

SUPPORTING DATA

TEST OPERATIONS VEHICLES

TYPE OF VEHICLE	# EA TYPE	# TO NELLIS	#TO INDIAN SPRINGS
Sedan	18	18	-
Station Wagon	4	4	-
Pick-up	38	38	-
Van	5	5	-
Stake truck	5	3	2
Truck tractor	3	1	2
Fork Lift	12	4	8
Backhoe	1	-	1
Trailers	28	-	28
Warehouse tug	1	-	1
Road roller	2	-	2
Trencher	2	-	2
Road grader	1	-	1
Scoop loader	2	-	2
Dump truck	3	-	3
Water sprinkler	3	-	3
Gasoline tanker	2	-	2
Trailer van	5	-	5
Drill rig	1	-	1
Crane	1	-	1
TOTAL	137	73	64

Attachment L-3

b. Explosive storage needs: Explosive storage at Nellis AFB proper will have to be provided to meet the following requirements:

TYPE	SQUARE FEET	NET EXPLOSIVE WT	COMMENT
Storage	100	1,000	Detonators
Storage	100	1,000	Pyrotechnics
Inert Storage	1,500	0	Shipping Containers
Storage	700	10,000	
Storage	700	10,000	

3. RECOMMENDATION:

a. Stop the excessing action at ISAFAF housing area.

b. Construct one 700SF storage magazine at Nellis proper to meet above requirements. These requirements are identified in the Facilities section of this report.

TRANSPORTATION

ISAFAF POC: Maj Roger Schofield, WTC RTI/DO DSN 682-0301
NELLIS POC: Capt Brooks Reese, 554 TRNS/LGTM DSN 682-5748

Vehicle Operations and Maintenance:

1. ANALYSIS: Attachment L-3 lists the vehicles and equipment which require support as well as the distribution between the ISAFAF site and the Nellis AFB site. There are sufficient existing vehicle maintenance facilities at ISAFAF for the sixty five vehicles to be based there. At Nellis there is presently insufficient manpower and space to adequately maintain assigned vehicles. The addition of seventy-three vehicles to the base work load will require construction of an additional 1,700 square foot vehicle maintenance facility.

2. RECOMMENDATION: Construct an additional 1,700 square feet of vehicle maintenance capacity.

Traffic Management

FCDNA POC: Lt Col Richard Grimes, DSN 246-8606; (Secondary: Col Richard Schutes, DSN246-7791)

1. ANALYSIS: Attachment L-4 lists the classifications, quantities, and preliminary estimated cost of the various items of material and equipment which requires shipment to Nellis AFB/ISAFAF. The preliminary estimated cost is $24,650,000. A final estimated cost is being prepared and is scheduled to be available after 10 Apr 95.

TEST SUPPORT

1. ANALYSIS:

a ISAFAF Facilities: At ISAFAF there are temporary lodging facilities for 250 people which can be used by FCDNA. (Adequacy of these quarters has not been assessed.) There are messing facilities also. In the community of Indian Springs proper there is a small motel, grocery store, restaurant and gas station. Across the highway from ISAFAF there is an old family housing area with mobile home hook-up facilities and inadequate housing facilities. This housing site has been declared excess to Air Force needs and is being disposed of by the Corps of Engineers, the Air Force's real property agent. The Air Force is in the process of stopping this excessing action. therefore, the trailer hook-up locations could be used to install temporary lodging/office facilities for foreign military customers on board for test set-up and the test event.

47

VI. LOGISTICS

WORKING GROUP CHAIRPERSON: Mr. Bruce E. Conklin, HQ DNA/LEEE, DSN221-1163; COM 703-325-1163

SUPPORT AGREEMENT

BASE POC: TSgt Connie Jenkins & Mr. Tom Hales, 554 TRANS/LGTL DSN 682-2034

1. ANALYSIS:

a. There presently is an Inter-service Support Agreement (ISSA) being finalized between Nellis AFB and FCDNA for support of FCDNA's geographically separated unit working at the Nevada Test Site (Appendix A/L-1 & L-2). This ISSA could be modified to incorporate any of the reimbursable services offered by Nellis. This range of services replicates the services presently available to FCDNA at Kirtland AFB.

b. The PHETS has a requirement for the collection of weather data for up to three days before, during and after a shot. This data is presently gathered by WSMR using a portable meteorological station. This type of measuring equipment is not available at Nellis AFB. What Nellis uses is computer simulation to provide weather data for their range missions. This is not suitable for PHETS requirements.

2. RECOMMENDATION:

a. Procure and provide portable weather station equipment for use during PHETS experiments.

b. Amplify ISSA item A5 Environmental Support, to have Nellis AFB provide assistance with permitting actions for land use through federal, state and local agencies.

MAINTENANCE/SUPPLY

BASE POC: TSgt Connie Jenkins, DSN 682-2034; TSgt Ronald Sinkfield, DSN 682-8322

FCDNA's mission related maintenance and supply storage functions will be accomplished in new facilities provided for their sole use with the following exceptions:

a. Supply receiving and shipping functions will be per ISSA.

b. Supply of vehicle fuels and fuels component of ANFO for PHETS will be per ISSA.

3. RECOMMENDATIONS:

a. Establish a joint use arrangement for use of the GRABS site in which the two organizations are geographically separated. An in-depth memorandum of understanding will need to be written as identified above.

b. Identify PHETS site at the earliest possible time in order to coordinate for EOD support for range clean-up.

of training the EOD flight required and the problems foreseen in scheduling the use of the range, a geographical sharing arrangement was determined to be better for both parties.

c. GRABS Site Discussion: The proposed arrangement was to leave the EOD operations where they were currently located on the range and site the GRABS project on another portion of the range. Since both EOD and the GRABS project normally detonate considerably less than 1,000 lb NEW, the location of the GRABS site was proposed to be 1,250 feet from the EOD detonation site. This is the minimum distance allowable by the base weapons safety office. This would allow both organizations to perform operations with less than 50 lb NEW without effecting the other's operation. When the GRABS project needed to set off a charge larger than 50 lb NEW, they would build their test facility near the EOD detonation site. This will cause some conflicts in joint usage, but with enough proper coordination can be accomplished. The EOD flight may also need to perform an emergency destruction operation which would require the GRABS personnel to evacuate the area. The primary conflict results from the people building the structures having a clear visual path to classified EOD procedures being conducted. Secondly, detonations that EOD sets off could damage the structures being built. A less than optimal solution for this would be to construct a block wall or berm behind which the EOD technicians could work. Another concern is the Clark County Air Pollution Control Board had limited the range to 4,000 lb NEW per month. The amount of detonations EOD performs and the GRABS project plans should not reach this limit. The maintenance and ownership of the range was also addressed and a MOU would need to be established.

d. PHETS Site Discussion: The group identified the costs for performing both a general surface and localized subsurface clearance on Range 64 South, Weapons and Tactics Range Complex, Nellis AFB NV 89191. The work required to perform a complete surface and localized subsurface clearance of twelve 500 ft by 500 ft sites plus 150 miles of trenching on Range 64 South.

Cost of range clearance operations
10 EOD personnel
60 days to perform work

TDY cost =	$40,000
Equipment expenditure =	$20,000
Total	$60,000

The EOD career field is becoming very small. At certain times during the year Nellis will not be able to get 10 EOD personnel to come in TDY and perform this clearance. Site excavation to support EOD operations will require work on 12 sites at a cost of $150K each. Total cost for this is $1.8M. Therefore, this clearance will need to be planned well in advance and its timing will also need to be flexible.

V. EXPLOSIVE ORDNANCE DISPOSAL (EOD)

Working Group Chairperson: Captain Thomas J. Svoboda, 558 CES/CED, DSN 682-1406

Base POC: MSgt Michael E. Jones, 558 CES/CED. DSN 682-1218

1. General: The FCDNA team surveyed the 558th Civil Engineering EOD Flight's proficiency range for possible use as a test location. Both complete take over of the range and a joint use plan were proposed. The implications of EOD clean-up of the PHETS site was also addressed.

2. ANALYSIS:

a. GRABS Site OPTION 1--FCDNA exclusive use of present EOD range.

1. The existing thermal treatment facility used to perform Ammunition Disposal Requests would need to be closed or relocated.
   a. Unserviceable or excess munitions would need to be shipped to another site for disposal.
   b. The environmental restoration required for a closure would need to be performed.
   c. An alternative location would need to be sited and approved by the State EPA

2. The EOD flight would not have a place to conduct proficiency training.
   a. Training involving ordnance or explosives must be performed on a sited training range.
   b. Classified render safe procedures need to be performed in a remote location.
   c. The existing runway used for Base Recovery After Attack training would be lost.
   d. Flight members would have to go TDY to train incurring additional time and expense.

3. The base would be left without a place to perform emergency destruct operations on ordnance declared hazardous and unsuitable for storage or transport.

4. A suitable alternative to the proficiency range isn't available.
   a. Range 63 is not sited for EOD training
   b. Range 63A, Silver Flag Alpha, would require armed guard transportation of explosives
   c. Travel times to Range 63 make it unsuitable
   d. Going TDY to another base to obtain practical training is not practical
   e. A thermal treatment facility would need to be sited in a new location

b. OPTION 2: FCDNA/558 CES/CED joint use arrangement. Both a time sharing arrangement and geography sharing arrangement were considered. Due to the extensive amount

3. RECOMMENDATIONS:

a. Develop an Inter-service Support Agreement (ISA) outlining environmental support requirements to include base and range activities.

b. Site GRABS activity in Area II next to the EOD OB/OD site.

c. Site HE test activity at the NTS. If the HE site location is selected at either 65S or 64S, immediately begin negotiations with the USFWS. Also, provide Nellis AFB full details of the proposed testing activity to allow them to formally request State and Federal Agency's approval.

IV. ENVIRONMENTAL

WORKING GROUP CHAIRPERSON: Mr. Jay McCain, USAFWTC/EMJ, DSN 682-4163

CO-CHAIRPERSON: Maj Brian Huizenga, USAFWTC/EM3, DSN 682-6107

BASE POC: N/A

1. GENERAL: Environmental Management reviewed the options of placing the GRABS and High Explosive (HE) test sites at and around Nellis AFB. A limited amount of information was available regarding HE test particulars. The Nevada Division of Environmental Protection was contacted for an opinion as to the feasibility of performing this operation on the Nellis Range Complex. A preliminary opinion from the Clark County Health District- Air Pollution Division indicated that Air Quality is not a show stopper at either location. However, they will require additional information and a formal request to investigate further and provide a formal response.

2. ANALYSIS:

a. GRABS testing located at Nellis AFB in Area II. Environmentally this does not appear to be a problem. The area discussed was out at the EOD OB/OD site. The Nevada Division of Environmental Protection- Bureau of Federal Facilities was contacted to solicit their option. This location is isolated from the general base populace, is not within an Installation Restoration Program (IRP) site. The Desert Tortoise does exist in this area and a tortoise fence would be required with United States Department of Fish and Wildlife Service (USFWS) approval. The client identified the need to perform earth work in the area, which is also acceptable. This type of work will require standard dust and storm water permits before earthwork commences. A small population of the Desert Poppy (Archomecon Californica) that is a candidate for the threatened/endangered species, inhabits this area and will require USFWS coordination to clear if required.

b. HE testing was proposed on the south 60 series ranges (64S and 65S). With limited information regarding HE testing particulars the environmental office contacted the Nevada Department of Environmental Protection (NDEP) to request their viewpoint on this action. From the State's perspective this type of action is acceptable. However, all of the 60 series ranges fall within a National Wildlife Refuge and it is doubtful the USFWS will agree with this type of activity without some type of mitigation.

c. Additionally the team was asked to consider the feasibility of moving the Thorium seeded training site from Kirtland AFB to Nellis AFB versus Kelly AFB. NDEP was against the proposal of developing thorium fields on the 60 series ranges and suggested this type of action take place within the boundaries of the Nevada Test Site (NTS).

REAL PROPERTY OFFICER Ms. Mary Ann Cox/558CES/CERR DSN 682-3302	\\Signed\\
CHIEF ENGINEER Ms. Kimberlee Benart/558CES/CEC DSN 682-6862	\\Signed\\
RESOURCE MANAGER Mr. Linard Harper/558CES/CERF DSN 682-8420	\\Signed\\
ENVIRONMENTAL ENGINEER Maj Brian Huizenga/USAFWTC/EM3 DSN 682-6107	\\Signed\\
DEPUTY BASE CIVIL ENGINEER Mr. Gene Rogers/558CES/CE2 DSN 682-4833	\\In Coordination\\

b. AUDITORS

(Print or Type Name/Office/DSN)	(Signature)
AIR FORCE AUDITORS John A. Williams, AFAA Det 918, Nellis AFB, DSN682-6915	\\Signed in Draft Form\\

Eight MILCON projects were identified at and estimated cost of $25.3M. See project summary below for detailed break-out of construction cost, see file copies of DD Form 1391 and AF Form 1178 parametric cost estimates.

13. **TOTAL ESTIMATED COST**: See project summary.

a. Facility Cost Breakout (line item scope/cost):

b. Source of Facility Cost for Each Line Item (AF Price Guide, Local Price Sources, etc.):

BRAC BUDGET PROGRAM OR _____
PROGRAM ELEMENT CODE _____

14. **COST ESTIMATE PREPARED BY:**

a. BASE REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
Mr. Dan Ocampo/558 CES/CECP, 682-3077 and Mr. Gordon Robertson, HQ ACC/CEPR, DSN574-3817	\\Signed\\

b. FCDNA REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
Mr Julian Paco/FCDNA/FCRPE DSN 246-8730	\\Signed\\

15. **COORDINATION**

a. BASE

(Print or Type Name/Office/DSN)	(Signature)
COMMUNITY PLANNER 1Lt Jason Ellis/558CES/CECP DSN 682-4153	In Coordination
BASE MILCON PROGRAMMER Mr. Stanley Fueller/558CES/CECP DSN 682-8451	\\Signed\\

57

PURPOSE/LOCATION: BRAC 95, FCDNA/FCT High Explosive Test Function from Kirtland AFB to Nellis AFB, NV

SURVEY CONTROL NUMBER (If Required) _____

1. **ACC/XP TEAM CHIEF** (Name/Office/Phone): Major Wade M. Palmore, ACC/XPPB, DSN 574-7159

2. **ACC/CE TEAM CHIEF** (Name/Office/Phone): Mr. Gordon J. Robertson, ACC/CEPR, DSN 574-3187

3. **BASE FUNCTIONAL EXPERT** (Name/Office/Phone): N/A New Mission. No Base Expertise.

4. **MAJCOM FUNCTIONAL EXPERT** (Name/Office/Phone): Col Harlan A. Lawson, FCDNA/FCT, DSN 246-5513

5. **TYPE OF CONSTRUCTION** (ADAL, New Construction, Renovation):

Primarily new construction and one renovation. See 1391's and 1178's on file 558 CES/CECP.

6. **CATEGORY CODE**: 610-287, Administrative; 319-946 Material Research Test Lab; 211-152 Gen Purpose Maint; 843-319 Infrastructure, 422-264 munitions storage, 442-758 warehouse storage.

7. **FUNCTION** (i.e., Maintenance Shops, Supply Warehouse, Squad Ops):

The FCDNA/FCT is an R&D mission which simulates and studies the effects on nuclear high explosions using conventional munitions.

10. **REQUIREMENTS** (i.e., AFR 86-2, Weapons Systems Requirements Plan, etc):

Reference ACC/XPPB Site Survey Report 27-30 Mar 95, Nellis AFB, NV. Actual personnel authorizations are 110 PN government and 125 PN contractor.

Special Purpose Space: Facility requirements summary and analysis are provided on tables 1.2 and 1.3 of the facilities section of this report

General Administrative Space: Same as above.

11. **ANALYSIS** (Requirement Compared to Existing Facilities):

See Facilities and Operations Analysis'.

12. **RECOMMENDATION**:

BRAC 95 MILCON PROJECT SUMMARY
FCDNA HIGH EXPLOSIVE TEST FUNCTION
AT
NELLIS AFB

NELLIS AFB PROPER

PROJ#	DESCRIPTION	SCOPE	COST ($000)
RKMF97-3009	Const FCDNA Admin Spt	23,100 SF	3,600.0
RKMF97-3010	Const FCDNA Ops & Test Spt	54,600 SF	7,700.0
RKMF97-3011	Const GRABS site	125 AC	3,000
RKMF97-3012	Infrastructure & Misc Spt	LS	1,550.0
		NELLIS AFB TOTAL:	$15,850.0

INDIAN SPRINGS

PROJ#	DESCRIPTION	SCOPE	COST ($000)
LKTC97-3013	Alter Admin Fac for FCDNA	7,500 SF	480.0
LKTC97-3014	Const FCDNA PHETS Fac	28,000 SF	3,850.0
LKTC97-3015	Const Munitions Storage Igloos	2,200 SF	610.0
INDIAN SPRINGS TOTAL:			$4,940.0

RANGE 64S

Proj #	DESCRIPTION	SCOPE	COST(OOO)
FKXF97-3016	CONST PHETS Site	10 sq mi	4,500
		RANGE TOTAL:	$ 4,500

FCDNA BEDDOWN TOTAL: $ 25,290

NOTE:

1. Facility costs do not include pre-wired work stations per HQ USAF/RTR.

2. Parametric cost estimates were accomplished using PDC, the Air Force pricing guide, 1995 Means Construction Cost Data and engineering experience. DD For 1391 and AF Form 1178 are on file with FCDNA. The base engineers raised concerns about the high bids -- historically experienced here at Nellis and specifically at Indian Springs.

3. Project costs are currently draft and still subject to review by FCDNA/FCT, HQ ACC/CE/XP and other agencies as required.

52

3. BEDDOWN ANALYSIS: The site survey team in conjunction with Air Staff, Nellis AFB and AFAA personnel evaluated the overall FCDNA/FCT facility requirements against the existing facility capacity on Nellis AFB. Specifically, the team explored the use of the old hospital and the facilities vacated as a result of the F-4G inactivation. However, after a close examination of existing base development plans as a result of on-going mission changes, these facilities were determined to be unavailable. Specifically, the F-4G facilities have been identified for the F-22 FOT&E and Fighter Weapons School new mission beddown projected for Nellis AFB. The F-22 program is budgeted and programmed based upon the use of these facilities. In reference to the old hospital, the base has an aggressive consolidation plan to demolish over 47,000SF of inadequate non-permanent type facilities, provide space for new and existing missions. (i.e. stand-up of the new Air Base Wing, Wellness Center, Services and other functions) and free-up mission essential flightline space. An analysis of the hospital indicated that approximately 7,000 SF could be made available for a portion of the FCDNA administrative requirements. However, based upon operational needs and no significant cost savings, it was determined that this was not a viable alternative. In summary, due to the unique requirements of the FCDNA high explosive test functions, Nellis AFB does not have adequate excess facilities to beddown the realigned FCDNA. Notional sitings are found at Appendix B.

4. MILCON COSTS: A total of eight MILCON projects were identified at an estimated cost of $25.3M to support this BRAC 95 realignment to Nellis AFB. Four projects at an estimated cost of $15.9M for Nellis AFB proper, three projects at an estimated cost of $4.9M at Indian Springs, and one project for 4.5M out on the Nellis Range 64S. FCDNA will review and validate MILCON documentation to include; Requirements, Current Situation and Impact if not provided, and parametric cost estimates. This documentation will be reviewed and validated by HQ AFMC. These projects are summarized on the following page:

FCDNA FACILITY REQUIREMENTS (RANGE)

Function	PN	Total Admin	Special Purpose	Remarks
PHETS Timing, Firing and Monitoring			2,500 SF	
Concrete Batch Plant				Vertical & Horizontal Concrete Const
ANFO Mixing Plant				Munitions
Quality Control			300 SF	
Power				
Site Power				
Access Road				
Concrete Material Storage				6 concrete
18 bunkers				Required to shelter Instrumentation

Table 1.34, Facility Requirements Analysis

53

FCDNA FACILITY REQUIREMENTS (INDIAN SPRINGS)

		Total	Special	
Function	**PN**	**Admin**	**Purpose**	**Remarks**
PHETS RQMNTS				
Admin space	50	7,500		Forward Location
PHETS warehouse	1		8,000	
Fab Shop			1,800	
Vehicle Maint			1,000	
Hydro Plus Storage			10,000	
Electronic shop	2		1,500	
Inst Calibration Shop	4		800	
Transducer Calibration	3		800	
Warehouse			3,000	
TOTAL		**7,500 GSF**	**25,900 GSF**	
COMBINED TOTAL			**33,400 GSF**	
MUNITIONS				
Munitions Storage			2,200 SF	
Charge Build-up pad			1,500 SF	
Inert Storage			1,500 SF	
TOTAL			**5,200 SF**	
MISCELLANEOUS				
GOV Compound			17,800 SY	200ftx800ft
Storage yard			35,600 SY	200ftx1600ft
Foreign Country			8,400 SY	
20 Mobile home hook-ups				

Table 1.33, Facility Requirements Analysis

Function	PN	Total Admin	Special Purpose	Remarks
GRABS RQMNTS			**125 Acre**	
20' Radius shocktube (relocated)				
Earth berms for shocktube				
Charge prep bunker				
2' Shock tube (relocated)				
Support facility (toilets/water/control)			500 SF	
Site work				
5 0HM grounding				
5000 KV				
Water				
Test chambers				
7" Shocktube (relocated)				

Table 1.32, Facility Requirements Analysis

54

FCDNA OPS AND TEST (NELLIS AFB)

Function	PN	Total Admin	Special Purpose	Remarks
FCTT (TOTTS)	20	3240	-	32 PN Assigned
Material Testing			1,160	
Instrumental shop			750	
Machine shop			5,700	
Carpenter shop			2,500	
Library			500	
Photo shop			750	
Instrumentation storage			1,000	
Warehouse			12,000	
Breakroom			300	
FCII TOTAL	20	3,240	24,560	
FCTI	22	3,564		Instrumentation Office
Storage warehouse			4,000	
GFE storage			8,000	
Instrument calibration			1,200	
Instrument assembly			1,200	
FCTI TOTAL	22	3,564	14,400	
FCT				Common use
Warehouse			8,800	
FCDNA OPS & Test Total		**6,804**	**47,760**	
Combined Total			**54,564 GSF**	
Rounded			**54,600 GSF**	
MUNITIONS				
Explosive Assembly pad			1,500	
Munitions storage			700	Class 1 1.1
Munitions storage			700	C-4
Munitions storage			100	Pyrotechnics
Muntions storage			100	Detonators
Munitions Total			**3,100SF**	

Table 1.31, Facility Requirements Analysis

FCDNA OPS AND TEST (NELLIS AFB)

FCDNA ADMIN (NELLIS AFB)

Function	PN	Total Admin	Special Purpose	Remarks
FCT	10	1,620		Command Section
Reception area			300	
100 PN Conf/Trng rm 35GSF/PN			3,500	Top SecretVideo Teleconfence ctr (VTC)
PC-3			75	Orderly room
Weigh-in			50	Orderly room
Personnel records			75	Orderly room
2 LAN systems			120	
FCT TOTAL	**10PN**	**1,620**	**4,120**	
FCTO	29	4,698		New Mexico Ops
Blue print storage			250	
Ozalid				
Reproduction area				
DRAFTING/CADD			100	
FCTO TOTAL	**29PN**	**4,698**	**350**	
FCTT	40	6,480		Test science &Tech off.
Tech library			250	
TS vault			500	
Computer rm			200	
Data storage			500	Graybeard computer data system
Planning rm (25PN)			625	25 GSF/PN
Seismic Ins shop			400	
FCTT TOTAL	**40PN**	**6,480**	**2,475**	
FCTM	12	1,944		Test management
Contract storage			100	
References			100	
FCTM TOTAL	**12**	**1,944**	**200**	
FCTC TOTAL	**7**	**1,134**		**Tech compliance**
Nellis Total		**15,876**	**7,145**	
Combined Total			**23,021 GSF**	
Rounded			**23,100 GSF**	

Table 1.3 FCDNA Facility Requirements Analysis

FCDNA FACILITY REQUIREMENT SUMMARY

Function	(NELLIS) Total Admin	(NELLIS) Total Purpose	(NELLIS) Total Rounded	(KIRTLAND) Existing Facilities	Remarks
FCDNA Admin	15,876SF	7,145SF	23,100SF	34,691SF	Nellis proper
FCDNA Ops & Test	6,804SF	47,760SF	54,600SF	68,287SF	Nellis proper
GRABS SITE			125 acres	155 acres	Nellis proper EOD area
Explosive assembly pad			1,500 SF	4,000SF	Nellis proper
Munitions Storage			1,600 SF	2,900SF	Nellis proper
PHETS Support	7,500SF	25,900SF	33,400SF	39,500SF	Indian Springs
Munitions Storage		2,200SF	2,200SF	2,200SF	Indian Springs
GOV Compound		17,800 SY	17,800 SY	open areas	Indian Springs
Storage		44,000 SY	44,000 SY	open areas	Indian Springs
Range		10 sq mi	10 sq mi	open areas	Range 64S
Timing & Firing Fac		2,500 SF	2,500 SF	3,600 SF	Range 64S

Table 1.2, Facility Requirements Criteria

FACILITY REQUIREMENTS CRITERIA

- AFH 32-1084 Standard Facility Requirements Handbook
- MIL-HDBK 1190
- ACC Design Standards
  - --- Open office space
  - --- System/Modular furniture (not part of project per HQ USAF/RTR)
  - --- Maintain flexibility for changing requirements
  - --- Reduce unusable space
- Space based upon authorized or assigned personnel, which ever is less
- Administrative space 162 GSF/PN. PER AFH 32-1084
- Special use space (Examples)
  - -- Video Teleconference (VTC)
  - -- Vaults
  - -- Planning and meeting rooms
  - -- Computer rooms
  - -- Maintenance/Fabrication shops
  - -- Labs
  - -- Supply/warehouse
  - -- GOV parking

Table 1.1, Facility Requirements Criteria

III. FACILITIES

WORKING GROUP CHAIRPERSON: Mr. Gordon J. Robertson, HQ ACC/CEPR, DSN 574-3187

BASE POC FOR FACILITIES WORKING GROUP: Mr. Dan Ocampo
558 CES/CECP, DSN 682-3077

1. GENERAL: HQ USAF/RTR requested HQ ACC to assist DNA in accomplishing a facility site survey to relocate the High Explosive Test function from Kirtland AFB to Nellis AFB as a BRAC 95 action. The team was chartered to analyze and validate FCDNA/FCT facility requirements, assess Nellis AFB facility capacity, evaluate beddown options, develop recommendations by taking into account all variables (i.e. environmental, Nellis mission, costs, etc), develop facility costs, and prepare draft DD Fm 1391/1391C programming documents and AF Fm 1178 parametric cost estimates.

2. FACILITY REQUIREMENTS:

a. Criteria: To develop and validate the overall facility requirements of the FCDNA/FCT High Explosive Test Function, DRAFT Air Force Handbook (AFH) 32-1084, Date 1 March 1995, Standard Facility Requirements Handbook was used per HQ USAF/RTR/CEC guidance. However, in light of the unique FCDNA Research and Development (R&D) mission the handbook could not be used to address specific areas. To determine requirements, the team accomplished a detailed analysis of FCDNA's mission (manning, existing facilities, equipment, etc), interviews with functional OPR's, and using applicable sections of AFH 32-1084. The team developed and validated FCDNA facility requirements. Table 1.1 summarizes facility requirements criteria used for FCDNA survey.

b. Facility Requirements Summary: An overall summary and detailed analysis of FCDNA/FCT total facility requirements associated with the BRAC 95 relocation from Kirtland AFB to Nellis AFB are summarized on Table 1.2 and 1.3.

36 strand single mode fiber optic cable -	$1,100,000.00
Data Terminating Equipment (DTE)	$100,000.00
Fiber Optic Cable Installation:	**$1,875,000.00**

7. PHETS Communications/Data Collection Costs: These are the cabling and installation costs associated with the replication of the PHETS data collection capabilities from WSMR to the Nellis Training Range. Real-time video capability is currently provided by the Army host at WSMR. Source is Allied Signal (FCDNA contractor).

Large Scale Test-bed	
Fiber Optic Cable (61,689ft)	$717,934.00
Fiber Optic Cable Installation (660 man-hours @ $30/hr)	$19,800.00
Trencher rental with operator ($14,000/mo @ 4 mos)	$56,000.00
Connectors	$9,326.00
Connector installation (722 hrs @$30/hr)	$21,660.00
Phenomenology and Intermediate Test-beds	
Fiber Optic Cable (11,553ft)	$111,877.00
Fiber Optic Cable Installation (116 man-hours @ $30/hr)	$3,480.00
Trencher rental with operator ($14,000/mo @ 1 mo)	$14,000.00
Connectors	$5,627.00
Connector installation (454 hrs @ $30/hr)	$13,620.00
Real-time Video Equipment	TBD
Total PHETS Comm Relocation Cost	**$973,324.00**

8. Total communications cost to provide the infrastructure necessary:

Administrative Telephone Cost	$84,000.00
Leased Comm Setup Costs	$9,000.00
VTC Facility and Connectivity	$256,261.00
Telephone Switch Upgrades	$860,000.00
Fiber Cable Connectivity	$1,875,000.00
PHETS Relocation	$973,324.00
Total Communications Infrastructure Costs****	**$4,057,585.00**

Note: The aforementioned costs do not include any Allied Support Costs. Refer to the DD Form 1391 associated with the building construction to determine Allied Support Costs.
**** Leased Comm Cost, First Year of $205.2K is not included in this number as it is not BRAC cost.

57

3. Leased Communications Circuit Startup Costs: These one time costs are required to initiate service. Source is 554CS/SCX and DITCO/RPC.

Circuit	Startup Cost
One 56KB line to Alexandria, VA area	$3,000.00
One T-1 to Los Alamos, NM	$3,000.00
One DCTN to VTC Scheduling Center, MD	$3,000.00
Total	**$9,000.00**

4. Video Teleconferencing Facility and Connectivity Cost: Video Teleconferencing Center costs include furniture, computer/communication equipment, audio/visual equipment, and installation - **$256,261.00** Source is FCDNA/FCC. FCDNA just completed the construction and installation of a VTC at Kirtland AFB in Mar 1995. The existing VTC is programmed to relocate with the FCDNA portion going to Kelly AFB.

5. Telephone Switch Upgrades Cost: Upgrades are required to support the personnel increases at the specified locations. Source is 38EIW/ESA.

Area 2:	
System 85 telephone switch upgrade -	$800,000.00
Indian Spring AFAF:	
System 85 telephone switch cabinet expansion -	$60,000.00
Total Telephone Switch Upgrade Cost:	**$860,000.00**

6.. Fiber Optic Cable Connectivity Costs: New or expanded fiber is required to connect PHETS to Indian Springs AFAF, 554CS building P-6 to Area 2 new facility, and 554 RANS building 200 to 554CS building P-6. Source is 38EIW/ESA.

Nellis AFB 554 RANS to 554 CS Facility:	
36 strand single mode fiber optic cable -	$150,000.00
Data Terminating Equipment (DTE)	$100,000.00
Nellis AFB 554 CS to Area 2 Administrative Facility:	
36 strand single mode fiber optic cable -	$325,000.00
Data Terminating Equipment (DTE)	$100,000.00
Indian Springs AFAF to PHETS:	

ADP inventory, moving costs, and new procurements necessitated by the physical separation of a currently collocated command are being addressed in the relocation cost collection initiative managed by the 377 CSW, Kirtland AFB, NM.

c. Specific Communications Costs are categorized into the following areas:

Administrative Telephones
Leased Communications Circuits Rates
Leased Communications Circuits Startup
Video Teleconferencing Facility and Connectivity
Telephone Switch Upgrades
Fiber Optic Cable
PHETS Communications/Data Collection

1. Administrative Telephone Cost: Costs support 235 personnel at the administration facility and test sites. Assume voice, computer modem, and fax support. Circuit Packs Cards cost $101 each and support up to 4 digital telephone requirements. Source is 554CS/SCX.

Item	Cost
Phone Unit	$290.00
Circuit Pack (Card)	$25.00
Installation	$21.00
Total per phone =	$336.00
250 total phones =	**$84,000.00**

2. Leased Communications Circuit Cost: Communication circuits are to replace connectivity currently available and required at Kirtland AFB. Source is 554CS/SCX and DITCO/RPC, Scott AFB, IL.

Circuit	Cost/Month
One 56KB line to Alexandria, VA area	$5,700.00
One T-1 to Los Alamos, NM	$5,700.00
One DCTN to VTC Scheduling Center, MD	$5,700.00
Total Per Month =	**$17,100.00**
Total First Year =	**$205,200.00**

58

II. Communication & Computer Systems

Working Group Chairperson: Mr. Cote, HQ ACC/SCYA, DSN 574-3190

FCDNA (Kirtland AFB) POC: Col Schuetz, FCDNA/FCR, DSN 246-7791

FCDNA Comm/Computer POC:	Major Jerald Coleman, FCDNA/FCC, DSN 246-2225
554 CS (Nellis AFB) POC:	Mr. Lin Lee, 554CS/SCX, DSN 682-5824
554 RANS (Nellis AFB) POC:	Mr. Campbell, 554 RANS/RSXR, DSN 682-3740
38EIW (Tinker AFB) STEM-B:	Mr. Pham, 38EIW/ESA, DSN 884-9778

1. GENERAL: ACC was tasked to identify the communications requirements and cost associated with moving the Test Directorate of FCDNA to new facilities located on Nellis AFB and the associated Nellis Test Range.

2. ANALYSIS:

a. Communications: FCDNA/FCT currently consists of missions requiring communications support at three major locations: Kirtland AFB, NM; White Sands Missile Range (WSMR), NM; and Nevada Test Site (NTS), NV. Requirements at NTS should be unaffected by the proposed relocation of FCDNA. Support requirements at Kirtland AFB and WSMR will be reduced but not eliminated, as a result of the proposed relocation.

The proposed siting of FCT missions at Nellis AFB, Indian Springs, and the Nellis Training Range will require the creation and expansion of communications capabilities at those locations. The administrative function of FCT has a proposed siting of Area 2, Nellis AFB and the Permanent High Explosive Test Site (PHETS) has a proposed siting at location in the Nellis Training Range approximately 15 miles from Indian Springs AFAF.

Communications requirements internal to the administrative facility will consist of telephone voice, fax, and computer modem connectivity for up to 235 government and contractor personnel, unclassified LAN connectivity for 110 government personnel, and classified LAN connectivity for 50 government personnel. Communications requirements internal to the PHETS will include telephone connectivity for 15 units and extensive data collection connectivity for test sensors. These two sites require telephone connectivity with their respective telephone switches and data connectivity between each other. Finally, the administrative facility requires external leased data connectivity to HQ DNA, Alexandria, VA, Los Alamos National Laboratories, NM, and Video Teleconferencing Scheduling Center, MD.

b. Data Automation: Communications and computer facility requirements to support LAN servers and communications equipment have been submitted for inclusion in the facility planning.

MUNITIONS STORAGE AREA REQUIREMENTS ON NELLIS AFB PROPER

To accommodate the proposed FCDNA Range at Nellis AFB, ten igloos within the 896 MUNS area would require a reduction in class/division 1.1 NEW. While these reductions wouldn't be expected to reduce the 896 MUNS' capability, the unit has not fully coordinated the reductions through their command.

IGLOOS AFFECTED:

	From	To		From	To
11001 -	500K	130K	11015 -	500K	250K
11002 -	162K	130K	11026 -	384K	250K
11003 -	162K	145K	11029 -	500K	400K
11004 -	500K	200K	11030 -	500K	475K
11005 -	500K	225K	11044 -	500K	450K

59

FCDNA/FCT TEST SUPPORT CONTRACTS

CONSTRUCTION CONTRACTOR - 50

- Construct new test structures and targets for High Explosive Testing
- Repair or rehabilitate used structures to extend their usable life
- Maintain GFE construction equipment and unique support vehicles

INSTRUMENTATION SUPPORT CONTRACTOR - 40

- Calibrate gage and instrumentation
- Install gages, cabling, and data acquisition equipment
- Establish timing and firing sequence
- Record data from test events
- Provide instrumentation support to ionizing Radiation Simulators, Advanced Research Electromagnetic Pulse Simulator, Large Blast and Thermal Simulator, as well as high explosive testing.

TECHNICAL DOCUMENTATION CONTRACTOR - 3

- Support documentation efforts for Quick Look Data Reports, Test Execution Report, Test Result Report, and meeting minute reports
- Produce and coordinate test video reports

THE TOTTS CONTRACT - 36

Provides technology and test support in the areas of nuclear and precision weapons effects, survivable structures and systems, and systems safety assessments. This support includes all aspects of planning, operation, maintenance, conducting, fabricating, modifying, fielding, testing, analyzing, and reporting of research, test, and development using the Defense Nuclear Agency (DNA) equipment and other specialized test support items, located at Kirtland AFB, New Mexico, and at other locations as directed by DNA The major end items of this acquisition are data, software, and technical reports, as required by individual technical instructions.

CURRENT FCT ASSETS -
PERMANENT HIGH EXPLOSIVE TEST SITE - WSMR

10 square miles (8.2 KT ANFO, airdrops)
27,000ft laboratories, workspace, warehouse
- 9,100SF environmentally controlled
- -3,200SF environmentally controlled plus UPS
  - -- 2,400SF environmentally controlled, UPS, dust

7,500SF admin space
33 hydroplus trailers parking
35 vehicles (construction, EH, admin)
4 AMMO storage bunkers
1 charge assembly building
Access to large bunkers at WSMR
Concrete batch plants with liquid Nitrogen
ANFO mixing plant

150 miles of underground cable
18 instrumentation bunkers
- shock isolation
- bermed

2 each 150' towers
Misc test structures

Capability to hook-up 20 mobile homes: electricity and telephone

60

CURRENT FCT ASSETS - Kirtland AFB

34,600SF Admin space plus special needs
- 100 person conference room
- TS storage vault
- Library
- Seismic instrument workshop
- Computer room

63,600SF Laboratories, workspace, warehouse

16 Trailers 8'x40'
- Safeguard
- Equipment storage

75 Vehicles (admin, EH and construction)

GRABS (close-in Test site)
- 155 acres (1000 lbs HE)
- 20' shock tube
- 2' shock tube
- 7" shock tube in building
- Half space test chamber
- Misc test chambers
- 30 vehicles/trailers
- 4 AMMO bunkers
- 1 charge prep bunker

WEAPONS TESTED RECENTLY

AIR FORCE

GBU-27
GBU-28
AGM-142
Multiple weapons, single aim point
Smart fuze

NAVY

Multiple weapons, single aim point
Fuel Air Explosive

ARMY

High velocity penetrator

FOREIGN COUNTRY TESTS

MK-82

FUTURE THRUSTS OF TEST PROGRAMS

- Counterproliferation areas of interest

- Ionizing radiation simulations for space and wartime threat

- EMP

- Penetration weapons testing still growing

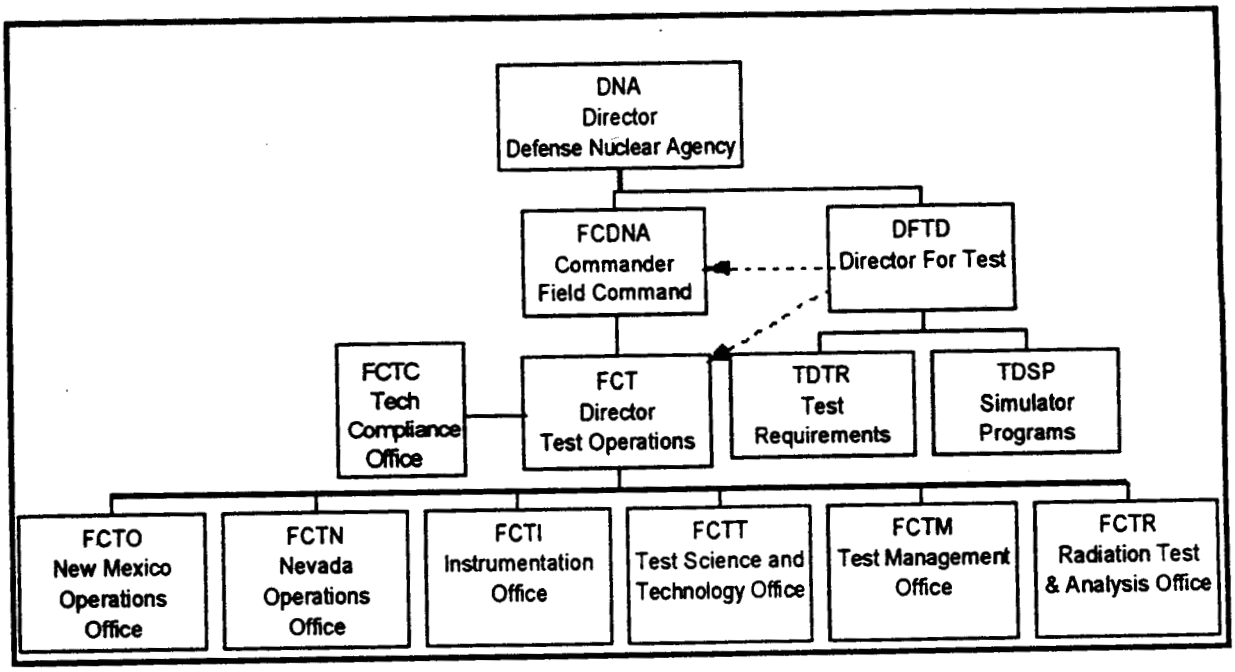
- Structural response of buried targets
  -- Hard Target Kill

- Weapons effects of new technologies

- Technology Transfer

61

DNA ORGANIZATION FOR TEST



f. SUPPORTING DATA:

FCT MISSION

- Conduct weapons effects tests in accordance with requirements established by HQ DNA/DFTD and customer needs.

- Nuclear weapons effects simulations
  - -- High explosive (blast and shock)
  - -- Thermal
  - -- EMP
  - -- Ionizing radiation

- Conventional Weapons
  - -- Weapons phenomenon
    (blast, shock, thermal, shrapnel)
  - -- Advanced conventional weapons
    (GBU-28, I-2000, I-800)
  - -- Hard Target Response
  - -- Support

Siting of the GRABS close-in test site near the EOD training and demolition pit as proposed by WTC/SEW is acceptable. The proposed site separates the FCDNA and EOD operations so that they do not interfere with one another. This site permits detonation of 86 lbs TNT equivalent throughout the site and up to 206 lbs TNT equivalent in the northern half of the site. However, this FCDNA site would not permit detonation of cased charges. Cased charges could be used (up to 500 lbs explosive weight) on the EOD range through scheduling coordination and possibly through exchange of ranges for periods requiring lengthy (up to a month) construction and target preparation times. A formalized MOA may be necessary to facilitate this downtime.

Existing explosives storage capacity at Nellis AFB will support FCDNA storage requirements for detonators, pyrotechnics and classified explosives. A new bunker (approx. 700 SF) must be constructed to provided adequate segregated storage for unclassified developmental explosive charges.

provide continuous access to Range 64S. Also, Range 64S site will require considerable EOD and target remnants clean-up. The estimate to clear 12 each 500 ft x 500 ft sites to 40 foot depth to support buried target construction at the proposed test-bed in area 64S is $2.0M.

The Test Control Center (TCC), the ANFO mixing plant, the concrete batch plants and 18 instrumentation bunkers will be constructed at the large test-bed. The TCC is a 2,400 SF, raised computer floors, humidity, temperature and dust controlled facility. This structure houses the $4M test control, timing and firing, and data collection systems as well as the PC-based quick look data reduction equipment.

d. GRABS/Admin: A potentially suitable location for the FCT administrative and test design/analysis functions and test support for the GRABS close-in test activities is in Area 2 at Nellis AFB. The only known negative issues are: 1.) possible low water pressure and impact on fire fighting and suppression and 2.) impact of security training operations in that areas. Area 3 at Nellis AFB should perhaps be considered as an alternate site for this activity.

e. Nellis AFB Facility availability

1. F-4G Squadron Facilities

No single F-4G facility contains enough suitable office or parking space for the entire FCDNA Test Directorate. Major renovation would be required to convert the maintenance units to office space. The existing F-4G facilities are located adjacent to flightline operations. Plans are being developed to locate future aircraft programs in these facilities. The F-4G aircraft maintenance facilities are a valuable flightline asset and should continue to function for aircraft related programs, not converted to general office space.

2. Building 4349 - "Old Hospital"

The existing facility requires major renovation to be utilized for administrative office space the majority of the space is being considered by Nellis AFB for housing other functions.

Approximately 7,000 SF of floor space has been considered for use by FCDNA. The current floorplan is uniquely designed for a hospital function and is not entirely suitable for office space. The wide hallways, individual patient room bathrooms and other specialized spaces leave approximately 50% net usable office space.

Current plans for occupying the hospital are to mix various Air Force functions. FCDNA requires secure, non-shared areas.

Locating only a portion of FCDNA personnel in the old hospital would separate them from the proposed new facility by approximately 5 miles. Fragmenting FCDNA personnel would hinder interaction and negatively impact our mission. Personnel located at the old hospital would be separated from classified and non-classified technical document storage areas, conference rooms and other administrative functions. Locating personnel in the old hospital is not a viable consideration.

4. A large test-bed permitted for 4.6 kilotons of explosives detonations with state-of-the-art data acquisition infrastructure. It would be preferable to have all these facilities located within allowable safety limits, but geographical constraints at Nellis AFB and Nellis Range preclude such siting. Since FCT High Explosive operations are presently split between Kirtland AFB and WSMR, we requested to site our present Kirtland AFB operations and facilities at Nellis AFB and our WSMR HE operations and facilities to the Nellis Range.

Nellis Range Area EC South was ruled out early because of the long distance (120 miles form Nellis AFB), the lack of support facilities nearby and sensitivity to having foreign experimenters and observers near the northern portion of the Nellis Range.

Indian Springs AFAF was visited and found suitable to house much of what is currently in the PHETS admin area at WSMR. Three buildings (Bldg 400, 404, 405) were offered near the chapel on the south side of Highway 95 which can be modified to satisfy the test group staffs, experimenters and other support staff (7,500 sq ft requirement).

b. Requirements: A large area is required to support the test operations such as are currently conducted at WSMR. Current support facilities at the PHETS site include 32,000SF of laboratories, workspace and warehouse. Laboratory space is 900SF of calibration lab and 800 SF of concrete testing lab. Workspace includes carpenter and fabrication shops (1,800 SF) vehicle maintenance shop (1,000 SF), cable configuration workshop (2,500 SF). Warehouse and storage facilities comprise the remaining 20,000 SF currently being used at WSMR. Three outdoor storage yards of 160,000 SF, 120,000 SF and 75,000 SF are required for construction materials, gauge mounts, camera towers and instrumentation cable storage. The 160,000 SF yard must be adjacent to the warehouse structure while the other two yards may be separated from the warehouse and test support area.

Explosive storage igloos (4 each) are required in the Indian Springs WSA: two each 1000 SF and two 100 SF.

Additionally, a 1500 SF charge build-up area with grounding, lightning protection and explosive proof lightening is required. Existing facilities at the WSA meet this need.

Fire protection, medical, security, vehicle maintenance for approximately 70 vehicles will be required at Indian Springs AFAF. During classified testing, 24-hour security at the test site will be required. This requirement may last from one hour to one week.

c. PHETS: Area 65S is a suitable location for large scale HE testing. It would require time and/or space separation from the Thunderbirds' practice airfield in 65S as well as relocating the A-10 strafing range. The entire area 65S would be required to provide adequate safe separation distances from Highway 95 and Indian Springs AFAF.

A site visit was made to the most southern portion of Range 64S, proposed location for FCDNA's Permanent High Explosive Test Site (PHETS). Although not as flat as the current PHETS location on White Sands Missile Range, NM, it appears that the area is suitable for FCDNA's test mission. A major concern is accessibility, because of USAF use of Range 65S. To access this area from Indian Springs AFB, one must traverse across Range 65S. Perhaps at some future date, operational arrangements can be made to

Element Commander. Functions supported by this office include classified control, command and control, counseling and orderly room functions.

c. Concerns:

1. Nellis AFB

- Low water pressure impacts
- Security training impacts on traffic movement
- Proposed GRABS site does not permit use of cased charges
- Proposed GRABS site limited to 86 lbs in southern half and 206 lbs in northern half. Desire up to 1000 lbs.
- Maintenance support for vehicles

2. Indian Springs AFAF

- Proposed changes to security operations and impact on protection of equipment, weapons storage area and classified material.
- Availability of space to site large storage yards
- Adequacy of firefighting capability for increased explosive storage
- Separation of FCDNA facilities by Highway 95

3. PHETS

- Environmental approval to site on 64S or 65S
- Clean-up of range to permit safe excavation in designated locations to 40 foot depth and for cable trenching operations
- Need designated access corridor through Range 65S to 64S
- Security for the test site, particularly for classified targets
- Lack of power at the test site
- Lack of mobile meteorological capability

2. ANALYSIS/RECOMMENDATION:

a. Siting: Sites offered by Nellis AFB for FCT to consider were carefully reviewed. Options ranged from everything at Indian Springs to various fragmenting of the functions between Nellis AFB, Indian Springs and area EC south. We were queried about not moving the explosive test program from White Sands Missile Range. The FCDNA position is to move everything but the Large Blast and Thermal Simulator from WSMR and everything but the ARES EMP test facility, the 6-foot shock tube and the shallow water test facility at Kirtland AFB if the Test Operations must leave New Mexico. In considering areas required to support the FCDNA Test Operations functions relocating to Nevada under the proposed '95 BRAC action, four principal functional areas are required:

1. The basic admin area to support 110-125 DoD personnel along with a Test Operation & Support Facility (laboratories, warehouse and maintenance shops);

2. A close-in test site (identified as 155 acre GRABS site at Kirtland AFB) for siting of shock tubes and small (less than 1,000 lbs) HE tests;

3. Administrative and test fielding integration and support facilities.

structures for live drops of aircraft delivered weapons, Davis Gun (explosive driven penetrator gun) and air gun inert penetrator tests, as well as other structured response and phenomenology tests. This test-bed presently consists of state-of-the-art data acquisition systems, timing and firing instrumentation systems, and command and control facilities to support testing throughout the 10 square miles of PHETS. The two concrete batch plants (80 cu yd and 200 cu yd per hour, meet a yearly requirement usually of monolithic pours 4 times per year between 2,000 and 10,000 cu yd per structure), the ANFO mixing plant, and two 150' high towers satisfy unique requirements of our OSD directed test programs. The administrative, test design and target preparation facilities, calibration labs and warehouse/storage spaces are essential to support the 30-60 tests conducted per year. See supporting data end of this section for a list of key elements at PHETS.

b. Organization: The Test Operations Directorate is organized into seven offices and the Director's office. The following is a brief description of the functions and responsibilities of these various organizations.

The New Mexico Operations Office (FCTO) provides the engineering and support functions that design and construct test targets and structures. FCTO provides the Test Group Directors who lead matrixed organizations from the various FCT offices through test preparation, fielding, execution and post-test operations. This office also provides the staffs for the ARES EMP simulator, Large Blast and Thermal Simulator (LB/TS) and the Thermal Radiation Source (TRS) simulators.

The Test Science and Technology Office (FCTT) designs the technical aspects of tests, provides technical liaison with customers, ensures technical objectives are achieved and conducts analysis of test data. FCTT is comprised primarily of doctoral (13) and other senior scientists (31) specializing in shock and blast phenomenon and geophysics. A classified library containing over 14,000 documents covering nuclear and advanced conventional test data history is also maintained by this office.

The Instrumentation Office (FCTI) provides instrumentation engineers who design the gauging and data acquisition systems required on each test. FCTI support all HE testing as well as the nuclear effects simulators; ionizing radiation, electromagnetic pulse, shock, blast and thermal.

The Test Management Office (FCTM) provides test coordination, cost analysis and scheduling functions for all testing assigned to FCT.

The Test Compliance Office (FCTC) ensures that Environmental, Safety & Health (ES&H), explosive safety and environmental regulations and policies are considered in all test planning operations. Both compliance for current and future tests and remediation of prior testing sites are supervised/managed by this office.

The Radiation Test and Analysis Office (FCTR) provides technical design and modernization for radiation simulators. FCTR will remain at Kirtland AFB.

The Nevada Operations Office (FCTN) maintains the DoD capability to resume underground nuclear testing, conducts conventional tunnel vulnerability testing and provides oversight for clean-up of DoD nuclear effects test sites. FCTN will remain at the Nevada Test Site.

The Director's office (FCT and FCT-A) provides over all leadership and integrating management. The Director for Test Operations is dual hatted as the Army

I. OPERATIONS

WORKING GROUP CHAIRPERSON: Col Harlan A. Lawson, FCDNA/FCT, DSN 246-5513

BASE POC: Lt Col Paul Haney, WTC/XP, DSN 682-3000 and Lt Col Jack Schofield, WTC/RSI, DSN 682-0301

1. GENERAL:

a. Overview: The Test Operations Directorate (FCT) of Field Command, Defense Nuclear Agency (FCDNA) conducts weapons effects tests in accordance with requirements established by HQ, Defense Nuclear Agency and customer needs. These effects tests include primarily nuclear weapons effects simulations, advanced conventional weapons effects and hardened target response. Other testing activities include new charge development, scaled structure testing and unique requirements for other U.S. government agencies and foreign nations.

The proposed BRAC realignment of Kirtland AFB, NM recommends that a large majority of the Test Operations Directorate facilities and functions relocate to Nellis AFB, NV (including the Nellis Range) prior to 2001. As currently envisioned, this move will bring 110-125 DoD personnel and 75 contractors (50 more construction contractors will be hired in Nevada) from Kirtland AFB to the Nellis AFB vicinity. Instrumentation, cabling, laboratories, workshops, vehicles, shock tubes, and test support equipment from Kirtland AFB and White Sands Missile Range (WSMR) essential to the High Explosive (HE) test functions will also relocate to the Nellis AFB vicinity.

The FCDNA Test Directorate and its general administrative, design and analysis functions are now collocated with FCDNA at Kirtland AFB. Of the 146 authorizations in FCT, 20 are located at the Nevada Test Site and the remaining 126 authorizations are located in New Mexico at Kirtland AFB and the WSMR. Specifically, high explosive tests conducted at Kirtland AFB contain less than 1,000 lbs of explosive. These tests are conducted at the Chestnut Range, owned by Phillip's Lab and cleared for up to 10,000 lbs HE, and at the Giant Reusable Air Blast Simulator (GRABS) site, 155 acres owned by FCT and cleared for up to 1,000 lbs HE since late 1994. Approximately 25 tests were conducted on these ranges in 1994. Other test facilities at Kirtland AFB, planned for relocation, include a Material Properties Lab, shock tubes (diameters of 20', 2' and 7"), Halfspace Test-bed, large gas gun for high speed scaled penetration testing, flyer-plate launch facility for hyper velocity impact shock testing, and shallow water shock test-bed.

Facilities remaining at Kirtland AFB include the Advanced Research Electromagnetic Research Simulator (ARES), the 6-foot diameter shock tube, and the Thermal Radiation Source (TRS) Test Site. See supporting data end of this section.

The PHETS at WSMR hosts the large scale test-bed (up to 8.2 kilotons of explosive charge, Ammonium Nitrate Fuel Oil - ANFO) and other test-beds supporting large scale nuclear effects simulation tests, advanced conventional weapons tests and unique HE tests for classified programs. The PHETS permits construction of large buried

SURVEY TEAM MEMBERS

NAME	RANK	OFFICE SYMBOL	DSN
Lippincott (DNA Leader)	CAPT (USN)	FCDNA/FCD	246-8613
Lawson	Col	FCDNA/FCT	246-5513
Heidenreich (EMTE)	Col	412 TW/EW	525-7627
Hetzel	Lt Col	FCDNA/FCTOE	246-6611
Donnalley	Lt Col	HQ USAF/RTR	225-4666
Neall	Lt Col	HQ USAF/RTR	225-4666
Palmore (Team Leader)	Maj	HQ ACC/XPPB	574-7159
Piekarczyk	Maj	HQ USAF/CEC	225-8177
Coleman	Maj	FCDNA/FCC	246-2225
Huizenga	Maj	USAFWTC/EM3	682-6107
Suoboda	Capt	558 CES/CED (EOD)	682-1218
Lu	GM-15	FCDNA/FCTI	505-846-2206
Conklin	GM-14	HQDNA/LEEE	703-325-1163
Ashbaugh	GM-14	FCDNA/Nevada	702-295-7067
Robertson	GS-13	HQ ACC/CEPR	574-3187
Paco	GM-13	FCDNA/FCRPE	246-8730
Barton	GS-13	AFAA/FSS	947-5548
Newburn	GS-12	AFAA/Eglin	872-3148
Cote	GS-11	HQ ACC/SCYN	574-3190

NELLIS BASE CONTACTS

Jones	Capt	554 MSS/DPM	682-9223
Reese	Capt	554 TRNS/LGTM	682-5748
Burditt	Capt	USAFWTC/SEY	682-2874
Ellis	1Lt	558CES/CECP	682-4153
Benart	GM-14	558CES/CERF	682-6862
Lee	GM-13	554 CS/SCX	682-5824
Williams	GS-12	AFAA/Nellis AFB	682-6915
Fueller	GS-12	558 CES/CECP	682-8451
Grantham	GS-12	USAFWTC/SEY	682-4045
Rodgers	GS-12	558CES/CE2	682-4833
Cox	GS-11	558CES/CERR	682-3302
Ocampo	GS-11	558 CES/CECP	682-3077
Hales	GS-11	554 TRNS/LGTL	682-2032
Harper	GS-09	558CES/CEC	682-8420
Carroll	MSgt	USAFWTC/SEW	682-1242
Ferguson	MSgt	558 CES/EOD	682-1503
Reymolds	MSgt	USAFWTC/SEW	682-4624
Jenkins	TSgt	554 TRNS/LGTL	682-3257
Sinkfield	TSgt	554 SUP/LGSF	682-8322

KEY NELLIS PERSONNEL

NAME	RANK	OFFICE SYMBOL	DSN
Wilcox	Col	USAFWTC/CV	682-5370
Ingram	Col	USAFWTC/CS	682-5371
Jaszczak	Col	USAF/DOE	295-1147
McFarlane	Col	57 WG/CV	682-7496
Warner	Col	57 WG/LG	682-4836
Barksdale	Col	57 WG/OG	682-4947
Brown	Col	554 MDG	682-2000
Chandler	Col	554 SPTG/CC	682-6550
Green	Col	554 SPTG/CD	682-6550
Rader	Col	554 SPS/CC	682-2566
Riggs	Col	558 CES/CC	682-4833
Carpenter	Col	554 RANS/CC	682-3600
Wallace	Lt Col	554 RANS/CD	682-3600
Dinkins	Lt Col	554 CS/CC	682-2069
Justet	Lt Col	554 MSS/CC	682-9229
Oehrli	Lt Col	554 CPTS/CC	682-2593
Costantini	Lt Col	USAFWTC/SE	682-7604
Haney	Lt Col	USAFWTC/XP	682-3000
Eldridge	Lt Col	554 CONS/CC	682-4003
Schofield	Lt Col	USAFWTC/RSI	682-0301
Finnegan	Lt Col	66 RQS/CC	682-6600
Uken	Lt Col	561 FS/CC	682-5381
Vendermarliere	Maj	554 TRNS/CC	682-4713
Fenoglio	Maj	USAFWTC/MO	682-5596
Hopper	GM-14	USAFWTC/EM	682-9367
Barton	GM-13	AFAA/FSS	947-5548
Williams	GS-12	AFAA/AAO	682-6915
Wilman	GS-12	USAFWTC/HO	682-9840
Cooper	GS-12	USAFWTC/RA	682-9843

6. EXPLOSIVE ORDNANCE DISPOSAL (EOD): FCDNA proposed operations affect two EOD aspects. The first EOD concern is the joint use of EOD range on Nellis AFB. A workable plan has been proposed for siting FCDNA functions in the vicinity of current EOD training site and will allow uninterrupted simultaneous operations. The second concern is EOD clearing of perspective PHETS site. This operation conducted by TDY military personnel will take between three to twelve months. Contractor utilization for this purpose would be cost prohibitive.

7. LOGISTICS: Logistical concerns fall in four areas:
a. Explosive storage capacity at Nellis AFB
b. Maintenance support capability at Nellis AFB
c. Security at ISAFAF
d. Water pressure to support firefighting and fire suppression at Nellis AFB. The concerns can be ameliorated through detailed coordination and infrastructure improvements. The standard Inter-service Support Agreement used at Nellis AFB is adequate with slight modifications to support the increased logistical requirements of this proposed relocation.

8. EMTE: The EMTE emitter move to the Nellis Range has no direct MILCON requirement at Nellis AFB. Nellis is impacted by TDY customer needs incurred due to the realignment of EMTE, however these needs can be met with existing facilities.

EXECUTIVE SUMMARY

1. GENERAL: The ACC team's mission was to assist FCDNA in the beddown of the High Explosive Test function from Kirtland AFB. FCDNA brings with it administrative, laboratory, and unique test requirements. The various functions include the Permanent High Explosive Test Site (PHETS), Giant Reusable Air Blast Simulator (GRABS), Joint Munitions Effects Manual (JMEMS) research and test support for counterproliferation programs. The most significant requirement is PHETS capability to detonate an Ammonium Nitrate/Diesel fuel (ANFO) charge of 4.6 Kilotons to simulate a nuclear airblast of 8.0 Kilotons. Environmental issues will be the biggest challenge to this beddown. On-base siting of other small test projects will likely face very little opposition. Options other than Nellis AFB are still being pursued by Air Staff as possible locations for FCDNA to include the Nevada Test Site (NTS) run by the Department of Energy (DOE).

2. OPERATIONS: The mission of this site survey was to assess various siting options for relocating the FCDNA high explosive testing operations from Kirtland AFB and White Sands Missile Range (WSMR) to Nellis AFB and Nellis Ranges. If state environmental and federal fish and wildlife approvals are obtained to use Range 64S or 65S for HE test operations, then the proposed siting plan is adequate. Consolidation of warehouse and workspace areas resulted in a 22% reduction in overall vertical storage and workspace from current usage.

3. COMMUNICATIONS: FCDNA have extensive communication requirements. These requirements include: Teleconferencing communications capability, T-1 lines, classified and unclassified LAN networks, fiber optic conductivity from Range Support functions to Range Operations. Teleconferencing security requirements are cleared to Top Secret/CNWDI. Possible expansion of Indian Springs Air Force Auxiliary Air Field (ISAFAF) and Nellis AFB telephone switch upgrades may be required.

4. FACILITIES: The facilities working group consisted of representatives from FCDNA/FCT, 558 CES, HQ ACC, HQ USAF and other base representatives. The working group assessed existing facility capacity and determined none were adequate or available for use. Eight MILCON projects were identified and validated at an estimated cost of $25.3M. Specifically, four projects at Nellis proper for $15.9M; three projects estimated at $4.9M at ISAFAF and one project at 64S RANGE for $4.5M.

5. ENVIRONMENTAL: After a review of the proposed actions, locating the GRABS testing on Nellis AFB near the existing EOD OB/OD sites does not pose any significant environmental difficulties. However, locating the PHETS within the 60 series ranges will probably be rejected/contested by the U.S. Department of Fish and Wildlife Service, due to the fact that this land is part of a National Wildlife Refuge. The environmental working group also inquired about the possible beddown of the Kelly operation at Nellis AFB. The Nevada Division of Environmental Protection (NDEP) was not receptive to the idea of developing thorium fields in this area and recommended these sites be located within the NTS.

INTRODUCTION

As a result of SECDEF BRAC 95 recommendation to the Base Closure Commission, Field Command Defense Nuclear Agency (FCDNA) - High Explosive Test will move to Nellis AFB. HQ AF/RTR requested HQ ACC/XPPB lead a composite site survey team from ACC, FCDNA and Nellis AFB. Our primary mission was to identify MILCON projects required to accommodate numerous FCDNA functions currently located at Kirtland AFB. The secondary mission of the ACC contingent was to identify MILCON requirements at Nellis AFB proper caused by the realignment of the Electromagnetic Test Environment (EMTE) from Eglin AFB. In addition to MILCON, the team considered issues such as logistics, environmental and base support.

UNCLASSIFIED

HEADQUARTERS AIR COMBAT COMMAND

DIRECTOR OF PLANS & PROGRAMS

BRAC 95
DET4, 505 CCEG BEDDOWN

HURLBURT FLD, FLORIDA

21-24 MAR 95

HQ ACC/XPPB

UNCLASSIFIED

68

TABLE OF CONTENTS

	PAGE
TABLE OF CONTENTS	1
INTRODUCTION	2
EXECUTIVE SUMMARY	3
SITE SURVEY TEAM ROSTER	4
POC ROSTER	5
I. OPERATIONS	6
II. COMMUNICATIONS	8
III. FACILITIES	11
IV. DISTRIBUTION	16

INTRODUCTION

HQ ACC/XPPB led an ACC team of selected functional area experts to identify MILCON projects to beddown Det 4, 505 CCEG at Hurlburt Fld. Det 4's movement is a result of the SECDEF recommendation to the Defense Base Closure and Realignment Commission to realign Kirtland AFB.

EXECUTIVE SUMMARY

The ACC site survey team was part of a larger team run by HQ AFMC/XPP. The ACC team's mission was to beddown Det 4, 505 CCEG at Hurlburt Field with its parent organization. Det 4's mission is to provide advanced distributed simulation emphasizing theater air defense. Det 4 is responsible for the development and operation of the Theater Air Command and Control Simulation Facility (TACCSF).

1. OPERATIONS: Det 4 is part of the 505 CCEG at Hurlburt Field and is an AWC unit. This unit supports numerous customers within DoD and other government agencies with a one of a kind, operator-in-loop air defense simulation facility. The plan is to unite Det 4 with its parent organization at Hurlburt Field. To move the 122 manpower positions to Hurlburt Field will require 40,900 SF of space.

2. COMMUNICATIONS: After review of the projected communications support required to beddown Det 4, 505th CCEG at Hurlburt Field, FL, the telecommunications authorizations in personnel and equipment are adequate, provided items stated in the C-CS working group report are utilized. The possible relocation will not impact on any collateral communications capabilities in a negative way. The base can support the relocation provided our inputs to the report are used as a positive source when implementing the relocation plan.

3. FACILITIES: The Facilities Working Group consisted of representatives from the 505 CCEG; 16 CES; HQ AFSOC; Det 4, 505 CCEG; 727 ACS; and HQ ACC. The working group toured the existing Blue Flag facility and determined it to be inadequate for alteration and addition for the Det 4, 505 CCEG. A new facility of 40,900 SF, $6.0M, is proposed for the 727 ACS communication/radar site. No other sites are available on Hurlburt Field due to vast wetland areas and future needs of the expanding 16 SOW mission.

SITE SURVEY TEAM ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Sirois	Lt Col	Det 4, 505 CCEG/CV	246-1471
Palmore	Maj (Leader)	HQ ACC/XPPB	574-7159
Akin	Capt	Det 4, 505 CCEG/ENS	246-1600
Thies	Mr	HQ ACC/CEPR	574-3187

HURLBURT TEAM ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Kelley	Lt Col (S)	USAFBTS/BTL	579-6121
Dean	Maj	HQ AFSOC/XP	579-4762
Jones	Maj	727 ACS(T)/LG	579-7273
Warnar	Capt	HQ AFSOC/SCP	579-2134
Franklin	Capt	505 TSS/MSF	579-5115
Rydland	1Lt	16 CS/SCP	579-4978
Nicholson	MSgt	16 CS/SCP	579-4977
Weshaga	TSgt	16 CS/SCP	579-2980
Allridge	SSgt	16 SPS/SPAIR	579-7252
Lewis	Mr	HQ AFSOC/CE	579-2260
Podich	Mr	16 CES/CD	579-7701
Hoffman	Mr	16 CES/CECP	579-6439
Meri-Akri	Mr	16 CES/CECP	579-5310

KEY HURLBURT PERSONNEL CONTACTED

NAME	RANK	OFFICE SYMBOL	DSN
Bailey	Brigadier General	16 SOW/CC	579-7782
Gilbert	Col	16 SPTG/CC	579-4446
Upson	Col	505 CCEG/CC	579-5054
Hawkins	Col	505 CCEG/CD	579-1802
Rohlfing	Col	USAFBTS/CC	579-7741
Davis	Col	USAFAGOS/CC	579-7611
Le Grande	Lt Col	16 CES/CC	579-7701
Reed	Lt Col (S)	16 SPS/CC	579-7620
Caldwell	Maj	16 CS/CC	579-6643

I. OPERATIONS

WORKING GROUP CHAIRPERSON: Lt Col Robert J. Sirois, Det 4, 505 CCEG, DSN 246-1472

CO-CHAIRPERSON: Maj Wade Palmore, HQ ACC/XPPB, DSN 574-7159

BASE POC: Col Carl Upson, 505 CCEG/CC, DSN 579-5054

1. GENERAL: The Operations (OPS) team surveyed the operations functions of Det 4, 505 CCEG, Theater Air Command and Control Simulation Facility (TACCSF). The OPS team mission was to assess facility space available to beddown Det 4, if the decision is made to move Det 4 to Hurlburt Field. Attention was focused on all options available to relocate Det 4 to Hurlburt with particular emphasis on locating Det 4 as close as possible to the 505 CCEG units. It was also assumed that the level of capability of Det 4 would not be degraded after the move.

2. ANALYSIS:

a. Det 4 provides advanced distributed simulation to a variety of joint agencies with a focus on theater air defense. Det 4 simulation efforts include a combination of constructive, virtual, and live operations. The unit uses Modeling and Simulation (M&S) for research, development, test, evaluation and training. The mission is accomplished through the use of high-fidelity, Distributed Interactive Simulation- (DIS) compliant, operator-in-the-loop, simulation systems and software. These systems include a variety of airborne weapons and sensor platforms along with several Army C4I and missile systems. In addition, Air Force Modular Control Equipment (MCE) and associated radar systems are modeled. These simulation efforts are distributed to joint agencies and their associated facilities worldwide over distributed networks to include SATCOM and dedicated T-1 connections, and the Defense Simulation Internet (DIS).

b. Det 4 requires a stand-alone facility to accomplish its mission. Due to the nature of the mission, scheduling, security, and diverse customer requirements, TACCSF could not share a facility within the constraints of available facilities currently in place at Hurlburt Field. The unit requires up to 40,900 square feet of space for 122 personnel, including 30 government military and civilian employees, and 92 contractors for technical support, and development, operations and maintenance (D,O&M). A test-bed on raised floor for the computer systems and simulators would require 21,100 square feet of space. Office and administrative support areas for the facility would require an additional 19,800 square feet. A potential site was located at Hurlburt Field in close proximity to the other 505 CCEG missions, which would facilitate linking of the facilities for communications and distributed simulation efforts. These efforts include a long-term goal of developing the Theater Battle Management Warfighting Center of Excellence to provide mission ready qualification for the Joint Forces Air Component Commander and his staff, which operate an AOC. The center of excellence concept would also provide operational test and evaluation and training for C4I systems and concepts in a more robust environment than is now possible.

c. The facility used to house the USAF Battlestaff Training School (USAFBTS), often referred to as "Blue Flag", was considered as a potential option. Due to the facility's architectural limitations and conflicts arising out of the diverse nature of USAFBTS and TACCSF missions, it was determined to be unacceptable. The current facility would require a major renovation in layout, electrical support requirements, and additional building requirements before it could be considered. Risk is extremely high.

3. RECOMMENDATIONS:

a. Det 4, 505 CCEG, TACCSF, should be located at Hurlburt Field in a stand-alone facility at one of two sites within close proximity to other 505 CCEG units. This will facilitate the unit's mission and future requirements for advanced distributed simulation efforts.

II. Communication & Computer Systems

Working Group Chairperson: Capt Franklin, 505th TSS

Base (Kirtland AFB) POC: TSgt Ray M. Owen, Det 4, 505 CCEG/TC

Hurlburt Field POC's: 1Lt John P. Rydland, 16 CS/SCP, DSN 579-4978
TSgt M. Wes Haga, 16 CS/SCPP, DSN 579-2980

1. GENERAL: The 16th Communications Squadron was tasked to identify the communications assets and cost associated with moving Det 4, 505th CCEG to a new facility located in close proximity to the existing 505th CCEG located at Hurlburt Fld.

2. ANALYSIS: As a result of initial meetings with the Site Survey Team, 16 CS/SCP accepted the following items to research and cost.

- Identify the Administrative Telephone Cost
- Identify the Leased Communications Circuit Cost
- Identify the Administrative Local Area Network Connectivity Cost
- Identify the internal cabling cost associated with the war gaming/simulator network: 420 workstations
- Identify the external copper cable requirements

A. Identify the Administrative Telephone Cost:

Hurlburt Field operates administrative telephones under the single line concept which states that each individual phone is an individual line. This means there are no shared phone numbers For Det 4, the use of the M5312 P-phone will satisfy their large intercom and conferencing requirements which they utilize presently. The following is a list of associated costs:

Item	Cost
M 5312 P-Phone	$380.00
MT6X21AC (Card)	$117.00
Installation	$50.00
Total per phone =	**$547.00**
122 total phones =	**$66,734.00**

B. Identify the Leased Communications Circuit Cost

The leased communications costs include:

Circuit	Cost/Month
Three T-1s to Arlington, VA area	$5,800.00
One T-1 to San Diego, CA	$6,500.00
One T-1 to Colorado Springs, CO	$6,100.00
One T-1 to DSI node, Gunter AFB, AL	$6,000.00
Total per month =	**$24,400.00**

C. Identify Administrative Local Area Network Connectivity Costs

LAN connectivity costs for the new facility. See attached technical solution and costing in ACC/XPPB for exact equipment breakdown and associated costs. **($ 43,902.95)**

D. Identify Wide Area Lan Connectivity Cost (fiber):

Wide area network connectivity cost to utilize a new building will roughly total **$40,000** to connect the new building with the existing 505th buildings. The existing 505th building (90005), will be connected via fiber through the Air Force Superhighway 2000 program. The $40,000 covers the cost to lay additional fiber between the two buildings install the required end equipment. This cost comes from the Superhighway 2000 program and the Hurlburt Field STEM-B Mr Charles J Meyers, 485th EIG/ESC.

E. Identify cable costs for the 420 station war gaming and simulation area. This cost is based on a worst case cable estimate. Using a 100 x 200 ft open space, the longest single lateral cable run is 173 ft, excluding any vertical displacement.

420 stations x 173 ft = 72,660 feet of cable required

Plenum Ethernet Cable = $210.00 / 1000 ft., ($ .21/ft)

72,660 ft x ($.21 per ft) = $ 15,258.60

F. Identify Copper Cable Connectivity External Costs

A 400 pair copper cable is required for copper cable connectivity into the base copper infrastructure.

Cost Covers:	Cable & Hardware	$ 9,400.00
	Installation	$ 2,200.00
	Total	**$11,600.00**

3. Total communications cost to provide the infrastructure necessary:

Administrative Telephone Cost	.$66,734.00
Leased Comm Cost	$24,400.00
LAN Connectivity Cost	$43,902.95
WAN Connectivity Cost	$40,000.00
Simulation Room Cable Cost	$15,258.60
Copper Cable Connectivity	$11,600.00
Total Communications Infrastructure Costs	**$201,895.55**

4. Note: The aforementioned costs do not include any Allied Support Costs. Refer to the DD Form 1391 associated with the building construction to determine Allied Support Costs.

III. Facilities

Facilities Working Group Chairperson: Mr. Gene Thies, HQ ACC/CEPR, DSN 574-3187

Base POC: Alex Meri-Akri, 16 CES/CEC, DSN 579-5310

General: The purpose of the site survey is to determine the construction required to accommodate Det 4, 505 CCEG at Hurlburt Fld, FL. The attached facility validation checklist contains all information pertaining to the proposed construction of a 40,900 SF facility on the 727 radar site on Hurlburt Field near the 505 CCEG compound. Actual DD Fm 1391s and 1178 are on file with ACC/XPPB and ACC/CEPR.

FACILITY VALIDATION CHECKLIST

DATE: 28-Apr-95

PURPOSE /LOCATION: BRAC 95 Det 4, 505 CCEG from Kirtland AFB to Hurlburt Field, FL.

SURVEY CONTROL NUMBER (If Required) _____

1. **ACC/XP TEAM CHIEF** (Name/Office/Phone): Major Wade Palmore, ACC/XPPB, DSN 574-7159

2. **ACC/CE TEAM CHIEF** (Name/Office/Phone): Gene Thies, ACC/CEPR, DSN 574-3187

3. **BASE FUNCTIONAL EXPERT** (Name/Office/Phone): Lt Col Robert Sirois, Det 4, 505 CCEG/CV, DSN 246-1471

4. **MAJCOM FUNCTIONAL EXPERT** (Name/Office/Phone): N/A

5. **TYPE OF CONSTRUCTION** (ADAL, New Construction, Renovation): New Construction

6. **CATEGORY CODE**: 171-623; Technical Training

7. **FUNCTION** (i.e., Maintenance Shops, Supply Warehouse, Squad Ops):

Theater Air Command and Control Simulation Facility for Air Defense simulation and training of aircrews and controllers.

10. **REQUIREMENTS** (i.e., AFR 86-2, Weapons Systems Requirements Plan, etc):

Reference ACC/XPPB Site Survey Report (pages 9 and 10), 13-16 Mar 95, Kirtland AFB NM. Actual personnel authorizations are 122 pn instead of the estimated 150 pn listed in the Kirtland report.

Special Purpose Space: 21,100 GSF; a unit unique requirement with no standard criteria. Secure Room criteria per DOD 5200.1-R Change 2, page V-2 and Appendix F.

General Administrative Space: 122 pn X 162 sf/pn equals 19,800 sf; per AF HDBK 32-1084, Chapter Eleven.

11. **ANALYSIS** (Requirement Compared to Existing Facilities):

The Facility Working Group considered two options: 1) Utilizing Bldg. 90005 and 2) constructing a new facility. The high bay of the Blue Flag Bldg (90005), 505 CCEG facility was initially considered. The high bay currently contains a two-story Blue Flag training structure. Three-story construction would provide 25,000 sf of Detachment 4 unit requirement, leaving 15,900 sf to be constructed outside the building. The high bay would normally accommodate a three-story administrative structure but Blue Flag requires high ceilings for briefing displays and equipment, eliminating the potential for three-story construction. Since a three-story structure inside of Blue Flag building is not feasible, a stand-alone facility for Det 4 will be required. Siting of a new facility was limited to two areas on Hurlburt Field due to extensive wetland areas and the growing 16 SOW mission: One site across from the Base Civil Engineering (BCE) complex on Independence Road and another site currently used by the 727 ACS for radar operations. The site across from the BCE complex is further from Bldg. 90005 and is used for Army deployments and 16 CES training. IAW the base long-range development plan (page 34), the site is designated for future 16 SOW administrative functions. The site of the 727 ACS radar operation is close to Bldg. 90005 but will require relocation of a communications tower and the radar. The radar hill will have to be leveled. Despite these relocations, the 727 ACS radar site is the optimum choice for the 16 SOW and 505 CCEG missions.

12. **RECOMMENDATION**:

Construct stand-alone 40,900 sf facility at the 727 ACS radar site. Relocate 727 ACS communications tower and radar.

13. **TOTAL ESTIMATED COST**: FY98

a. Facility Cost Breakout (line item scope/cost):

ITEM	U/M	QUANTITY	COST	($000)
AIR DEFENSE SIMULATION/TRAINING FACILITY	SF	40,900	95	3,886
SUPPORTING FACILITIES				1,485
UTILITIES	LS			(300)
PAVEMENTS	SY	6,400	46	(295)
SITE IMPROVEMENTS	LS			(300)
*RELOCATE RADAR/RADIO ANTENNAS	LS			(150)
*RAISED FLOOR, SECURE ROOMS	SF	16,300	22	(360)
*REMOVE RADAR MOUND	CY	20,000	4	(80)
SUBTOTAL				5,371
CONTINGENCY (5%)				269
TOTAL CONTRACT COST				5,640
SUPERVISION, INSPECTION AND OVERHEAD (6%)				338
TOTAL REQUEST				5,978
TOTAL REQUEST (ROUNDED)				6,000

b. Source of Facility Cost for Each Line Item (AF Price Guide, Local Price Sources, etc.):

75

All cost estimates were sourced from AF Price Guide in WIMS PDC except those marked by * which came from MEANS Construction Price Guide, 1994.

BRAC BUDGET PROGRAM OR _____
PROGRAM ELEMENT CODE _____

14. **COST ESTIMATE PREPARED BY:**

a. BASE REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
ALEX MERI-AKRI 16 CES/CEC 579-5310	\\SIGNED\\

a. ACC CES/ESP REPRESENTATIVE:

(Print or Type Name/Office/DSN)	(Signature)
SEBASTIAN REMICCI	\\SIGNED\\

15. **COORDINATION**

a. BASE

(Print or Type Name/Office/DSN)	(Signature)
COMMUNITY PLANNER CARL T. HOFFMAN	\\SIGNED\\
BASE MILCON PROGRAMMER ALEX MERI-AKRI	\\SIGNED\\
REAL PROPERTY OFFICER BECKY BARRETT	\\SIGNED\\
CHIEF ENGINEER THOMAS BALLASCH	\\SIGNED\\
RESOURCE MANAGER LT. PETER JENNESS	\\SIGNED\\

ENVIRONMENTAL ENGINEER MICHAEL GOLD	\\SIGNED\\
DEPUTY BASE CIVIL ENGINEER NICHOLAS PODICH	\\SIGNED\\

b. AUDITORS

(Print or Type Name/Office/DSN)	(Signature)
AIR FORCE AUDITORS BOB NEWBURN	\\SIGNED\\

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HQ ACC/DOR/DOS/DOT 205 Dodd Blvd. STE 101 Langley AFB VA 23665-2789	3
HQ ACC/DRB/DRC/DRF/DRM/DRSMO-2 204 Dodd Blvd. Ste 226 Langley AFB, VA 23665-7777	5
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HQ ACC/XPM/XP-SAS/XPP (7) 204 Dodd Blvd. STE 202 Langley AFB VA 23665-2778	9

HQ ACC/SCP 108 Benedict Ave STE 209 Langley AFB VA 23665-1993	1
ACC CES/ESE Crestar Bldg STE 500 11817 Canon Blvd. Newport News VA 23606	2
HQ ACC/INA/INF 129 Andrews St. Ste 150 Langley AFB VA 23665-2767	2
USAF AWC/CC/CS 203 West D Avenue Rm. 600 Eglin AFB FL 32542-6867	2
HQ AFSOC/XP 100 Bartley St Hurlburt Field, FL 32544-5273	1
16 SOW/CC/CS 131 Bartley St Ste 315 Hurlburt Field, FL 32544-5273	2
505 CCEG/CC 142 Hartson St Hurlburt Field, FL 32544	1
Det 4, 505 CCEG/CC/CV 1655 First St., SE Kirtland AFB, NM 87117-5617	2
HQ AFMC/XPX 4375 Chidlaw St Ste 6 Wright Patterson AFB, OH 45433-5006	1
Total	45

HEADQUARTERS AIR COMBAT COMMAND

DIRECTOR OF PLANS & PROGRAMS

ACC FACILITIES ASSESSMENT

KIRTLAND AFB, NEW MEXICO

13-16 MAR 95

HQ ACC/XPPB

78

TABLE OF CONTENTS

	PAGE
TABLE OF CONTENTS	1
INTRODUCTION	2
EXECUTIVE SUMMARY	3
SITE SURVEY TEAM ROSTER	4
POC ROSTER	5
I. Det 4 505 CCEG	6
II. Det 1 31 TES	10
III. DEFENSE NUCLEAR AGENCY	11
IV. DISTRIBUTION	13

INTRODUCTION

HQ ACC/XPPB led an ACC team of selected functional area experts to identify facility requirements of ACC units currently located on Kirtland AFB. These units, Det 4, 505 CCEG and Det 1, 31 TES, will potentially relocate to other bases as a result of SECDEF recommendations to the Defense Base Closure and Realignment Commission. At Air Staff request, the ACC team looked at selected Field Command Defense Nuclear Agency (FCDNA) facilities requirements in preparation for their move to Nellis AFB.

EXECUTIVE SUMMARY

The ACC site survey team looked at areas that directly and indirectly affect ACC. The ACC units are: Det 4, 505 CCEG and Det 1, 31 TES. The unit action that indirectly affects ACC is FCDNA relocation to Nellis AFB.

1. Det 4, 505 CCEG: Det 4 is part of the 505 CCEG at Hurlburt Field and is an Air Warfare Center (AWC) unit. This unit supports numerous customers within DoD and other government agencies with a one of a kind, operator-in-loop air defense simulation facility. The unit is planned to be united with it's parent organization at Hurlburt Field. To move the 150 manpower positions to Hurlburt Field will require 41,000 SF of space.

2. Det 1, 31 TES: Det 1 is part of the 31 TES at Edwards AFB and is part of the 79 TEG. The 79 TEG is a unit of AWC. Det 1 accomplishes modeling and simulation in support of AFOTEC programs at Kirtland AFB. The plan is for Det 1 to move back to it's parent organization at Edwards AFB when current projects are completed FY 97/4. To move the 31 manpower positions to Edwards AFB will require 3,100 SF of space.

3. FCDNA: The Test Operations Directorate, FCDNA, is a DoD agency chartered to conduct nuclear and high explosive tests and evaluation. The functions than are to move to the Nellis AFB complex are located on Kirtland AFB and White Sands Missile Range (WSMR). The functions include the Blast Shock Test, Air Blast Simulator and Permanent High Explosive Test Site. Relocation of these functions and 226 associated personnel will require extensive facilities on Nellis AFB and the Nellis AFB Range Complex.

SITE SURVEY TEAM ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Brad Purvis	Maj	HQ ACC/XPPB	574-7159
Wade Palmore	Maj	HQ ACC/XPPB	574-7159
Jennie Dickover	Capt	HQ ACC/SCXP	574-4011
Bryon Rodriguez	2Lt	USAF WTC/XP	682-3138
Gene Theis	Civ	HQ ACC/CEPR	574-3187

POC ROSTER

NAME	RANK	OFFICE SYMBOL	DSN
Lester, Dennis L.	Lt Col	Det 4, 505 CCEG/CC	246-1472
Keppler, Darryl	Lt Col	Det 1, 31 TES/CC	246-2331
Lippincott, Lincoln H.	Capt (USN)	FCDNA/FCD	246-8613
Lawson, Harlan A.	Col	FCDNA/FCT	246-5513
Sirois, Robert J.	Lt Col	Det 4, 505 CCEG/CV	246-1471
Akin, Thomas	Capt	Det 4, 505 CCEG/ENS	246-1600
Owen, Ray M.	TSgt	Det 4, 505 CCEG/TC	246-0726
Pugh, Keith A.	Maj	Det 4, 505 CCEG/PD	246-1471

I. DET 4, 505TH COMMAND & CONTROL EVALUATION GROUP (CCEG)

A. Communication & Computer Systems

Working Group Chairperson: Capt Jennie E. Dickover, HQ ACC/SCXP, DSN 574-4011

Base POC: TSgt Ray M. Owen, Det 4, 505 CCEG/TC

1. GENERAL: The Communications Working Group (CWG) surveyed the communications infrastructures and manpower authorizations of the 505 CCEG.

2. ANALYSIS:

a. Base Communications Infrastructure.

(1) The 505th consists of 2 buildings (Bldg 20361 and 20360) connected with a T3 circuit. The main computer facility is 20,000 SF of space occupied with various computers and simulator necessary to perform the mission of the unit. There are 150 users in the unit. The communications infrastructure in both buildings is adequate.

(2) The communications infrastructure includes personal computer workstations, 3 separate LANs, and many computer simulation suites. The 3 LANs include one for the unit and one for each of two contractors. There is also a requirement for LAN connectivity to three other sites which is being accomplished by 6 T1 circuits. The unit can meet its needs with 2 pairs of fiber cable to the Base Communications Squadron. These cables should be run independently to prevent single point of failure. In addition, there is approximately 30 ft of fiber optic cable connecting the computers in the test-bed.

(3) The security requirements will be outlined for each system in the site survey from Eglin. The existing facility is operating under waivers and it will be necessary to house the equipment in a vault at the new location.

(4) There is a Video Teleconference Center located in one of the briefing rooms that will be moved. It is a point to point connection to Washington, DC.

(5) There are no satellite requirements for this unit.

b. Manpower Authorizations.

(1) There are a total of 150 manpower authorizations, however, there has been no breakdown by AFSC.

21

c. Data Automation Inventory Summary.

The data automation inventory list will be provided at the 20-24 March Site Survey at Eglin. Lt Col Sirois will attend to ensure the requirements of the unit are identified. The complete inventory will be listed in the Eglin report.

3. RECOMMENDATION: The unit is located in an inadquate, outdated facility. The new facility should allow the unit to contain the modeling and simulation function in a centralized location. Except for the fiber connectivity requirements to the Communications Squadron, the unit should not impact the operations of the base.

B. Facilities

Working Group Chairperson: Mr. Gene Thies, HQ ACC/CEPR, DSN 574-3187

Base POC: Capt Thomas Akin, Det 4, 505 CCEG/DE, DSN 246-1600

1. GENERAL: The purpose of this Facility Site Survey is to identify facility requirements for Det 4, 505 CCEG that is being considered for relocation from Kirtland AFB to Hurlburt Field, FL.

2. ANALYSIS: The unit presented a facility requirements plan based on their existing facilities. The team toured the facilities. The unit occupies 40,900 SF in two buildings. They occupy all of Building 20361, (36,300 SF), and a small portion of Building 20360, (4,600 SF). This facility utilization information came from base real property records. Most of the computer and terminal functions are maintained in secure areas. These areas must be secured to store computer systems that contain Top Secret classified information. Vault construction for these computer systems may be required and will depend on the facility location at Hurlburt Field. The working group performed a functional analysis of the unit plan. The facility requirement is broken down into two main categories; general administrative and special purpose space. Floor plans of current facility usage will be maintained in official ACC/CEPR files.

3. RECOMMENDATION: The following space requirements are the result of analysis and discussion with unit personnel and contractor representatives.

a. Facility Requirement Criteria: The following information provides the tools and guidelines to assist in the development of an organization total facility requirement.

(1) Facility Requirements Policy and Guidance

-- AF HDBK 32-1084, Standard Facility Requirements Handbook (Replaces AFM 86-2)

-- Space based upon authorized not assigned

(2) Facility Requirements Criteria Summary:

Computer Area (secure vault)	10,000 GSF
Node Terminals (secure vault)	5,000 GSF
Visitor Gallery (secure vault)	850 GSF
White Force Terminal (secure vault)	400 GSF
Communications/LAN Equipment	1,000 GSF
Maint, Storage, Shipping	1,000 GSF
Training/Briefing 150 PN	2,500 GSF
Break Room	350 GSF

82

Sub total	21,100 GSF *
General Administrative	
150 PN Admin Area with prewired	19,500 GSF
workstations 130 SF/PN	
Admin Mechanical Room	400 GSF
TOTAL	**41,000 GSF**

Table 1.2 -- Facility Requirements Criteria

* This 21,100 SF contains all common areas and mechanical systems.

II. DET 1, 31 TEST & EVALUATION SQUADRON

A. Communications & Computer Systems

Working Group Chairperson: Capt Jennie E. Dickover, HQ ACC/SCXP, DSN 574-4011

Base POC: TSgt Riley, DET 1, 31 TES, DSN 246-2331

1. GENERAL: The purpose of the communications site survey is to identify the existing communications requirements of the unit. The unit consists of 31 positions which support the AFOTEC test and evaluation mission. All of the assets, to include the computers and communication support, belong to AFOTEC.

2. ANALYSIS: The computers are old VAX machines, but fairly limited in number. The test-bed is completely self-contained and requires no outside connectivity. The unit is connected to the AFOTEC LAN, but if it moved to Edwards, may need to be connected to the new host unit. If the computers are moved to Eglin with the AFOTEC host, new processing capabilities may be necessary. This is not a stand alone unit, and may need outside communication support at its final location.

3. RECOMMENDATION: A true idea of the communications requirements beyond administrative computer and phone support will depend on the final location.

B. Facilities

Working Group Chairperson: Mr. Gene Thies, HQ ACC/CEPR, DSN 574-3187

Base POC: CMSgt Fain, Det 1, 31 TES, DSN 246-2331

1. GENERAL: The purpose of the facility study is to identify facility requirements for the Det 1, 31 TES that is being considered for relocation from Kirtland AFB.

2. ANALYSIS: The unit presented a brief description of their function and space. The team toured the facility. The unit occupies approximately 400 Net Square Feet (NSF) of general administrative space for 5 persons, and 2,500 NSF of secure vault area for 26 persons. The unit is fully contained in a portion of Building 20129 with AFOTEC functions. The computer systems used by the unit contain Top Secret information and must be secured in a SCIF.

3. RECOMMENDATION: In accordance with AF-HDBK 32-1084, Standard Facility Requirements Handbook, the unit requires approximately 650 NSF (130 SF/PN) of general administrative space and 2,500 NSF of secure vault space.

III. FIELD COMMAND, DEFENSE NUCLEAR AGENCY

Working Group Chairperson: Maj Wade Palmore, HQ ACC/XPPB, DSN 574-7159

Base POC: Col Harlan Lawson, FCDNA Test Directorate, DSN 246-5513

1. GENERAL: HQ AF/RTR requested ACC/XPPB steward the FCDNA's Test Directorate beddown at Nellis AFB. In this capacity XPPB will lead the site survey at Nellis AFB. XPPB will also provide guidance to FCDNA functional area experts to accomplish the necessary MILCON and cost data collection and validation for submission to the Base Closure Executive Group. The ACC Team attended a briefing by FCDNA to the AF Site Survey Team. FCDNA provided an extensive handout, covering detailed facility data. FCDNA indicated which functions would go to Kelly AFB, Nellis AFB and those remaining at White Sands Missle Range (WSMR).

2. ANALYSIS: The ACC Team toured the facilities and offices that were designated to go to Nellis AFB. Nellis AFB will gain 101 DoD employees plus 125 contract personnel. These people manage and direct the High Explosive Test functions under FCDNA. Major high explosive test facilities include two sizes of blast shock tubes, the thermal radiation test site, the Giant Reusable Air Blast Simulator (GRABS) on 155 acres (Kirtland AFB) and the Permanent High Explosive Test Site (PHETS) on 10 sq mi of WSMR.

a. Except for the PHETS all other high explosive test functions are located on Kirtland AFB, only minutes away from the main FCDNA offices. If these functions move to Nellis AFB, FCDNA must duplicate the physical proximity that exits at Kirtland AFB. The PHETS is approx. 100 miles south of Kirtland AFB, in the northern area of WSMR. PHETS would have to be sited on the Nellis AFB Range Complex isolated from other functions. The environmental impact of the PHETS operations on the Nellis AFB Range Complex will have to be assessed.

b. On Nellis AFB proper, FCDNA test operations will require a 35,000 SF administration/research facility and vehicle maintenance support for over 100 vehicles (over half are heavy equipment). Warehousing and R&D shops (approx. 40,000 SF) must also be accommodated on Nellis AFB.

c. FCDNA has significant communications infrastructure, serving 125 users with substantial security requirements; communication circuit connectivity to over 14 locations plus basic administration phones, STU III and multi-line requirements. Unit-wide LAN with a classified capability, utilizing fiber and unshielded twisted pair.

CURRENT FCDNA TEST DIRECTORATE FACILITIES

BUILDING #	EXISTING SF	DESCRIPTION
613	10083	R&D
614	5247	R&D
641	1000	STORAGE
730	2165	OFFICE
734	11513	R&D, 5K OFFICE
20362	34691	2120 CONF, 400 VAULT, 805 CALIB. LAB, OFFICE
20414	14196	LAB, 15OO OFFICE
20677	4559	INSTRUMENTATION
29022	700	EXPLOSIVES BUNKER
29023	700	EXPLOSIVES BUNKER
29025	700	EXPLOSIVES BUNKER
29026	700	EXPLOSIVES BUNKER
29024	100	EXPLOSIVES STORAGE BOX
57101	8220	WAREHOUSE/ASSEMBLY AREA

3. RECOMMENDATION: FCDNA produce a draft plan for Nellis AFB facilities that consolidates the numerous individual facilities currently on Kirtland AFB. This plan will be used on the Nellis AFB site survey, 27-31 Mar 95.

DISTRIBUTION

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HQ ACC/DOR/DOS/DOT 205 Dodd Blvd. STE 101 Langley AFB VA 23665-2789	3
HQ ACC/DRB/DRC/DRF/DRM/DRSMO-2 204 Dodd Blvd. Ste 226 Langley AFB, VA 23665-7777	5
HQ ACC/FMA/FMF 216 Sweeney Blvd. Ste 212 Langley AFB VA 23665-2792	2
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ACC CES/ESE Crestar Bldg STE 500 11817 Canon Blvd. Newport News VA 23606	2
HQ ACC/INA/INF 129 Andrews St. Ste 150 Langley AFB VA 23665-2767	2
USAF AWC/CC/CS 203 West D Avenue Rm. 600 Eglin AFB FL 32542-6867	2
USAF WTC/CS 4370 North Washington Blvd Ste 117 Nellis AFB NV 89191-7076	1
Det 4, 505 CCEG/CC 1655 First St., SE Kirtland AFB, NM 87117-5617	1
31 TES/CC 60 North Wolf Ave. Edwards AFB, CA 93524-6275	1 1
Det 1, 31 TES/CC 8500 Gibson Blvd., SE Kirtland AFB, NM 87117-5000	1
FCDNA 1680 Texas St SE Kirtland AFB, NM 87117-5000	3
Defense Nuclear Agency 6801 Telegraph Rd Alexandria, VA 22310	1
79 TEG/CC 203 West D Ave, Suite 400 Eglin AFB, FL 32542-6867	1
Total	47

Code Buck
TP FN/XP
367-7085

BRAC 95
SITE SURVEYS

MAJOR TONY LOPER
BASES & UNITS BRANCH
PLANS & OPERATIONS
7 APRIL 1995

OVERVIEW

- OBJECTIVE
- ASSUMPTIONS
- MISSION LAY-IN
- COSTS
- WHAT'S NEXT

OBJECTIVE

- DETERMINE THE "BILL TO PAY" TO IMPLEMENT BRAC RECOMMENDATIONS
  - RELOCATE 58 SOW FROM KIRTLAND AFB TO HOLLOMAN AFB
  - RELOCATE DEFENSE NUCLEAR AGENCY FROM KIRTLAND AFB TO HOLLOMAN AFB

ASSUMPTIONS

- TAIWANESE AT-38 PROGRAM LEAVES AS PROGRAMMED
  - LOCKHEED CONSOLIDATES INTO BLDG 301
  - BLDG 500 BECOMES AVAILABLE
- 49 FW SJA & SOCIAL ACTIONS MOVES TO BLDG 318
  - BRAC FUNDS BLDG 318 ALTERATION
  - BLDG 302 BECOMES AVAILABLE

MISSION LAY-IN

- OUR APPROACH
  - EXISTING CAPACITY
  - O&M PROJECTS
  - MILCON PROJECTS

EXISTING CAPACITY
PAVEMENTS

ITEM	COST($M)
RUNWAY	0

EXISTING CAPACITY
MAINTENANCE

ITEM	COST($M)
PMEL	0
NDI	0
SUPPLY WAREHOUSE	0
VEHICLE MAINTENANCE	0

EXISTING CAPACITY
POL

ITEM	COST($M)
JP-8 STORAGE	0
MOGAS STORAGE	0
DIESEL STORAGE	0
LOX	0
NITROGEN	0

EXISTING CAPACITY
SUPPORT

ITEM	COST($M)
VOQ (48 ROOMS)	0
DORMITORY (73 BEDSPACES)	0
DINING HALL (277 MEALS)	0

O&M PROJECTS

ITEM	COST($M)
COVER SWIMMING POOL	0.30
BASE COMM INFRASTRUCTURE	2.23
INSTALL COMM EQUIPMENT	0.29
ADDITIONAL CIRCUITS	0.07
WEATHER SUPPORT	0.11
REMOTE SWITCH UPGRADE	0.55
ENGINEERING SITE SURVEYS	0.01
VOQ, VAQ, DORM FURNITURE	1.30
COMM FACILITY	0.19

MILCON
PAVEMENTS

PROJECT	COST($M)
AUX FIELD/ASSAULT STRIP/ HELIPADS	6.40
TAXIWAY W/ SHOULDER	5.50
APRONS/RAMP/HELIPADS	15.00

MILCON
MAINTENANCE

PROJECT	COST($M)
C-130 MAINTENANCE HANGAR (1 SPOT)/C-130 AMU	5.80
HELO MAINT HANGAR (4 SPOTS) H-53 AMU/H-1/H-60 AMU/FORWARD AREA SUPPLY TERMINAL	9.70
CORROSION CONTROL (1 SPOT)	3.90
FUEL CELL	4.25
AVIONICS/GEN PURPOSE MAINT/ GUN SHOP	10.20

MILCON
MAINTENANCE

PROJECT	COST($M)
AGE SHOP/COVERED STORAGE/ YARD	2.45
SURVIVAL EQUIP SHOP/AERIAL DELIVERY FACILITY	4.80
TEST CELL	0.40
ENGINE QUEEN BEE	4.75

MILCON
MUNITIONS

PROJECT	COST($M)
MULTICUBICLE MAGAZINE STORAGE	0.94

MILCON
OPERATIONS

PROJECT	COST($M)
WING/GROUP HQ/OSS	3.90
LSS	1.60
C-130, H-53, H-1/H-60 SQUAD OPS/ CCT/STORAGE	8.40
SIMULATOR FACILITY (11 W/ COMPUTER)	17.00
ACADEMIC CLASSROOMS	10.00
SIM W/O COMPUTER/TRNG AID FAB SHOP	1.05

MILCON
OPERATIONS

PROJECT	COST($M)
PARARESCUE & FTD (BLDG 302)	1.50

MILCON
SUPPORT

PROJECT	COST($M)
VOQ (40 ROOMS)	3.80
VAQ (144 ROOMS)	7.08
DORMITORY (176 PN)	8.40
ADAL CHILD DEV CENTER	0.98
ADAL YOUTH CENTER	0.90
ADAL HOSPITAL	3.10
FIRE STATION	1.25

MILCON
SUPPORT

PROJECT	COST($M)
BASE INFRASTRUCTURE	5.80
COMM SUPPORT	1.00
MFH (600 UNITS)	78.20
FY97 200 UNITS	
FY99 200 UNITS	
FY01 200 UNITS	
MILCON PLANNING & DESIGN	21.00

OTHER COMM COSTS

ITEM	COST ($M)
TRUNKED LAND MOBILE RADIO	1.22
REMOTE SWITCH UPGRADE	1.39

SURVEY COSTS

APPN	AMOUNT ($M)
3300	145.94
3400	4.86
3080	2.61
7040	78.20
600/700	0.00
TOTAL	231.61

UNDER REVIEW

PROJECT	COST($M)
TAXIWAY (33,300 SY)	5.90
BAI PARKING (24,200 SY)	2.95
RENOVATE VOQ	TBD

WHAT'S NEXT

- CALCULATE TOTAL PROGRAM COST
  - RESULTS OF HOLLOMAN SITE SURVEY
  - ADDITIONAL COSTS COMPUTED AT HQ AETC
- 14 & 17 APR 95 - XOP BRIEF AETC LEADERSHIP
- 20 APR 95 - AFMC BRIEF HOLLOMAN MILCON TO USAF/CEP
- 3 MAY 95 - AFMC BRIEF TOTAL PROGRAM TO AF BCWG

WHAT'S NEXT

- 4 MAY 95 - AFMC BRIEF TOTAL PROGRAM TO AF BCEG

FORCE STRUCTURE
FY97/4

MDS	PAA	BAI	TAI
MC-130	3	0	3
HC-130	4	0	4
TH-53	4	2	6
MH-53	4	0	4
HH-60	7	0	7
UH-1	4	2	6

MANPOWER
(FY97/4)

PERM PARTY

OFF	ENL	CIV	TOT
156	1025	80	1261

(CONTRACTORS: 246)

AVG DAILY STUDENT LOAD

OFF	ENL	CIV	TOT
100	220	0	320

58 SOW REQUIREMENTS

PAVEMENTS

ITEM	RQMT
RUNWAY (7,000 FT)	117,000 SY
TAXIWAY	32,500 SY
APRONS	127,600 SY
HELO PADS (4 W/ ASPHALT SHOULDER)	27,200 SY
RADAR BORE PAD	1,800 SY

MAINTENANCE

ITEM	RQMT
C-130 AMU	9,000 SF
H-53 AMU	8,500 SF
H-60/H-1 AMU	5,000 SF
C-130 MAINT HANGAR (1 SPOT)	20,000 SF
CORROSION CONTROL (1 SPOT)	18,200 SF
HELO MAINT HANGAR (4 SPOTS)	36,735 SF
GENERAL PURPOSE MAINT	25,000 SF
NONDESTRUCTIVE INSPECT	4,000 SF
FUEL CELL (INC BENSON TANKS)	23,000 SF
AVIONICS	40,000 SF
AGE SHOP	10,350 SF
AGE COVERED STORAGE	15,530 SF
AGE YARD	172 SY
SURVIVAL EQUIP SHOP	10,766 SF
SUPPLY WAREHOUSE	24,000 SF
FORWARD SUPPLY POINT (FAST)	8,062 SF
ENGINE QUEEN BEE	36,200 SF
GUN SHOP	7,158 SF
TEST CELL	7,418 SF
PMEL	1550 ITEMS
VEHICLE MAINTENANCE	96 VEHICLES

99

MUNITIONS

ITEM	RQMT
MUNITIONS STORAGE	4,000 SF

POL

ITEM	RQMT
JP-8 STORAGE	347,204 GAL/MO
MOGAS STORAGE	1,060 GAL/MO
DIESEL STORAGE	11,430 GAL/MO
LOX	1,760 GAL/MO
NITROGEN	2500 CU FT/MO

OPERATIONS

ITEM	RQMT
WING/GROUP HQ	18,106 SF
OPS SUPP SQ	5,312 SF
PARARESCUE FACILITY	30,789 SF
LOG SUPP SQ	9,038 SF
C-130 SQUADRON OPS	17,500 SF
H-53 SQUADRON OPS	12,931 SF
H-60/H-1 SQUADRON OPS	14,000 SF
FTD	10,600 SF
SIMULATOR (11 W/ COMPUTER & SUBSTATION)	74,680 SF
SIMULATOR (5 W/O COMPUTER)	35,875 SF
ACADEMIC FACILITIES	56,738 SF
AERIAL DELIVERY FACILITY	15,700 SF
TRNG DEVICE FAB SHOP	7,500 SF
DROP ZONES (3)	960 ACRES
AUXILARY FIELD (W/ 1200 SF FIRE STATION)	600 ACRES
ASSAULT STRIP	40,000 SY
COVERED POOL	LS
PJ CLIMBING WALL	LS

100

SUPPORT

ITEM	RQMT
VOQ (ROOMS)	88
VAQ (ROOMS)	144
DORMITORY (ROOMS)	356
DINING HALL (MEALS)	277
MFH (UNITS)	711
OTHER SUPPORT	

COMM-COMPUTER

ITEM

ENGINEERING & INSTALLATION
- TELEPHONE INSTALLATION
- COMM CABLE

CONTRACTOR SUPPORT
- LAN EQUIP INSTALL
- A-V EQUIP INSTALL
- VTC SYSTEM INSTALL

ADDITIONAL CIRCUITS
ATCALS
LAND MOBILE RADIO
UHF CIRCUIT
COMPUTER LINE MODULE
TELEPHONE SWITCH EXPANSION
FACILITY PREWIRING
COMM CONSTRUCTION SUPPORT

/D/

BRAC 95
SITE SURVEYS

MAJOR TONY LOPER
BASES & UNITS BRANCH
PLANS & OPERATIONS

OBJECTIVE

DETERMINE THE "BILL TO PAY" TO IMPLEMENT BRAC RECOMMENDATIONS

HQ AETC
SURVEY TEAM

COL FOX	AXO	487-4527
MAJ LOPER	XOPU	487-3390
MAJ CANTOR	XOPU	487-3390
MAJ THOMPSON	XOPU	487-3390
MAJ HAMBLIN	XOPB	487-4411
MAJ TILLEMA	XOTS	487-5704
MAJ WINFIELD	XOTS	487-5704
TSGT BUTCHER	XOSF	487-5756

HQ AETC
SURVEY TEAM

CAPT FOGARTY	CEPR	487-6200
CAPT WINKLER	CEPR	487-6200
MS SPIVEY	CECB	487-4658
MAJ EDDINGTON	LGXP	487-4602
CAPT HENLEY	LGXP	487-4602
CMSGT HAUCH	LGXP	487-4602
MSGT MARTINEZ	LGMAT	487-3663
MR MCCURLEY	SCXX	487-6954

GUIDELINES

- SITE SURVEYS REFINE & VALIDATE MILCON/O&M REQUIREMENTS
- BRAC ONLY PAYS FOR WHAT IS REQUIRED OR WHAT CURRENTLY EXISTS, WHICHEVER IS LESS
  - MAKE MAXIMUM USE OF EXISTING FACILITIES
  - AFI 32-1024 WILL BE USED FOR SPACE REQUIREMENTS
  - SPECIAL-USE SPACE MUST BE JUSTIFIED
- BOS & OTHER COSTS MUST BE DEFINED

OUR APPROACH

- IDENTIFY ALL FACILITY REQUIREMENTS
  - OPS
  - MAINTENANCE/LOGISTICS
  - ADMIN
  - SPECIAL-USE
  - DORMS
  - MUNITIONS/WEAPONS STORAGE
  - PAVEMENTS
  - SECURITY
  - UTILITIES

OUR APPROACH

- MILCON
  - USE MILCON PRICING GUIDE
  - SHOW PLANNING & DESIGN SEPARATELY
    - AFI 32-1024 OR EXISTING SPACE
    - 8.5% OF PROJECT TOTAL
  - 1391s COMPLETED DURING SURVEY

OUR APPROACH

- OPERATIONS & MAINTENANCE (O&M)
  - ADD/ALTER CONSTRUCTION PROJECTS– SAME AS MILCON
  - CIVILIAN PERSONNEL
    - PCS
    - SEVERANCE
    - UNEMPLOYMENT

OUR APPROACH

- O&M (CONT.)
  - PACKING & SHIPPING
    - LG ESTIMATES NUMBER OF ITEMS & WEIGHT & CUBE TO SHIP
    - LG CALCULATES COST
      - PACKING
      - SHIPPING
      - DISASSEMBLY & ASSEMBLY

OUR APPROACH

- O&M (CONT.)
  - COMMUNICATIONS-COMPUTER COSTS
    - SWITCH EXPANSION
    - REHOMING CIRCUITS
    - EXPANSION OF COMM INFRASTRUCTURE
    - INSTALLATION, REMOVAL, & RELOCATION OF EQUIPMENT

OUR APPROACH

- MILITARY FAMILY HOUSING
  - AF/CEHH VALIDATES REQUIREMENT
  - ONLY IF NEEDED
- OTHER PROCUREMENT
  - COMMUNICATIONS
  - STORAGE TANKS
  - EQUIPMENT

WHAT'S NEXT

- CALCULATE TOTAL PROGRAM COST
  - RESULTS OF SITE SURVEYS
  - ADDITIONAL COSTS COMPUTED AT HQ AETC
- BRIEF AETC LEADERSHIP
- BRIEF MILCON RESULTS TO USAF/CE
- BRIEF TOTAL PROGRAM TO BCEG

22-MAR-95 WED 9:21 P.00

AIR EDUCATION & TRAINING COMMAND

BRAC 95
SITE SURVEYS

MAJOR TONY LOPER
BASES & UNITS BRANCH
PLANS & OPERATIONS
17 MARCH 1995

OVERVIEW

- OBJECTIVE
- CURRENT v. REQUIRED
- DETAILED REQUIREMENTS
- WHAT'S NEXT

R-22-95 WED 9:22 P.03

OBJECTIVE

DETERMINE THE "BILL TO PAY" TO IMPLEMENT BRAC RECOMMENDATIONS

P-04
9:22
R 22-95 WED

MANPOWER
(FY97/4)

PERM PARTY

OFF	ENL	CIV	TOT
156	1025	80	1261

(CONTRACTORS: 246)

AVG DAILY STUDENT LOAD

OFF	ENL	CIV	TOT
100	220	0	320

R-05
9:23
22-MAR-95

CURRENT v. REQUIRED

TITLE	CURRENT	REQUIRED
APRON	518,213 SY	115,100 SY
MAINTENANCE		
C-130 AMU	19,775 SF	19,775 SF
HELO AMUs	19,870 SF	19,870 SF
BACKSHOPS	275,574 SF	212,574 SF

P-06
9:23
APR-22-95 WED

CURRENT v. REQUIRED

TITLE	CURRENT	REQUIRED
COVERED PARKING		
C-130	4	3
HELO	19	4
MUNITIONS	9600 CF	9600 CF

APR 22-95 WED 9:24 P.07

CURRENT v. REQUIRED

TITLE	CURRENT	REQUIRED
OPERATIONS		
WG/GP	21,000 SF	18,106 SF
SQ OPS	85,522 SF	71,193 SF
OSS	6,000 SF	5,312 SF
LSS	19,000 SF	18,800 SF

MAR-22-95 WED 9:24 P.08

PAVEMENTS

TITLE	RQMT (SY)
RUNWAY (7,000 FT)	117,000
TAXIWAY	87,500
APRONS	115,100
HELO PADS (4)	23,500
RADAR BORE PAD	1,800
AUXILIARY FIELD (600 ACRES W/ 1200 SF FIRE STATION)	92,500

APR-22-95 WED 9:25 P.09

115

MAINTENANCE

TITLE	RQMT (SF)
C-130 AMU	19,775
H-53 AMU	14,840
H-60/H-1 AMU	5,030
C-130 MAINT HANGAR (INC CORROSION CONTROL)	66,050
HELO MAINT HANGAR (4 SPACES)	36,735
GENERAL PURPOSE MAINT	25,500
NONDESTRUCTIVE INSPECT	4,000

P-10
MAR-22-95 WED 9:25
9/1

MAINTENANCE
CONT.

TITLE	RQMT (SF)
FUEL CELL	23,000
AVIONICS	40,000
ACFT SUPP EQUIP SHOP (AGE)	19,200
SURVIVAL EQUIP SHOP	10,766
SUPPLY WAREHOUSE	35,750
ENGINE QUEEN BEE	36,200
GUN SHOP	7,158
TEST CELL	40,000

P.11
9:25
APR 22-95 WED
117

MAINTENANCE
CONT.

TITLE	RQMT
AGE YARD	333 SY
PMEL	1550 ITEMS

MUNITIONS

TITLE	RQMT (CF)
MUNITIONS STORAGE (IGLOOs)	9,600

POL

TITLE	RQMT
JP-8 STORAGE	347,204 GAL/MO
MOGAS STORAGE	1,060 GAL/MO
DIESEL STORAGE	11,430 GAL/MO
LOX	1,760 GAL/MO
NITROGEN	2500 CU FT/MO

OPERATIONS

TITLE	RQMT (SF)
WING/GROUP HQ	18,106
OPS SUPP SQ	5,312
PARARESCUE FACILITY	30,789
LOG SUPP SQ	18,843
C-130 SQUADRON OPS	21,972
H-53 SQUADRON OPS	18,556
H-60/H-1 SQUADRON OPS	14,893
FTD	10,600

P.15
APR 22-95 WED 9:27

OPERATIONS
CONT.

TITLE	RQMT (SF)
SIMULATOR (11 W/ COMPUTER)	74,680
ELECTRICAL SUBSTATION	TBD
SIMULATOR (5 W/O COMPUTER)	35,875
ACADEMIC FACILITIES	56,738
AERIAL DELIVERY FACILITY	15,700

P.16
9:28
R 22-95 WED

OPERATIONS
CONT.

TITLE	RQMT
PJ CLIMBING WALL	CONSTRUCT
DROP ZONES (3)	960 ACRES
ASSAULT STRIP	40,000 SY

SUPPORT

TITLE	RQMT
VOQ (ROOMS)	88
VAQ (ROOMS)	144
DORMITORY (ROOMS)	356
DINING HALL (MEALS)	277
MFH (UNITS)	709

R 22-95 WEA 9:29 P-18

COMM-COMPUTER
LOSING BASE

TITLE	MAN HRS
ENGINEERING & INSTALLATION	302
COMM EQUIP REMOVAL	
CONTRACTOR SUPPORT	330
LAN EQUIP REMOVAL	
A-V EQUIP REMOVAL	
VTC SYSTEM REMOVAL	
CIRCUIT DEACTIVATION	

P.19
9:29
R-22-95 WED

COMM-COMPUTER
GAINING BASE

TITLE	MAN HOURS
ENGINEERING & INSTALLATION	5,527
TELEPHONE INSTALLATION	
COMM CABLE	
CONTRACTOR SUPPORT	330
LAN EQUIP INSTALL	
A-V EQUIP INSTALL	
VTC SYSTEM INSTALL	
ADDITIONAL CIRCUITS	

P-20
9:30
R 22-95 WEA

COMM-COMPUTER
GAINING BASE

TITLE

ATCALS

REPLACE LAND MOBILE RADIO

REPLACE CREST UHF CIRCUIT

COMPUTER LINE MODULE

TELEPHONE SWITCH EXPANSION

FACILITY PREWIRING (MILCON)

COMM CONSTRUCTION SUPPORT (MILCON)

P.21
R 22-95 WED 9:30
LR7

PACKING & SHIPPING

TITLE

EQUIPMENT

SIMULATORS

STATIC DISPLAYS (12 ACFT; 5 HULKS)

P-N-N
9:31 WED 22-95

WHAT'S NEXT

- BEDDOWN SITE SURVEY AT HOLLOMAN
  - 3-7 APR 95
  - ATTENDEES
- CALCULATE TOTAL PROGRAM COST
  - RESULTS OF HOLLOMAN SITE SURVEY
  - ADDITIONAL COSTS COMPUTED AT HQ AETC

WHAT'S NEXT

- 17-19 APR 95 - XOP BRIEF AETC LEADERSHIP
- 26 APR 95 - AFMC BRIEF HOLLOMAN MILCON TO USAF/CE
- 1 MAY 95 - AFMC BRIEF TOTAL PROGRAM TO BCEG

Kirtland Organizations and Manpower Authorizations

AF Organizations (* indicates unit remains at Kirtland)

Organization	Officer	Enlisted	Civilian	Total	
Special Operations Training Forces	194	1,159	196	1,549	
AFOTEC	344	102	219	665	
AFIA, AFSC	141	48	111	300	
AF Office of the Security Police	16	31	20	67	
NCO Academy	0	14	1	15	
AF portion of DNA manpower	62	63	12	137	
Misc AF Tenants, Suppt Ret (Base X bound)	227	620	162	1,009	
Eliminations	42	705	-111	636	
BOS Support for AFRES/ANG units	0	0	37	37	*
Philips Lab (after civilianization)	190	47	1,049	1,286	*
SMC Test Group (after civilianization)	61	1	188	250	*
898th Munitions Squadron (after civilianization)	1	9	311	321	*
EOD Support for 898th	0	8	1	9	*
AFRES	0	2	4	6	*
ANG (F-16s)	19	61	276	356	*
Total (Active Duty Only)	1,278	2,807	2,196	6,281	
Total To Move	984	2,037	721	3,742	
Total To Eliminate	42	705	-111	636	
Total Active Duty to Remain	252	65	1,586	1,903	

Source: PE Data Sheet 5/4/95

DNA provided by DNA HQ (Col Summer) on 27 Jan 95, 29 Jan, 31 Jan

Non-AF Tenants (* indicates unit remains at Kirtland)

Organization	Officer	Enlisted	Civilian	Total	
AFB Seismological Lab	0	0	65	65	*
Corps of Engineers	4	0	301	305	*
DCMAO Phoenix Residency	1	0	40	41	*
Defense Printing Service	0	0	3	3	*
Defense Commissary Agency	0	7	84	91	
Def Reutilization & Marketing Office	0	0	15	15	
Defense Contract Mgt Ops Office	0	0	120	120	*
Defense Eval Support Activity	14	6	73	93	*
Def Finance & Accounting Service	0	11	57	68	
Defense Industrial Resource Service	0	0	4	4	*
Defense Investigative Service	0	0	13	13	*
Dept of Energy ABQ Ops	0	0	877	877	*
Drug Interdiction Program	6	24	0	30	*
Federal Aviation Agency	0	0	46	46	*
Defense Nuclear Agency Command	34	2	315	351	
DNA Tenant to Remain	6	6	12	24	*
Inhal. Toxicology Research Inst (DOE)	0	0	194	194	*
Naval Air Warfare Center Weapons Div	1	2	13	16	*
Navy Liasion Office	1	2	0	3	*
Sandia National Lab	0	0	7,506	7,506	*
US Coast Guard Reserve	4	16	0	20	*
US Customs ABQ	0	0	89	89	*
US Customs PE	0	0	10	10	*
US Navy Balloon Team	2	2	0	4	*
US Navy Personnel Support Det	1	9	4	14	*
Aeromedical Rsrch Lab (Blast Fac)	0	1	14	15	*
White Sands Missle Range Det	0	0	2	2	*
Total Tenants	74	88	9,857	10,019	
Total Tenants Moving	34	20	471	525	
Total to Eliminate	0	0	0		
Total To Remain	40	68	9,386	9,494	

Source: PE Data Sheet 5/4/95

DNA data provided by DNA HQ (Col Summer) on 27 Jan 95, 30, 31 January

Kirtland Realignment Movement Table (Phillips Lab Cantonment)

5/4/95 17:17

Manpower	Officers	Enlisted	Civilians	Total	Source
Current Force Structure (4Q94 Data)	1416	2962	11759	16137	COBRA Screen 4 Data
Adjusted Base Line Population (4Q97 Projection)	1436	3038	2769	7243	PE Data -- 5/4/95
Add Non-AF Tenants	74	88	9,857	10019	From "Population Wrksheet"
New Adjusted Base Line Population	1510	3126	12626	17262	Mathematical Sum
Civilianization Process	-139	-168	307	0	Derive from PE Data -- 5/4/95
New Base Line Population (Total to Move, Canton, or Eliminate)	1371	2958	12933	17262	Mathematical Sum
Move					
Move AETC (SOF) Forces to Holloman	194	1,159	196	1549	PE Data -- 5/4/95
Move Portion of DNA to Kelly	48	32	164	244	50/50 Split
Move portion of DNA to Nellis	48	33	163	244	50/50 Split
Move AFOTEC to Eglin	344	102	219	665	PE Data -- 5/4/95
AFIA/AFSC to Kelly	141	48	111	300	PE Data -- 5/4/95
Move AFOSP to Lackland	16	31	20	67	PE Data -- 5/4/95
Move NCO Academy to McChord	0	14	1	15	PE Data -- 5/4/95
Move Everybody Else (other mission/BOS/Non-AF) to Base X	227	638	318	1183	Derive from PE Data -- 5/4/95
Total Moves (Population Moving from Kirtland)	1018	2057	1192	4267	Mathematical Sum
Canton					
Phililps Lab remains	190	47	1,049	1286	PE Data -- 5/4/95
SMC Test Group	61	1	188	250	PE Data -- 5/4/95
898th Munitions Sq remains	1	9	311	321	PE Data -- 5/4/95
DNA Tenant to Remain	6	6	12	24	PE Data -- 5/4/95
EOD Support 898th	0	8	1	9	PE Data -- 5/4/95
AFRES Units	0	2	4	6	PE Data -- 5/4/95
ANG Units	19	61	276	356	PE Data -- 5/4/95
Retain BOS to support AFRES/ANG	0	0	37	37	PE Data -- 5/4/95
Cantonment Infrastructure	0	0	600	600	PE Data -- 5/4/95
Non-AF Tenants Remaining	34	62	9,374	9470	PE Data -- 5/4/95
Total Canton (Population Remaining at Kirtland)	311	196	11852	12359	Mathematical Sum
Positions Eliminated	42	705	-111	636	PE Data -- 5/4/95
Total Moves/Eliminations/Canton	1371	2958	12933	17262	Mathematical Sum
Force Structure Change (Delta from 4Q94 to 4Q97 Population)	94	164	867	1125	COBRA Assumption
Civilianization	-139	-168	307	0	Derive from PE Data -- 5/4/95
Total Force Structure Change	-45	-4	1174	1125	Mathematical Sum

/23

KIRTLAND AFB MILCON

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 97	
• UTILITY ISOLATION	$4.0
• ISOLATE/METER SANITARY SEWER SYS	$2.7
• MOVE SPACE POWER LAB	$2.0
• ISOLATE/METER UTILITY SYSTEMS (ANG)	$0.4
• PLANNING AND DESIGN (9%)	$3.9
– SUBTOTAL	**$9.9**

133

KIRTLAND AFB MILCON
(CON'T)

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 98	
• ADAL PERIMETER SECURITY (PL)	$1.5
• PERIMETER SECURITY FENCE (ANG)	$0.3
• ADAL PERIMETER SECURITY FENCE (KUMSC)	$0.9
• ADD TO SECURITY OPS FACILITY	$0.7
• ARMORY/REMOTE ARMING FACILITY	$0.3
• RESERVE FIRE TEAM TRAINING	$0.5
• PLANNING & DESIGN (9%)	$0.5
– SUBTOTAL	**$4.6**

KIRTLAND AFB MILCON
(CON'T)

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 99	
• JET FUEL STORAGE COMPLEX (ANG)	$2.0
• RENOVATE TRAINING FACILITIES	$0.5
• PLANNING & DESIGN	$0.2
– SUBTOTAL	**$2.7**
– FY00	
• CONSOLIDATED SUPPORT FACILITY	$2.5
• ALTER SECURE FACILITY	$0.5
• FACILITY CLOSURE/PRESERVATION	$12.2
• PLANNING & DESIGN (9%)	$1.4
– SUBTOTAL	**$16.6**

135

KIRTLAND AFB O&M

	Then Yr $M
• FOR KIRTLAND AFB	
– FY 98 - ANG	
• REFURB TWO BUILDINGS	$0.28
• CE MAINT STORAGE FACILITY	$0.25
• ISOLATE/METER UTILITIES	$0.15
– SUBTOTAL	**$0.68**
– FY 00 - PHILLIPS LAB	
• RENOVATE VEH MAINT FAC	$0.04
• INSTALL ELECTRIC METERS	$0.25
• INSTALL GAS METERS	$0.03
– SUBTOTAL	**$0.32**

KIRTLAND AFB

Estimates in FY 95 year dollars

• MILCON	$374.2
• Personnel	$6.6
– (Early Retirement, New Hires, RIF, Unemployment)	
• Prog Planning/Mothball	$15.1
• HAP/RSE, CIV Moving, Civilian PPS	$36.9
• Freight, One-Time Moving Cost	$43.0
• Total One Time Unique,	$43.8
– Comm, Equip, Purchased Services, Annual Lv)	
• Military Elim/Moving	$4.3
• **TOTAL**	**$523.9**

Exhibit I

AF CONTROLLED LANDS:

AIR FORCE FEE OWNED	24,148.15
PUBLIC DOMAIN (WITHDRAWN)	18,439.84
DONATED FROM CITY OF ALBUQUERQUE	1,344.00
PERPETUAL EASEMENT (Restrictive Easement on UNM Land for Ordnance Storage)	81.57
GENERAL USE PERMITS (Ingrants)	12.00
TOTAL	44,026.56

DOE FEE OWNED:	2,938
DOE WITHDRAWL	4,595
TOTAL	7,533

AF FEE-OWNED LAND UNDER PERMIT TO DOE 4,333.04 ACRES

AF WITHDRAWN LAND UNDER PERMIT TO DOE 3,471.11 ACRES

TOTAL LAND UNDER PERMIT TO DOE 7,834.15 ACRES

TOTAL AF BUILDING SPACE UNDER PERMIT TO DOE 469,326 SQUARE FEET

DOE F 1325.8

United States Government

Department of Energy

memorandum

Albuquerque Operations Office

DATE: APR 7 1995

REPLY TO ATTN OF: PASD

SUBJECT: Cost Impacts of Proposed Kirtland AFB Realignment

TO: Dr. Victor Reis, Assistant Secretary for Defense Programs, DP-1, HQ

At the April 3, 1995, hearings conducted by the Senate Appropriations Subcommittee on Energy and Water, Senator Bingaman asked for the estimate of costs, expressed in net present value, to be incurred by the Department of Energy (DOE) as a result of the proposed Kirtland realignment. We have evaluated and attached three cost scenarios which we believe are credible. Of these, Scenario 1 is the most reasonable, and indicates that the cost impact to DOE over the next 20 years will be $443 million. In calculating the cost estimates, we used the same 2.75 percent net present value discount rate as used by the U.S. Air Force (USAF). Please note that the variance of the other scenarios does not exceed $1 million. Therefore, there are no significant differences in the three scenarios. I would appreciate your formally providing this information to the Subcommittee.

On April 11, 1995, Albuquerque Operations Office staff will be meeting with Air Force Base Realignment and Closure personnel to discuss and compare DOE cost estimates vis-a-vis USAF projected savings.

Bruce G. Twining
Manager

3 Attachments

cc:
See page 2

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137

cc:
Charles B. Curtis, Under Secretary
of Energy, US, HQ

Major General Jay D. Blume, Jr.
HQ USAF/RT
1670 Air Force Pentagon
Washington, DC 20330-1670

Scenario 1
Net Present Value
DOE Costs
(Millions of Dollars)

Fiscal Year	DOE/AL Annual Costs	DOE/AL Adjusted Ann. Costs	DOE/AL NPV Acc. Costs	Air Force NPV Costs Factors
1996	1.1	1.1	1.1	1.013657
1997	16.4	15.8	16.9	1.041532
1998	31.9	29.8	46.7	1.070174
1999	41.2	37.5	84.2	1.099604
2000	33.3	29.5	113.7	1.129843
2001	30.6	26.4	140.0	1.160914
2002	30.6	25.7	165.7	1.192839
2003	30.6	25.0	190.7	1.225642
2004	30.6	24.3	215.0	1.259347
2005	30.6	23.6	238.6	1.293979
2006	30.6	23.0	261.6	1.329564
2007	30.6	22.4	284.0	1.366127
2008	30.6	21.8	305.8	1.403695
2009	30.6	21.2	327.0	1.442297
2010	30.6	20.6	347.7	1.481960
2011	30.6	20.1	367.8	1.522714
2012	30.6	19.6	387.3	1.564589
2013	30.6	19.0	406.4	1.607615
2014	30.6	18.5	424.9	1.651824
2015	30.6	18.0	442.9	1.697250

Assumptions:

1) DOE annual operating costs are projected to be $30.6 million in FY 1995 dollars.
2) DOE one-time costs are projected to be $64.1 million in FY 1995 dollars.
3) DOE takes over operations at the same pace as the Air Force loses personnel. One-time costs phased in over four years begining in FY 1997.
4) Uses the same discount rates used by the Air Force.

Scenario 1A
Net Present Value
DOE Costs
(Millions of Dollars)

Fiscal Year	DOE/AL Annual Costs	DOE/AL Adjusted Ann. Costs	DOE/AL NPV Acc. Costs	Air Force NPV Costs Factors
1996	1.1	1.1	1.1	1.013657
1997	9.9	9.5	10.7	1.041532
1998	22.3	20.8	31.5	1.070174
1999	44.5	40.4	71.9	1.099604
2000	39.8	35.2	107.1	1.129843
2001	37.0	31.9	139.0	1.160914
2002	30.6	25.7	164.7	1.192839
2003	30.6	25.0	189.6	1.225642
2004	30.6	24.3	213.9	1.259347
2005	30.6	23.6	237.6	1.293979
2006	30.6	23.0	260.6	1.329564
2007	30.6	22.4	283.0	1.366127
2008	30.6	21.8	304.8	1.403695
2009	30.6	21.2	326.0	1.442297
2010	30.6	20.6	346.6	1.481960
2011	30.6	20.1	366.7	1.522714
2012	30.6	19.6	386.3	1.564589
2013	30.6	19.0	405.3	1.607615
2014	30.6	18.5	423.9	1.651824
2015	30.6	18.0	441.9	1.697250

Assumptions:

1) DOE annual operating costs are projected to be $30.6 million in FY 1995 dollars.
2) DOE one-time costs are projected to be $64.1 million in FY 1995 dollars.
3) DOE takes over operations at the same pace as the Air Force loses personnel. One-time costs phased in over five years begining in FY 1997.
4) Uses the same discount rates used by the Air Force.

Scenario 1B
Net Present Value
DOE Costs
(Millions of Dollars)

Fiscal Year	DOE/AL Annual Costs	DOE/AL Adjusted Ann. Costs	DOE/AL NPV Acc. Costs	Air Force NPV Costs Factors
1996	1.1	1.1	1.1	1.013657
1997	19.6	18.8	20.0	1.041532
1998	41.5	38.8	58.7	1.070174
1999	34.8	31.7	90.4	1.099604
2000	26.9	23.9	114.2	1.129843
2001	30.6	26.4	140.6	1.160914
2002	30.6	25.7	166.2	1.192839
2003	30.6	25.0	191.2	1.225642
2004	30.6	24.3	215.5	1.259347
2005	30.6	23.6	239.2	1.293979
2006	30.6	23.0	262.2	1.329564
2007	30.6	22.4	284.6	1.366127
2008	30.6	21.8	306.4	1.403695
2009	30.6	21.2	327.6	1.442297
2010	30.6	20.6	348.2	1.481960
2011	30.6	20.1	368.3	1.522714
2012	30.6	19.6	387.9	1.564589
2013	30.6	19.0	406.9	1.607615
2014	30.6	18.5	425.4	1.651824
2015	30.6	18.0	443.5	1.697250

Assumptions:

1) DOE annual operating costs are projected to be $30.6 million in FY 1995 dollars.
2) DOE one-time costs are projected to be $64.1 million in FY 1995 dollars.
3) DOE takes over operations at the same pace as the Air Force loses personnel. One-time costs phased in over three years begining in FY 1997.
4) Uses the same discount rates used by the Air Force.

Cost Impacts to DOE from the Proposed KAFB Realignment

Detailed Assumptions and Costing Formulas

by

the DOE/SNL Study Team

March 27, 1995

Cost Development Outline

- Assumptions
- Site Cantonment Considerations
- Cost Planning Scenario
- Activity Areas Considered
- Cost Summaries
- One Time Conversion Costs
- Annual Operating Costs

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Global Assumptions:

1. Realignment occurs, requires 3-5 years to accomplish

2. DOE/SNL becomes landlord for their cantonment(s) only

3. DOE/SNL will minimize land and facilities holdings and the size of their cantonment(s) to the extent practicable, consistent with missions and populations

Detailed Assumptions

- Cost estimates are based on existing operations, not new facilities
- Estimates reflect increased costs to DOE due to:
  - Loss of services currently provided by USAF
  - Deferral or change in scope of planned USAF projects that directly affect DOE operations
  - Creation of DOE cantonment
- Costs are in FY95 dollars
- Most USAF property (and legal responsibility) will not be transferred to DOE; DOE will only manage these assets as a tenant
- The perimeter must be fenced and placarded as DOE managed property

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Detailed Assumptions con't.

- Utility service to other agencies within the DOE cantonment will be provided to their facility boundary and metered at that point

  › only USAF facilities under immediate consideration for reuse
  ›e Air Force Safety and Inspection Center and the Brig and
  ›ment Facilities

  not include costs of mothballing (pickling) or
  ›sioning, Decontamination, and Demolition of USAF
  ›es encompassed by the new DOE cantonment area

Please comment

- Estimates assume USAF is going to complete MILCON projects that have been recommended for completion by KAFB

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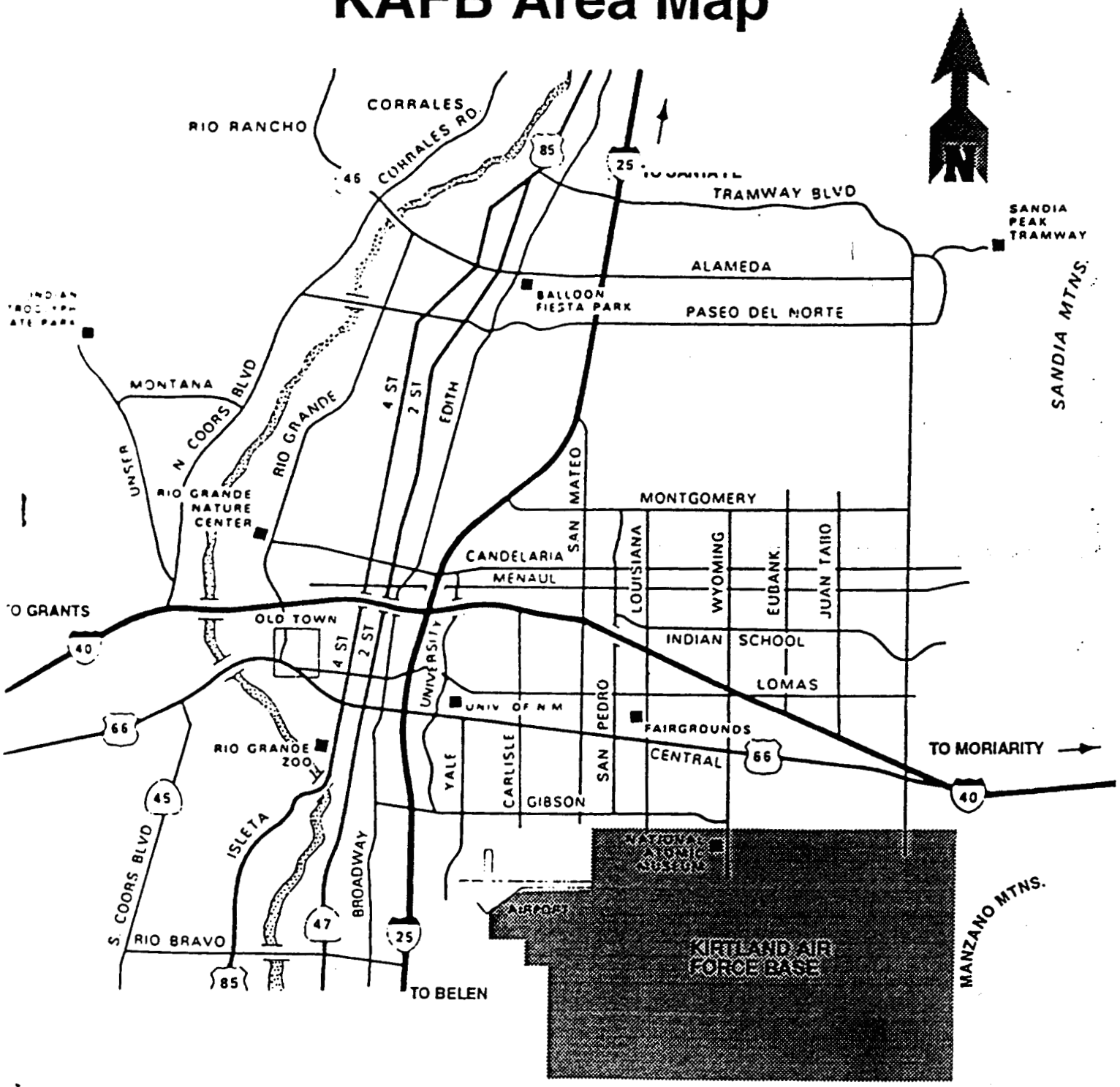
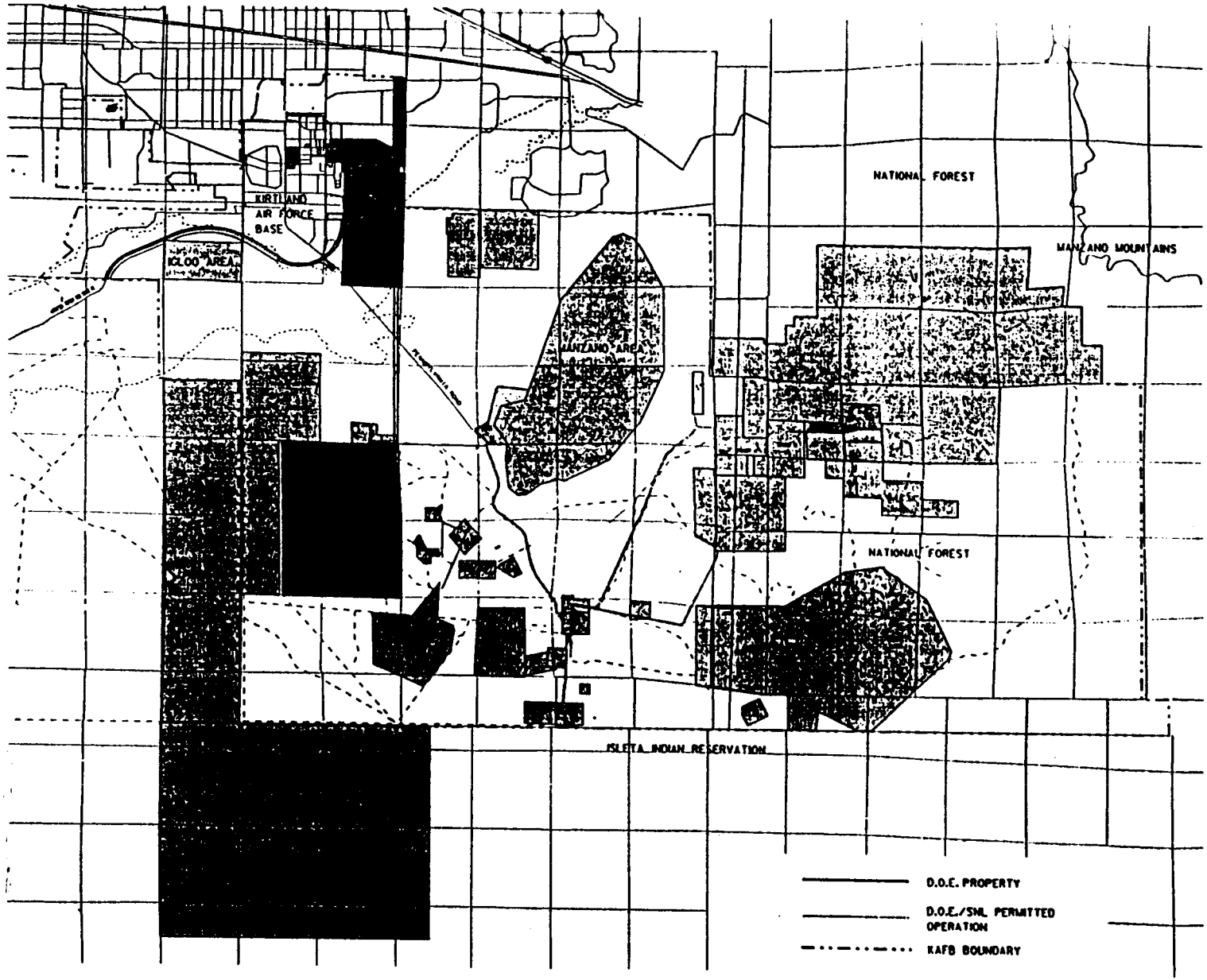
KAFB Area Map

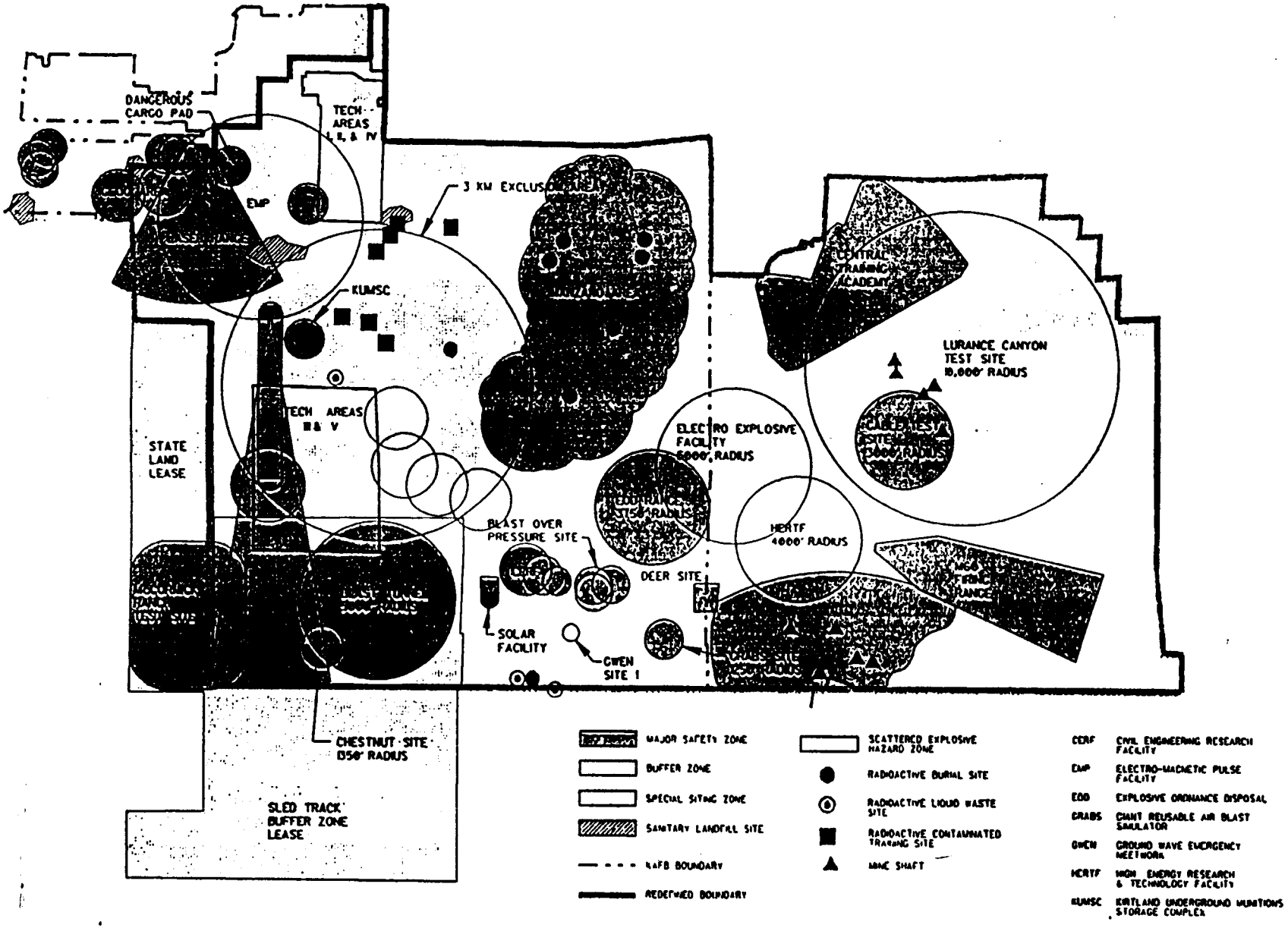


Albuquerque, New Mexico

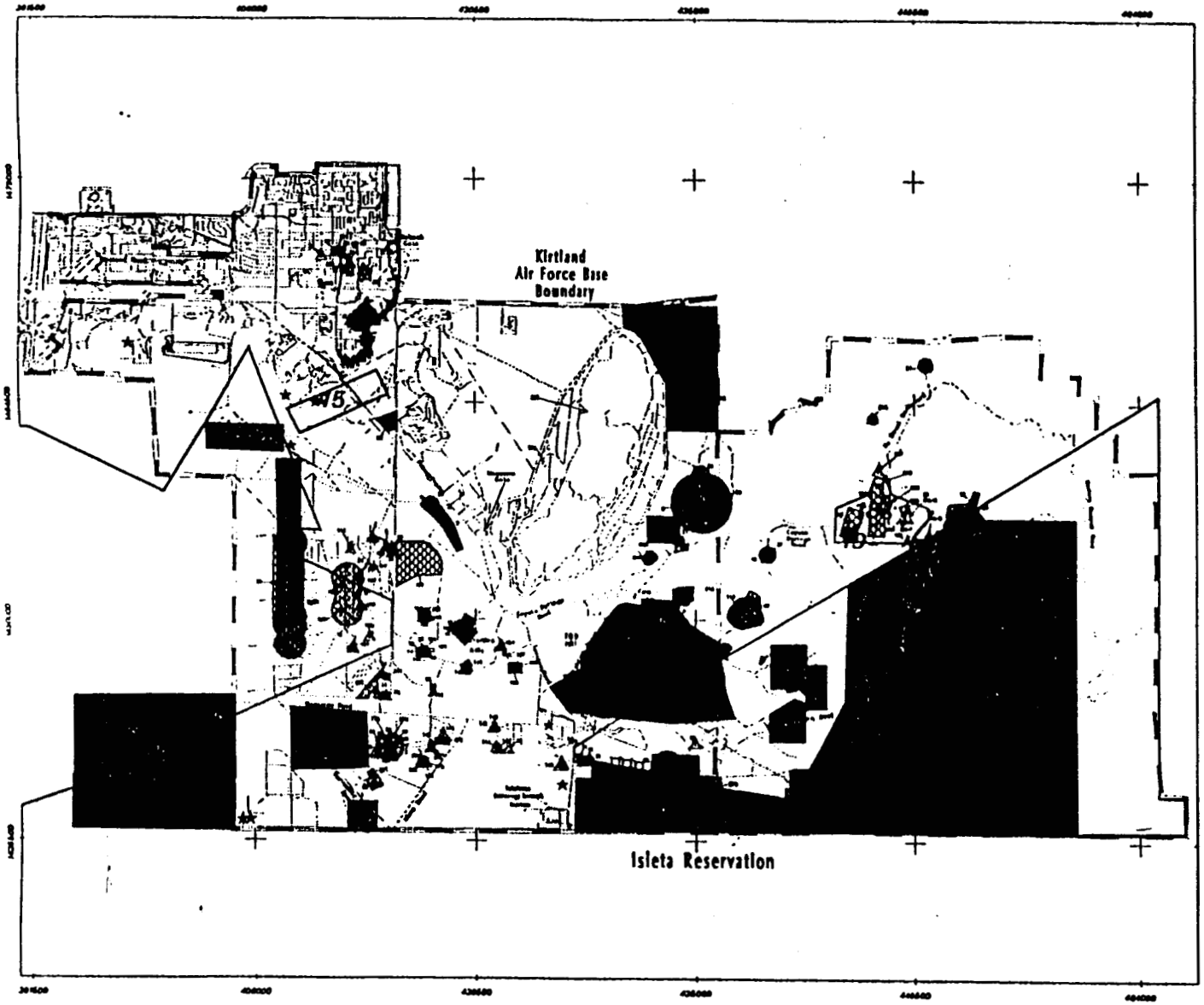


DOE/SNL Owned and Permitted Lands

15



SNL/KAFB Hazard Zones



Legend

- KAFB Boundary
- Roadways (all types)
- ER Sites Greater Than 1 Acre
- ER Sites Less Than 1 Acre
- Has been visually surveyed, low amount of UXO.
- Has not been surveyed, within a gun fan of a known fire/launch site, or is within a known ordnance use area with moderate uxo hazard.
- Has been visually surveyed significant amount of UXO.
- Unassessed, hazard unknown
- High Explosives Removal Completed
- Low Level Radiation Pit

Numbers in italics refer to Site Survey Report available by contacting the ER Program

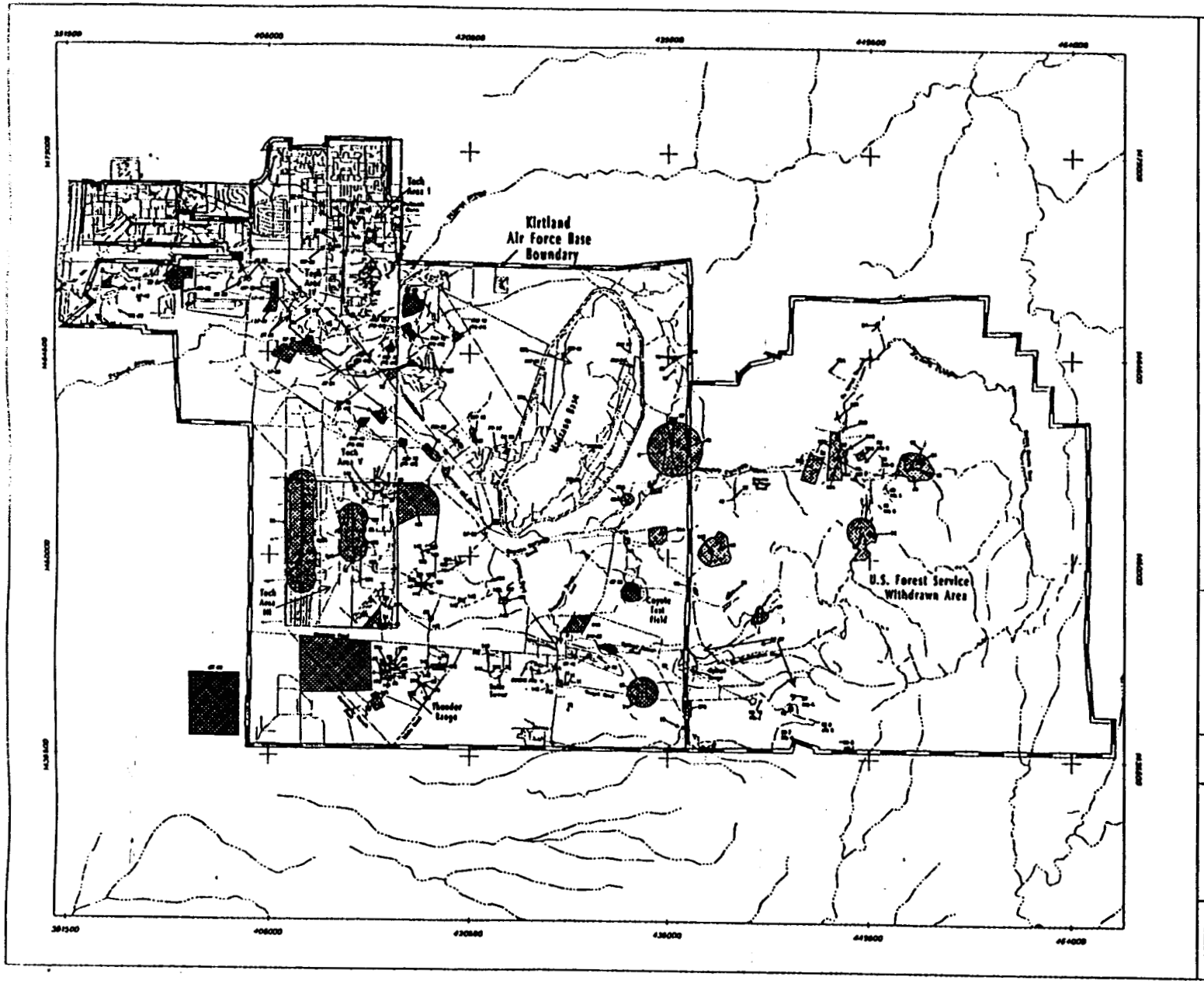
0 7000 14000
Scale in Feet

0 1680 3360
Scale in Meters

Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

Unexploded Ordnance Areas
KAFB - Sandia National Labs

1 in=7000	1:84000	MAPID=050711
Unclassified	DRAFT	SNL GIS ORG. 7512
ehebert	db050711.aml	03/23/95



Legend

- Kirtland Air Force Base and U.S. Forest Service Withdrawn Area Boundaries
- Roadways (all types)
- Drainage Features
- SNL Technical Areas
- SNL Environmental Restoration Sites
- Installation Restoration Program Sites

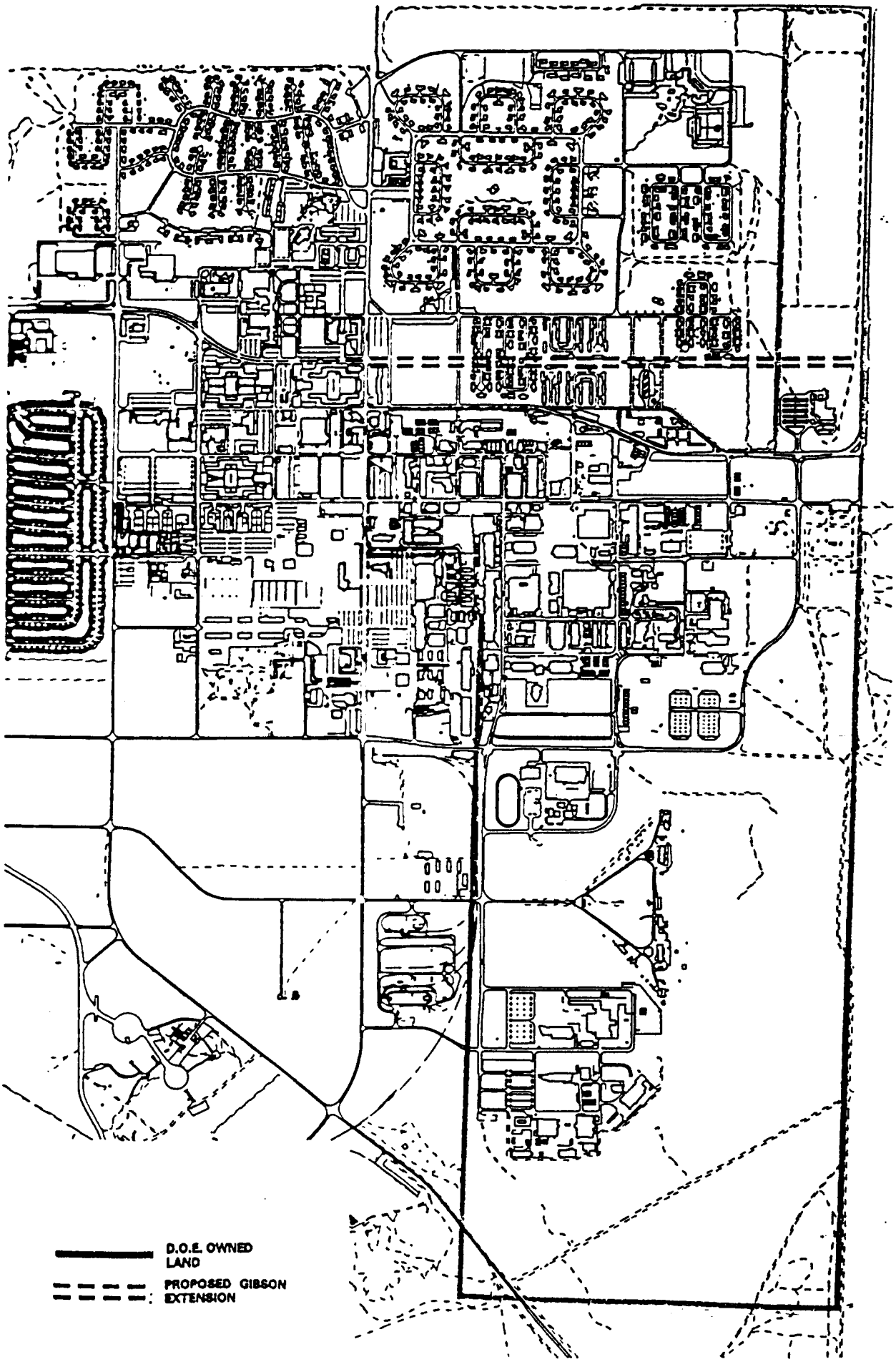
0 7000 14000
Scale in Feet
0 1680 3360
Scale in Meters

Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

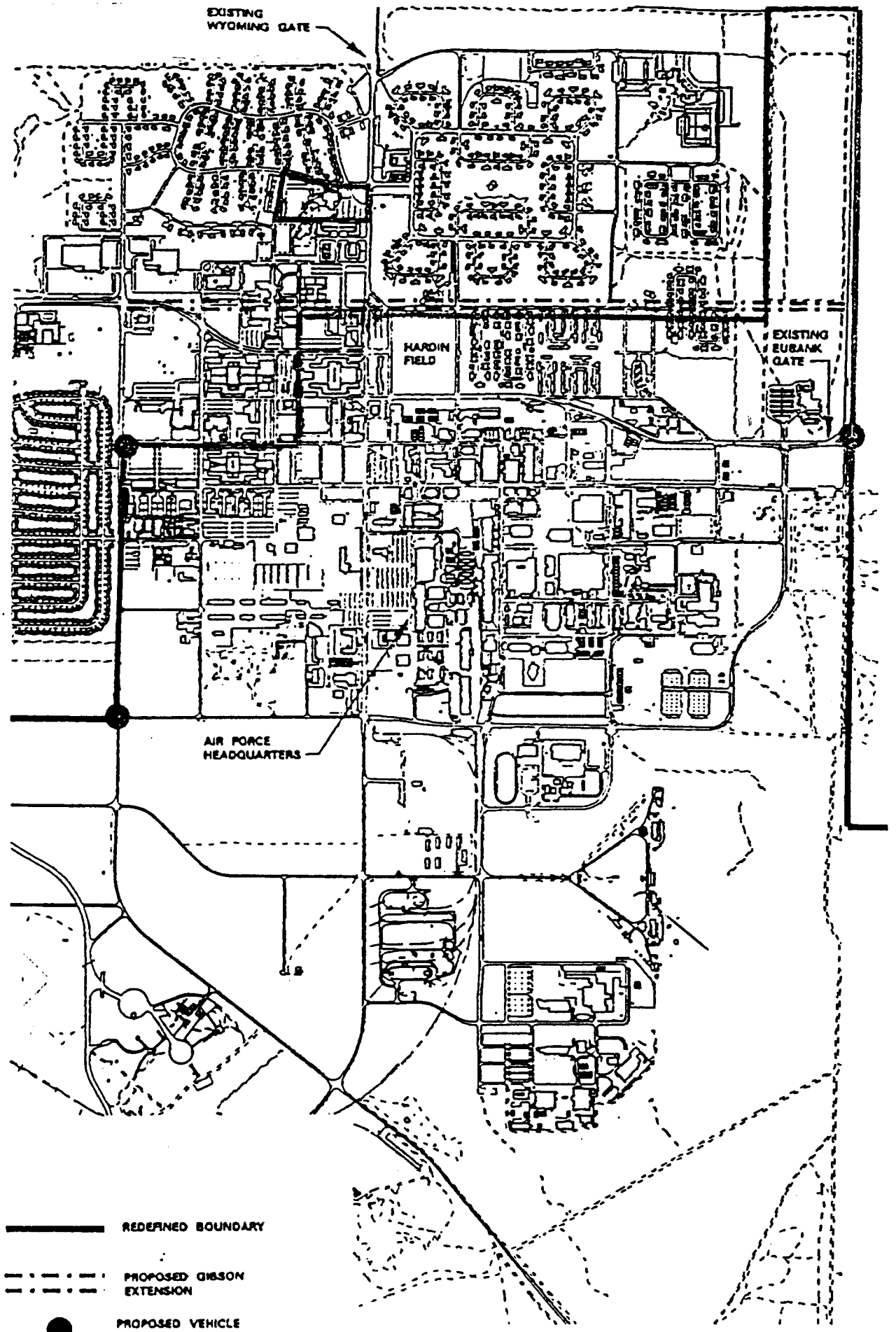
SNL ER Sites and Air Force IRP Sites at KAFB

1"=7000'	1:84000	MAPID-960400
Unclassified	DRAFT	SNL DIS ORG. 7512
dbloshly	irp94em.aml	01/27/96

153



Current DOE Ownership



Proposed DOE Cantonment

Planning Scenario

- Redefined Map
- Pickling Assumption
- Cost Comparisons (< 2 years)

Activity Areas Considered

- Public Safety
  - Security
  - Fire
  - Emergency Operations
- Physical Plant
  - Roads and Bridges
  - Traffic Lights and Controls
  - Gates, Intersections, Fencing and associated Demolition
  - Landscaping
- Utilities
  - Electrical Systems
  - Water Systems
  - Sanitary Sewer and Storm Drainage
  - Gas Lines
  - Steam System
  - Communications

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GAO 5 J.E. Rev 3.21.95

159

Conversion Costs

- Review of USAF Construction Plans
- DOE reductions
- DOE Cantonment Costs
- Conversion Cost Summary

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KAFB MILCON Utility/Physical Plant Projects and Recommendations

FY	Project	Cost ($M)	Recommendation (comments)
94	Upgrade Electrical Dist. Phase I	6.8	Complete
	Upgrade Utility Systems	8.0	Adjust (Completed demo of steam plant, will complete gas line, $5M in steam distribution deferred)
95	Upgrade Electrical Dist. Phase II	3.0	Defer (Aesthetic upgrade)
	Add to or Alter Base Water System	8.8	Complete
	Underground Storage Tank Removal	3.2	Complete
96	Upgrade Electrical Dist. Phase III	7.7	Defer (Aesthetic upgrade with replacement of Sub 22)
	Rebuild Manzano Bridge	3.9	Defer (Design complete, 0.5M of cost is for UXO removal)
97	Upgrade Electrical Dist. Phase IV	9.0	Defer (Enhancement and upgrade from Museum south)
98	Upgrade Steam & Gas Phase II	7.7	Defer (Steam and Gas west of Wyoming)
Total Estimated Construction Costs		58.1	
Total Recommended for Completion		24.8	
Total Deferred		33.3	

GAO 7 J.E. Ren 3.21.95

DOE Reductions to USAF Plans

FY	Project	DOE Requirement	Cost ($M)
94	Upgrade Utility Systems	Decommission steam distribution system, install package boilers where req'd: (Museum, AL, Brig, Coronado)	0.8
96	Upgrade Electrical Dist. Phase III	Modifications of Sub 22 only	0.6
96	Rebuild Manzano Bridge	Complete as described including UXO removals	6.3

NOTE: USAF MILCON list included construction costs only. Design, construction management, inspection, and acceptance, project management and contingency are not included. SNL average costs for these services add 37%.

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Cost Summary

Dollars in Millions

	Conversion	Operating
Public Safety	15.1	14.9
Physical Plant	18.4	3.8
Utilities	28.6	10.1
DOE	2.0	0.4
Equipment O&M and Replacement		1.4
TOTAL COSTS	$64.1M	$30.6M

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161

One Time Conversion Cost - $ in thousands

Key		Construction /Renovation	Capital Equipment	Training & Non-Capital	Allocated Costs	Subtotal
	Public Safety					
1	Fire Protection	4,500	1,920	442	1,475	8,337
2	Security	0	267	4,321	987	5,575
3	Emergency Operations	275	368	142	169	954
4	Test Operations	0	150	60	45	255
	Public Safety Total	4,775	2,705	4,965	2,676	15,121
	Physical Plant					
5	Roads	2,888	0	0	621	3,508
6	Bridge	5,213	0	0	1,121	6,333
7	Fencing	3,133	0	0	674	3,807
7	Entry Portals	800	0	0	172	972
8	Roads & Ground Maintenance	0	1,648	300	419	2,367
9	Geographic Data Conversion	~~710~~	130	50	191	1,081
10	Legal survey	~~100~~	0	100	22	122
11	Administrative & Mgt. Support	0	80	64	31	175
	Physical Plant Total	12,843	1,858	414	3,250	18,365
		-810		+100		

KAFB3A.XLS

102

	One Time Conversion Cost - $ In thousands	Construction /Renovation	Capital Equipment	Training & Non-Capital	Allocated Costs	Subtotal
	Utilities					
11	Electrical	3,765	1,920	558	1,342	7,585
12	Water	2,273	0	0	489	2,761
13	Sanitary Sewer	1,513	0	0	325	1,838
14	Storm Drainage	2,269	0	0	488	2,757
15	Gas	580	0	0	125	705
16	Steam	235	0	0	51	286
17	Water Plant	0	150	20	37	207
18	Alarm Communications	700	0	0	151	851
19	Telecommunications Eng.	7,900	0	100	1,720	9,720
11	Engineering & Admin. Support	0	30	46	16	92
22	HVAC System	420	150	10	125	705
23	Utility Maintenance & Support	200	168	258	135	761
24	Fire Protection Maintenance	200	120	14	72	406
	Utilities Total	20,054	2,538	1,006	5,074	28,671
	DOE					
27	Energy Tech. Train. Complex	1,400	0	0	0	1,400
27	Allied Signal	10	10	0	0	20
28	DOE Complex Boiler	460	0	0	0	460
29	Other DOE Facility Boilers	71	0	0	0	71
	DOE Total	1,941	10	0	0	1,951
	Total	39,613	7,111	6,385	10,999	64,108

KAFB3A.XLS

163

Conversion Cost Summary

	Dollars in Millions
Public Safety	15.1
Physical Plant	18.4
Utilities	28.6
DOE	2.0
Equipment O&M and Replacement	
TOTAL COSTS	$64.1M

Sandia National Laboratories

GAO 16 J.E. Ren 3.22.95

Annual Operating Costs

- Personnel and Associated Personnel Costs
- Supplies and Materials
- Equipment Operations and Maintenance
- Equipment Replacement
- Other Allocable Costs

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GAO 9 J.E. Ren 3.21.95

165

Operating Expenses Per Year - $ in thousands

Key		FTE #	Base + Fringe	DS & DC	Training & Non-Capital	Allocated Costs	Subtotal
	Public Safety						
1	Fire Protection	108	4,718	500	90	2,597	7,905
2	Security	73	2,910	60	190	1,174	4,335
3	Emergency Operations	14	820	130	25	505	1,480
4	Test Operations	7	444	350	100	341	1,236
	Public Safety Total	202	8,892	1,040	405	4,618	14,956
	Physical Plant						
8	Roads & Grounds Maintenance	31	1,265	58	0	1,104	2,427
9	Geographic Data Conversion	3	181	280	0	254	715
11	Administrative & Mgt. Support	6	333	0	0	287	620
	Physical Plant Total	40	1,780	338	0	1,645	3,762

KAFB3A.XLS

166

	Operating Expenses Per Year - $ In thousands	FTE #	Base + Fringe	DS & DC	Training & Non-Capital	Allocated Costs	Subtotal
	Utilities						
11	Electrical	4	192	1,860	50	576	2,678
17	Water Plant	9	432	16	18	380	845
19	Telecommunications Eng.	2	132	1,290	0	353	1,775
11	Engineering & Admin. Support	7	386	30	20	393	829
22	HVAC System	6	288	11	6	252	557
23	Utility Maintenance & Support	8	384	25	140	366	914
24	Fire Protection Maintenance	4	192	20	0	170	382
25	Infrastructure Maintenance	0	0	1,725	0	371	2,096
	Utilities Total	40	2,005	4,977	234	2,860	10,076
	DOE						
27	Ross Hangar	0	0	200	0	0	200
27	Allied Signal	6	210	0	0	0	210
	DOE Total	6	210	200	0	0	410
	Subtotal	288	12,887	6,555	639	9,124	29,204
	Annual Capital Equip. Operations Maintenance - 10%	0	0	0	0	711	711
	Annual Capital Equip. Replacement - 10%	0	0	0	0	711	711
	Total	288	12,887	6,555	639	10,546	30,626

KAFB3.XLS

291

Annual Operating Cost Summary

	Dollars in Millions	FTE's
Public Safety	14.9	202
Physical Plant	3.8	40
Utilities	10.1	40
DOE	0.4	6
Equipment O&M and Replacement	1.4	
TOTAL COSTS	$30.6M	288

Sandia National Laboratories

GAO 17 J.E. Ren 3.22.95

KAFB BRAC COST ELEMENT DATA SHEET

Estimators Name: Organization: Telephone Number:

SUMMARY CATEGORY:

SUMMARY ELEMENT:

ITEM:

BACKGROUND DESCRIPTION:

ASSUMPTIONS:

COST ANALYSIS:

ONE TIME COSTS:

Total Project Cost:
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BENCHMARKING:

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28 March 95
Vanden

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Column 5 -- Subtotal. This is the sum of columns 1,2,3, & 4 to estimate the total one time costs of assuming these functions.

Operating Expenses Per Year:

Column 1 -- FTE. This is the number of full time equivalent employees. By the definition provided by the Sandia Accounting Department Organization 10400 these employees

work a maximum of only 40 hours per week or 80 hours per pay period. This convention artificially increases the number of employees to provide Fire, Rescue, Hazardous material Spill, Security, and Emergency Management Services in the entire estimate.

Column 2 -- Base + Fringe. This is a derived cost for personnel. It is the average salary for employees in the Organization (Cost Work Center) times 31%. Fringe includes the costs of vacations, sick leave, and other benefits. **These estimates supersede all personnel cost figures in the engineering estimate roll-ups attached**.

Column 3 -- DS & DC. These stand for Direct Support and Direct Costs. Included in this column are the estimated infra-Sandia Center charges for cross departmental technical support (Environmental, Engineering, Industrial Safety, etc.), contractor support (Time and Material contracts for in-office performance of tasks), and general consumable supplies (non-property materials) to accomplish this function.

Column 4 -- Training and Non-Capital Equipment. These are the estimated annual training and equipment (property) purchases required to maintain proficiency and certifications to perform this function under DOE/SNL Procedures.

Column 5 -- Allocated costs. This is a derived cost using two equations. The first is the application of the Work Center Load, an overhead rate charged internally to Sandia to achieve full cost recovery -- this load varies by Center, to the derived average wages in column 2. The next step is to apply the Corporate Overhead rate of 21.5% to this figure by multiplying this "loaded rate" by 1.215. The second equation applies the Corporate Overhead, 21.5% to the DS&DC's and the Training Costs in columns 3 and 4. The EXCEL formula is: [{(column 2 * Cntr Load) * 1.215} + {(sum column 3 +4) * 0.215}] = Allocated Costs.

Rows D & E -- Annual Capital Equipment Maintenance and Replacement. These costs are estimated to be 10% each. They apply only to column 2 (Capital Equipment) from the One-time Conversion Costs.

Column 6 -- Subtotal. This is the sum of columns 2 + 3 + 4 + 5.

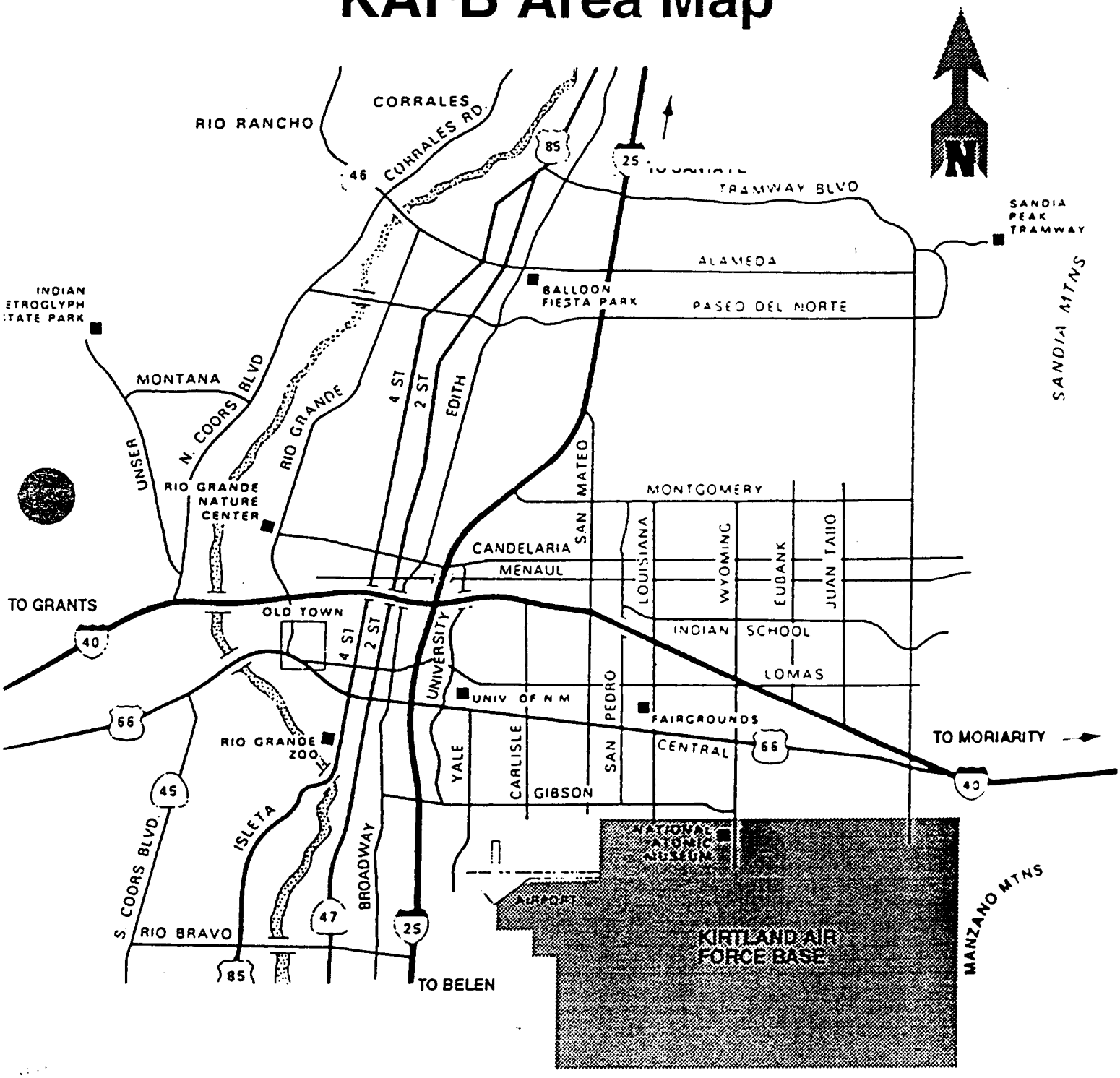
Cost Development Outline

- Assumptions
- Site Cantonment Considerations
- Cost Planning Scenario
- Activity Areas Considered
- Cost Summaries
- One Time Conversion Costs
- Annual Operating Costs

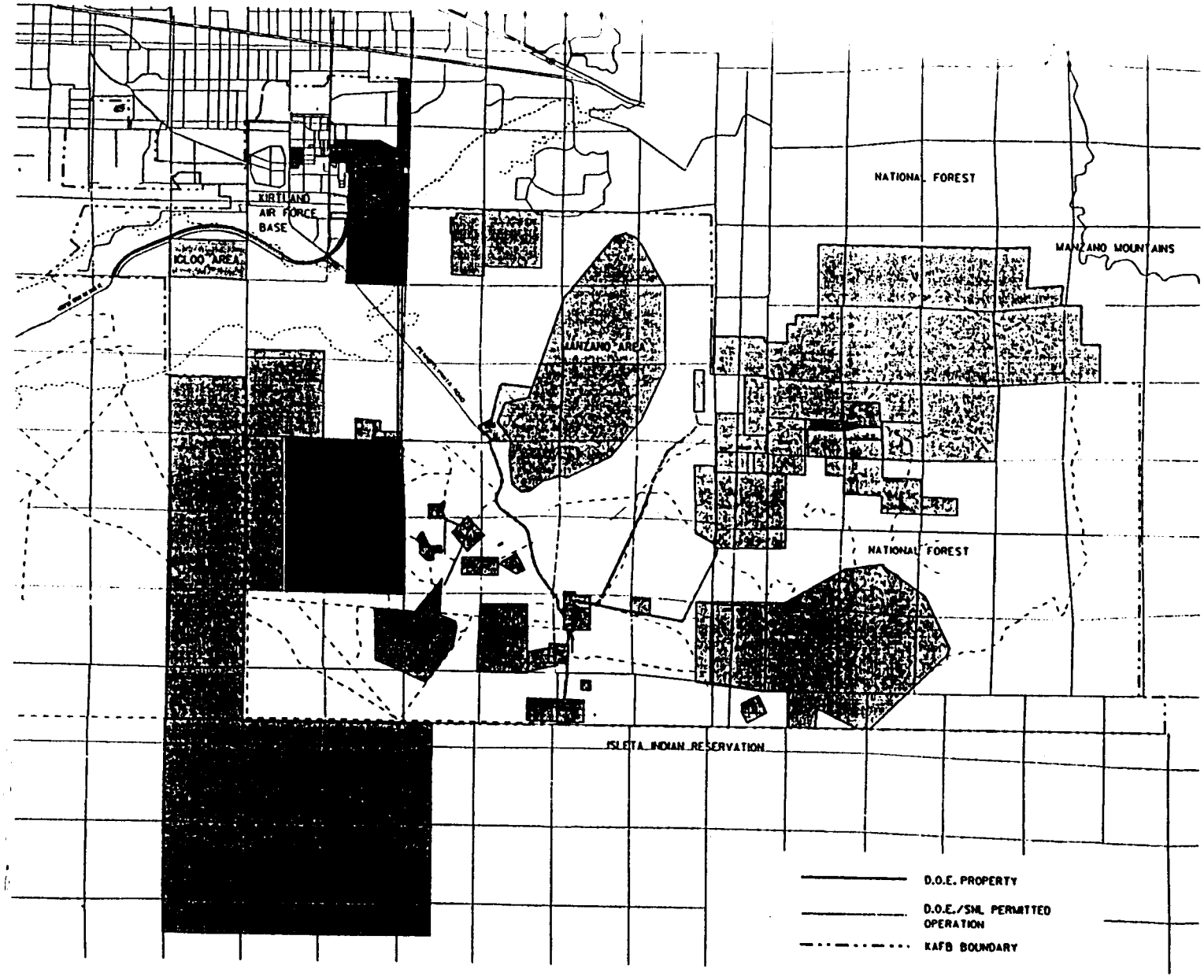
Sandia National Laboratories

GAO 2 J.E. Ren 3.21.95

KAFB Area Map

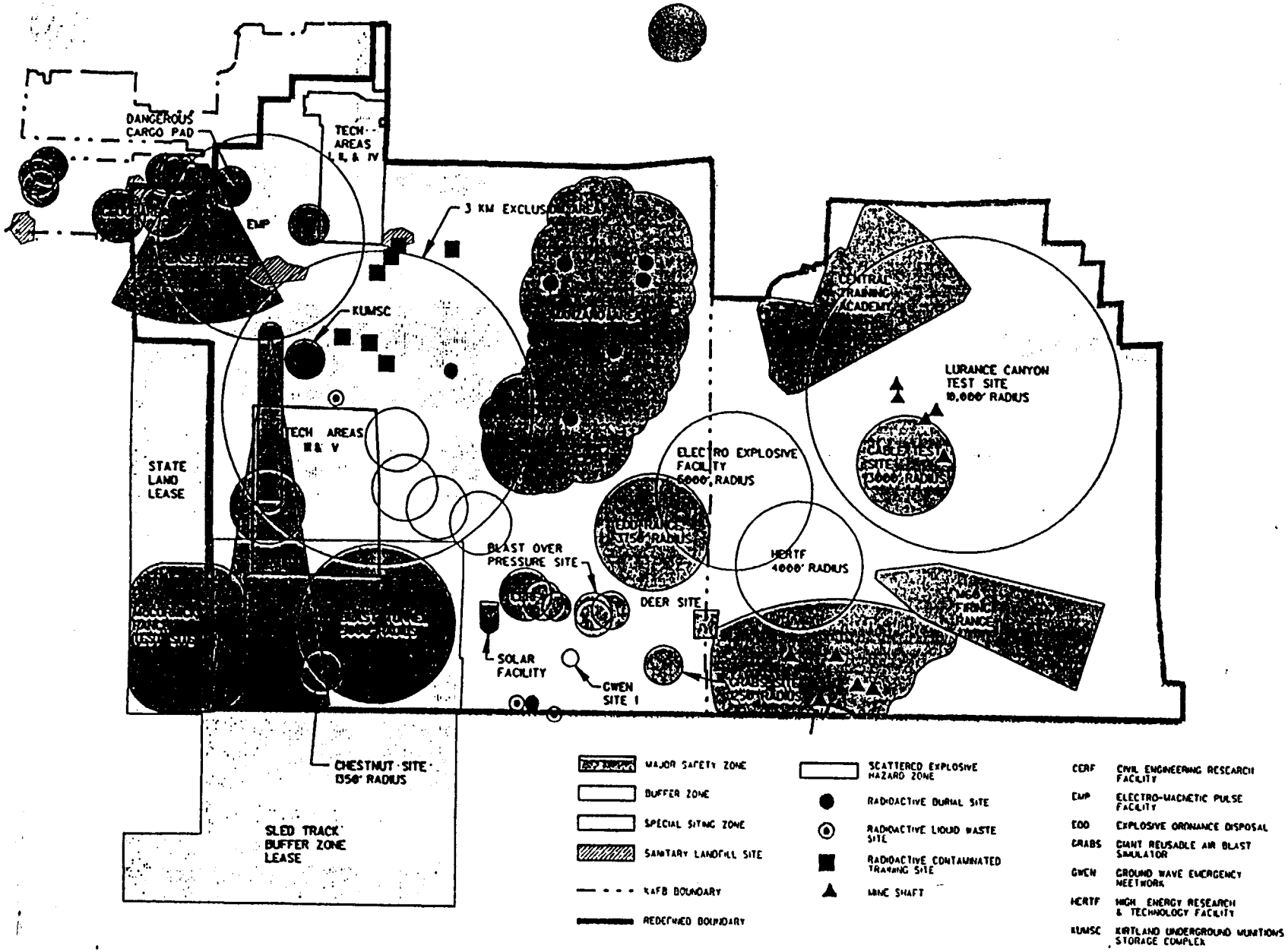


Albuquerque, New Mexico

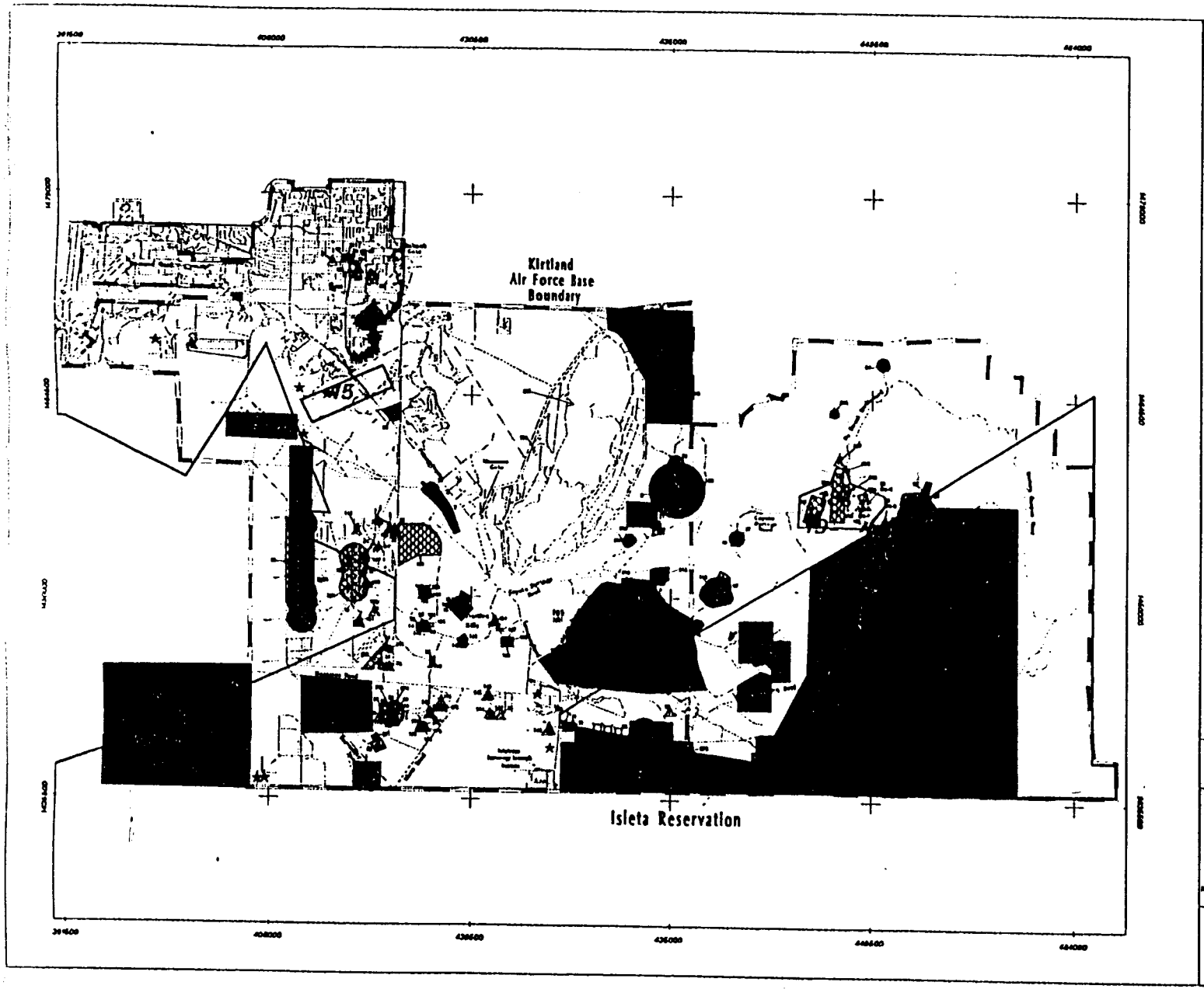


DOE/SNL Owned and Permitted Lands

179



SNL/KAFB Hazard Zones



Legend

- KAFB Boundary
- Roadways (all types)
- ER Sites Greater Than 1 Acre
- ER Sites Less Than 1 Acre
- Has been visually surveyed, low amount of UXO.
- Has not been surveyed, within a gun fan of a known fire/launch site, or is within a known ordnance use area with moderate uxo hazard.
- Has been visually surveyed significant amount of UXO.
- Unassessed, hazard unknown
- High Explosives Removal Completed
- Low Level Radiation Pit

Numbers in italics refer to Site Survey Report available by contacting the ER Program

0 7000 14000
Scale in Feet

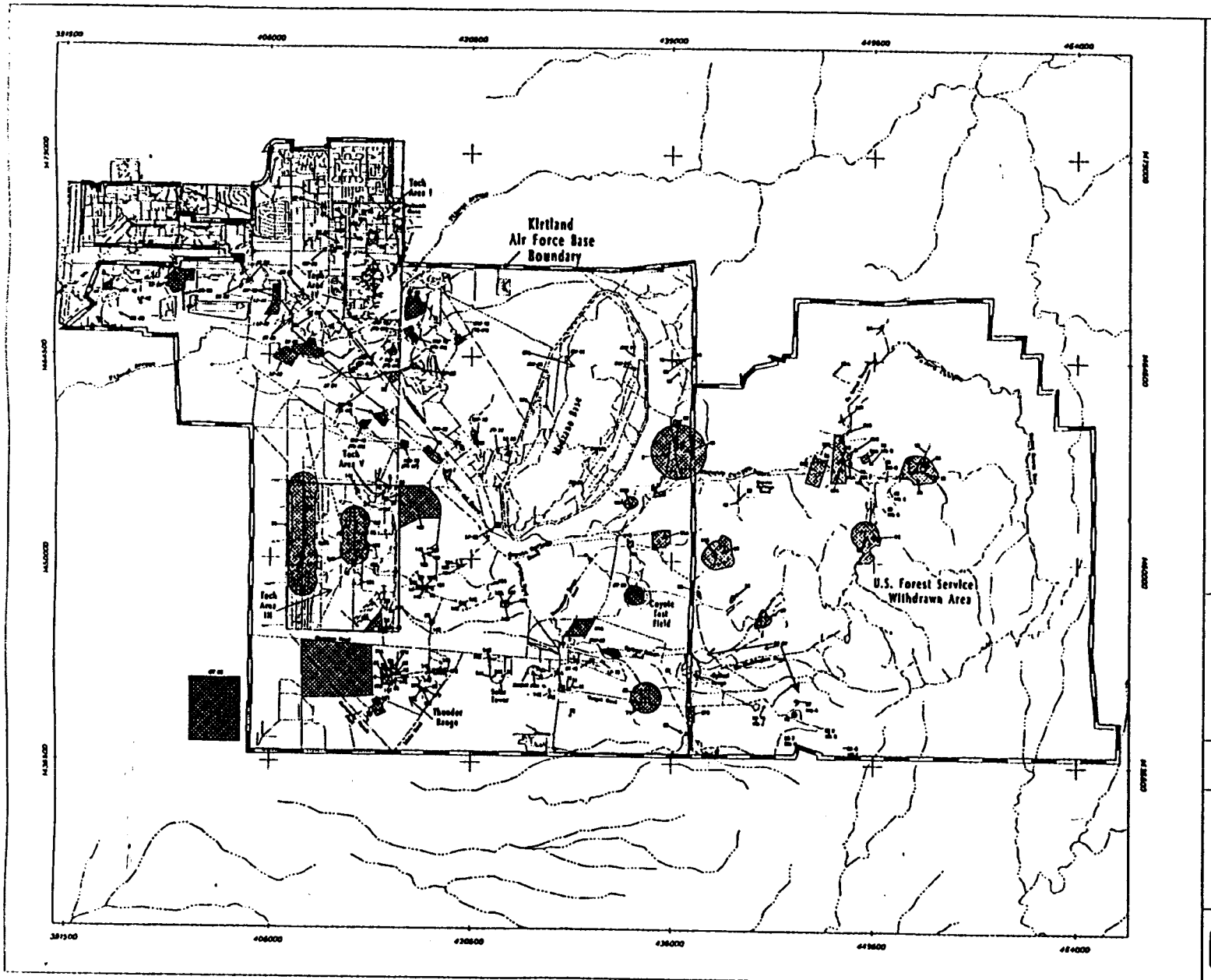
0 1680 3360
Scale in Meters

Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

Unexploded Ordnance Areas
KAFB - Sandia National Labs

1 In=7000	1:84000	MAPID=950711
Unclassified	DRAFT	SNL GIS ORG. 7512
ehebert	db950711.aml	03/23/95

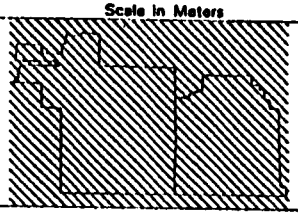
181



Legend

- Kirtland Air Force Base and U.S. Forest Service Withdrawn Area Boundaries
- Roadways (all types)
- Drainage Features
- SNL Technical Areas
- SNL Environmental Restoration Sites
- Installation Restoration Program Sites

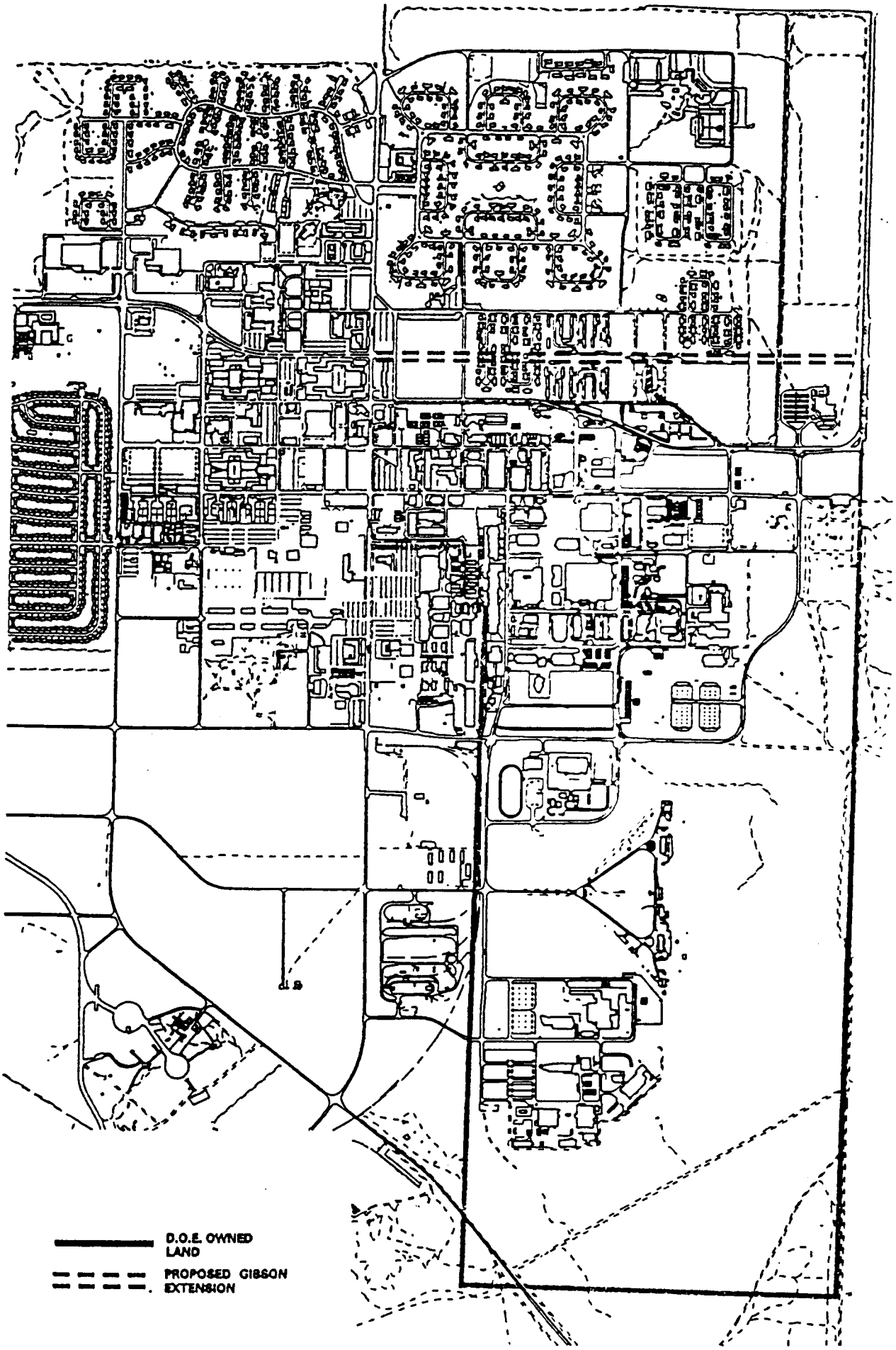
0 7000 14000
Scale in Feet
0 1680 3360
Scale in Meters



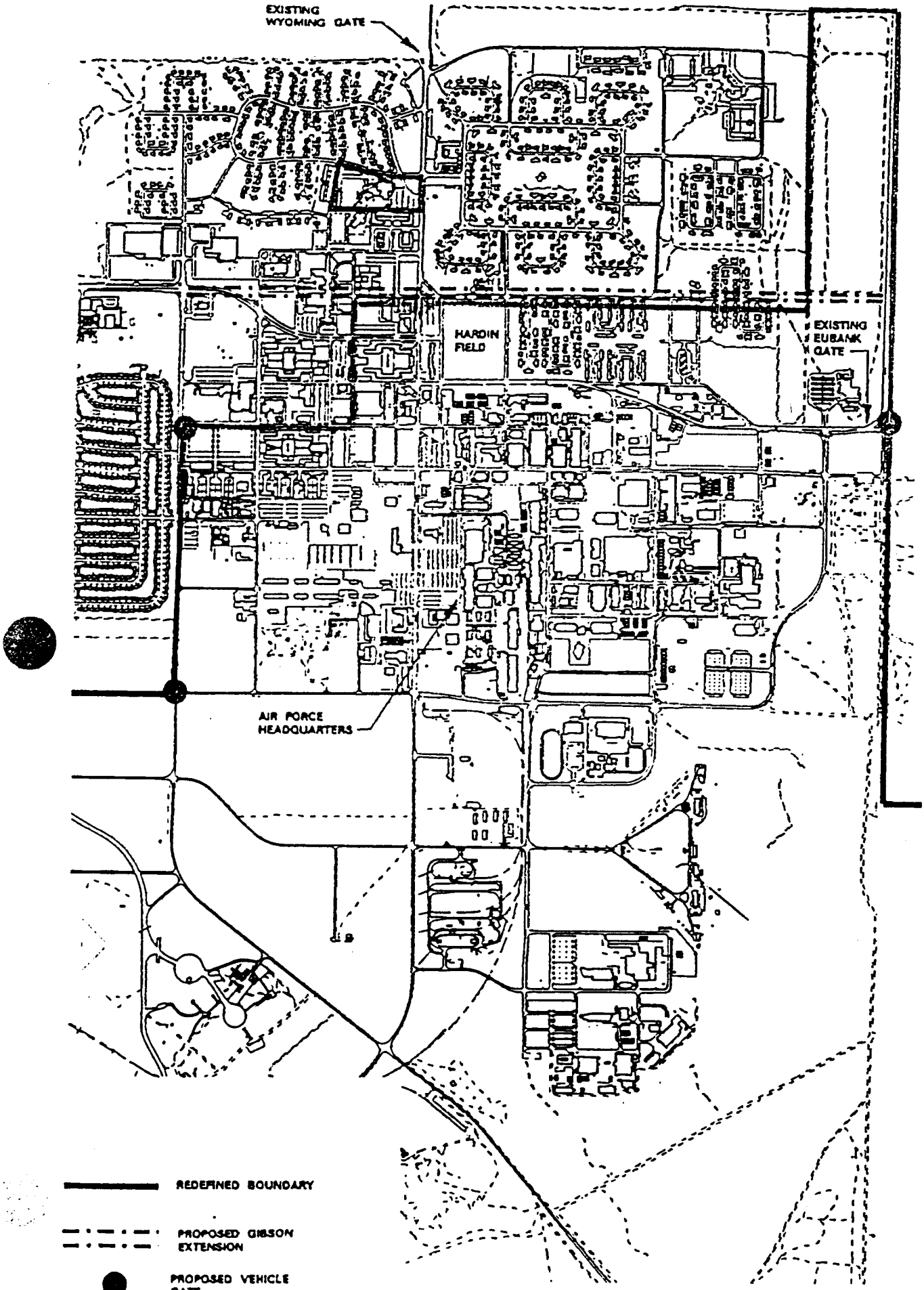
Sandia National Laboratories, New Mexico
Environmental Operations Geographic Information System

SNL ER Sites and Air Force IRP Sites at KAFB

1"=7000'	1:84000	MAPID=960400
Unclassified	DRAFT	SNL OIS ORG. 7512
dbleakly	irp94sm.aml	01/27/95



Current DOE Ownership



Proposed DOE Cantonment

185

Planning Scenario

- Redefined Map
- Pickling Assumption
- Cost Comparisons (< 2 years)

KAFB BRAC COST ELEMENT DATA SHEET

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SUMMARY ELEMENT:

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28 March 95
Vanden

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Column 5 -- Subtotal. This is the sum of columns 1,2,3, & 4 to estimate the total one time costs of assuming these functions.

Operating Expenses Per Year:

Column 1 -- FTE. This is the number of full time equivalent employees. By the definition provided by the Sandia Accounting Department Organization 10400 these employees

work a maximum of only 40 hours per week or 80 hours per pay period. This convention artificially increases the number of employees to provide Fire, Rescue, Hazardous material Spill, Security, and Emergency Management Services in the entire estimate.

Column 2 -- Base + Fringe. This is a derived cost for personnel. It is the average salary for employees in the Organization (Cost Work Center) times 31%. Fringe includes the costs of vacations, sick leave, and other benefits. **These estimates supersede all personnel cost figures in the engineering estimate roll-ups attached**.

Column 3 -- DS & DC. These stand for Direct Support and Direct Costs. Included in this column are the estimated infra-Sandia Center charges for cross departmental technical support (Environmental, Engineering, Industrial Safety, etc.), contractor support (Time and Material contracts for in-office performance of tasks), and general consumable supplies (non-property materials) to accomplish this function.

Column 4 -- Training and Non-Capital Equipment. These are the estimated annual training and equipment (property) purchases required to maintain proficiency and certifications to perform this function under DOE/SNL Procedures.

Column 5 -- Allocated costs. This is a derived cost using two equations. The first is the application of the Work Center Load, an overhead rate charged internally to Sandia to achieve full cost recovery -- this load varies by Center, to the derived average wages in column 2. The next step is to apply the Corporate Overhead rate of 21.5% to this figure by multiplying this "loaded rate" by 1.215. The second equation applies the Corporate Overhead, 21.5% to the DS&DC's and the Training Costs in columns 3 and 4. The EXCEL formula is: [{(column 2 * Cntr Load) * 1.215} + {(sum column 3 +4) * 0.215}] = Allocated Costs.

Rows D & E -- Annual Capital Equipment Maintenance and Replacement. These costs are estimated to be 10% each. They apply only to column 2 (Capital Equipment) from the One-time Conversion Costs.

Column 6 -- Subtotal. This is the sum of columns 2 + 3 + 4 + 5.