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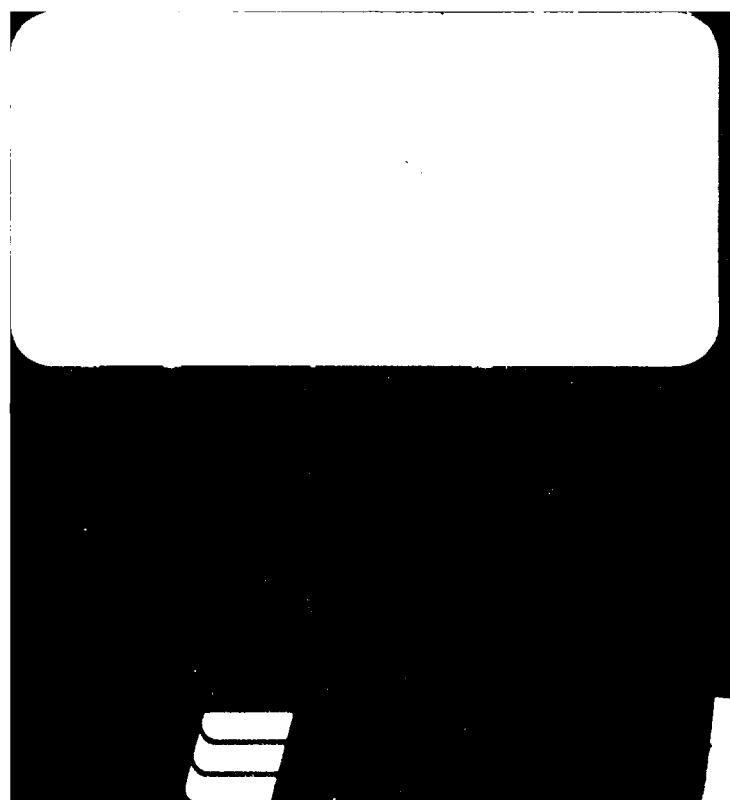
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REGIONAL STUDIES
FOR
VALLEY CLUSTERING

21 August 1981

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Results of the regional studies for valley clustering scenario of MX horizontal shelters in Nevada and Utah shows the various shelter options. The various shelter options include the 4600 shelter arrangement, 2300 shelter arrangement, and 1150 shelter arrangement for various scenarios of valleys, depth to rock, and depth to water.		

FOREWORD

This summary sketch book of valley clustering scenarios in Nevada/Utah was produced at the direction of the AFRCE-MX pursuant to Change Order P00027, Contract No. F04704-80-C-0006.

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1.0 INTRODUCTION

1.0 INTRODUCTION

This document contains three sections. Each pertains to a requested total of shelters as given in the table below:

<u>Section</u>	<u>Shelters</u>
I	4600
II	2300
III	1150

One Area Support Center (ASC) supports shelters within a 65 statute mile radius.

The sketches and tables presented herein identify specific ASC locations by dots and valleys, or portions thereof, by shading. These locations contain sufficient shelters to add up to the requested total (see table above) within 65-mile circles. Initials identify the valley names and, in most cases, are located immediately to the left of the valley sketch.

The table facing each sketch identifies the valley by name and gives the number of shelters considered in the option. The number of shelters after each valley represents (unless specified as 23:1 clustering) the theoretical counts based on valley clustering. All numbers were generated by TRW except in the case of 23:1 clustering.

The total number of shelters available for each of the 36 valleys is shown in Table 1.

Table 2, Data Matrix, identifies the deployment option, the number of shelters, the number of valleys, and ASCs and in 13

TABLE 1
AVAILABLE SHELTER

	VALLEY CLUSTERING				23:1 CLUSTERING
	50' TO ROCK AND WATER OPTION A	OPTION B	150' TO ROCK AND WATER OPTION C	OPTION D	2/3 HEX OPTION E
<u>UTAH</u>					
Dugway	132	198	114	171	115
Fish Springs Flat	99	148	50	75	46
Pine	249	374	242	363	115
Sevier Desert	142	213	62	93	46
Sevier Lake	70	105	57	86	23
Snake	650	975	390	585	437
Tule	367	550	198	297	230
wan Wah	213	320	175	263	115
Whirlwind	291	436	215	322	276
Utah Subtotal	2,213	3,319	1,503	2,255	1,403
<u>NEVADA</u>					
Antelope	125	188	51	76	92
Big Sand Springs	70	105	57	86	69
Big Smoky	430	645	189	284	230
Butte	293	440	264	396	207
Cave	79	118	70	105	69
Coal	219	328	201	302	138
Delamar/Pahroc	170	255	138	207	138
Dry Lake	284	426	267	400	230
Garden	161	242	126	189	138
Hamlin	333	500	186	279	230
Hot Creek	167	250	99	148	138
Jakes	89	134	83	124	69
Kobeh	150	225	8	12	115
Lake	191	286	94	141	161
Little Smoky	195	292	137	206	92
Long	125	188	80	120	92
Monitor	276	414	83	124	138
Muleshoe	81	122	69	104	69
Newark	177	266	96	144	115
Penoyer	212	318	146	219	115
Railroad	455	682	273	410	299
Ralston	312	468	256	384	207
Reveille	91	136	74	111	69
Spring	121	182	68	102	92
Stone Cabin	331	496	159	238	184
White River	398	597	191	286	276
Nevada Subtotal	5,535	8,303	3,465	5,197	3,772
TOTAL	7,748	11,622	4,968	7,452	5,175

TABLE 2
DATA MATRIX

PAGE 1 OF 3

OPTION	NUMBER OF SHELTERS	NUMBER OF VALLEYS	NUMBER OF ASCs	DTN LENGTH (Statute miles)
A1	5332	21	3	540
B1	5370	16	2	373
C1	4968	35	4	927
D1	5481	23	3	538
A2	5324	24	3	
B2	5324	15	2	
C2	4968	35	4	
D2	5332	24	3	
A3	4885	21	3	
B3	5303	20	2	
C3	2976	27	3	
D3	4464	27	3	
A4	4885	27	3	
B4	5303	20	2	
C4	2976	27	3	
D4	4464	27	3	
A5	5365	22	3	
B5	5549	15	2	
C5	4830	34	4	
D5	5306	22	3	
A6	5333	24	3	
B6	5351	16	2	
C6	4830	34	4	
D6	5327	23	3	
A13-1	5321	25	3	
B13-1	5392	17	2	
C13-1	3395	26	3	
D13-1	5092	26	3	
A13-3	4601	25	3	
B13-3	5368	20	2	
C13-3	2747	25	3	
D13-3	4120	25	3	
A13-5	5240	25	3	
B13-5	5336	16	2	
C13-5	3257	25	3	
B13-5	4885	25	3	
A7	2690	14	2	277
B7	2661	9	2	198
C7	2633	19	3	350
D7	2650	13	2	252
E7	2346	18	2	546
A8	2833	11	2	
B8	2719	5	1	
C8	2646	17	2	

TABLE 2
DATA MATRIX

PAGE 2 OF 3

OPTION	NUMBER OF SHELTERS	NUMBER OF VALLEYS	NUMBER OF ASCs	DTN LENGTH (Statute miles)
D8	2639	10	2	
E8	2300	14	2	
A9	2644	17	2	
B9	2635	13	2	
C9	2678	21	3	
D9	2650	16	2	
E9	2323	18	2	
A10	2640	17	2	
B10	2633	11	1	
C10	2678	21	3	
D10	2892	17	2	
E10	2323	18	2	
A11	2726	14	2	
B11	2734	9	2	
C11	2711	19	3	
D11	2720	12	2	
E11	2300	19	2	
A12	2833	11	2	
B12	2719	5	1	
C12	2654	17	2	
D12	2639	10	2	
E12	2300	14	2	
A13-7	2645	14	2	
B13-7	2669	10	1	
C13-7	2644	20	2	
D13-7	2659	14	1	
E13-7	2346	16	2	
A13-9	2786	16	2	
B13-9	2633	12	1	
C13-9	2656	23	3	
D13-9	2668	16	2	
E13-9	2300	19	2	
A13-11	2683	14	2	
B13-11	2732	10	1	
C13-11	2688	19	3	
D13-11	2667	14	1	
E13-11	2346	16	2	
A14	1392	7	1	167
B14	1529	5	1	138
C14	1346	10	1	216
D14	1392	6	1	150
A15	1339	8	1	
B15	1329	6	1	
C15	1337	8	1	

TABLE 2
DATA MATRIX

PAGE 3 OF 3

OPTION	NUMBER OF SHELTERS	NUMBER OF VALLEYS	NUMBER OF ASCs	DTN LENGTH (Statute miles)
D15	1323	7	1	
A16	1357	9	1	
B16	1339	7	1	
C16	1380	15	1	
D16	1316	9	1	
A17	1324	9	1	
B17	1328	6	1	
C17	1324	14	2	
D17	1429	9	1	
A18	1354	7	1	
B18	1392	5	1	
C18	1354	10	1	
D18	1404	6	1	
A19	1339	8	1	
B19	1329	6	1	
C19	1337	8	1	
D19	1323	7	1	
A20-14	1392	7	1	
B20-14	1529	5	1	
C20-14	1422	11	1	
D20-14	1392	6	1	
A20-16	1398	9	1	
B20-16	1560	7	1	
C20-16	1380	15	1	
D20-16	1334	9	1	
A20-18	1448	8	1	
B20-18	1392	5	1	
C20-18	1332	10	1	
D20-18	1404	6	1	

2

cases, the Designated Transportation Network (DTN) road length in statute miles. Possible reductions in DTN length may result from valley clustering. The data presented in this document were generated from visual estimates of proportional parts of areas related to number of shelters in whole areas at a scale of 1:500,000. Consequently, this limits the accuracy of the counts, and emphasis should be placed on relative values of options rather than on absolute values of any one option. The option is identified at the top of the table by a letter and a number as well as by identification. For instance, Option A-1 corresponds to A = horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water, 1 = best 4600 shelters and 15 percent for Coyote MOB.

Figure 1 shows the Military Overflight Areas (MOAs) and Restricted Areas overlapping or infringing on the Designated Deployment Area (DDA). In some instances, the areas in MOAs and Restricted Areas were excluded from the shelter count.

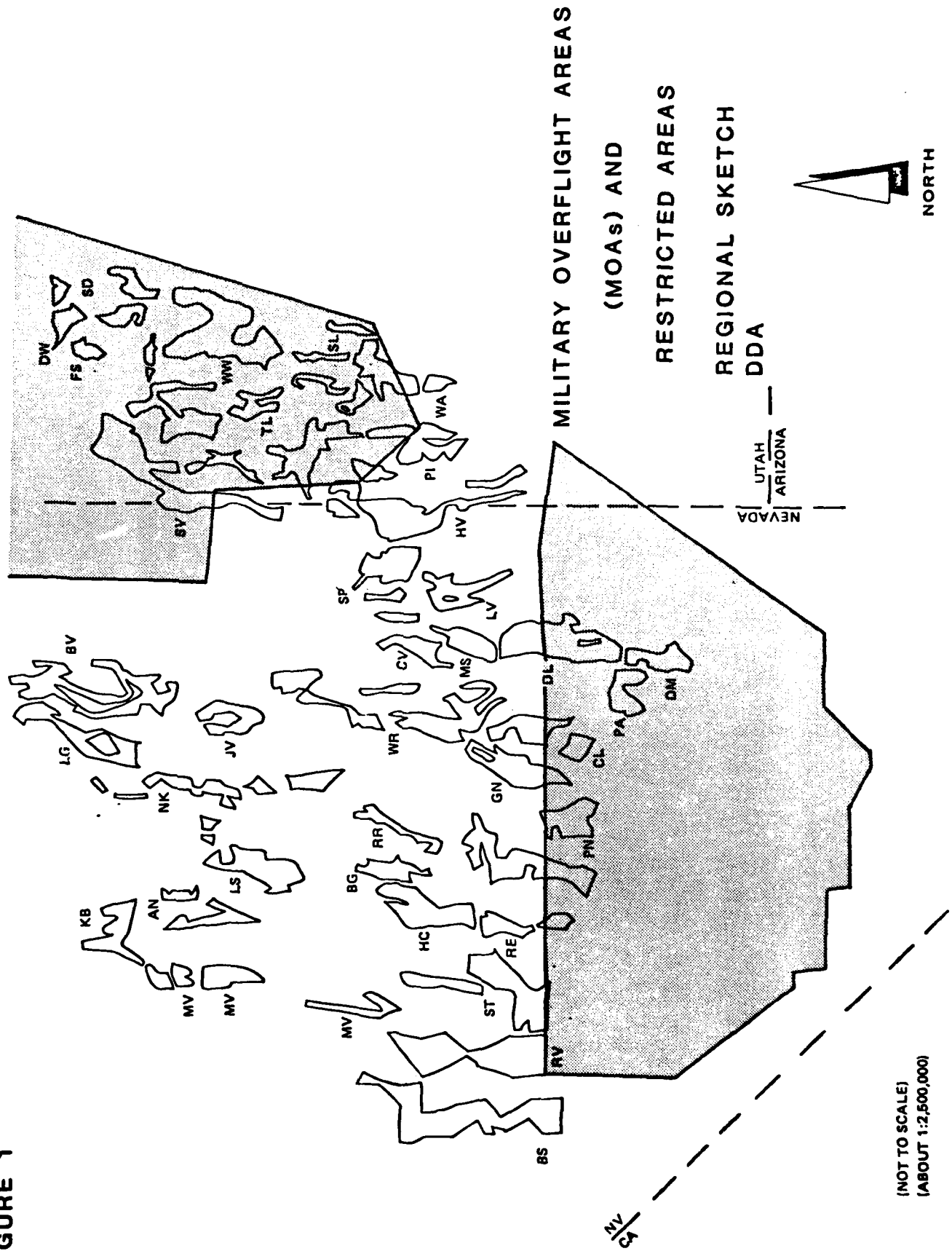
Most of the scope of work was defined in an AFRCE-MX memorandum dated 1 July 1981, submitted to Ertec Western, and subsequently augmented verbally by Major Mike Elliott, AFRCE-MX. This memo follows.

1.1 REGIONAL STUDIES FOR VALLEY CLUSTERING

Items 1 through 13 will be examined under each of the following conditions:

- A. Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water.

FIGURE 1



- B. Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water.
 - C. Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water.
 - D. Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water.
 - E. Horizontal shelters - 23:1 clustered will be examined for case 7 through 12 using Ertec's May 15 numbers.
-

1. Find the most compact system using 4600 shelters and 15 percent - Coyote MOB.
2. Find the most compact system using 4600 shelters and 15 percent - Milford MOB.
3. Repeat #1, but avoid all MOAs and Restricted Areas.
4. Repeat #2, but avoid all MOAs and Restricted Areas.
5. Repeat #1, but avoid the Delamar/Pahroc valleys.
6. Repeat #2, but avoid the Delamar/Pahroc valleys.
7. Best 2300 shelters and 15 percent - Coyote MOB.
8. Best 2300 shelters and 15 percent - Milford MOB.
9. Repeat #7, but avoid all MOAs and Restricted Areas.
10. Repeat #8, but avoid all MOAs and Restricted Areas.
11. Repeat #7, but avoid the Delamar/Pahroc valleys.
12. Repeat #8, but avoid the Delamar/Pahroc valleys.
13. Repeat #'s 1, 3, 5, 7, 9, and 11 for Nevada only.
14. Best 1150 shelters and 15 percent - Coyote MOB.
15. Best 1150 shelters and 15 percent - Milford MOB.
16. Repeat #14, but avoid all MOAs and Restricted Areas.
17. Repeat #15, but avoid all MOAs and Restricted Areas.
18. Repeat #14, but avoid Delamar/Pahroc valleys.

19. Repeat #15, but avoid Delamar/Pahroc valleys.

20. Repeat #s 14, 16, and 18 for Nevada only.

-
- o TRW numbers will be used for A (1-13)
 - B (1-13) = A x 1.5
 - C (1-13)
 - D (1-13)
 - o Ertec cluster numbers will be used for cases E (7-12).
 - o Cases A-D (7, 9, 11) - One ASC will be at Milford.
-

2.0 4600 SHELTER OPTIONS

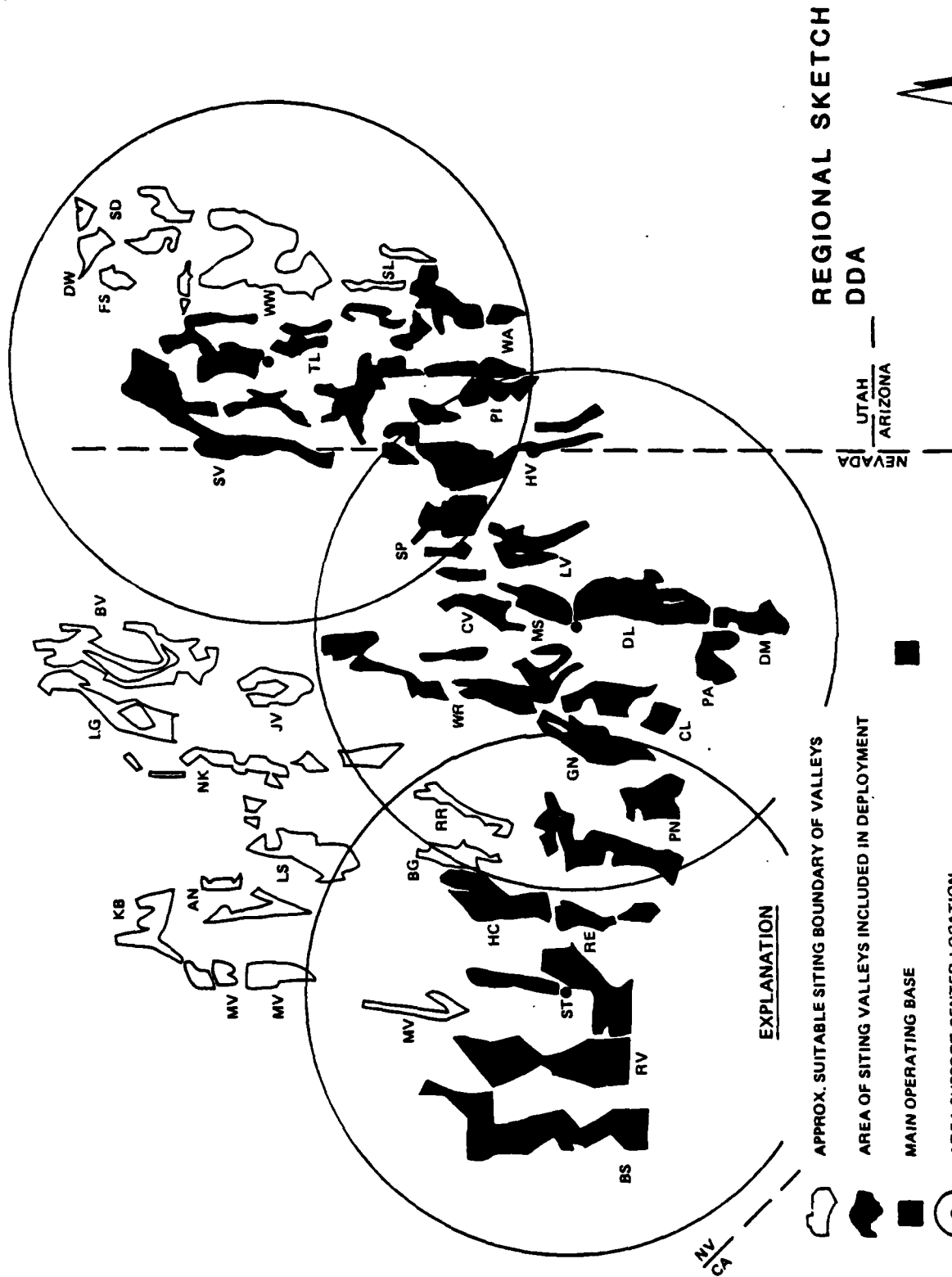
2.0 4600 SHELTER OPTIONS

This section contains options for 4600 shelters as specified in Section 1.1.

A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

1) Best 4600 shelters and 15 percent - Coyote MOB

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	333
Fish Springs Flat	FS		Hot Creek	HC	167
Pine	PI	249	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	191
Snake	SV	650	Little Smoky	LS	
Tule	TL	367	Long	LG	
Wah Wah	WA	213	Monitor	MV	
Whirlwind	WW		Muleshoe	MS	81
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	212
Big Smoky	BS	430	Railroad	RR	273
Butte	BV		Ralston	RV	312
Cave	CV	79	Reveille	RE	91
Coal	CL	219	Spring	SP	121
Delamar/Pahroc	DM	170	Stone Cabin	ST	331
Dry Lake	DL	284	White River	WR	398
Garden	GN	161			
			TOTAL SHELTERS		5332
			TOTAL VALLEYS		21
			TOTAL ASCs		3



EXPLANATION

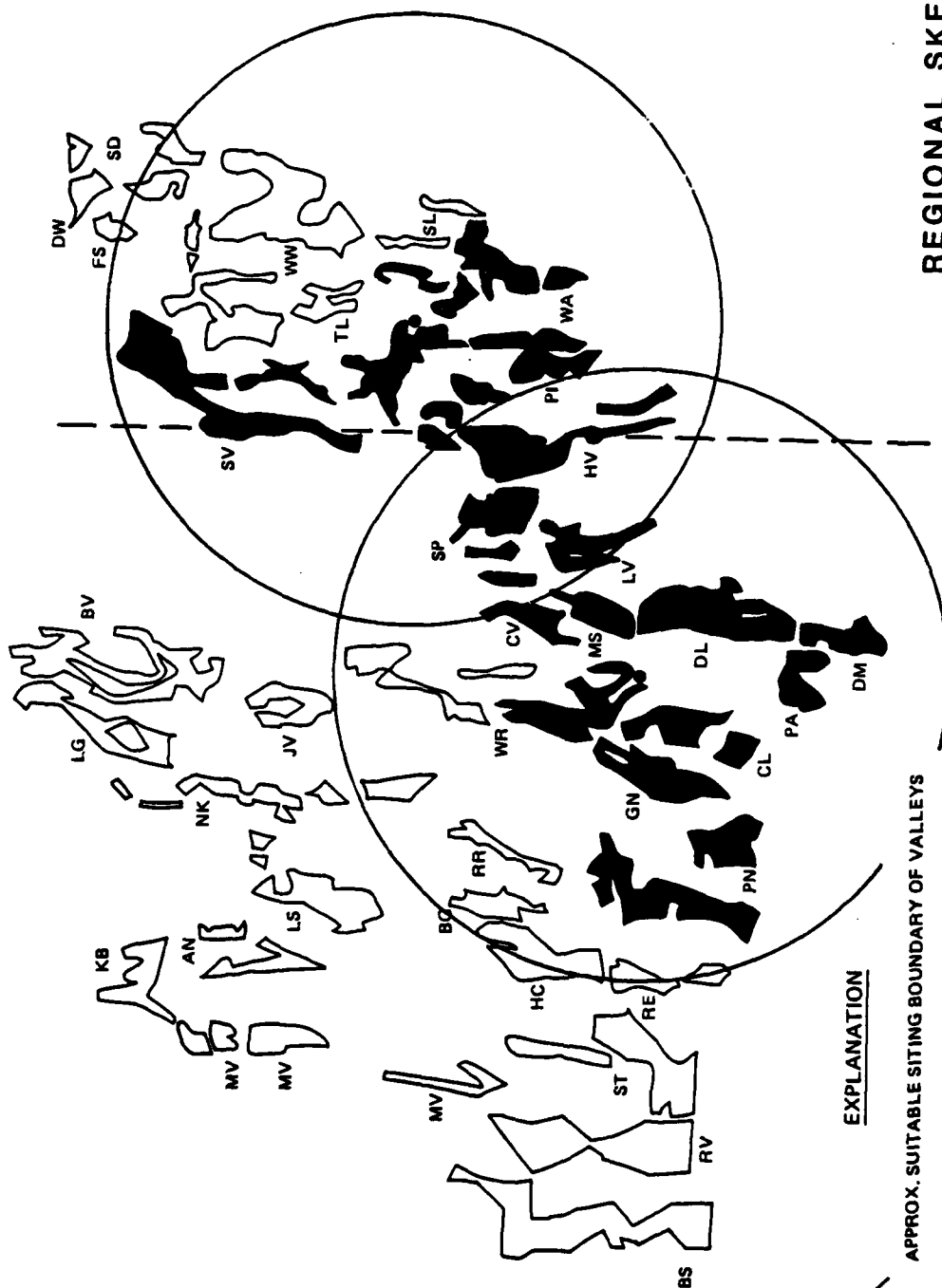
- APPROX. SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

1) Best 4600 shelters and 15 percent - Coyote MOB

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	500
Fish Springs Flat	FS		Hot Creek	HC	
Pine	PI	374	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	286
Snake	SV	975	Little Smoky	LS	
Tule	TL	116	Long	LG	
Wah Wah	WA	320	Monitor	MV	
Whirlwind	WW		Muleshoe	MS	122
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	318
Big Smoky	BS		Railroad	RR	410
Butte	BV		Ralston	RV	
Cave	CV	118	Reveille	RE	
Coal	CL	328	Spring	SP	182
Delamar/Pahroc	DM	255	Stone Cabin	ST	
Dry Lake	DL	426	White River	WR	398
Garden	GN	242			
			TOTAL SHELTERS		5370
			TOTAL VALLEYS		16
			TOTAL ASCs		2



REGIONAL SKETCH

DDA

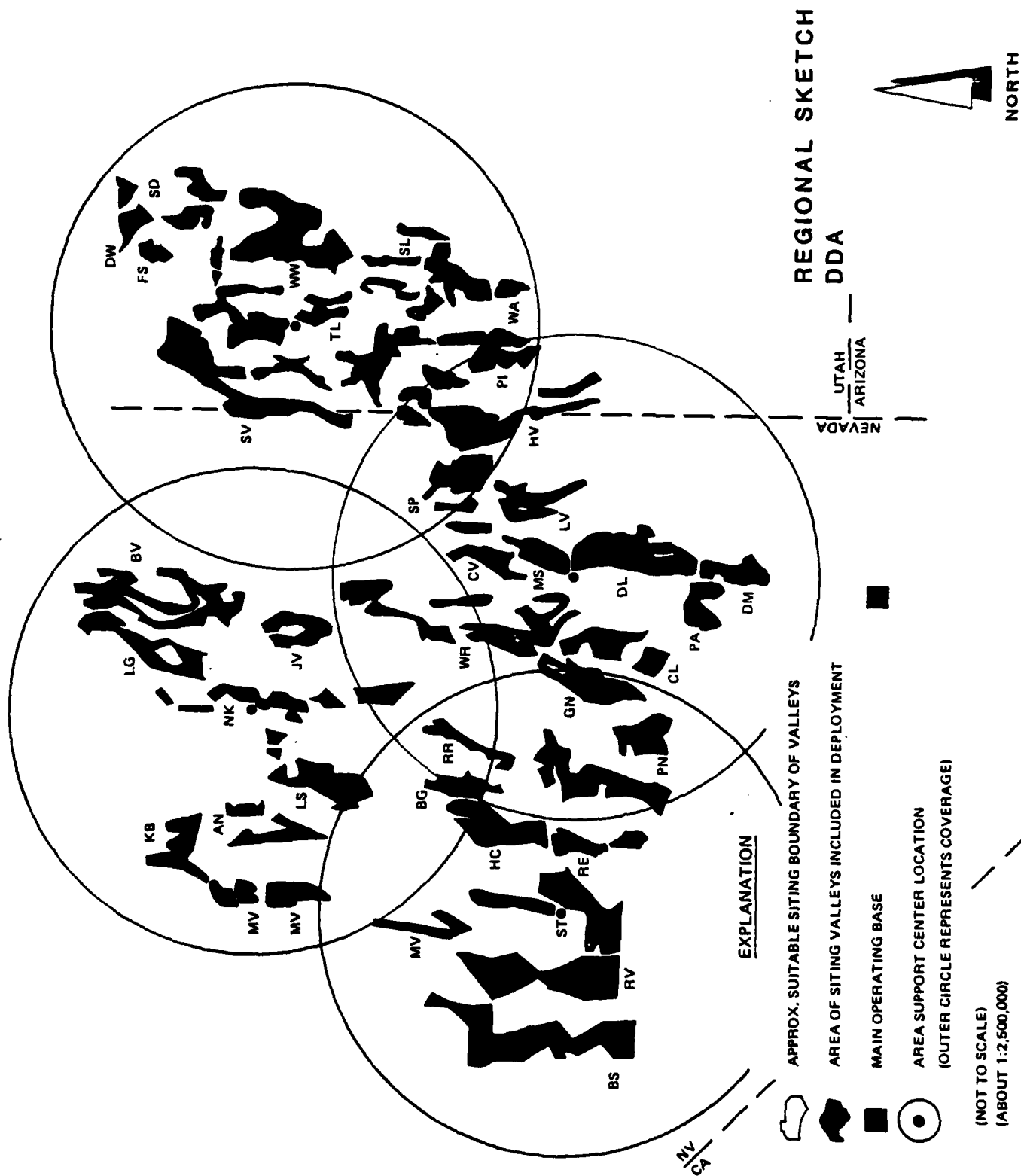
UTAH
ARIZONA



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

1) Best 4600 shelters and 15 percent - Coyote MOB

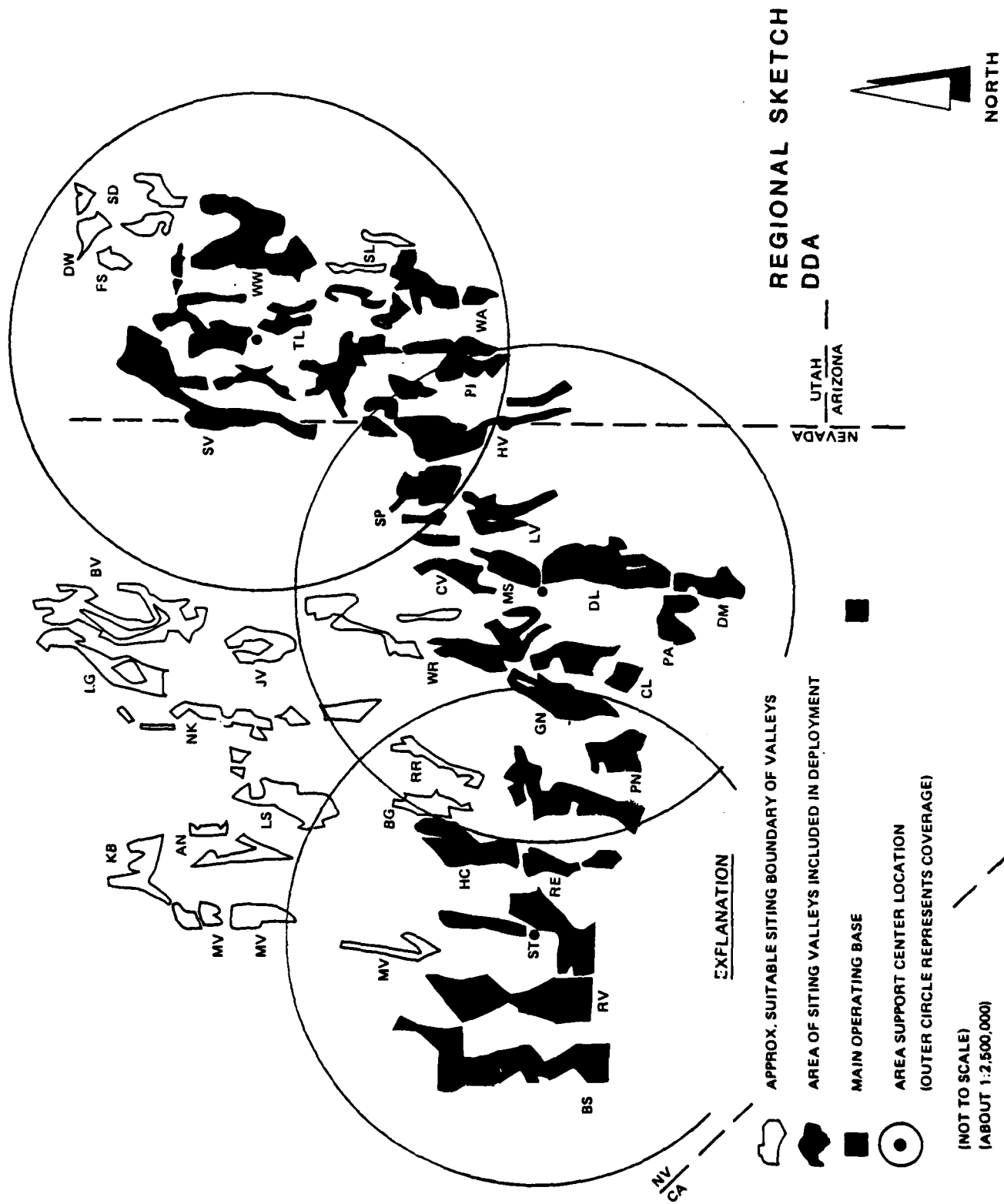
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	114	Hamlin	HV	186
Fish Springs Flat	FS	50	Hot Creek	HC	99
Pine	PI	242	Jakes	JV	83
Sevier Desert	SD	62	Kobeh	KB	8
Sevier Lake	SL	57	Lake	LV	94
Snake	SV	390	Little Smoky	LS	137
Tule	TL	198	Long	LG	80
Wah Wah	WA	175	Monitor	MV	83
Whirlwind	WW	215	Muleshoe	MS	69
Antelope	AN	51	Newark	NK	96
Big Sand Springs	BG	57	Penoyer	PN	146
Big Smoky	BS	189	Railroad	RR	273
Butte	BV	264	Ralston	RV	256
Cave	CV	70	Reveille	RE	74
Coal	CL	201	Spring	SP	68
Delamar/Pahroc	DM	138	Stone Cabin	ST	159
Dry Lake	DL	267	White River	WR	191
Garden	GN	126			
			TOTAL SHELTERS		4968
			TOTAL VALLEYS		35
			TOTAL ASCS		4



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

1) Best 4600 shelters and 15 percent - Coyote MOB

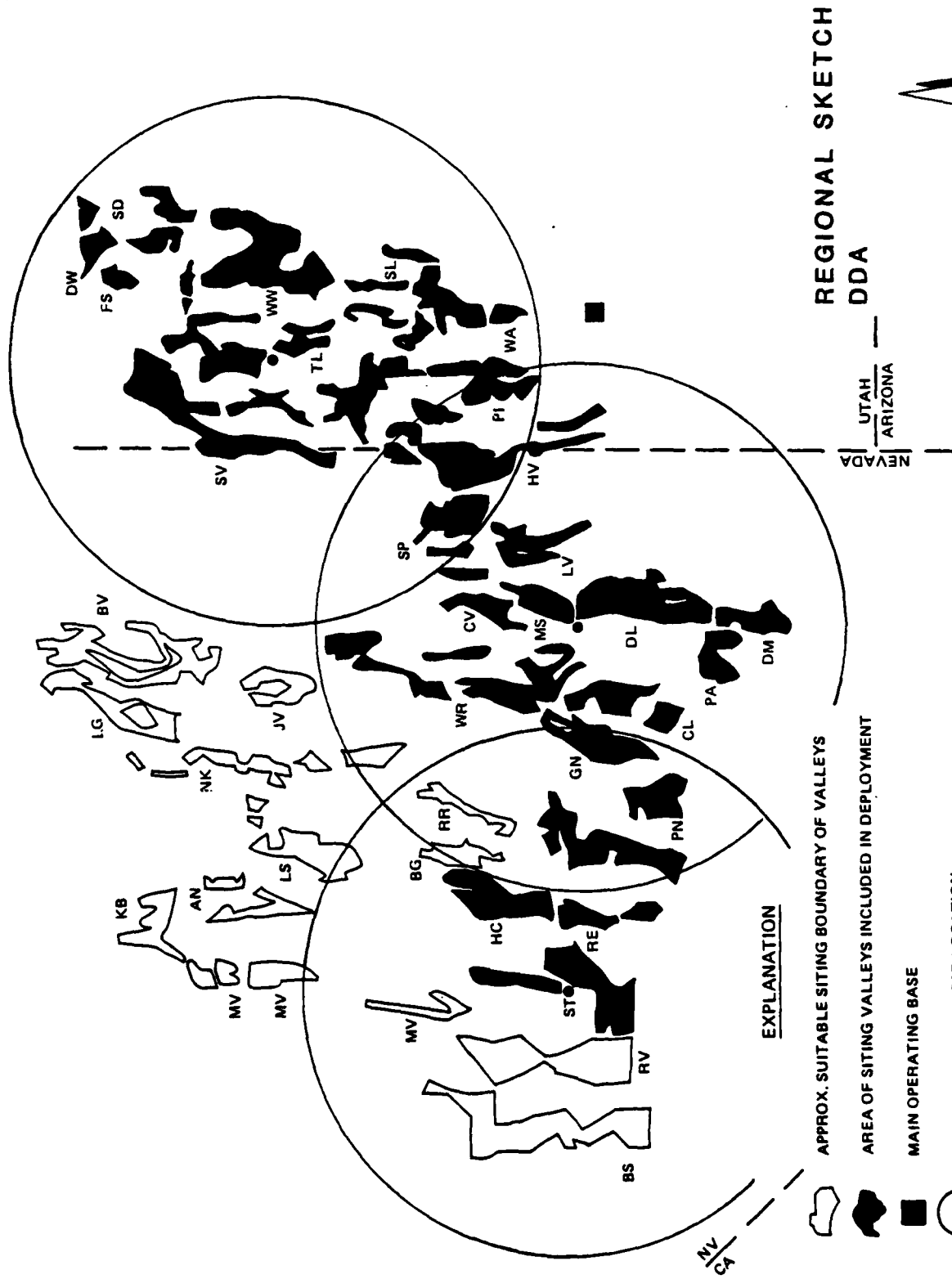
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Fish Springs Flat	FS	34	Hot Creek	HC	148
Pine	PI	363	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	141
Snake	SV	585	Little Smoky	LS	
Tule	TL	297	Long	LG	
Wah Wah	WA	263	Monitor	MV	
Whirlwind	WW	290	Muleshoe	MS	104
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	219
Big Smoky	BS	284	Railroad	RR	246
Butte	BV		Ralston	RV	384
Cave	CV	105	Reveille	RE	111
Coal	CL	302	Spring	SP	102
Delamar/Pahroc	DM	207	Stone Cabin	ST	238
Dry Lake	DL	400	White River	WR	190
Garden	GN	189			
			TOTAL SHELTERS		5481
			TOTAL VALLEYS		23
			TOTAL ASCS		3



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

2) Best 4600 shelters and 15 percent - Milford MOB

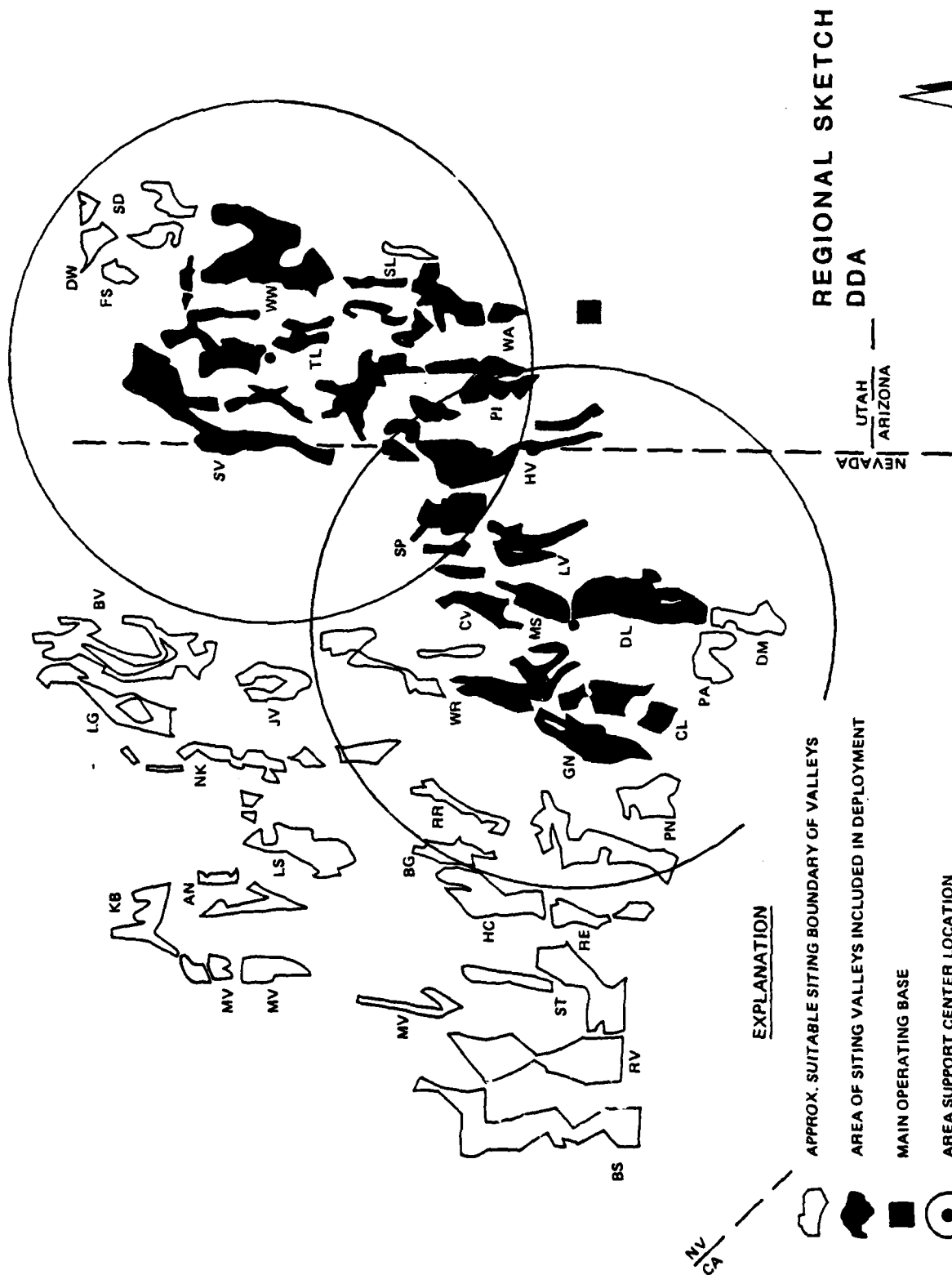
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
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Fish Springs Flat	FS	99	Hot Creek	HC	167
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Snake	SV	650	Little Smoky	LS	
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Butte	BV		Ralston	RV	
Cave	CV	79	Reveille	RE	91
Coal	CL	219	Spring	SP	121
Delamar/Pahroc	DM	170	Stone Cabin	ST	331
Dry Lake	DL	284	White River	WR	398
Garden	GN	161			
			TOTAL SHELTERS		5324
			TOTAL VALLEYS		24
			TOTAL ASCs		3



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

2) Best 4600 shelters and 15 percent - Milford MOB

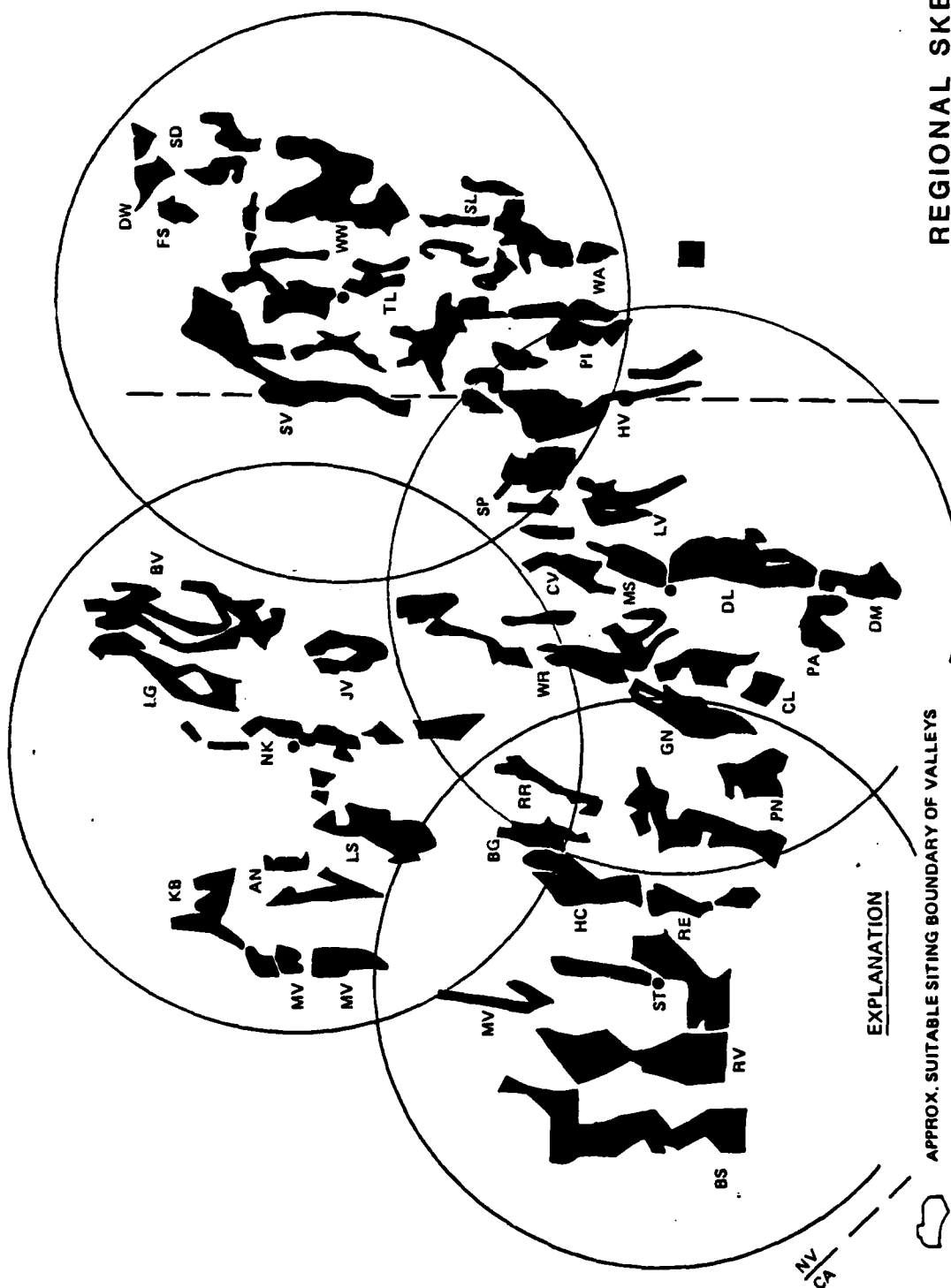
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
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Fish Springs Flat	FS	67	Hot Creek	HC	
Pine	PI	374	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	286
Snake	SV	975	Little Smoky	LS	
Tule	TL	550	Long	LG	
Wah Wah	WA	320	Monitor	MV	
Whirlwind	WW	436	Muleshoe	MS	122
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	
Big Smoky	BS		Railroad	RR	
Butte	BV		Ralston	RV	
Cave	CV	118	Reveille	RE	182
Coal	CL	328	Spring	SP	
Delamar/Pahroc	DM		Stone Cabin	ST	
Dry Lake	DL	426	White River	WR	398
Garden	GN	242			
			TOTAL SHELTERS		5324
			TOTAL VALLEYS		15
			TOTAL ASCS		2



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

2) Best 4600 shelters and 15 percent - Milford MOB

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	114	Hamlin	HV	186
Fish Springs Flat	FS	50	Hot Creek	HC	99
Pine	PI	242	Jakes	JV	83
Sevier Desert	SD	62	Kobeh	KB	8
Sevier Lake	SL	57	Lake	LV	94
Snake	SV	390	Little Smoky	LS	137
Tule	TL	198	Long	LG	80
Wah Wah	WA	175	Monitor	MV	83
Whirlwind	WW	215	Muleshoe	MS	69
Antelope	AN	51	Newark	NK	96
Big Sand Springs	BG	57	Penoyer	PN	146
Big Smoky	BS	189	Railroad	RR	273
Butte	BV	264	Ralston	RV	256
Cave	CV	70	Reveille	RE	74
Coal	CL	201	Spring	SP	68
Delamar/Pahroc	DM	138	Stone Cabin	ST	159
Dry Lake	DL	267	White River	WR	191
Garden	GN	126			
			TOTAL SHELTERS		4968
			TOTAL VALLEYS		35
			TOTAL ASCs		4



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

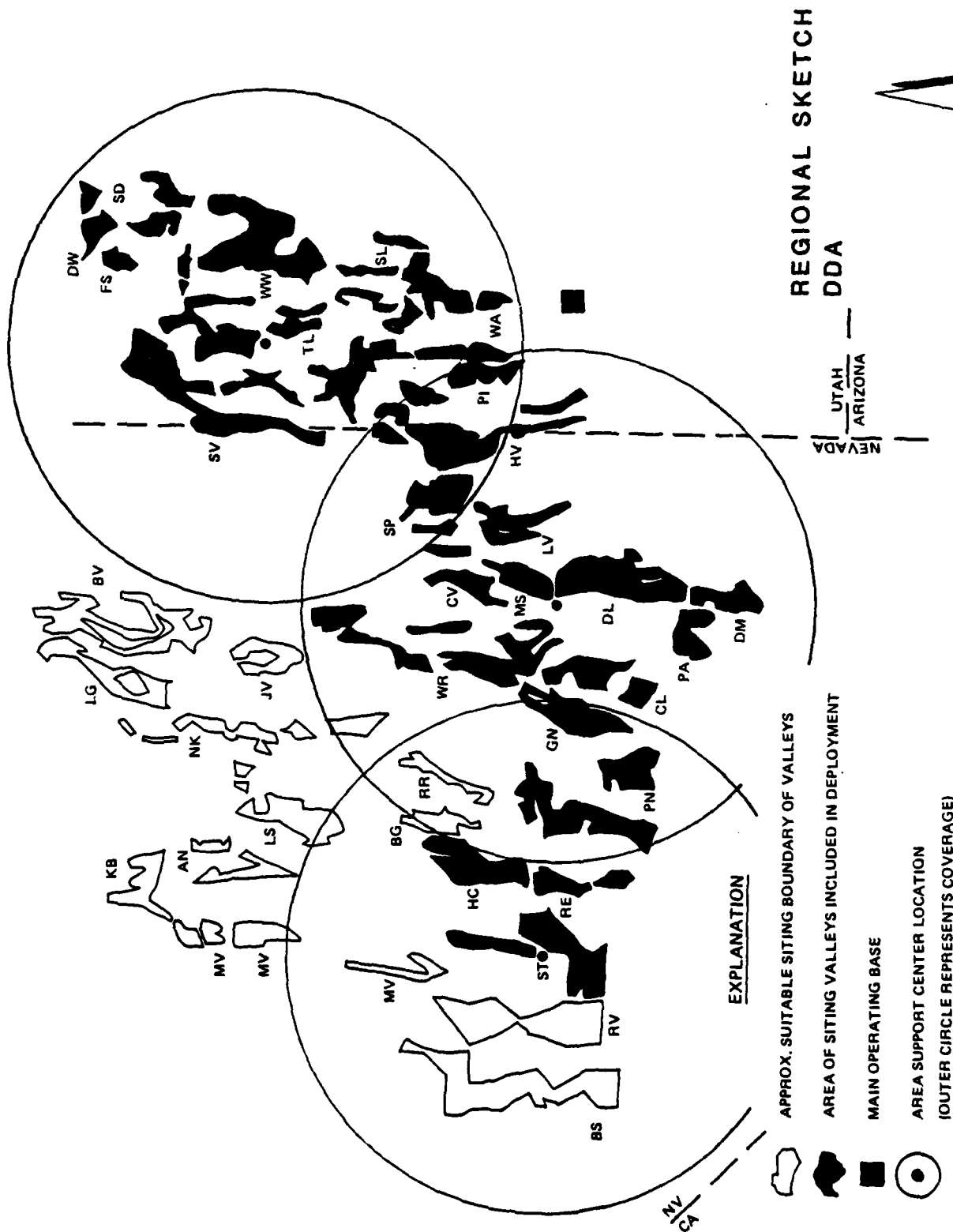
NEVADA
UTAH
ARIZONA
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D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

2) Best 4600 shelters and 15 percent - Milford MOB

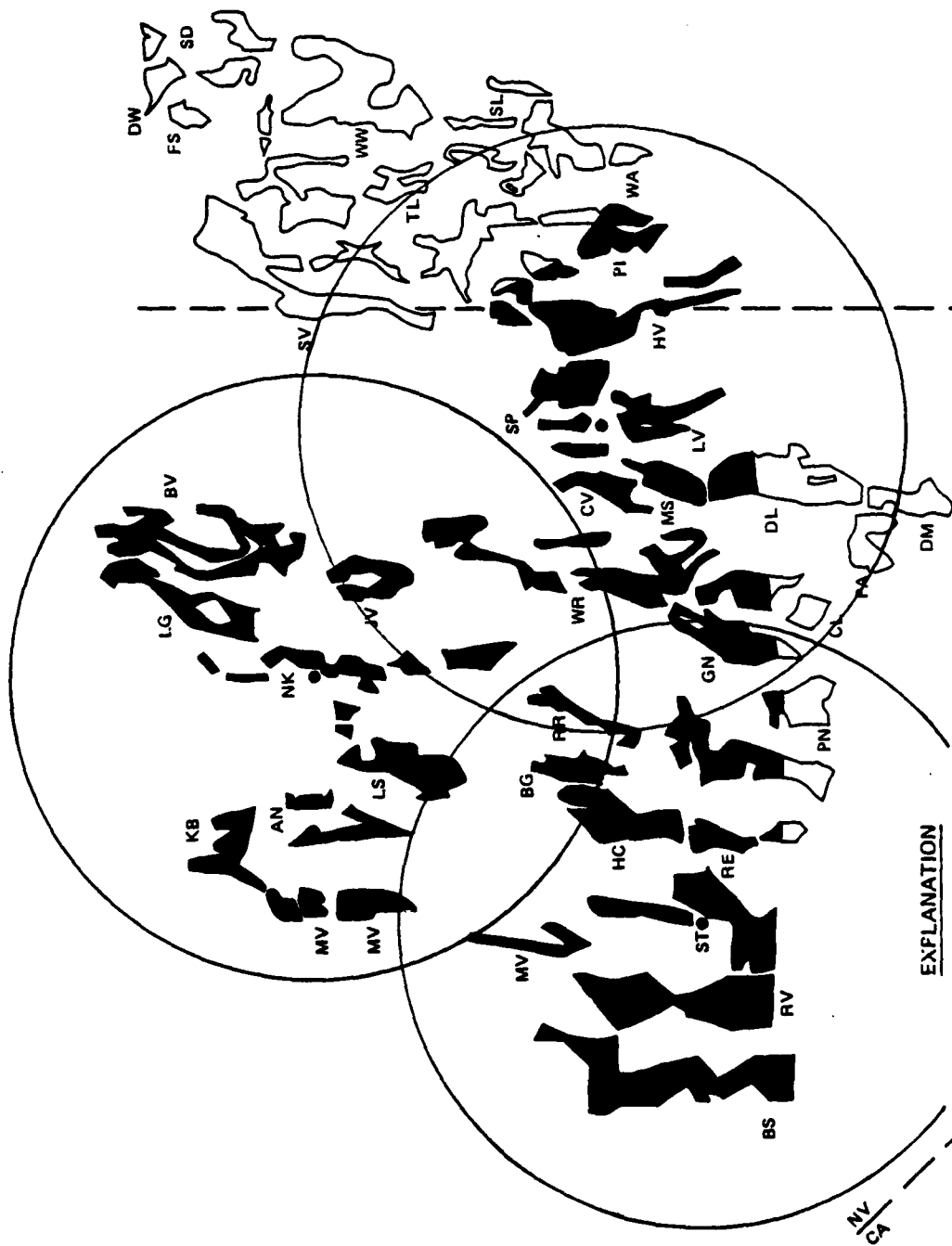
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	171	Hamlin	HV	279
Fish Springs Flat	FS	75	Hot Creek	HC	148
Pine	PI	363	Jakes	JV	
Sevier Desert	SD	93	Kobeh	KB	
Sevier Lake	SL	86	Lake	LV	141
Snake	SV	585	Little Smoky	LS	
Tule	TL	297	Long	LG	
Wah Wah	WA	263	Monitor	MV	
Whirlwind	WW	322	Muleshoe	MS	104
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	219
Big Smoky	BS		Railroad	RR	246
Butte	BV		Ralston	RV	
Cave	CV	105	Reveille	RE	111
Coal	CL	302	Spring	SP	102
Delamar/Pahroc	DM	207	Stone Cabin	ST	238
Dry Lake	DL	400	White River	WR	286
Garden	GN	189			
			TOTAL SHELTERS		5332
			TOTAL VALLEYS		24
			TOTAL ASCs		3



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

3) Best 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	300
Fish Springs Flat	FS		Hot Creek	HC	167
Pine	PI	166	Jakes	JV	89
Sevier Desert	SD		Kobeh	KB	150
Sevier Lake	SL		Lake	LV	191
Snake	SV	26	Little Smoky	LS	195
Tule	TL		Long	LG	125
Wah Wah	WA		Monitor	MV	276
Whirlwind	WW		Muleshoe	MS	81
Antelope	AN	125	Newark	NK	177
Big Sand Springs	BG	70	Penoyer	PN	35
Big Smoky	BS	430	Railroad	RR	355
Butte	BV	293	Ralston	RV	312
Cave	CV	79	Reveille	RE	73
Coal	CL	115	Spring	SP	121
Delamar/Pahroc	DM		Stone Cabin	ST	331
Dry Lake	DL	95	White River	WR	398
Garden	GN	110			
			TOTAL SHELTERS		4885
			TOTAL VALLEYS		27
			TOTAL ASCs		3



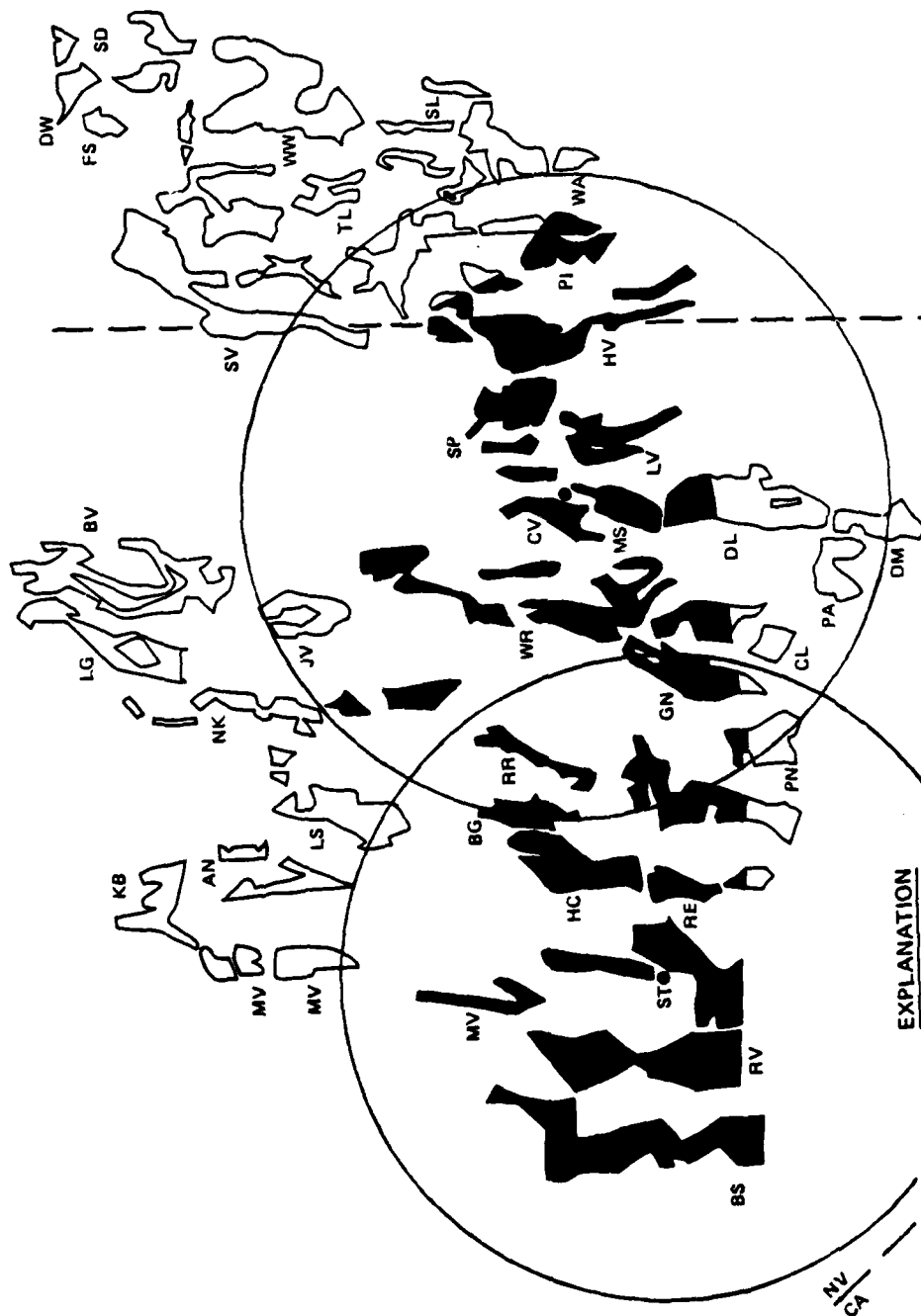
REGIONAL SKETCH

UTAH
ARIZONA
NEVADA



- B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
- 3) Best 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

<u>VALLEY</u>	<u>ABRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	450
Fish Springs Flat	FS		Hot Creek	HC	250
Pine	PI	249	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	286
Snake	SV	48	Little Smoky	LS	
Tule	TL		Long	LG	
Wah Wah	WA		Monitor	MV	140
Whirlwind	WW		Muleshoe	MS	122
Antelope	AN		Newark	NK	
Big Sand Springs	BG	105	Penoyer	PN	52
Big Smoky	BS	645	Railroad	RR	506
Butte	BV		Ralston	RV	468
Cave	CV	118	Reveille	RE	110
Coal	CL	172	Spring	SP	182
Delamar/Pahroc	DM		Stone Cabin	ST	496
Dry Lake	DL	142	White River	WR	597
Garden	GN	165			
			TOTAL SHELTERS		5303
			TOTAL VALLEYS		20
			TOTAL ASCS		2



REGIONAL SKETCH

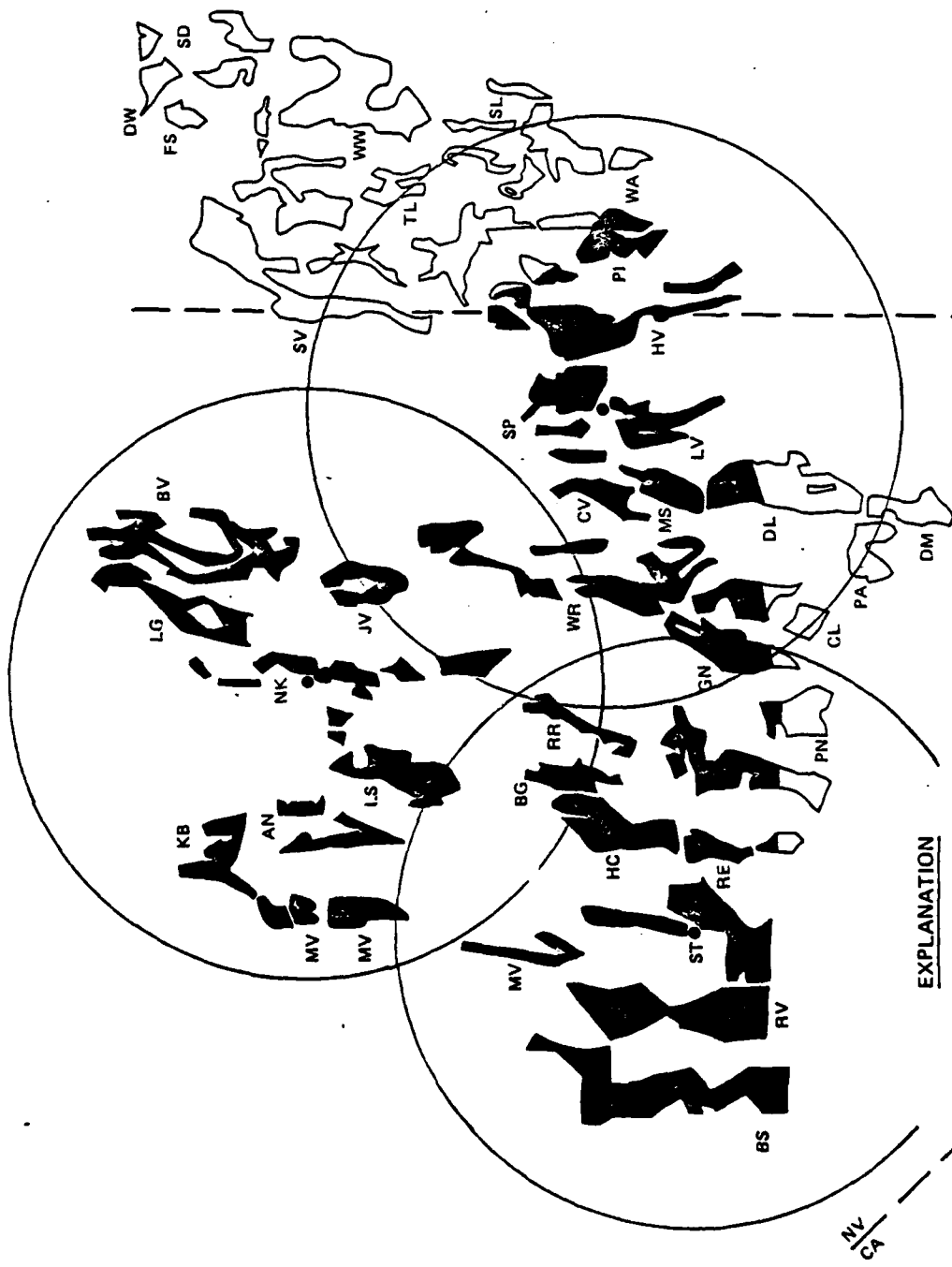
DDA

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- C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water
- 3) Best 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Duyway	DW		Hamlin	HV	168
Fish Springs Flat	FS		Hot Creek	HC	99
Pine	PI	161	Jakes	JV	83
Sevier Desert	SD		Kobeh	KB	8
Sevier Lake	SL		Lake	LV	94
Snake	SV	16	Little Smoky	LS	137
Tule	TL		Long	LG	80
Wah Wah	WA		Monitor	MV	83
Whirlwind	WW		Muleshoe	MS	69
Antelope	AN	51	Newark	NK	96
Big Sand Springs	BG	57	Penoyer	PN	24
Big Smoky	BS	189	Railroad	RR	213
Butte	BV	264	Ralston	RV	256
Cave	CV	70	Reveille	RE	59
Coal	CL	106	Spring	SP	68
Delamar/Pahroc	DM		Stone Cabin	ST	159
Dry Lake	DL	89	White River	WR	191
Garden	GN	86			
			TOTAL SHELTERS		2976
			TOTAL VALLEYS		27
			TOTAL ASCs		3



REGIONAL SKETCH

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UTAH ———
ARIZONA



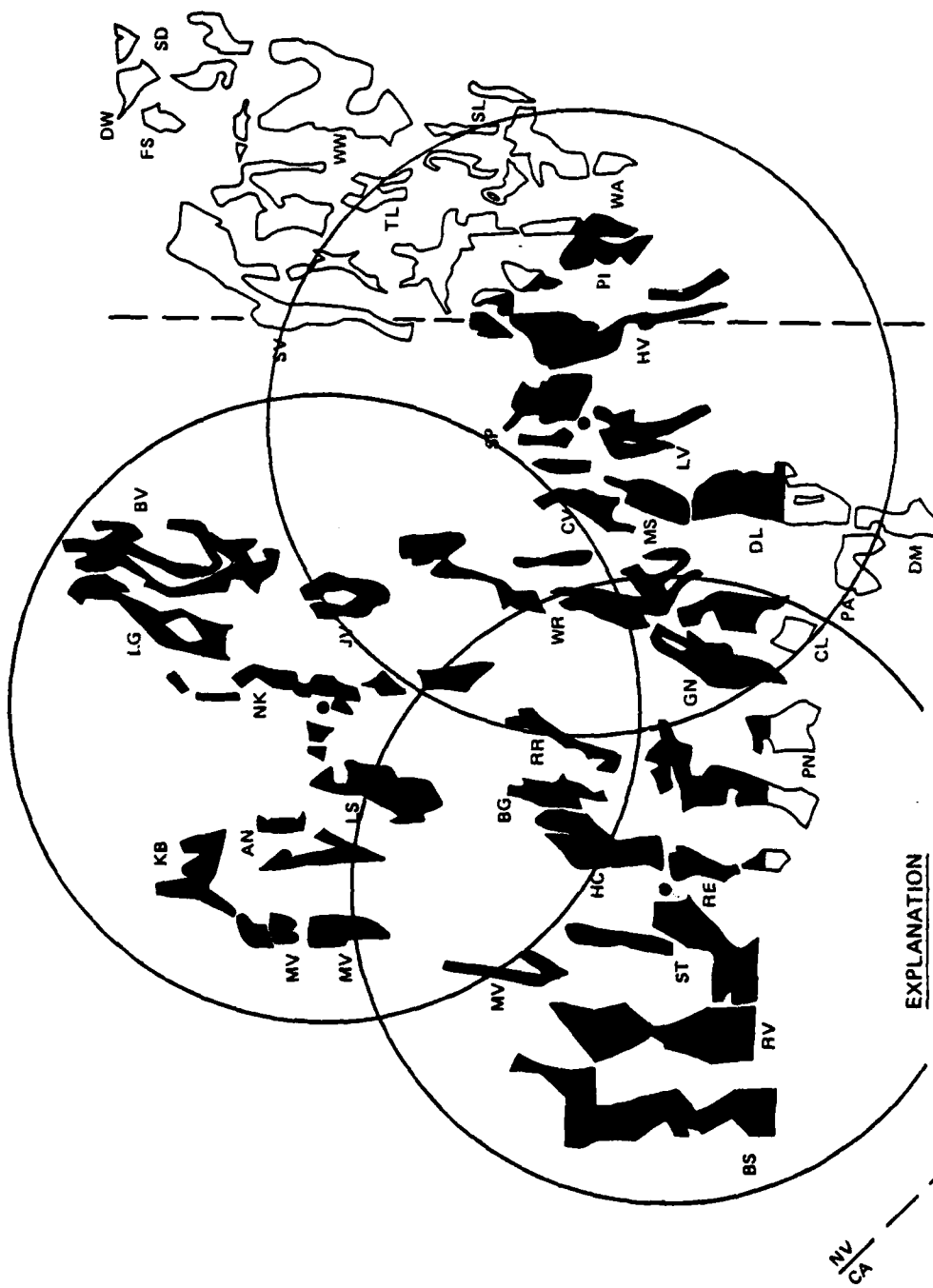
EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

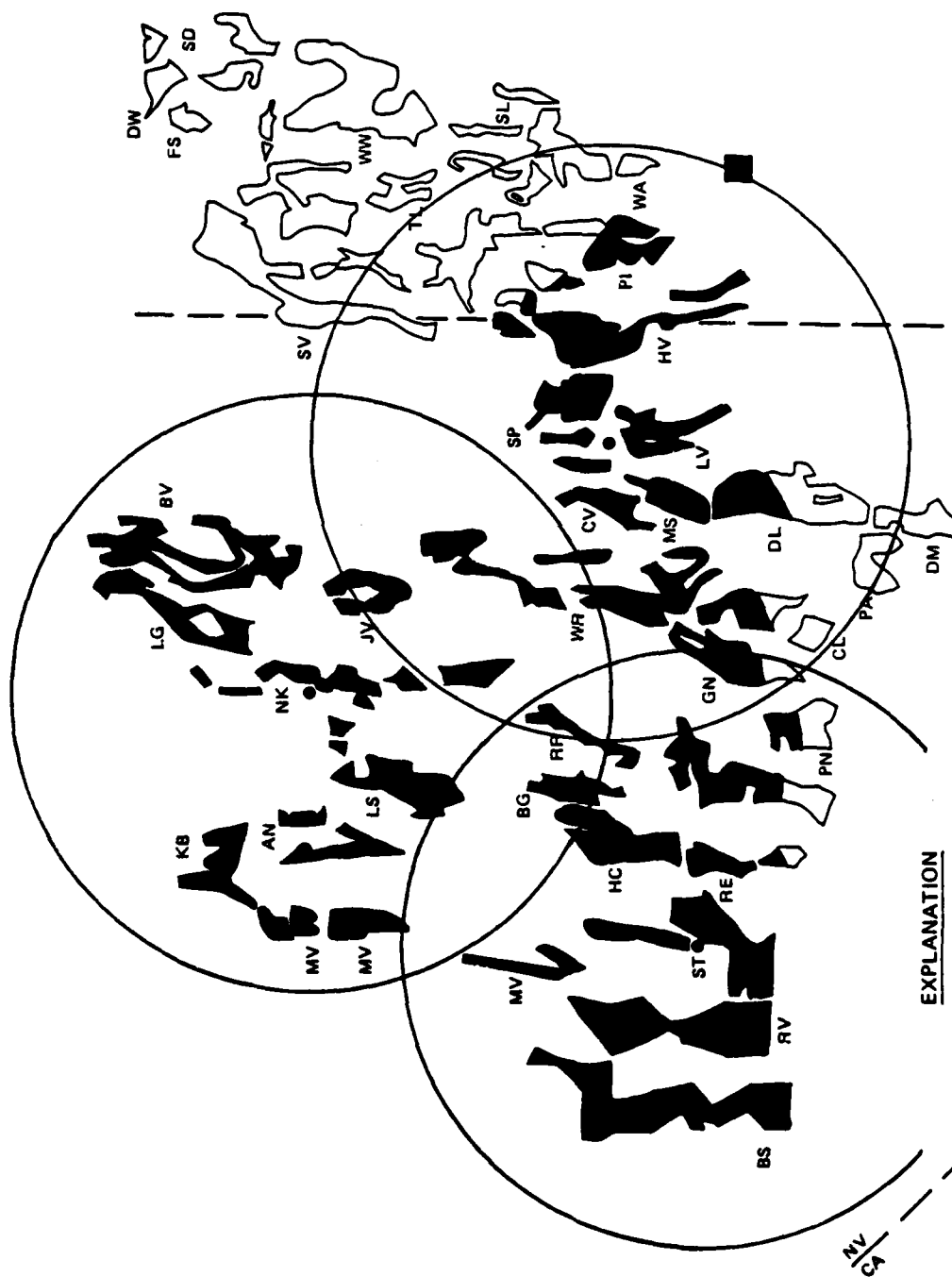
- D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water
- 3) Best 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Duqway	DW		Hamlin	HV	252
Fish Springs Flat	FS		Hot Creek	HC	148
Pine	PI	242	Jakes	JV	124
Sevier Desert	SD		Kobeh	KB	12
Sevier Lake	SL		Lake	LV	141
Snake	SV	24	Little Smoky	LS	206
Tule	TL		Long	LG	120
Wah Wah	WA		Monitor	MV	124
Whirlwind	WW		Muleshoe	MS	104
Antelope	AN	76	Newark	NK	144
Big Sand Springs	BG	86	Penoyer	PN	36
Big Smoky	BS	284	Railroad	RR	320
Butte	BV	396	Ralston	RV	384
Cave	CV	105	Reveille	RE	88
Coal	CL	159	Spring	SP	102
Delamar/Pahroc	DM		Stone Cabin	ST	238
Dry Lake	DL	134	White River	WR	286
Garden	GN	129			
			TOTAL SHELTERS		4464
			TOTAL VALLEYS		27
			TOTAL ASCs		3



- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 4) Best 4600 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	300
Fish Springs Flat	FS		Hot Creek	HC	167
Pine	PI	166	Jakes	JV	89
Sevier Desert	SD		Kobeh	KB	150
Sevier Lake	SL		Lake	LV	191
Snake	SV	26	Little Smoky	LS	195
Tule	TL		Long	LG	125
Wah Wah	WA		Monitor	MV	276
Whirlwind	WW		Muleshoe	MS	81
Antelope	AN	125	Newark	NK	177
Big Sand Springs	BG	70	Penoyer	PN	35
Big Smoky	BS	430	Railroad	RR	355
Butte	BV	293	Ralston	RV	312
Cave	CV	79	Reveille	RE	73
Coal	CL	115	Spring	SP	121
Delamar/Pahroc	DM		Stone Cabin	ST	331
Dry Lake	DL	95	White River	WR	398
Garden	GN	110			
			TOTAL SHELTERS		4885
			TOTAL VALLEYS		27
			TOTAL ASCs		3



REGIONAL SKETCH

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EXPLANATION

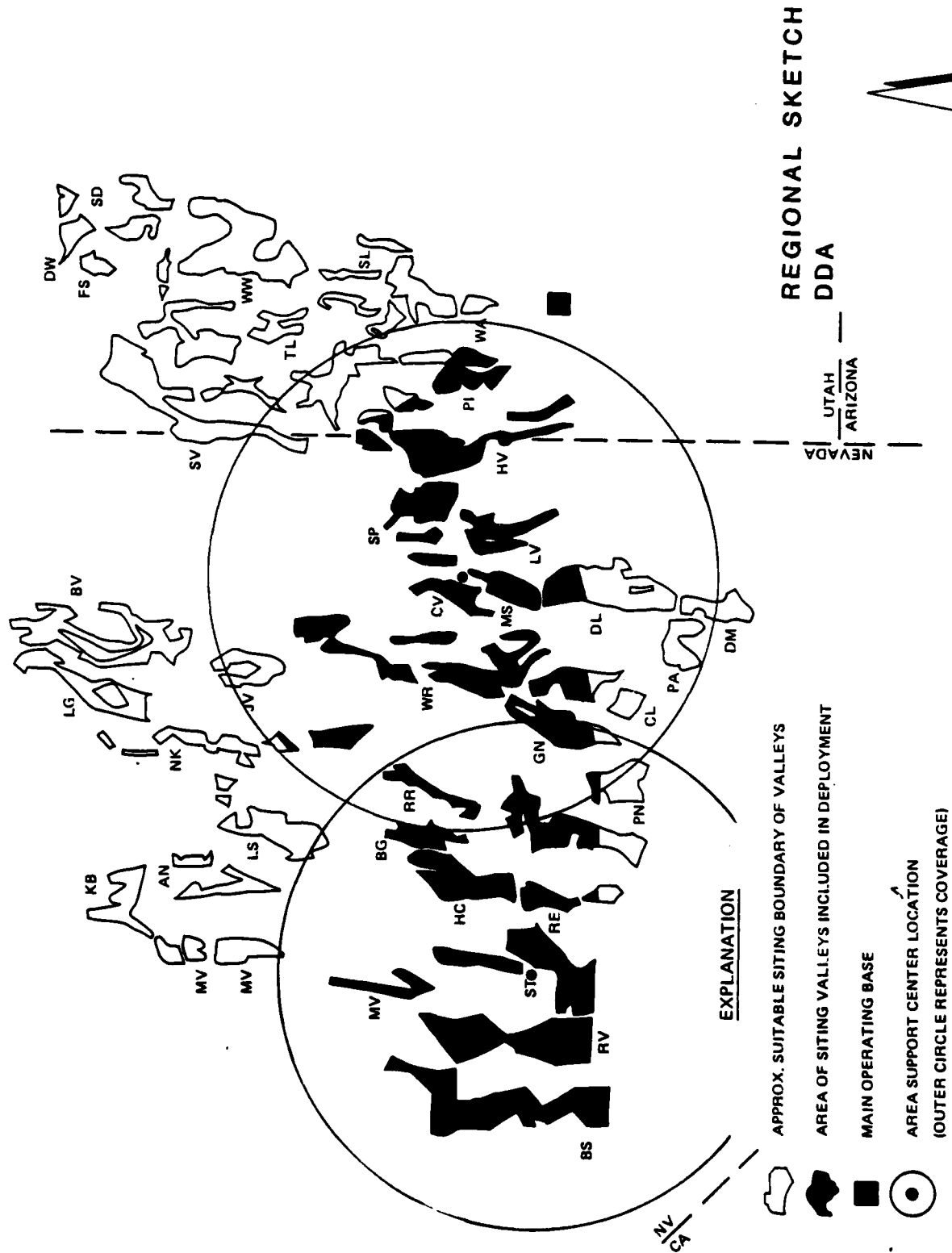
- APPROX. SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

4) Best 4600 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

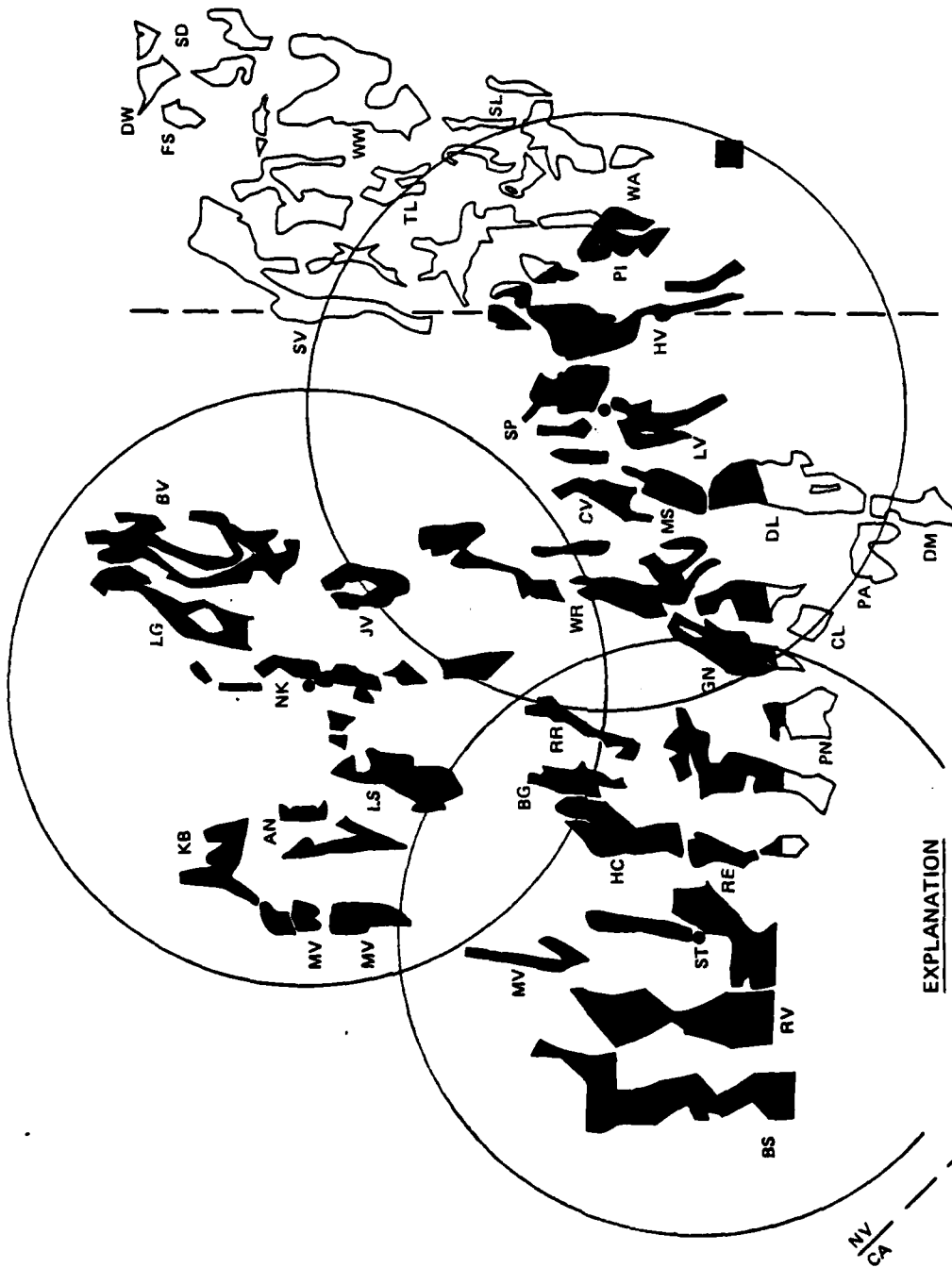
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	450
Fish Springs Flat	FS		Hot Creek	HC	250
Pine	PI	249	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	286
Snake	SV	48	Little Smoky	LS	
Tule	TL		Long	LG	
Wah Wah	WA		Monitor	MV	140
Whirlwind	WW		Muleshoe	MS	122
Antelope	AN		Newark	NK	
Big Sand Springs	BG	105	Penoyer	PN	52
Big Smoky	BS	645	Railroad	RR	506
Butte	BV		Ralston	RV	468
Cave	CV	118	Reveille	RE	110
Coal	CL	172	Spring	SP	182
Delamar/Pahroc	DM		Stone Cabin	ST	496
Dry Lake	DL	142	White River	WR	597
Garden	GN	165			
			TOTAL SHELTERS		5303
			TOTAL VALLEYS		20
			TOTAL ASCS		2



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

4) Best 4600 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	168
Fish Springs Flat	FS		Hot Creek	HC	99
Pine	PI	161	Jakes	JV	83
Sevier Desert	SD		Kobeh	KB	8
Sevier Lake	SL		Lake	LV	94
Snake	SV	16	Little Smoky	LS	137
Tule	TL		Long	LG	80
Wah Wah	WA		Monitor	MV	83
Whirlwind	WW		Muleshoe	MS	69
Antelope	AN	51	Newark	NK	96
Big Sand Springs	BG	57	Penoyer	PN	24
Big Smoky	BS	189	Railroad	RR	213
Butte	BV	264	Ralston	RV	256
Cave	CV	70	Reveille	RE	59
Coal	CL	106	Spring	SP	68
Delamar/Pahroc	DM		Stone Cabin	ST	159
Dry Lake	DL	89	White River	WR	191
Garden	GN	86			
			TOTAL SHELTERS		2976
			TOTAL VALLEYS		27
			TOTAL ASCs		3



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

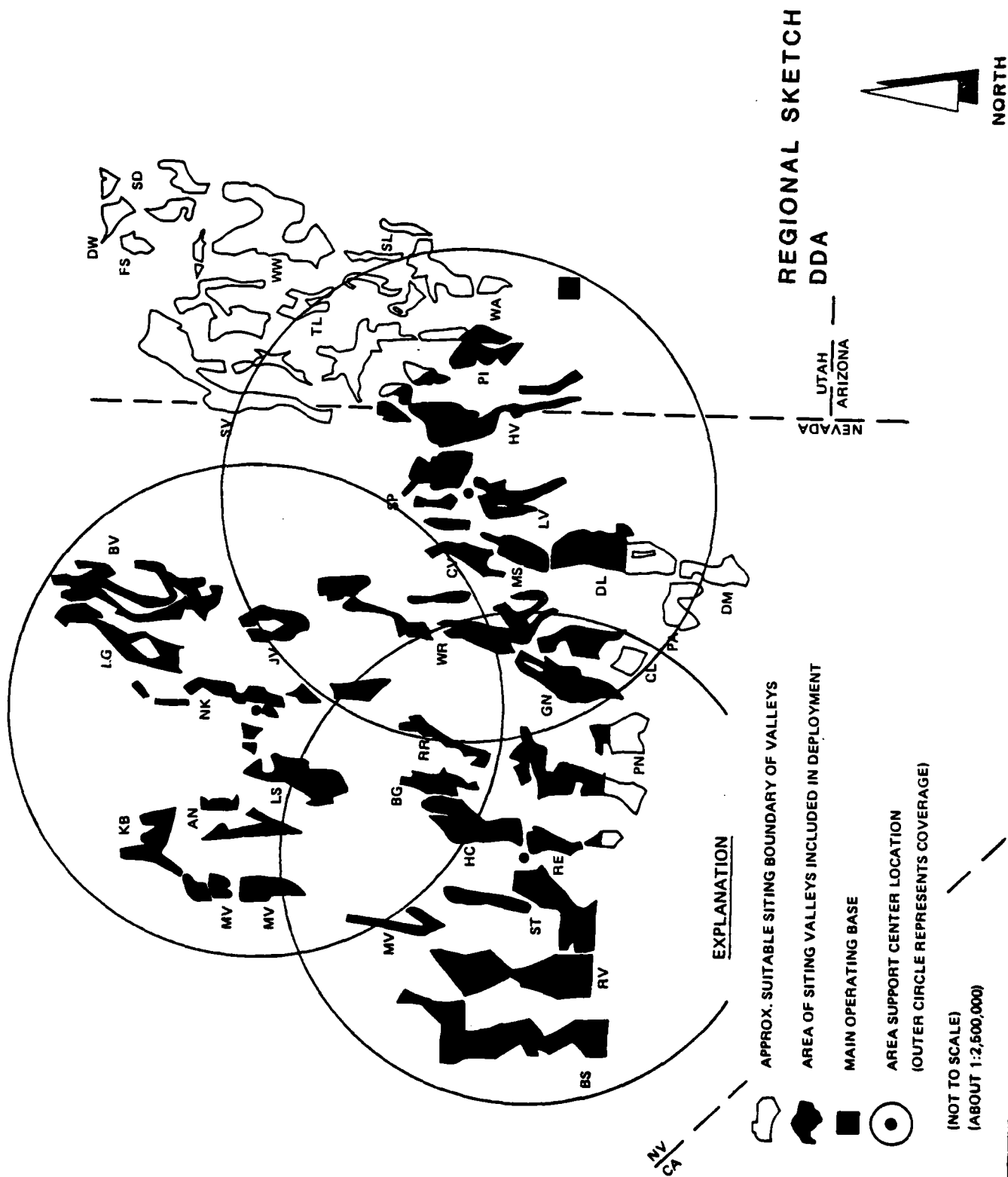
REGIONAL SKETCH

UTAH
ARIZONA
NEVADA
DDA



- D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water
- 4) Best 4600 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

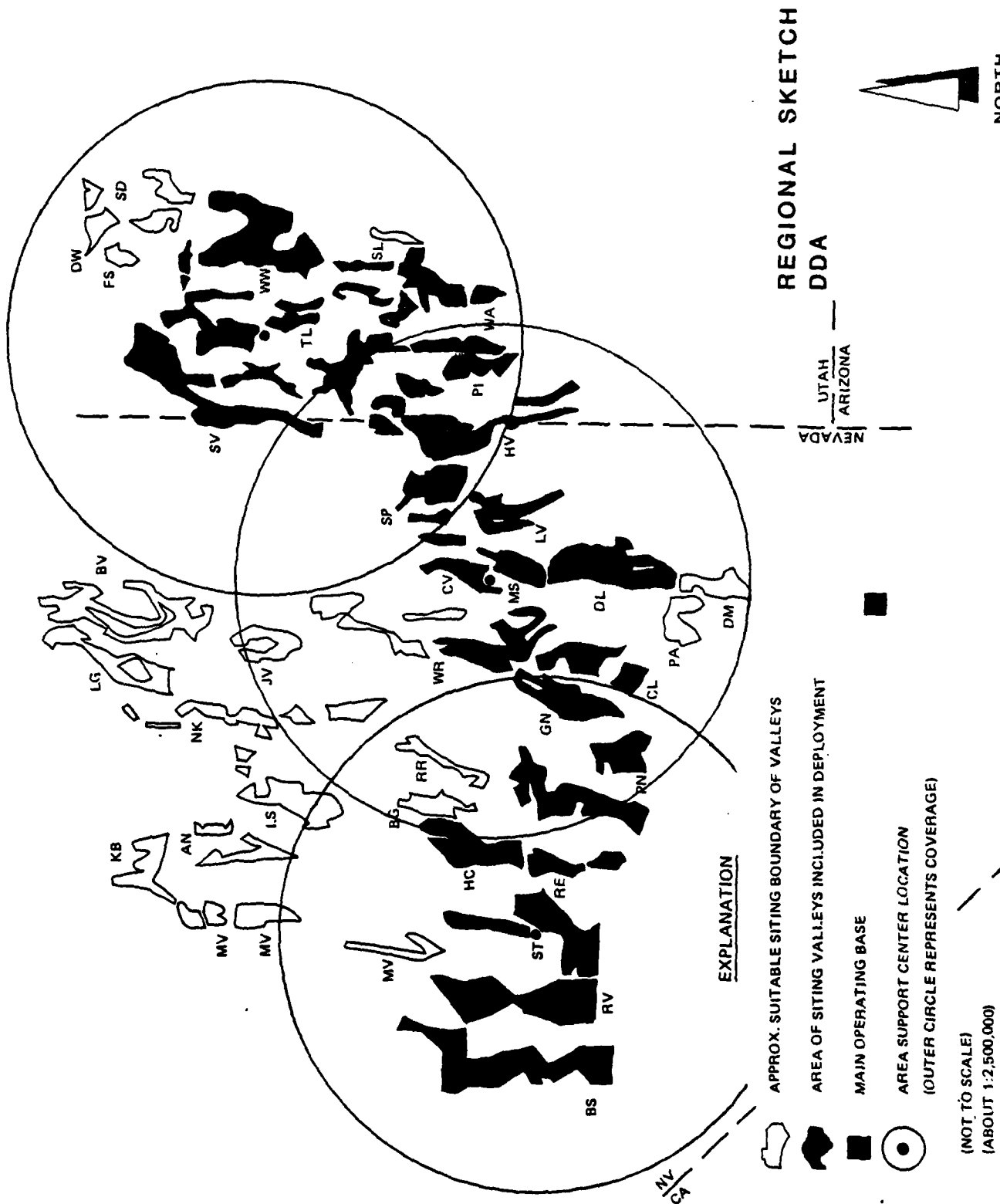
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Duqway	DW		Hamlin	HV	252
Fish Springs Flat	FS		Hot Creek	HC	148
Pine	PI	242	Jakes	JV	124
Sevier Desert	SD		Kobeh	KB	12
Sevier Lake	SL		Lake	LV	141
Snake	SV	24	Little Smoky	LS	206
Tule	TL		Long	LG	120
Wah Wah	WA		Monitor	MV	124
Whirlwind	WW		Muleshoe	MS	104
Antelope	AN	76	Newark	NK	144
Big Sand Springs	BG	86	Penoyer	PN	36
Big Smoky	BS	284	Railroad	RR	320
Butte	BV	396	Ralston	RV	384
Cave	CV	105	Reveille	RE	88
Coal	CL	159	Spring	SP	102
Delamar/Pahroc	DM		Stone Cabin	ST	238
Dry Lake	DL	134	White River	WR	286
Garden	GN	129			
			TOTAL SHELTERS		4464
			TOTAL VALLEYS		27
			TOTAL ASCS		3



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

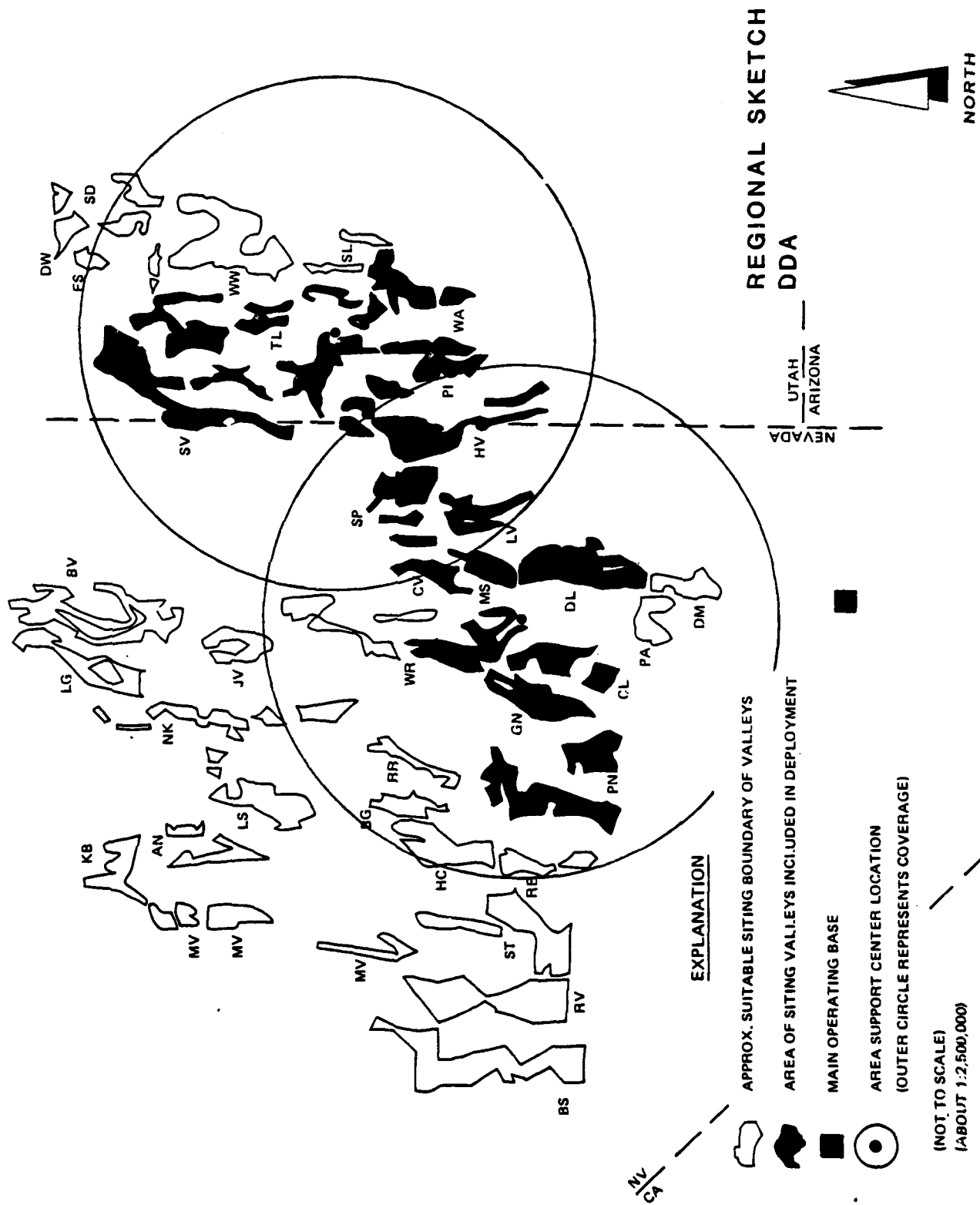
5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	333
Fish Springs Flat	FS	45	Hot Creek	HC	167
Pine	PI	249	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	191
Snake	SV	650	Little Smoky	LS	
Tule	TL	367	Long	LG	
Wah Wah	WA	213	Monitor	MV	
Whirlwind	WW	291	Muleshoe	MS	81
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	212
Big Smoky	BS	430	Railroad	RR	273
Butte	BV		Ralston	RV	312
Cave	CV	79	Reveille	RE	91
Coal	CL	219	Spring	SP	121
Delamar/Pahroc	DM		Stone Cabin	ST	331
Dry Lake	DL	284	White River	WR	265
Garden	GN	161			
			TOTAL SHELTERS		5365
			TOTAL VALLEYS		22
			TOTAL ASCs		3



- B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
- 5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

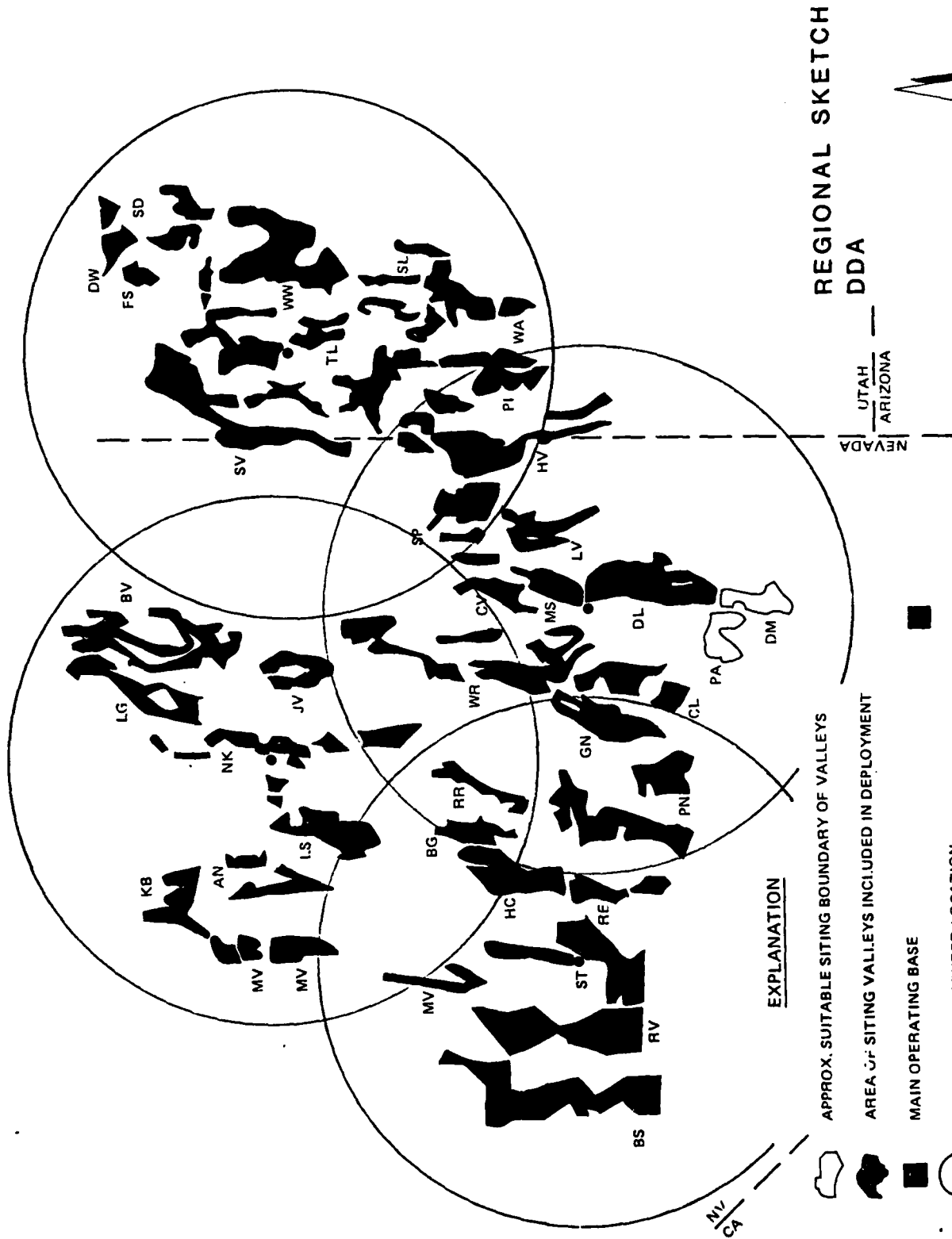
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	500
Fish Springs Flat	FS		Hot Creek	HC	
Pine	PI	374	Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	286
Snake	SV	975	Little Smoky	LS	
Tule	TL	550	Long	LG	
Wah Wah	WA	320	Monitor	MV	
Whirlwind	WW		Muleshoe	MS	122
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	318
Big Smoky	BS		Railroad	RR	410
Butte	BV		Ralston	RV	
Cave	CV	118	Reveille	RE	182
Coal	CL	328	Spring	SP	
Delamar/Pahroc	DM		Stone Cabin	ST	
Dry Lake	DL	426	White River	WR	398
Garden	GN	242			
			TOTAL SHELTERS		5549
			TOTAL VALLEYS		15
			TOTAL ASCs		2



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	114	Hamlin	HV	186
Fish Springs Flat	FS	50	Hot Creek	HC	99
Pine	PI	242	Jakes	JV	83
Sevier Desert	SD	62	Kobeh	KB	8
Sevier Lake	SL	57	Lake	LV	94
Snake	SV	390	Little Smoky	LS	137
Tule	TL	198	Long	LG	80
Wah Wah	WA	175	Monitor	MV	83
Whirlwind	WW	215	Muleshoe	MS	69
Antelope	AN	51	Newark	NK	96
Big Sand Springs	BG	57	Penoyer	PN	146
Big Smoky	BS	189	Railroad	RR	273
Butte	BV	264	Ralston	RV	256
Cave	CV	70	Reveille	RE	74
Coal	CL	201	Spring	SP	68
Delamar/Pahroc	DM		Stone Cabin	ST	159
Dry Lake	DL	267	White River	WR	191
Garden	GN	126			
			TOTAL SHELTERS		4830
			TOTAL VALLEYS		34
			TOTAL ASCs		4



EXPLANATION

- APPROX. SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION (OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

DDA

NEVADA
UTAH
ARIZONA



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	279
Fish Springs Flat	FS	34	Hot Creek	HC	148
Pine	PI	363	Jakes	JV	
Sevier Desert	SD		Kobeh	KR	
Sevier Lake	SL		Lake	LV	141
Snake	SV	585	Little Smoky	LS	
Tule	TL	297	Long	LG	
Wah Wah	WA	263	Monitor	MV	
Whirlwind	WW	322	Muleshoe	MS	104
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	219
Big Smoky	BS	284	Railroad	RR	246
Butte	BV		Ralston	RV	384
Cave	CV	105	Reveille	RE	111
Coal	CL	302	Spring	SP	102
Delamar/Pahroc	DM		Stone Cabin	ST	238
Dry Lake	DL	400	White River	WR	190
Garden	GN	189			
			TOTAL SHELTERS		5306
			TOTAL VALLEYS		22
			TOTAL ASCs		3

A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

6) Best 4600 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	132	Hamlin	HV	333
Fish Springs Flat	FS	99	Hot Creek	HC	167
Pine	PI	249	Jakes	JV	
Sevier Desert	SD	142	Kobeh	KB	
Sevier Lake	SL	70	Lake	LV	191
Snake	SV	650	Little Smoky	LS	
Tule	TL	367	Long	LG	
Wah Wah	WA	213	Monitor	MV	
Whirlwind	WW	291	Muleshoe	MS	81
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	212
Big Smoky	BS		Railroad	RR	273
Butte	BV		Ralston	RV	312
Cave	CV	79	Reveille	RE	91
Coal	CL	219	Spring	SP	121
Delamar/Pahroc	DM	170	Stone Cabin	ST	331
Dry Lake	DL	284	White River	WR	265
Garden	GN	161			

TOTAL SHELTERS

5333

TOTAL VALLEYS

24

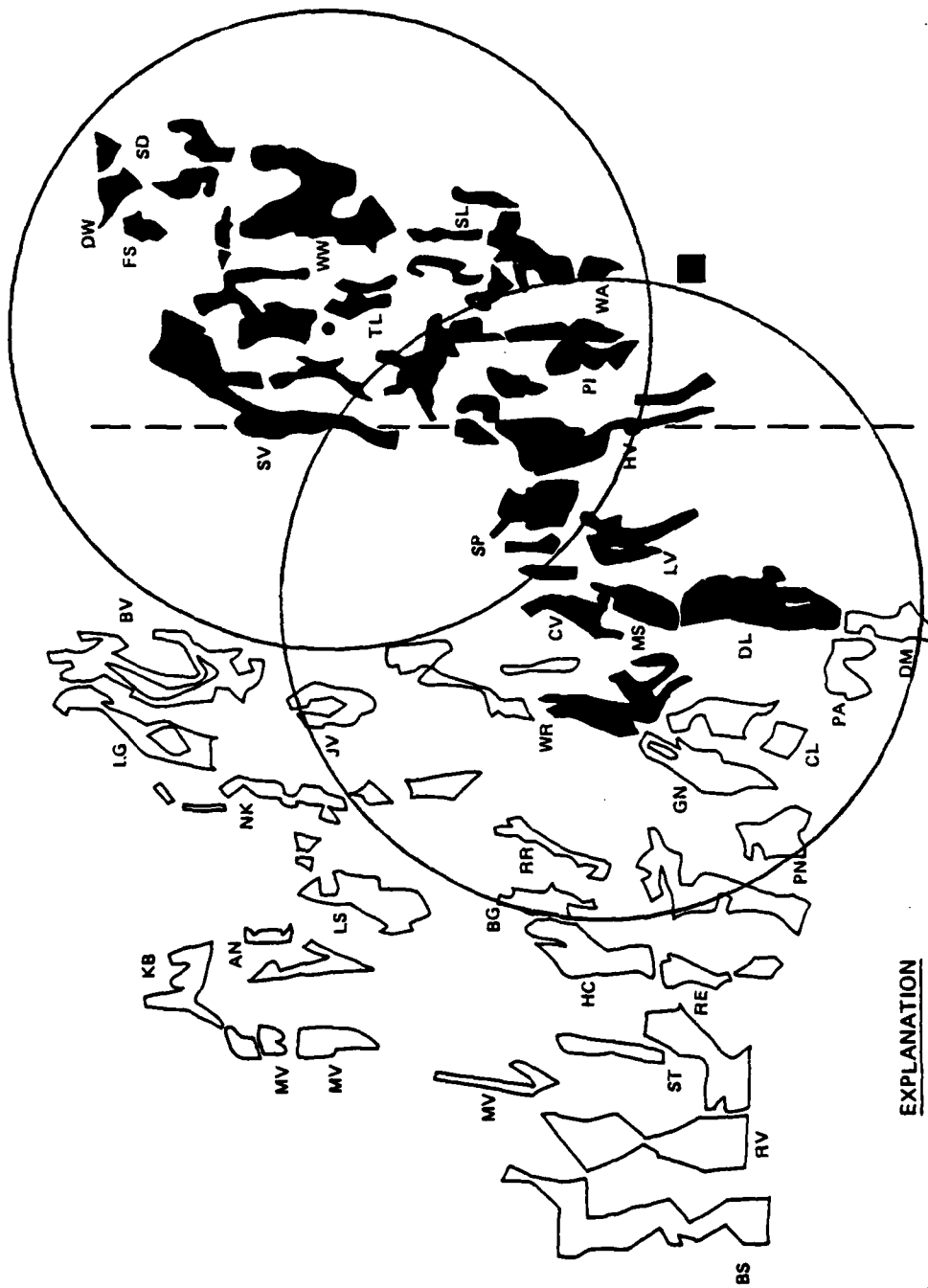
TOTAL ASCs

3

B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

6) Best 4600 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	198	Hamlin	HV	500
Fish Springs Flat	FS	148	Hot Creek	HC	
Pine	PI	374	Jakes	JV	
Sevier Desert	SD	213	Kobeh	KB	
Sevier Lake	SL	105	Lake	LV	286
Snake	SV	975	Little Smoky	LS	
Tule	TL	550	Long	LG	
Wah Wah	WA	320	Monitor	MV	
Whirlwind	WW	436	Muleshoe	MS	122
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	
Big Smoky	BS		Railroad	RR	
Butte	BV		Ralston	RV	
Cave	CV	118	Reveille	RE	
Coal	CL		Spring	SP	182
Delamar/Pahroc	DM		Stone Cabin	ST	
Dry Lake	DL	426	White River	WR	398
Garden	GN				
			TOTAL SHELTERS		5351
			TOTAL VALLEYS		16
			TOTAL ASCs		2



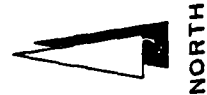
EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

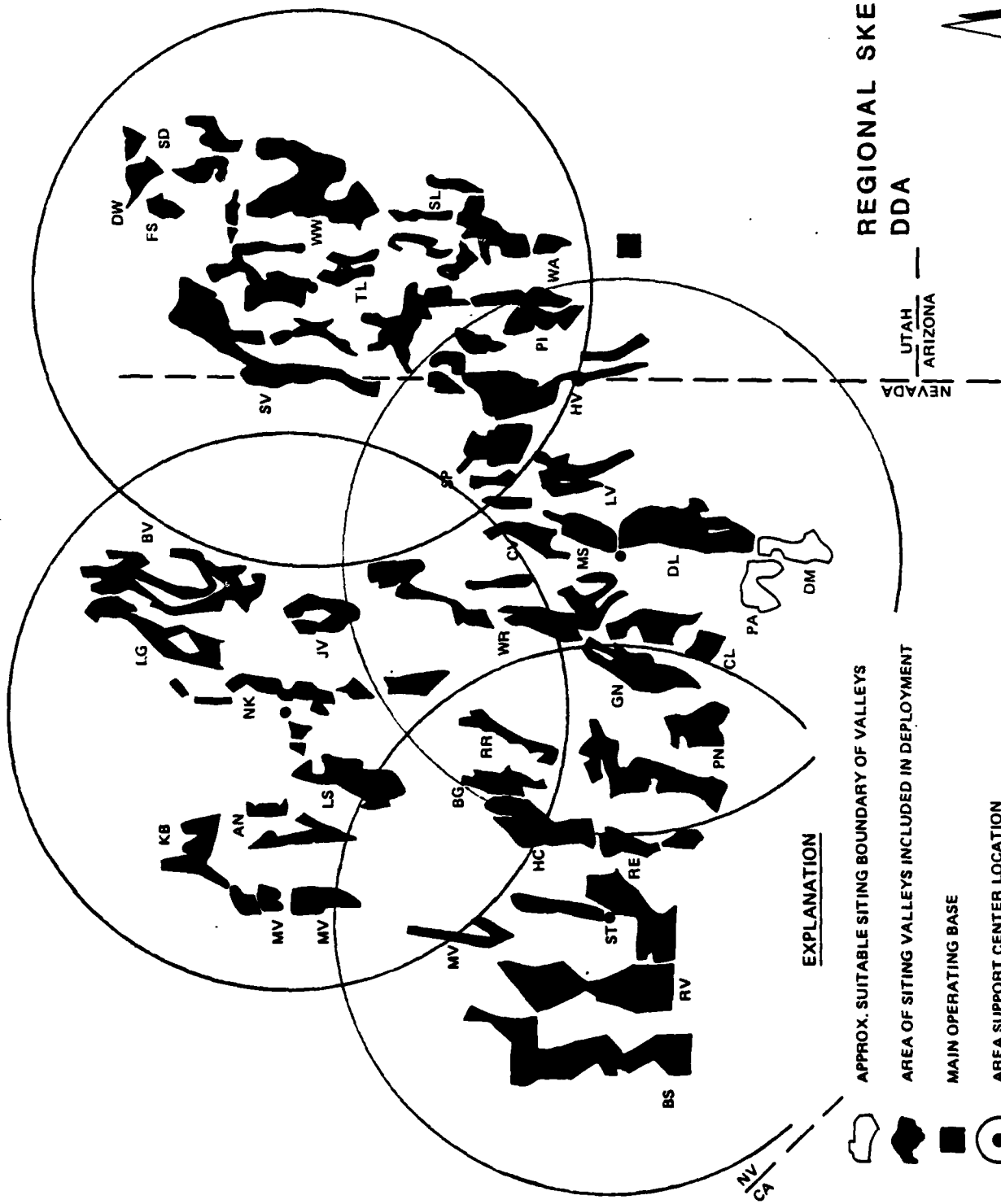
NEVADA ——— UTAH ——— DDA
ARIZONA



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

6) Best 4600 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	114	Hamlin	HV	186
Fish Springs Flat	FS	50	Hot Creek	HC	99
Pine	PI	242	Jakes	JV	83
Sevier Desert	SD	62	Kobeh	KB	8
Sevier Lake	SL	57	Lake	LV	94
Snake	SV	390	Little Smoky	LS	137
Tule	TL	198	Long	LG	80
Wah Wah	WA	175	Monitor	MV	83
Whirlwind	WW	215	Muleshoe	MS	69
Antelope	AN	51	Newark	NK	96
Big Sand Springs	BG	57	Penoyer	PN	146
Big Smoky	BS	189	Railroad	RR	273
Butte	BV	264	Ralston	RV	256
Cave	CV	70	Reveille	RE	74
Coal	CL	201	Spring	SP	68
Delamar/Pahroc	DM		Stone Cabin	ST	159
Dry Lake	DL	267	White River	WR	191
Garden	GN	126			
			TOTAL SHELTERS		4830
			TOTAL VALLEYS		34
			TOTAL ASCS		4



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



NORTH

EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION

(OUTER CIRCLE REPRESENTS COVERAGE)

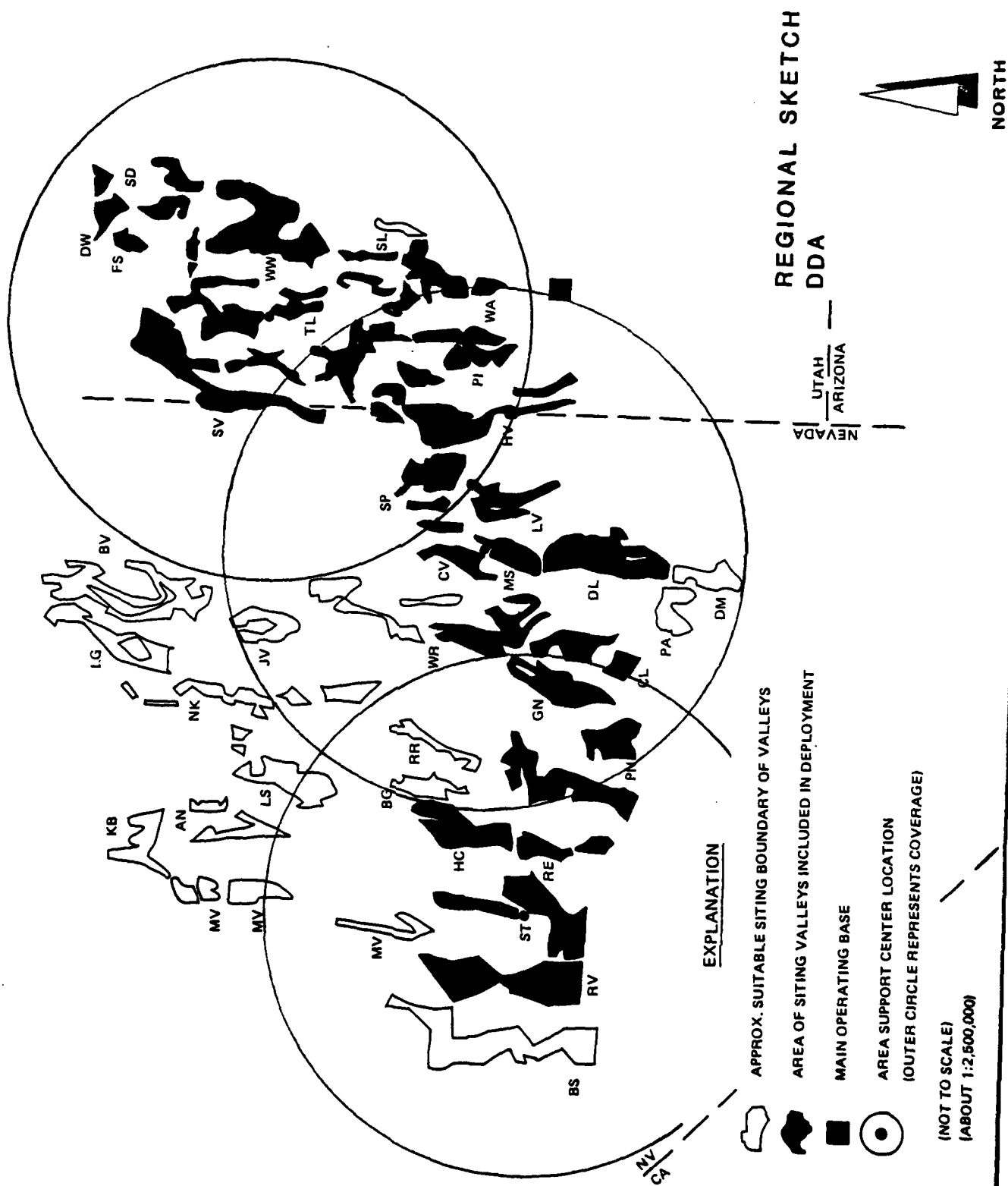
(NOT TO SCALE)

(ABOUT 1:2,500,000)

D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

6) Best 4600 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

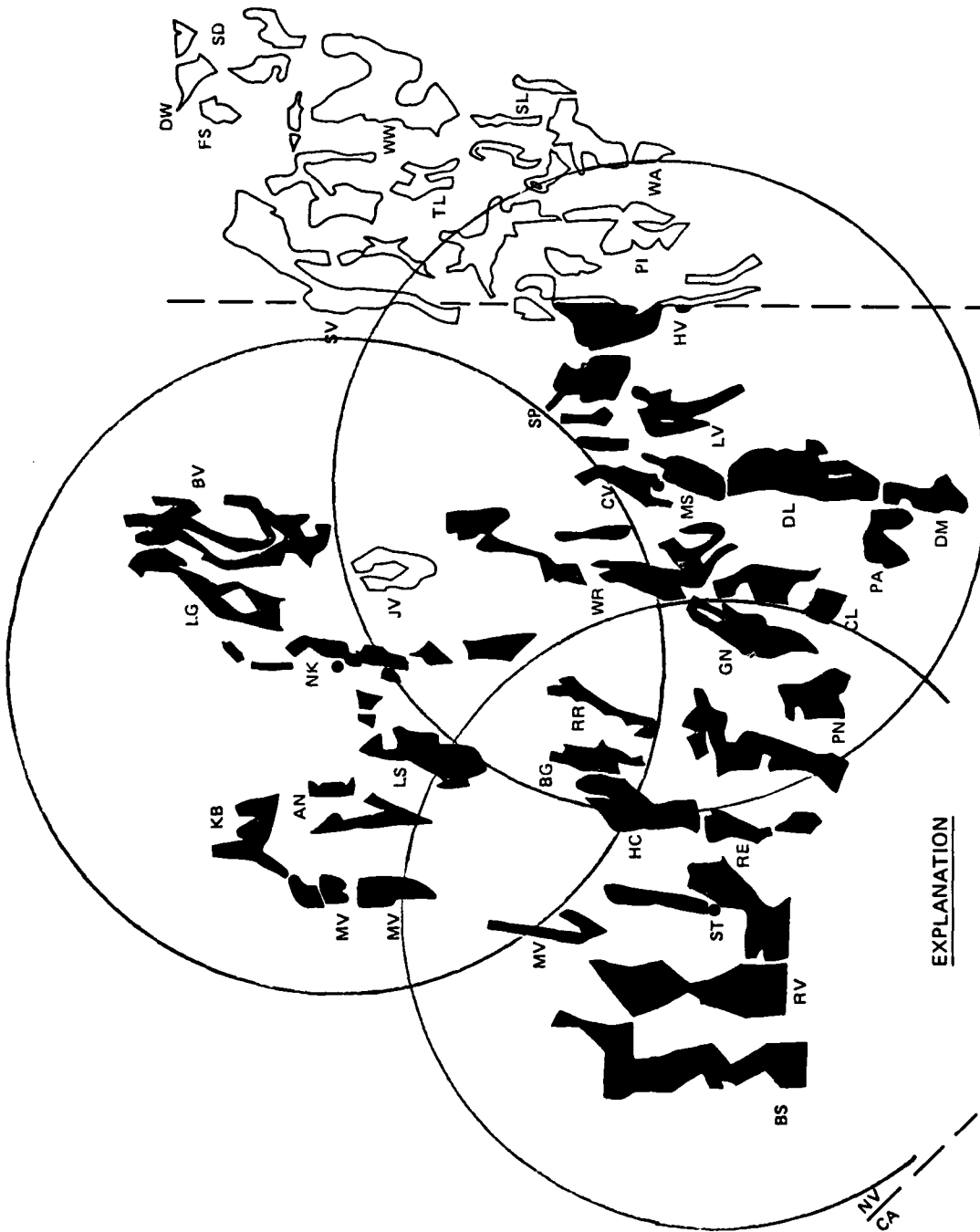
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW	171	Hamlin	HV	279
Fish Springs Flat	FS	75	Hot Creek	HC	148
Pine	PI	363	Jakes	JV	
Sevier Desert	SD	93	Kobeh	KE	
Sevier Lake	SL		Lake	LV	141
Snake	SV	585	Little Smoky	LS	
Tule	TL	297	Long	LG	
Wah Wah	WA	263	Monitor	MV	
Whirlwind	WW	322	Muleshoe	MS	104
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	219
Big Smoky	BS		Railroad	RR	246
Butte	BV		Ralston	RV	384
Cave	CV	105	Reveille	RE	111
Coal	CL	302	Spring	SP	102
Delamar/Pahroc	DM		Stone Cabin	ST	238
Dry Lake	DL	400	White River	WR	190
Garden	GN	189			
			TOTAL SHELTERS		5327
			TOTAL VALLEYS		23
			TOTAL ASCs		3



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

13-1) Best 4600 shelters and 15 percent - Coyote MOB, Nevada only

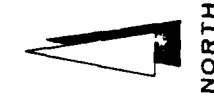
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	208
Fish Springs Flat	FS		Hot Creek	HC	167
Pine	PI		Jakes	JV	
Sevier Desert	SD		Kobeh	KB	150
Sevier Lake	SL		Lake	LV	191
Snake	SV		Little Smoky	LS	195
Tule	TL		Long	LG	125
Wah Wah	WA		Monitor	MV	276
Whirlwind	WW		Muleshoe	MS	81
Antelope	AN	125	Newark	NK	177
Big Sand Springs	BG	70	Penoyer	PN	212
Big Smoky	BS	430	Railroad	RR	455
Butte	BV	293	Ralston	RV	312
Cave	CV	79	Reveille	RE	91
Coal	CL	219	Spring	SP	121
Delamar/Pahroc	DM	170	Stone Cabin	ST	331
Dry Lake	DL	284	White River	WR	398
Garden	GN	161			
			TOTAL SHELTERS		5321
			TOTAL VALLEYS		25
			TOTAL AGCS		3



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



NORTH

B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

13-1) Best 4600 shelters and 15 percent - Coyote MOB, Nevada only

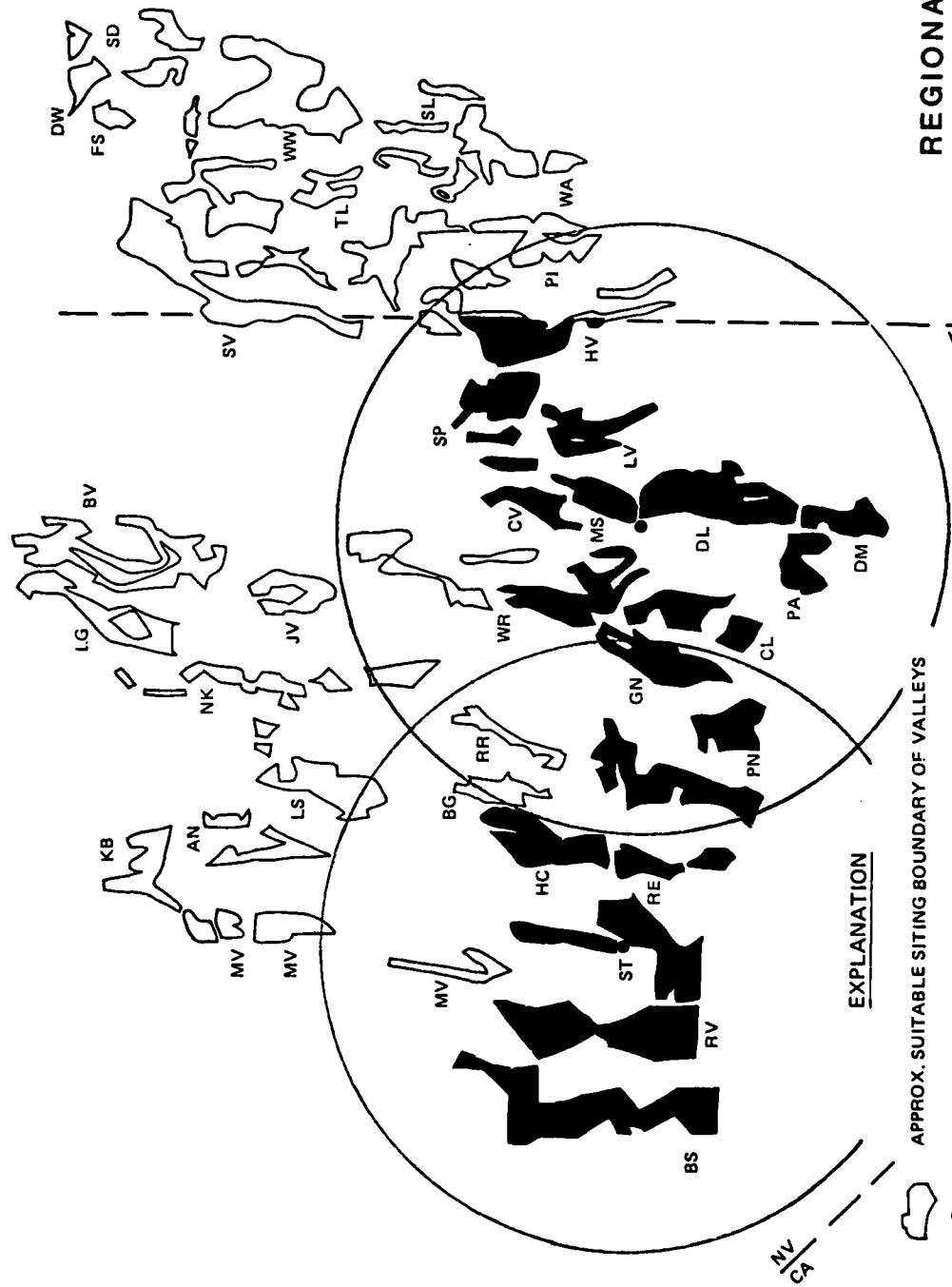
<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>	<u>VALLEY</u>	<u>ABBRE- VIATION</u>	<u>NUMBER OF SHELTERS USED</u>
Dugway	DW		Hamlin	HV	312
Fish Springs Flat	FS		Hot Creek	HC	250
Pine	PI		Jakes	JV	
Sevier Desert	SD		Kobeh	KB	
Sevier Lake	SL		Lake	LV	286
Snake	SV		Little Smoky	LS	
Tule	TL		Long	LG	
Wah Wah	WA		Monitor	MV	
Whirlwind	WW		Muleshoe	MS	122
Antelope	AN		Newark	NK	
Big Sand Springs	BG		Penoyer	PN	318
Big Smoky	BS	645	Railroad	RR	410
Butte	BV		Ralston	RV	468
Cave	CV	118	Reveille	RE	136
Coal	CL	328	Spring	SP	182
Delamar/Pahroc	DM	255	Stone Cabin	ST	496
Dry Lake	DL	426	White River	WR	398
Garden	GN	242			
			TOTAL SHELTERS		5392
			TOTAL VALLEYS		17
			TOTAL ASCs		2

DDA

UTAH
ARIZONA



NICOTIN



EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION

(KOLTER CIRCLE REPRESENTS COVERAGE)

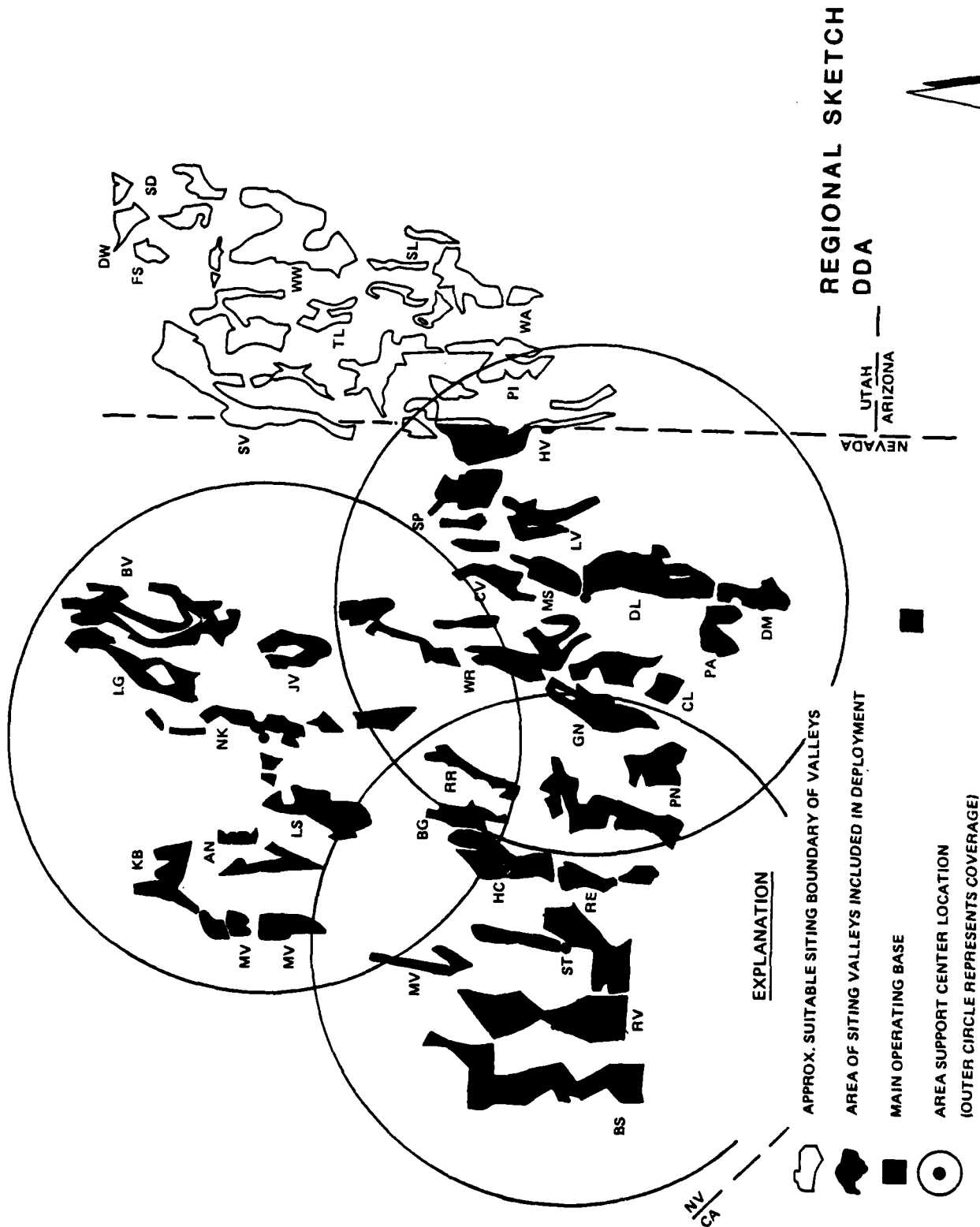
(NOT TO SCALE)

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C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

13-1) Best 4600 shelters and 15 percent - Coyote MOB, Nevada only

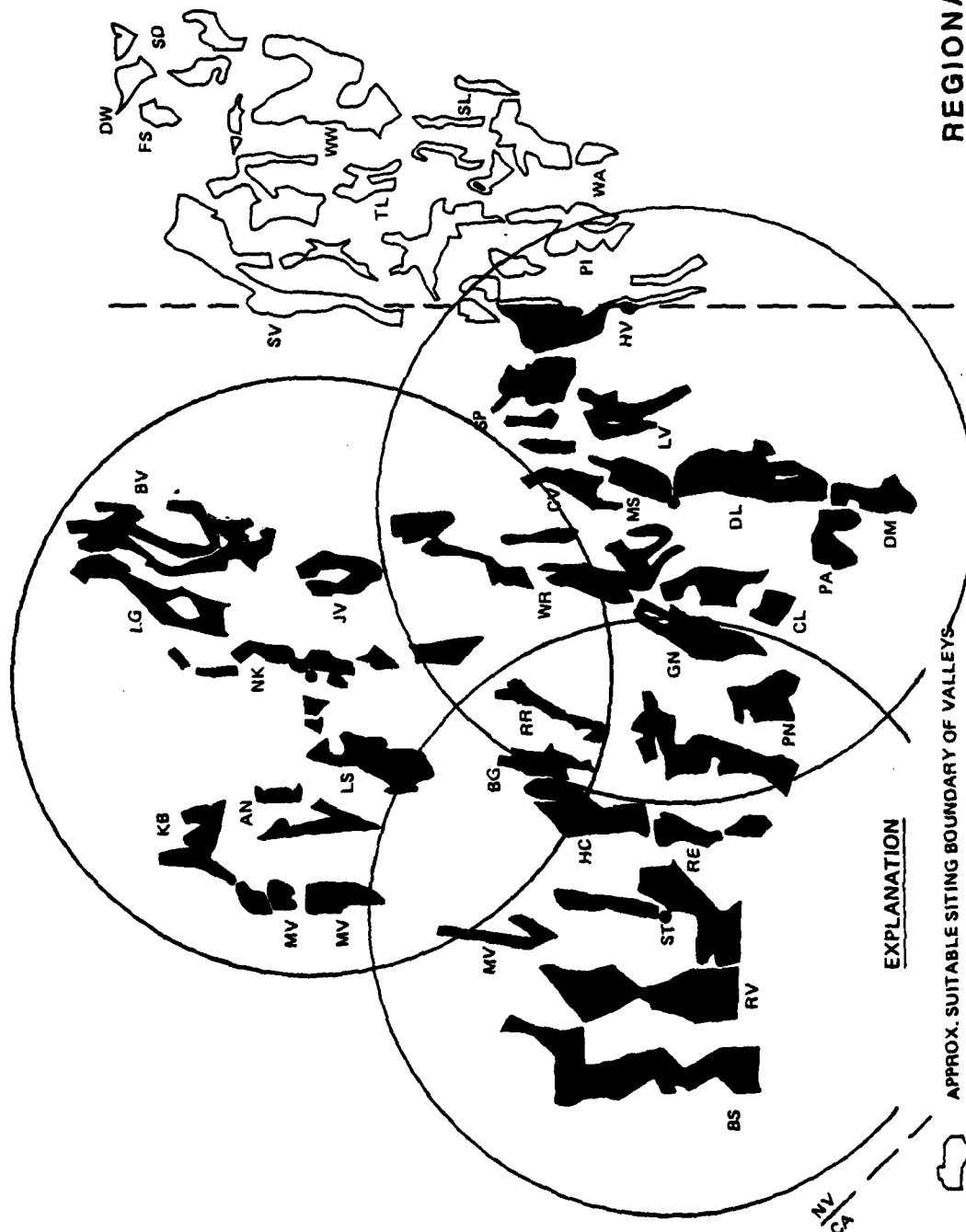
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 116 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | 83 |
| Sevier Desert | SD | | Kobeh | KB | 8 |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | 137 |
| Tule | TL | | Long | LG | 80 |
| Wah Wah | WA | | Monitor | MV | 83 |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | 51 | Newark | NK | 96 |
| Big Sand Springs | BG | 57 | Penoyer | PN | 146 |
| Big Smoky | BS | 189 | Railroad | RR | 273 |
| Butte | BV | 264 | Ralston | RV | 256 |
| Cave | CV | 70 | Reveille | RE | 74 |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | 138 | Stone Cabin | ST | 159 |
| Dry Lake | DL | 267 | White River | WR | 191 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 3395 |
| | | | TOTAL VALLEYS | | 26 |
| | | | TOTAL ASCs | | 3 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

13-1) Best 4600 shelters and 15 percent - Coyote MOB, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 174 |
| Fish Springs Flat | FS | | Hot Creek | HC | 148 |
| Pine | PI | | Jakes | JV | 124 |
| Sevier Desert | SD | | Kobeh | KB | 12 |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | 206 |
| Tule | TL | | Long | LG | 120 |
| Wah Wah | WA | | Monitor | MV | 124 |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | 76 | Newark | NK | 144 |
| Big Sand Springs | BG | 86 | Penoyer | PN | 219 |
| Big Smoky | BS | 284 | Railroad | RR | 410 |
| Butte | BV | 396 | Ralston | RV | 384 |
| Cave | CV | 105 | Reveille | RE | 111 |
| Coal | CL | 302 | Spring | SP | 102 |
| Delamar/Pahroc | DM | 207 | Stone Cabin | ST | 238 |
| Dry Lake | DL | 400 | White River | WR | 286 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 5092 |
| | | | TOTAL VALLEYS | | 26 |
| | | | TOTAL ASCs | | 3 |



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



NORTH

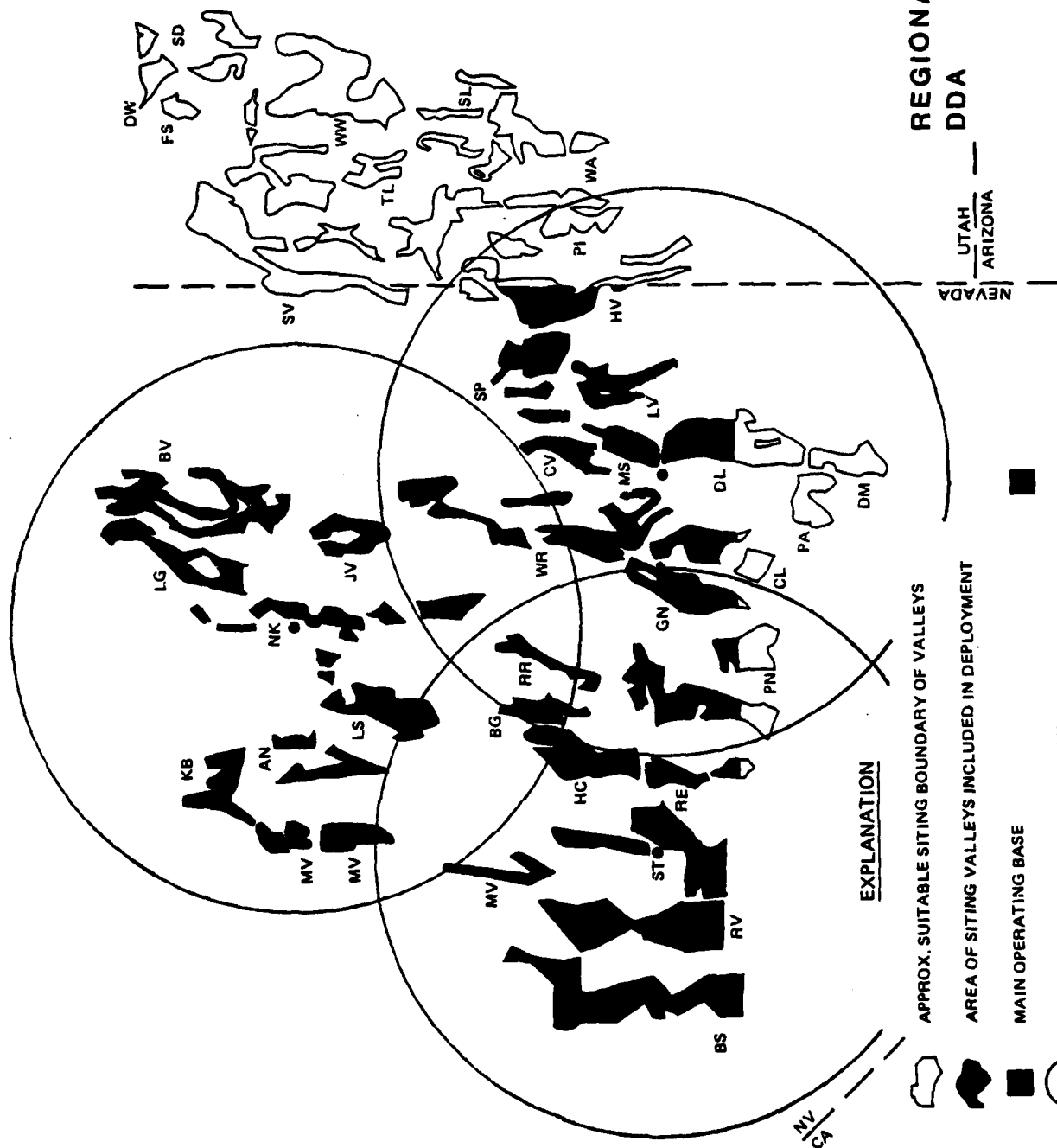
EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 13-3) Best 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas,
Nevada only

| <u>VALLEY</u> | <u>ABRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|--------------------------|------------------------------------|----------------|--------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 208 |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | | Jakes | JV | 89 |
| Sevier Desert | SD | | Kobeh | KR | 150 |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | 195 |
| Tule | TL | | Long | LG | 125 |
| Wah Wah | WA | | Monitor | MV | 276 |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | 125 | Newark | NK | 177 |
| Big Sand Springs | BG | 70 | Penoyer | PN | 35 |
| Big Smoky | BS | 430 | Railroad | RR | 355 |
| Butte | BV | 293 | Ralston | RV | 312 |
| Cave | CV | 79 | Reveille | RE | 73 |
| Coal | CL | 115 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 331 |
| Dry Lake | DL | 95 | White River | WR | 398 |
| Garden | GN | 110 | | | |
| | | | TOTAL SHELTERS | | 4601 |
| | | | TOTAL VALLEYS | | 25 |
| | | | TOTAL ASCs | | 3 |



REGIONAL SKETCH

DDA

UTAH
ARIZONA

NEVADA

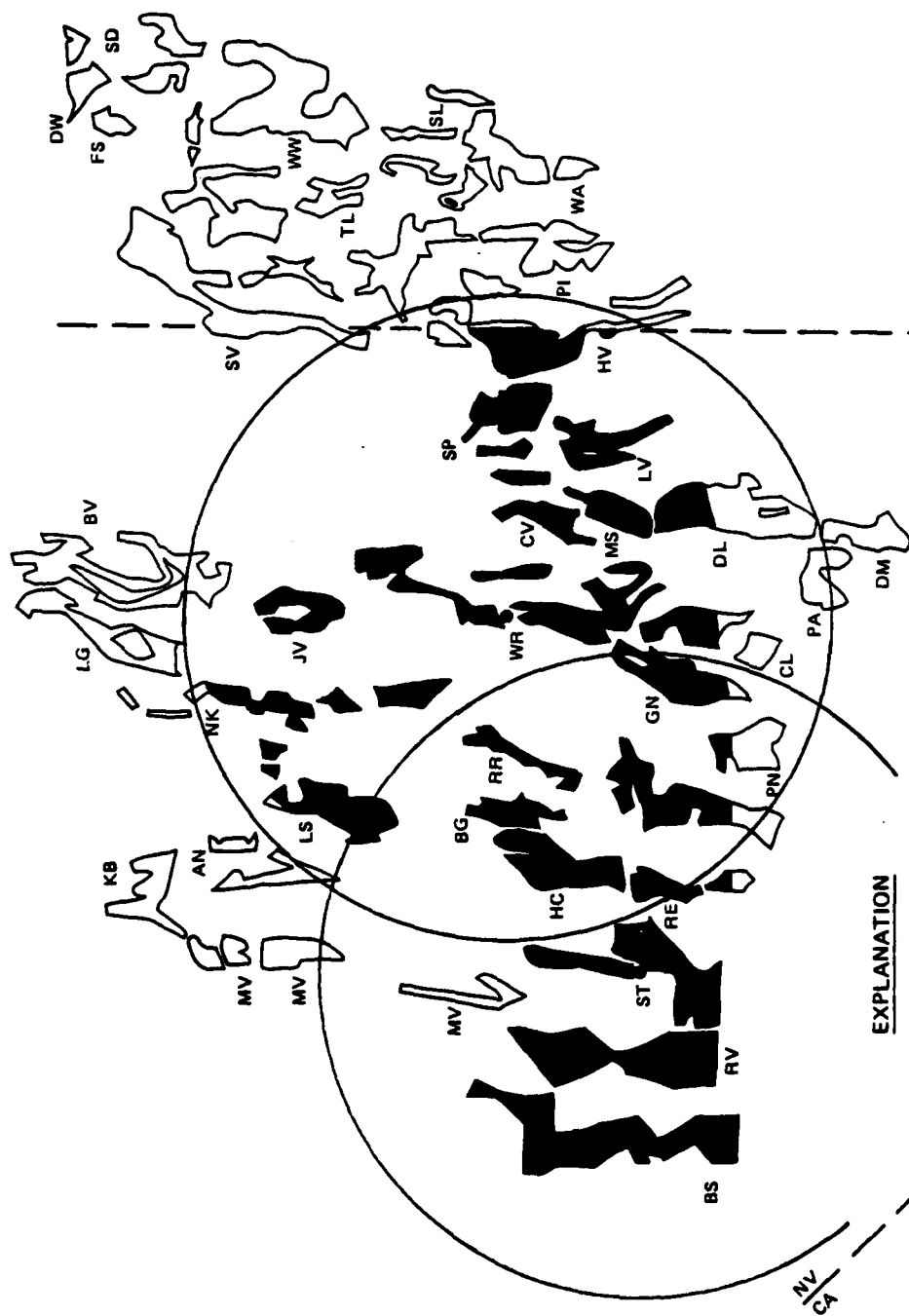


(NOT TO SCALE)
(ABOUT 1:2,500,000)

B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

13-3) Best 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas,
Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 312 |
| Fish Springs Flat | FS | | Hot Creek | HC | 250 |
| Pine | PI | | Jakes | JV | 134 |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | 280 |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | 200 |
| Big Sand Springs | BG | 105 | Penoyer | PN | 52 |
| Big Smoky | BS | 645 | Railroad | RR | 532 |
| Butte | BV | | Ralston | RV | 468 |
| Cave | CV | 118 | Reveille | RE | 110 |
| Coal | CL | 172 | Spring | SP | 182 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 496 |
| Dry Lake | DL | 142 | White River | WR | 597 |
| Garden | GN | 165 | | | |
| | | | TOTAL SHELTERS | | 5368 |
| | | | TOTAL VALLEYS | | 20 |
| | | | TOTAL ASCS | | 2 |



REGIONAL SKETCH

DDA

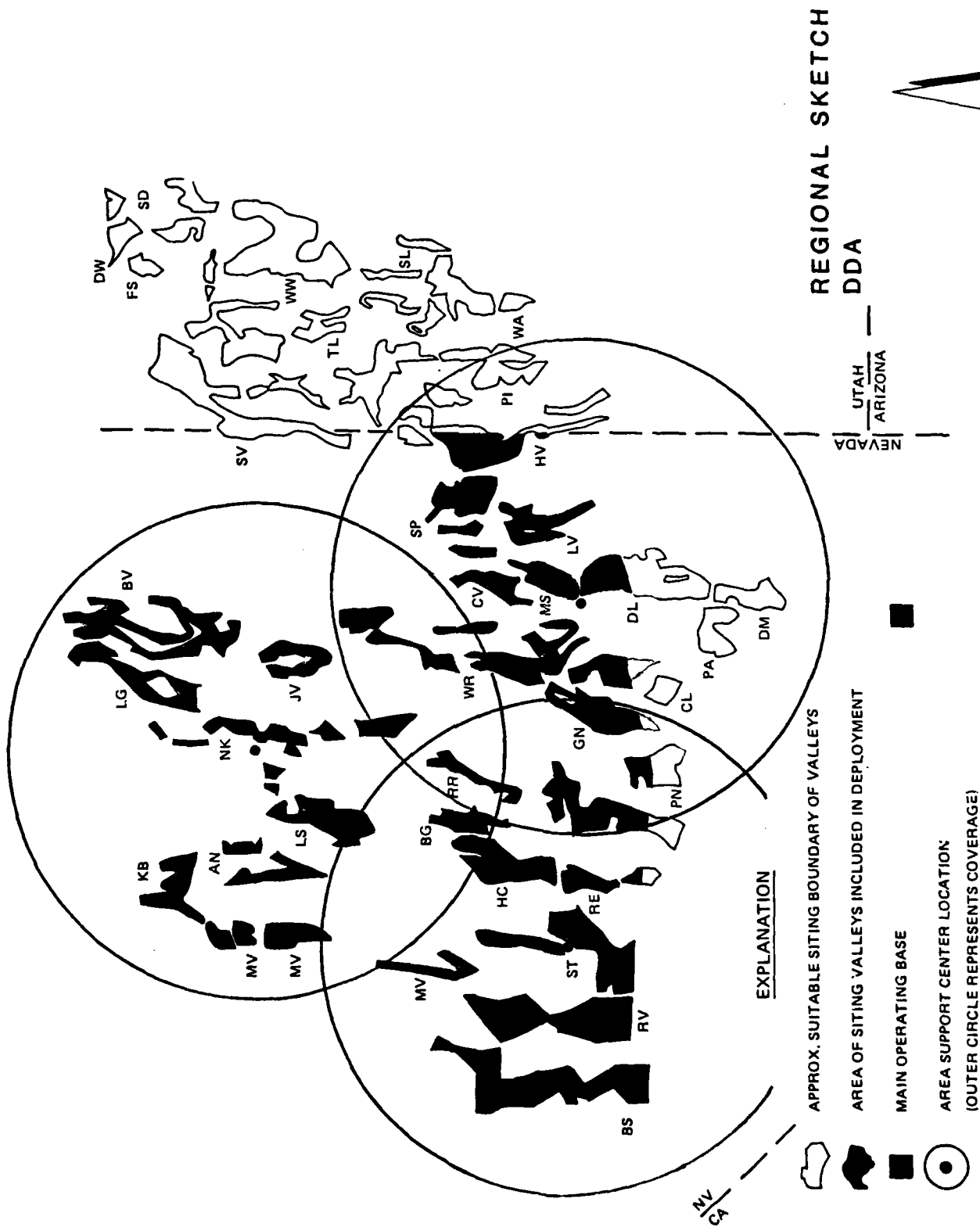
UTAH
ARIZONA
NEVADA



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

13-3) Rest 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas,
Nevada only

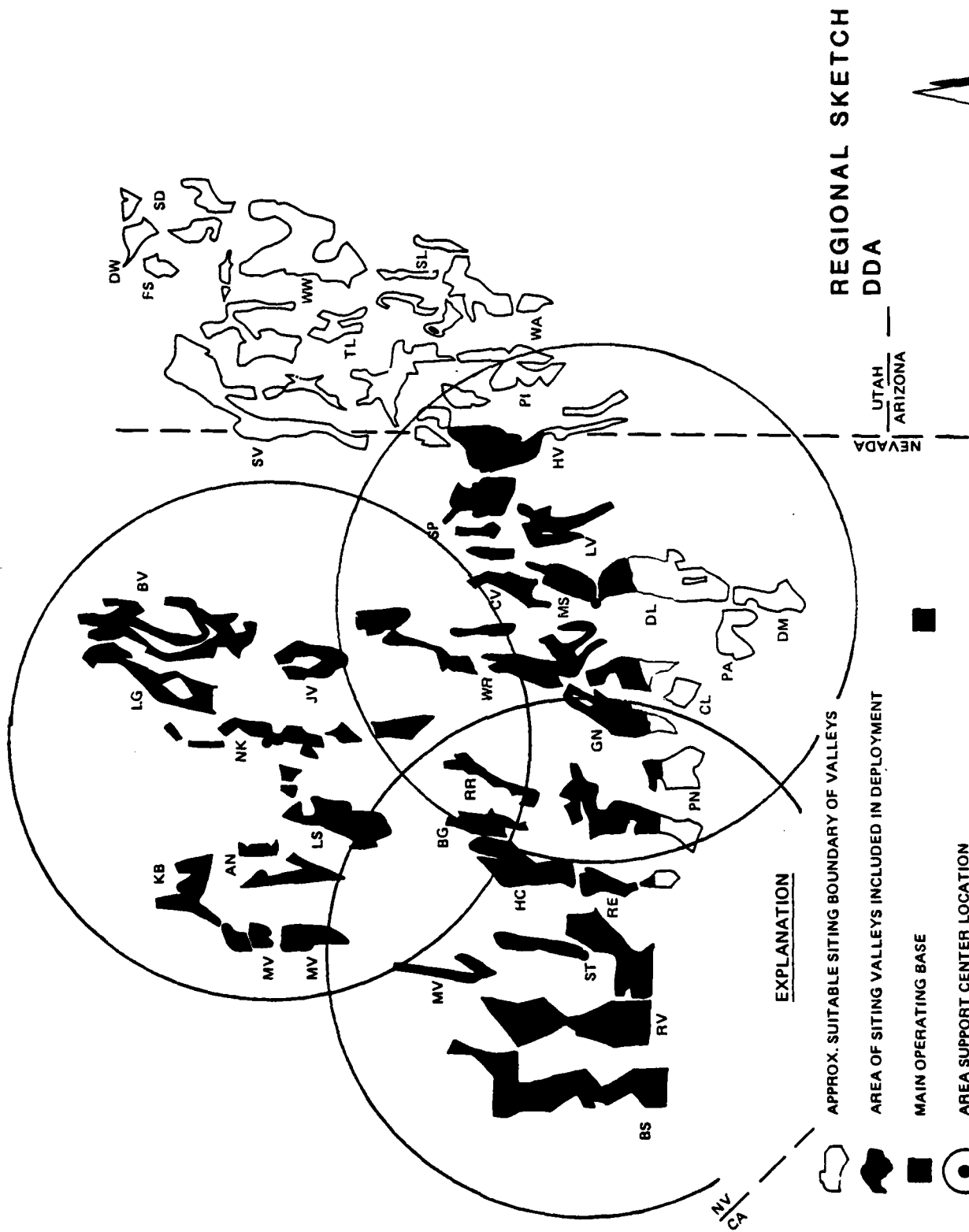
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 116 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | 83 |
| Sevier Desert | SD | | Kobeh | KB | 8 |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | 137 |
| Tule | TL | | Long | LG | 80 |
| Wah Wah | WA | | Monitor | MV | 83 |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | 51 | Newark | NK | 96 |
| Big Sand Springs | BG | 57 | Penoyer | PN | 24 |
| Big Smoky | BS | 189 | Railroad | RR | 213 |
| Butte | BV | 264 | Ralston | RV | 256 |
| Cave | CV | 70 | Reveille | RE | 59 |
| Coal | CL | 106 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 159 |
| Dry Lake | DL | 89 | White River | WR | 191 |
| Garden | GN | 86 | | | |
| | | | TOTAL SHELTERS | | 2747 |
| | | | TOTAL VALLEYS | | 25 |
| | | | TOTAL ASCs | | 3 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

13-3) Best 4600 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Duqway | DW | | Hamlin | HV | 174 |
| Fish Springs Flat | FS | | Hot Creek | HC | 148 |
| Pine | PI | | Jakes | JV | 124 |
| Sevier Desert | SD | | Kobeh | KB | 12 |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | 206 |
| Tule | TL | | Long | LG | 120 |
| Wah Wah | WA | | Monitor | MV | 124 |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | 76 | Newark | NK | 144 |
| Big Sand Springs | BG | 86 | Penoyer | PN | 36 |
| Big Smoky | BS | 284 | Railroad | RR | 320 |
| Butte | BV | 396 | Ralston | RV | 384 |
| Cave | CV | 105 | Reveille | RE | 88 |
| Coal | CL | 159 | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 230 |
| Dry Lake | DL | 134 | White River | WR | 286 |
| Garden | GN | 129 | | | |
| | | | TOTAL SHELTERS | | 4120 |
| | | | TOTAL VALLEYS | | 25 |
| | | | TOTAL ASCs | | 3 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

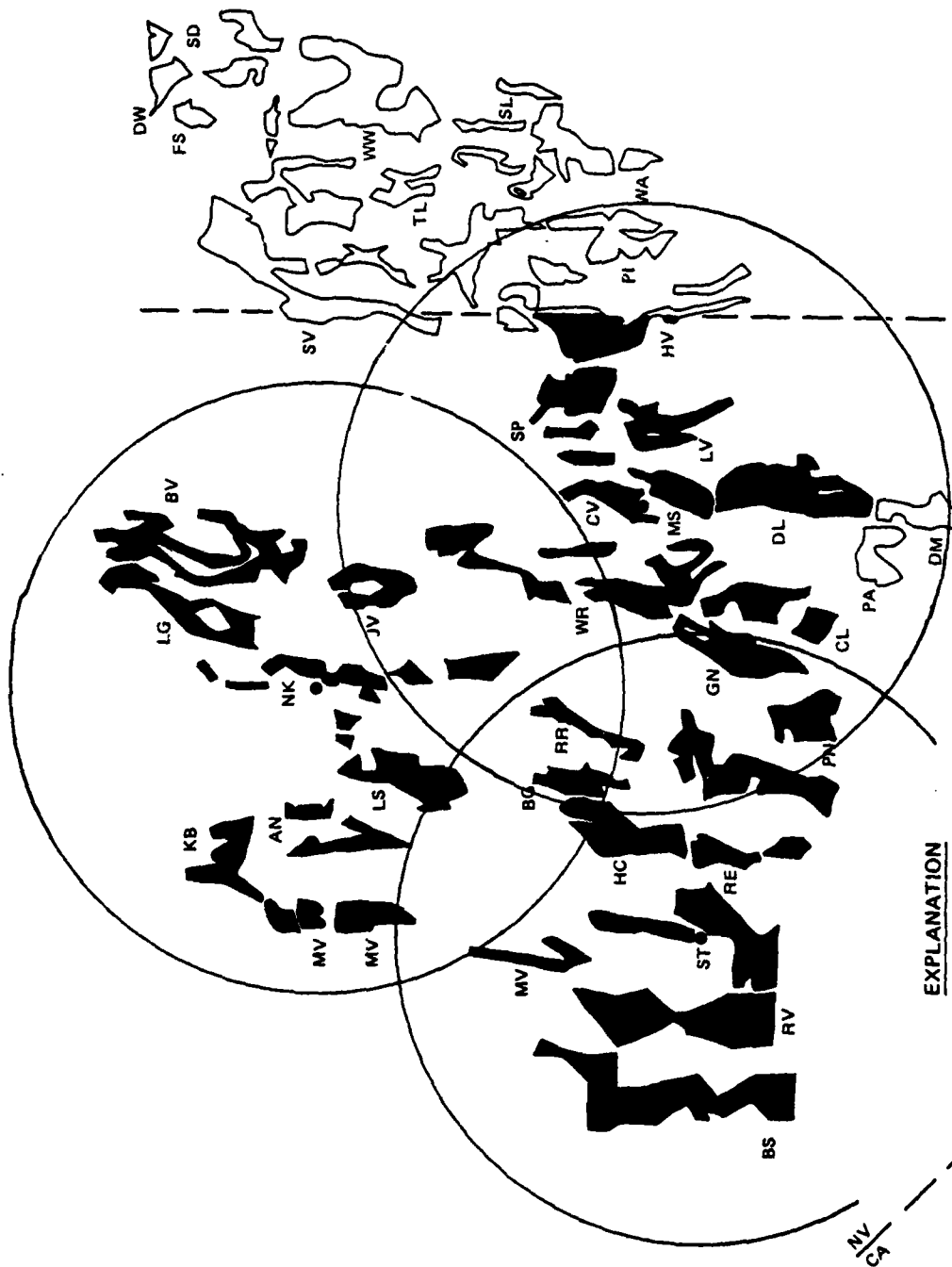
NEVADA —
UTAH —
ARIZONA —
DDA



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

13-5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 208 |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | | Jakes | JV | 89 |
| Sevier Desert | SD | | Kobeh | KB | 150 |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | 195 |
| Tule | TL | | Long | LG | 125 |
| Wah Wah | WA | | Monitor | MV | 276 |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | 125 | Newark | NK | 177 |
| Big Sand Springs | BG | 70 | Penoyer | PN | 212 |
| Big Smoky | BS | 430 | Railroad | RR | 455 |
| Butte | BV | 293 | Ralston | RV | 312 |
| Cave | CV | 79 | Reveille | RE | 91 |
| Coal | CL | 219 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 331 |
| Dry Lake | DL | 284 | White River | WR | 398 |
| Garden | GN | 161 | | | |
| | | | TOTAL SHELTERS | | 5240 |
| | | | TOTAL VALLEYS | | 25 |
| | | | TOTAL ASCs | | 3 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION (OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

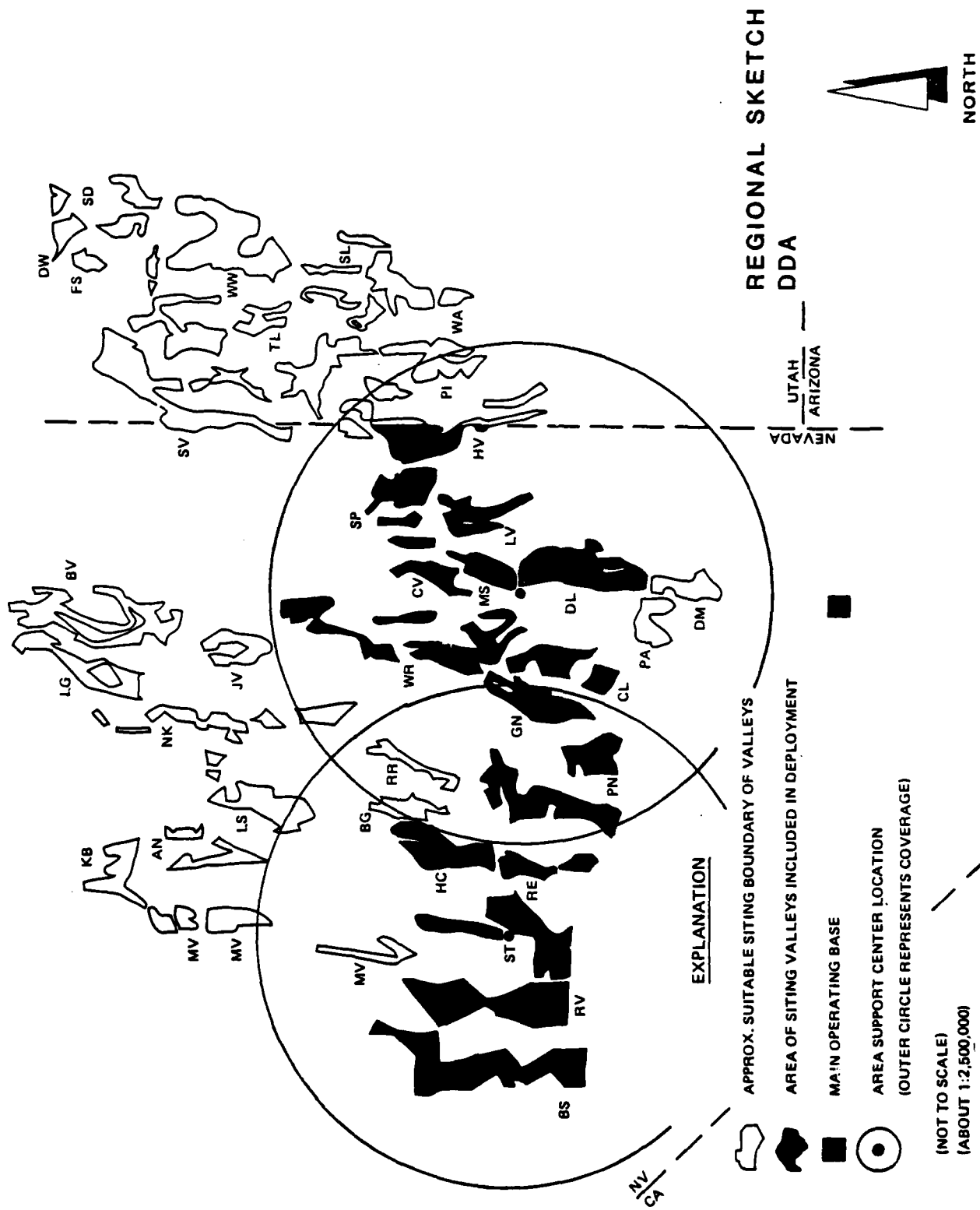
REGIONAL SKETCH

UTAH — DDA
ARIZONA
NEVADA



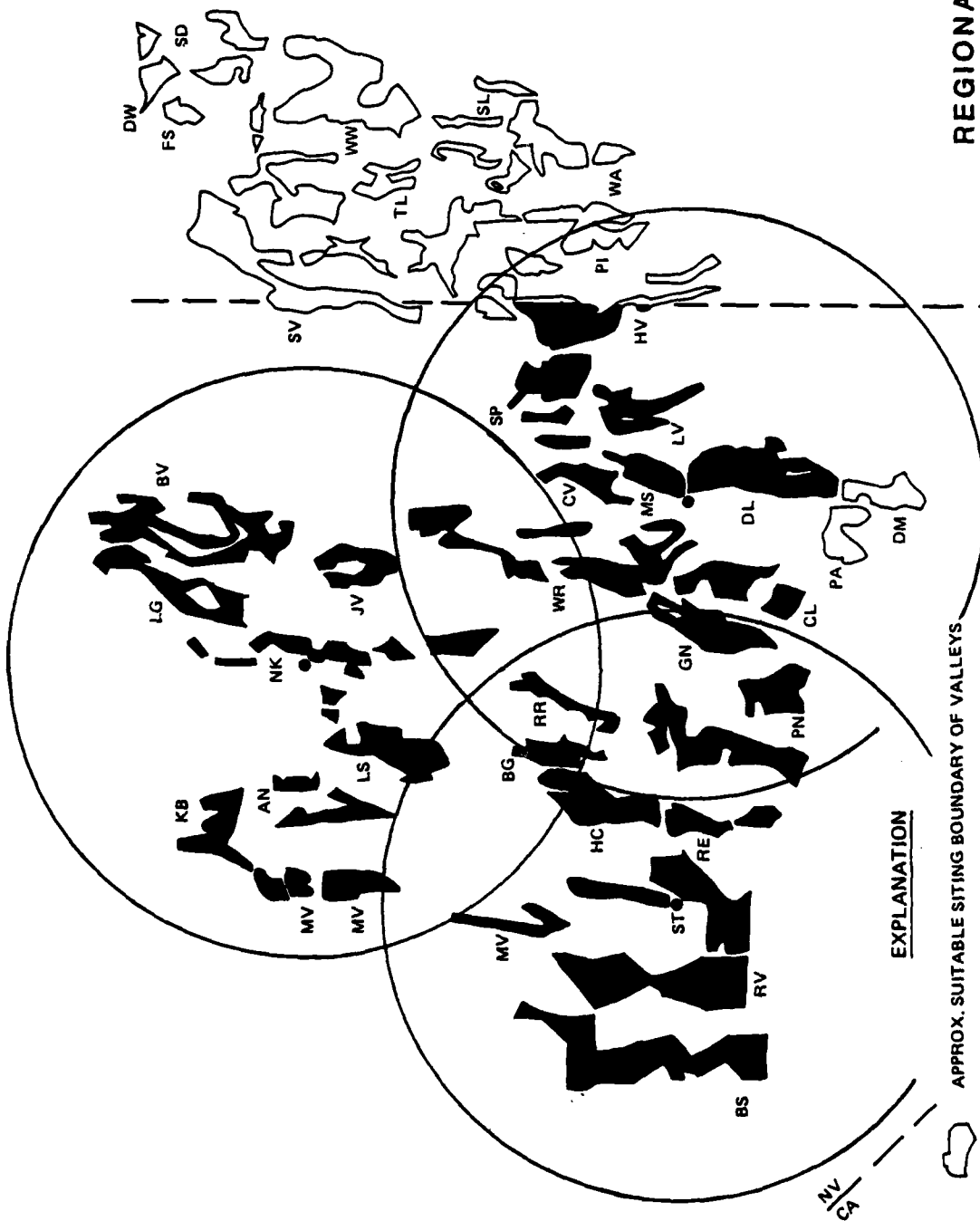
- B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
- 13-5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys,
Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 312 |
| Fish Springs Flat | FS | | Hot Creek | HC | 250 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WM | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 318 |
| Big Smoky | BS | 645 | Railroad | RR | 410 |
| Butte | BV | | Ralston | RV | 468 |
| Cave | CV | 118 | Reveille | RE | 136 |
| Coal | CL | 328 | Spring | SP | 182 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 496 |
| Dry Lake | DL | 426 | White River | WR | 597 |
| Garden | GN | 242 | | | |
| | | | TOTAL SHELTERS | | 5336 |
| | | | TOTAL VALLEYS | | 16 |
| | | | TOTAL ASCs | | 2 |



- C) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 13-5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys,
Nevada only

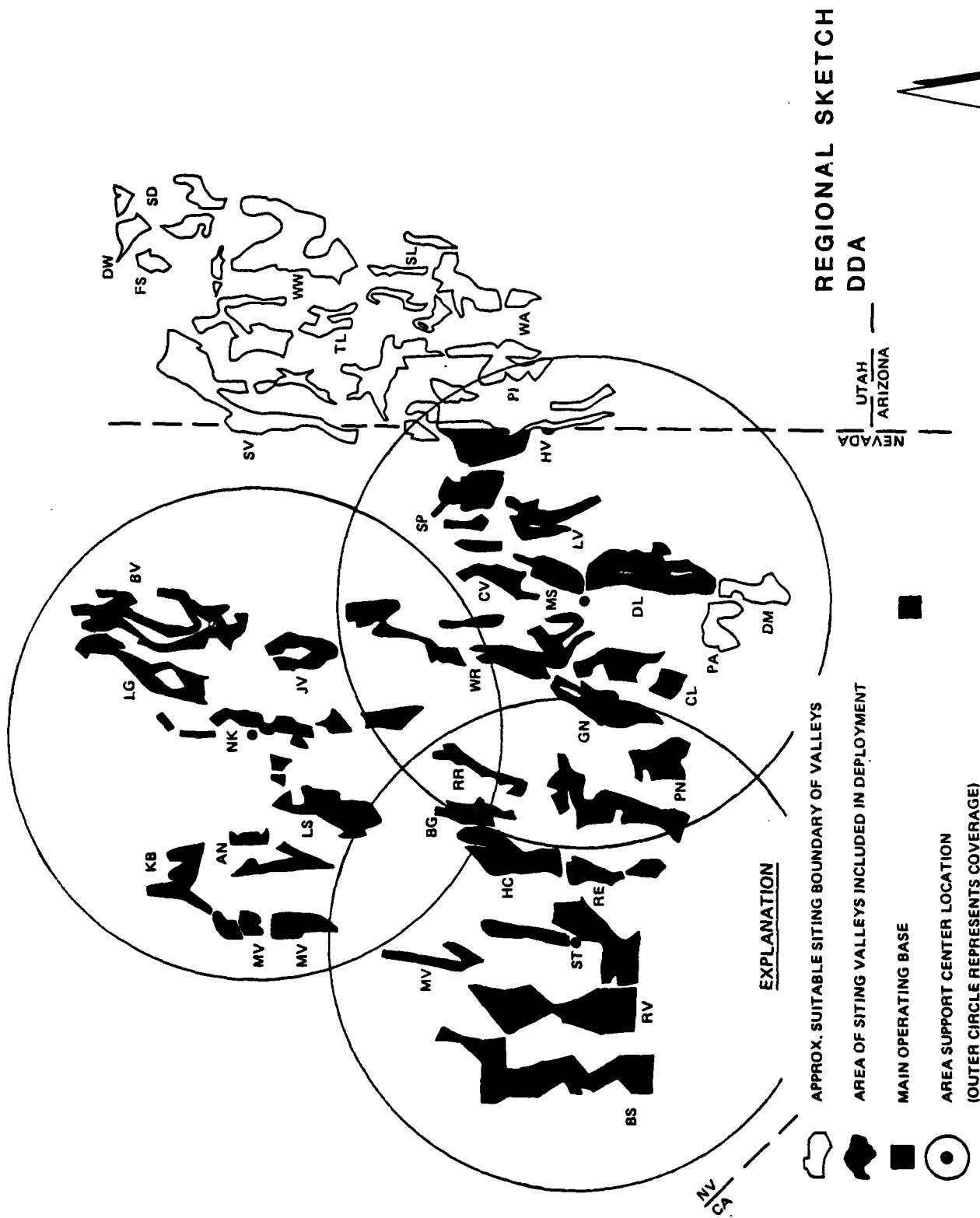
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 116 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | 83 |
| Sevier Desert | SD | | Kobeh | KB | 8 |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | 137 |
| Tule | TL | | Long | LG | 80 |
| Wah Wah | WA | | Monitor | MV | 83 |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | 51 | Newark | NK | 96 |
| Big Sand Springs | BG | 57 | Penoyer | PN | 146 |
| Big Smoky | BS | 189 | Railroad | RR | 273 |
| Butte | BV | 264 | Ralston | RV | 256 |
| Cave | CV | 70 | Reveille | RE | 74 |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 159 |
| Dry Lake | DL | 267 | White River | WR | 191 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 3257 |
| | | | TOTAL VALLEYS | | 25 |
| | | | TOTAL ASCs | | 3 |



D) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

13-5) Best 4600 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys,
Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 174 |
| Fish Springs Flat | FS | | Hot Creek | HC | 148 |
| Pine | PI | | Jakes | JV | 124 |
| Sevier Desert | SD | | Kobeh | KB | 12 |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | 206 |
| Tule | TL | | Long | LG | 120 |
| Wah Wah | WA | | Monitor | MV | 124 |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | 76 | Newark | NK | 144 |
| Big Sand Springs | BG | 86 | Penoyer | PN | 219 |
| Big Smoky | BS | 284 | Railroad | RR | 410 |
| Butte | BV | 396 | Ralston | RV | 384 |
| Cave | CV | 105 | Reveille | RE | 111 |
| Coal | CL | 302 | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 238 |
| Dry Lake | DL | 400 | White River | WR | 286 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 4885 |
| | | | TOTAL VALLEYS | | 25 |
| | | | TOTAL ASCs | | 3 |



3.0 2300 SHELTER OPTIONS

2

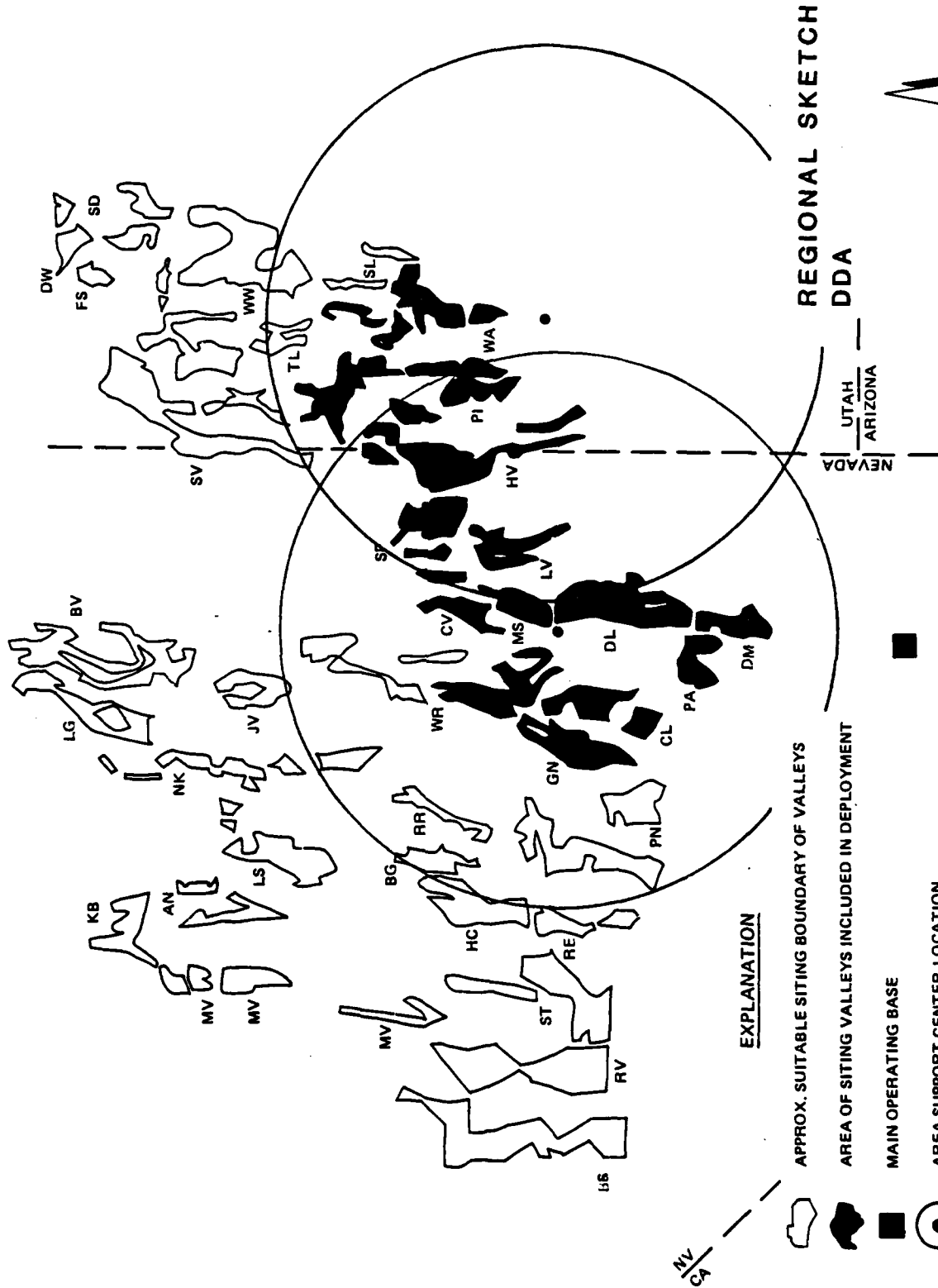
3.0 2300 SHELTER OPTIONS

This section contains options for 2300 shelters as specified in Section 1.1.

A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

7) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 333 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | 247 | Little Smoky | LS | |
| Tule | TL | 77 | Long | LG | |
| Wah Wah | WA | 213 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | |
| Coal | CL | 219 | Spring | SP | 121 |
| Delamar/Pahroc | DM | 170 | Stone Cabin | ST | |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | 161 | | | |
| | | | TOTAL SHELTERS | | 2690 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCS | | 2 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

7) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 500 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 374 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | | Spring | SP | 182 |
| Delamar/Pahroc | DM | 255 | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2661 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 2 |

F/C 16/1

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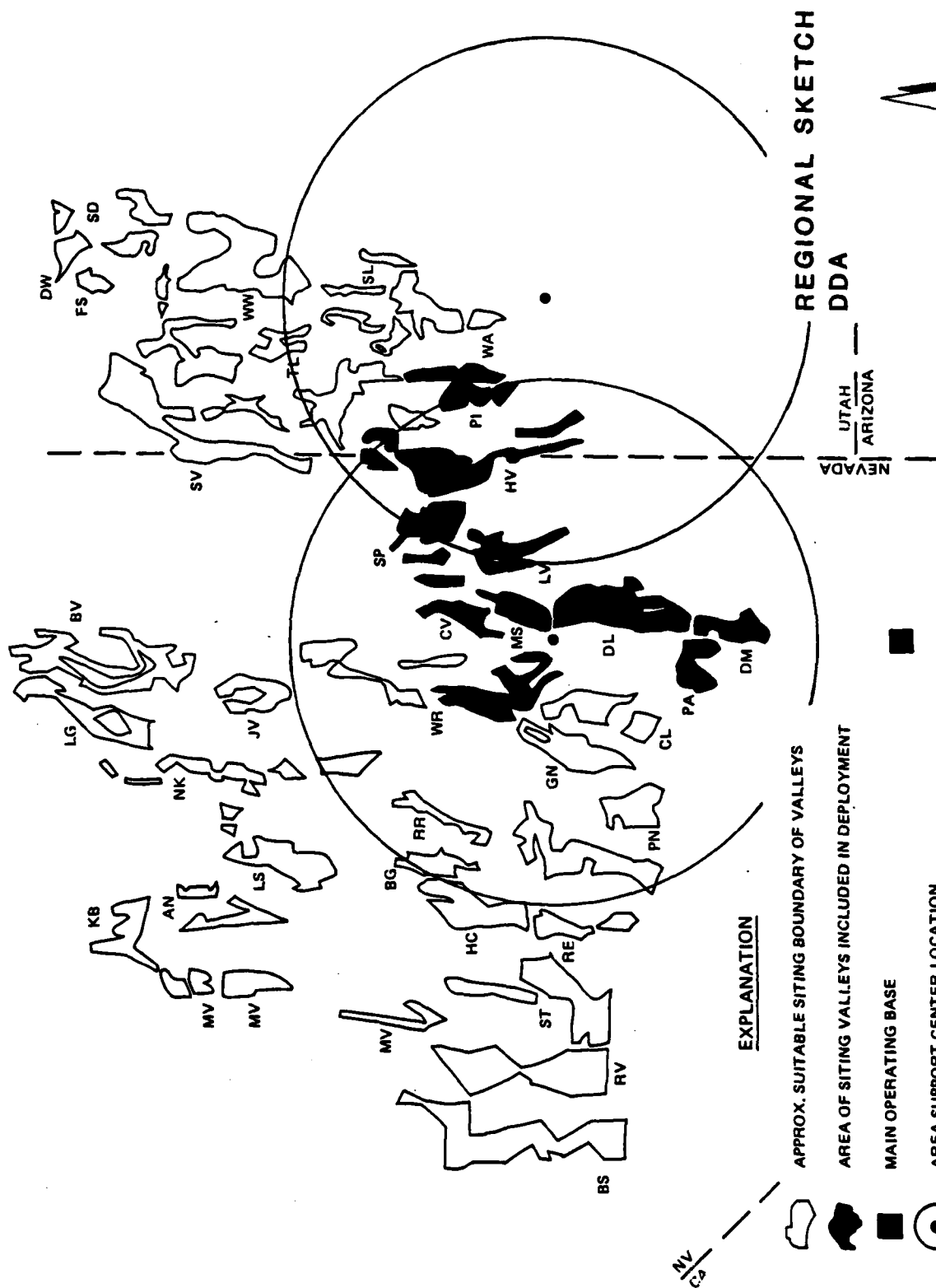
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2nd 3

| | | | | | | | | | | | | | | | | | | | |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | | | |

A resolution test chart featuring several groups of horizontal and vertical lines of varying thicknesses. Each group is accompanied by a numerical value indicating the resolution. The values include 1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5, 5.0, 5.6, 6.3, 7.1, 8.0, 9.0, 10.0, 11.2, 12.5, 14.0, 16.0, 18.0, 20.0, 22.5, 25.0, 28.0, 32.0, 36.0, 40.0, 45.0, 50.0, 56.0, 63.0, 71.0, 80.0, 90.0, 100.0, 112.0, 125.0, 140.0, 160.0, 180.0, 200.0, 225.0, 250.0, 280.0, 320.0, 360.0, 400.0, 450.0, 500.0, 560.0, 630.0, 710.0, 800.0, 900.0, 1000.0, 1120.0, 1250.0, 1400.0, 1600.0, 1800.0, 2000.0, 2250.0, 2500.0, 2800.0, 3200.0, 3600.0, 4000.0, 4500.0, 5000.0, 5600.0, 6300.0, 7100.0, 8000.0, 9000.0, 10000.0.

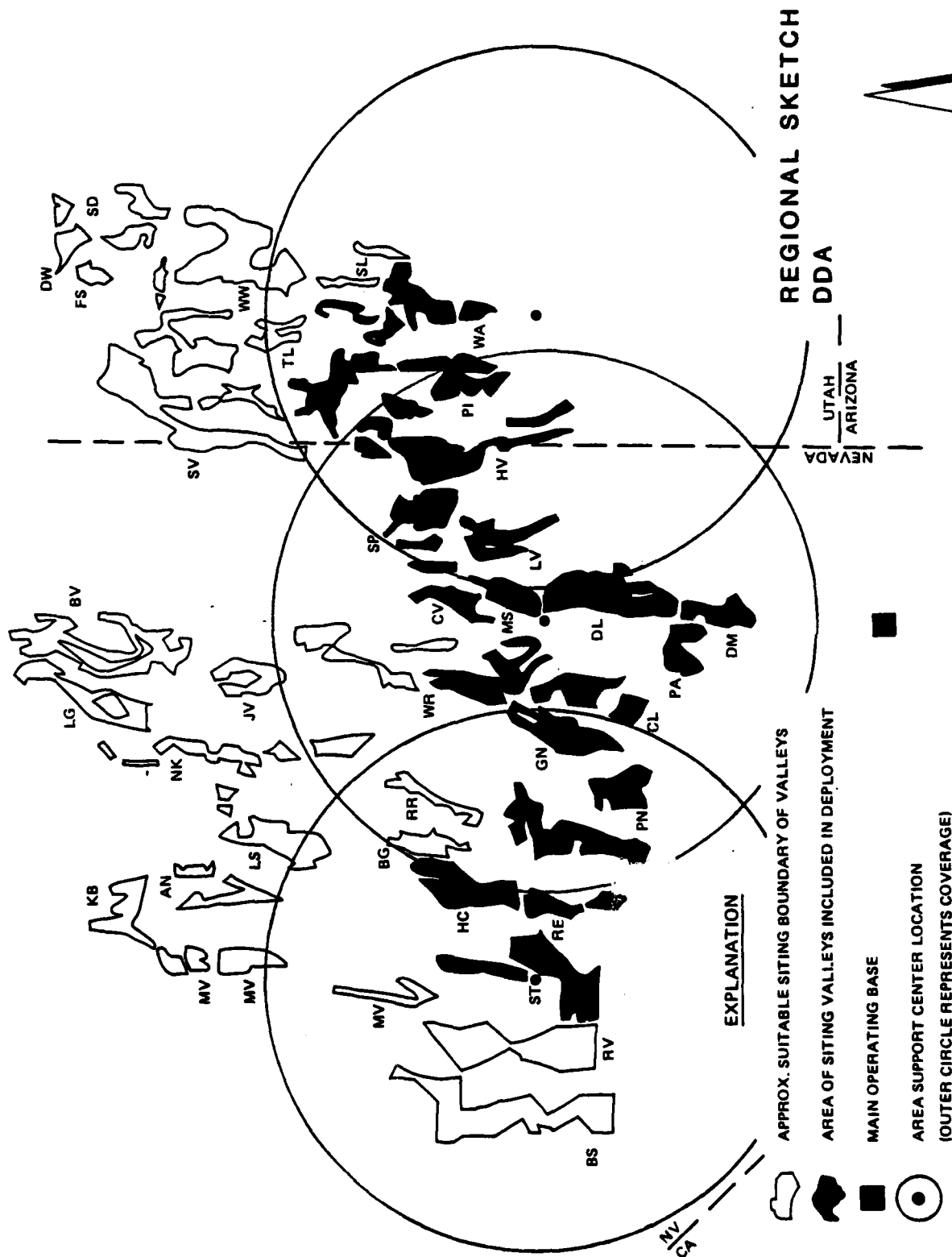
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

7) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC

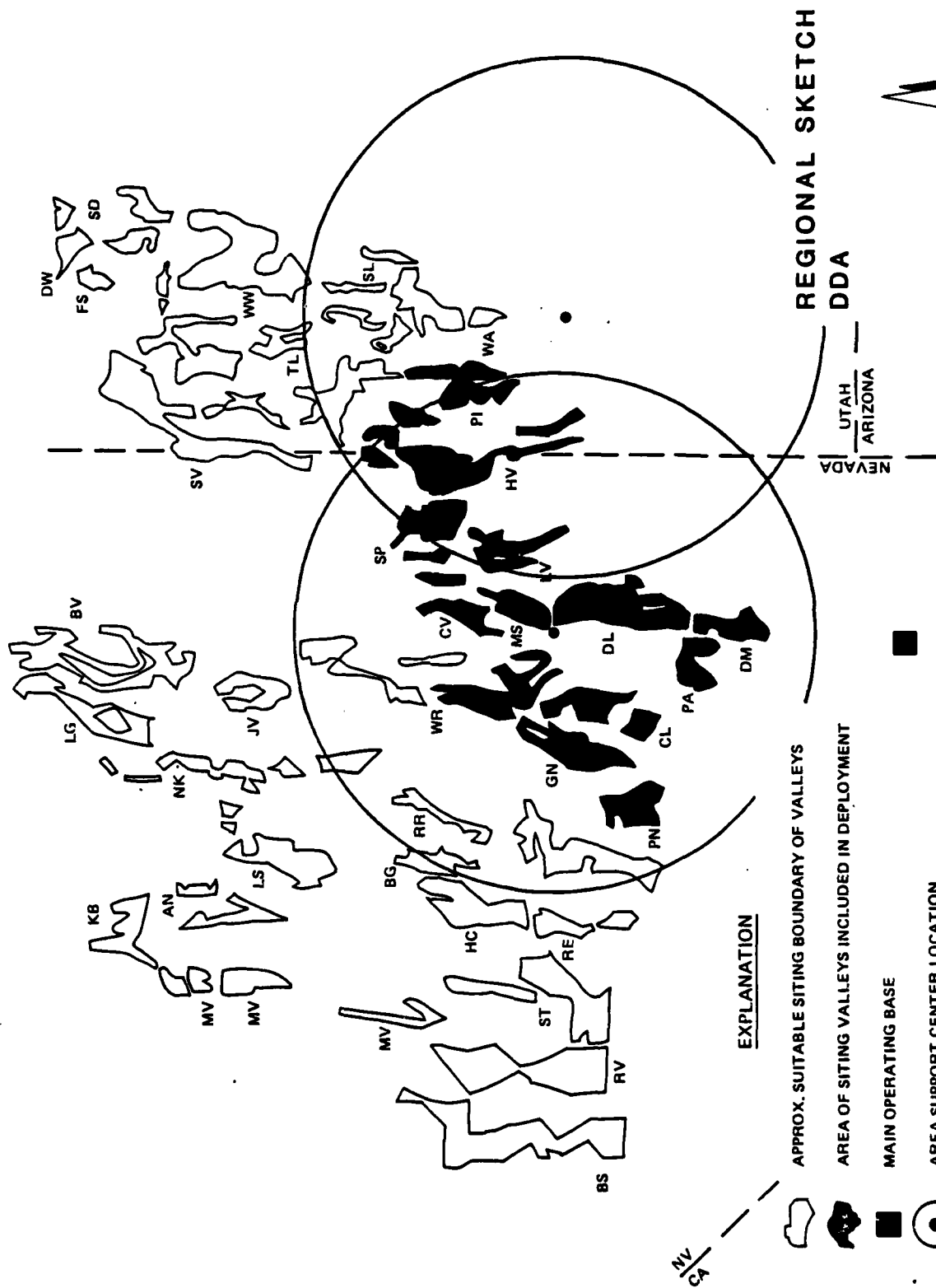
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | 148 | Little Smoky | LS | |
| Tule | TL | 42 | Long | LG | |
| Wah Wah | WA | 213 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 146 |
| Big Smoky | BS | | Railroad | RR | 164 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | 74 |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | 138 | Stone Cabin | ST | 159 |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 2633 |
| | | | TOTAL VALLEYS | | 19 |
| | | | TOTAL ASCs | | 3 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

7) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 279 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 363 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | 49 | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 219 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | |
| Coal | CL | 302 | Spring | SP | 102 |
| Delamar/Pahroc | DM | 207 | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | 190 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 2650 |
| | | | TOTAL VALLEYS | | 13 |
| | | | TOTAL ASCs | | 2 |



EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

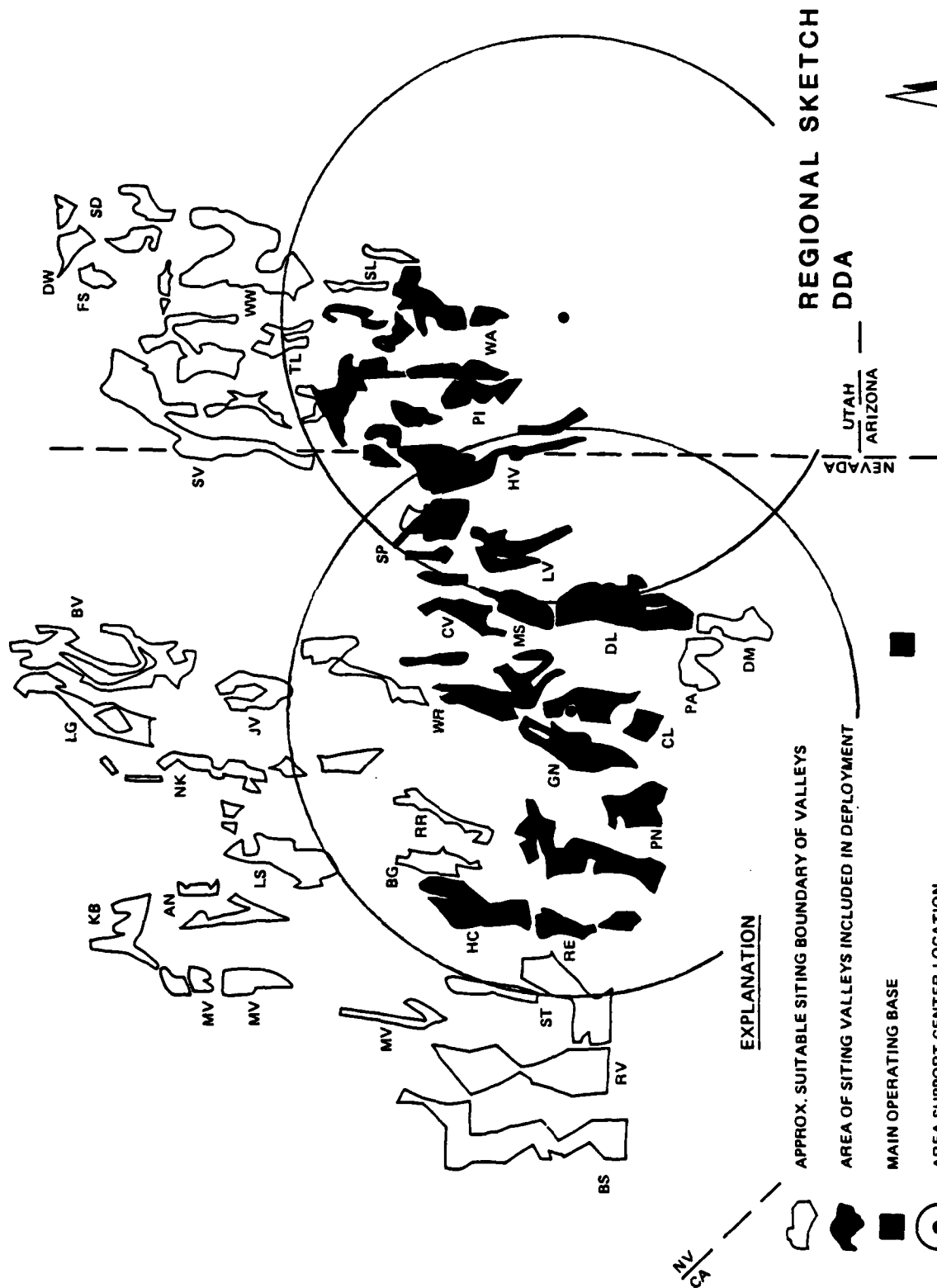
DDA

NORTH

E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

7) Best 2300 shelters - Coyote MOB, Milford ASC

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 230 |
| Fish Springs Flat | FS | | Hot Creek | HC | 138 |
| Pine | PI | 115 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 161 |
| Snake | SV | 92 | Little Smoky | LS | |
| Tule | TL | 46 | Long | LG | |
| Wah Wah | WA | 115 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 115 |
| Big Smoky | BS | | Railroad | RR | 184 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 69 | Reveille | RE | 69 |
| Coal | CL | 138 | Spring | SP | 92 |
| Delamar/Pahroc | DM | 138 | Stone Cabin | ST | |
| Dry Lake | DL | 230 | White River | WR | 207 |
| Garden | GN | 138 | | | |
| | | | TOTAL SHELTERS | | 2346 |
| | | | TOTAL VALLEYS | | 18 |
| | | | TOTAL ASCs | | 2 |



EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

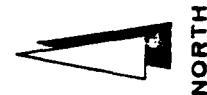
AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

DDA

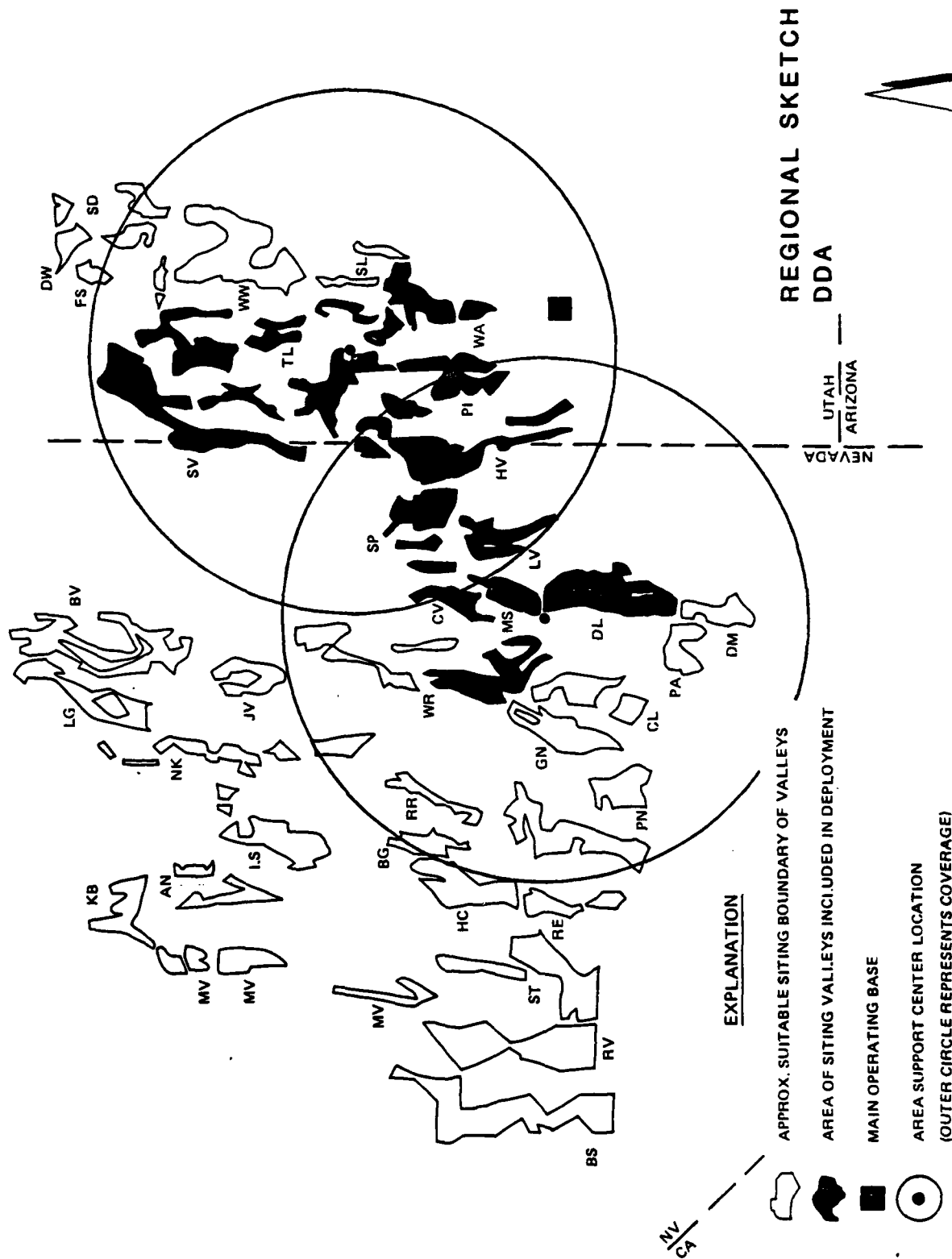
UTAH
ARIZONA
NEVADA



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

8) Best 2300 shelters and 15 percent - Milford MOB

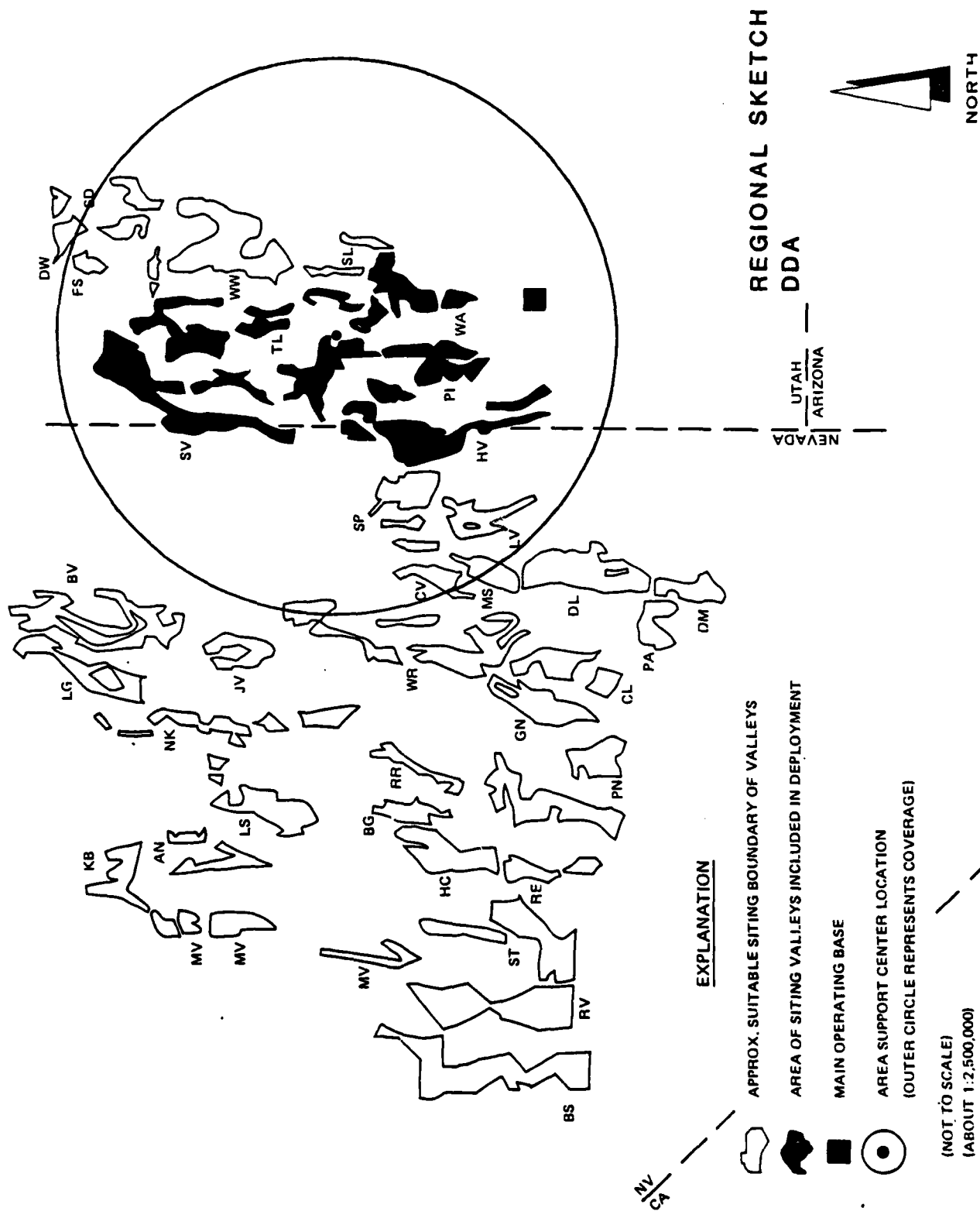
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 333 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | 191 |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | 650 | Little Smoky | LS | |
| Tule | TL | 367 | Long | LG | |
| Wah Wah | WA | 213 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | 121 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2833 |
| | | | TOTAL VALLEYS | | 11 |
| | | | TOTAL ASCs | | 2 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

8) Best 2300 shelters and 15 percent - Milford MOB

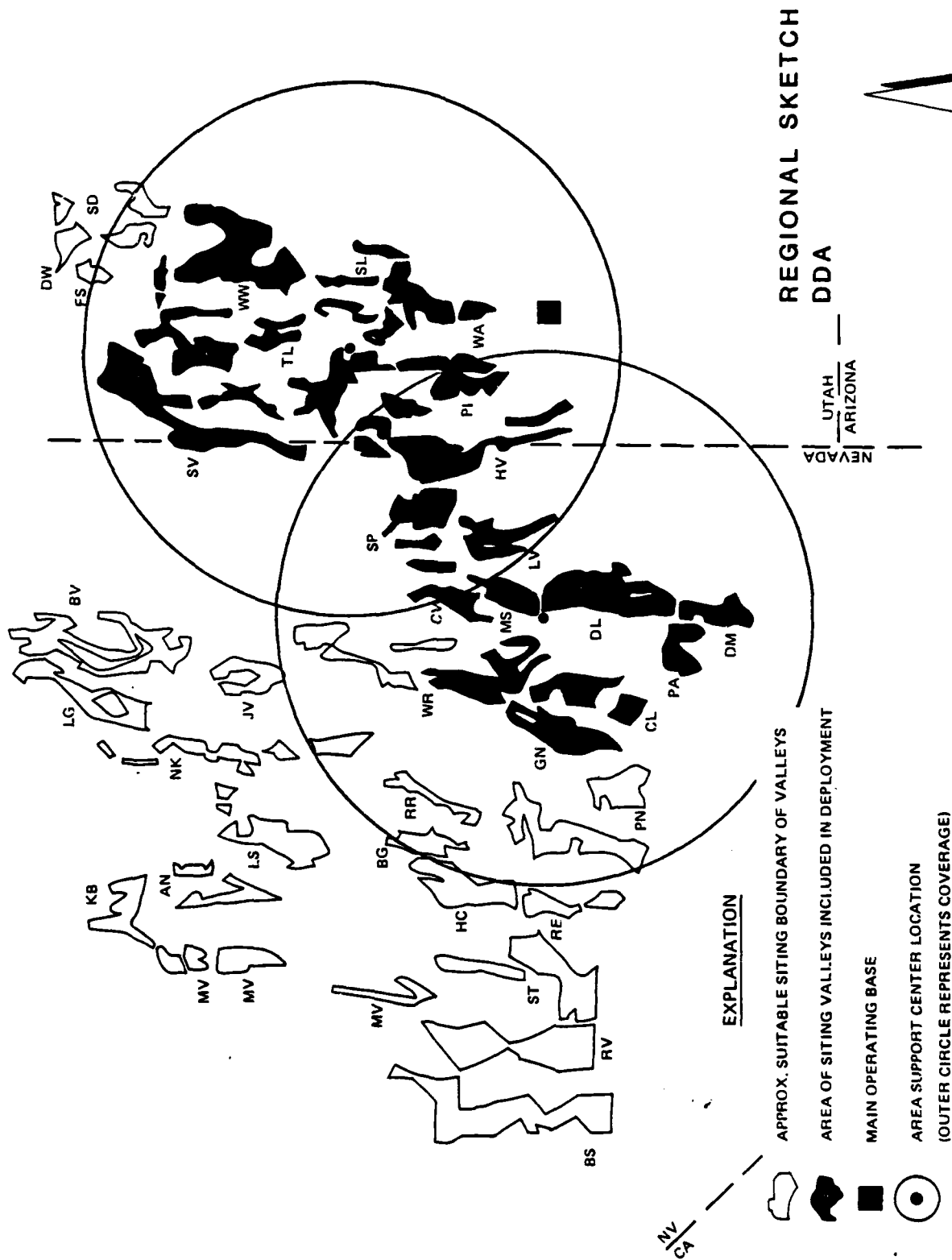
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dogway | DW | | Hamlin | HV | 500 |
| Flat Springs | FS | | Hot Creek | HC | |
| Flat | PI | 374 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Sevier | SV | 975 | Little Smoky | LS | |
| Tukey | TL | 550 | Long | LG | |
| Wah Wah | WA | 320 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2719 |
| | | | TOTAL VALLEYS | | 5 |
| | | | TOTAL ASCs | | 1 |



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

8) Best 2300 shelters and 15 percent - Milford MOB

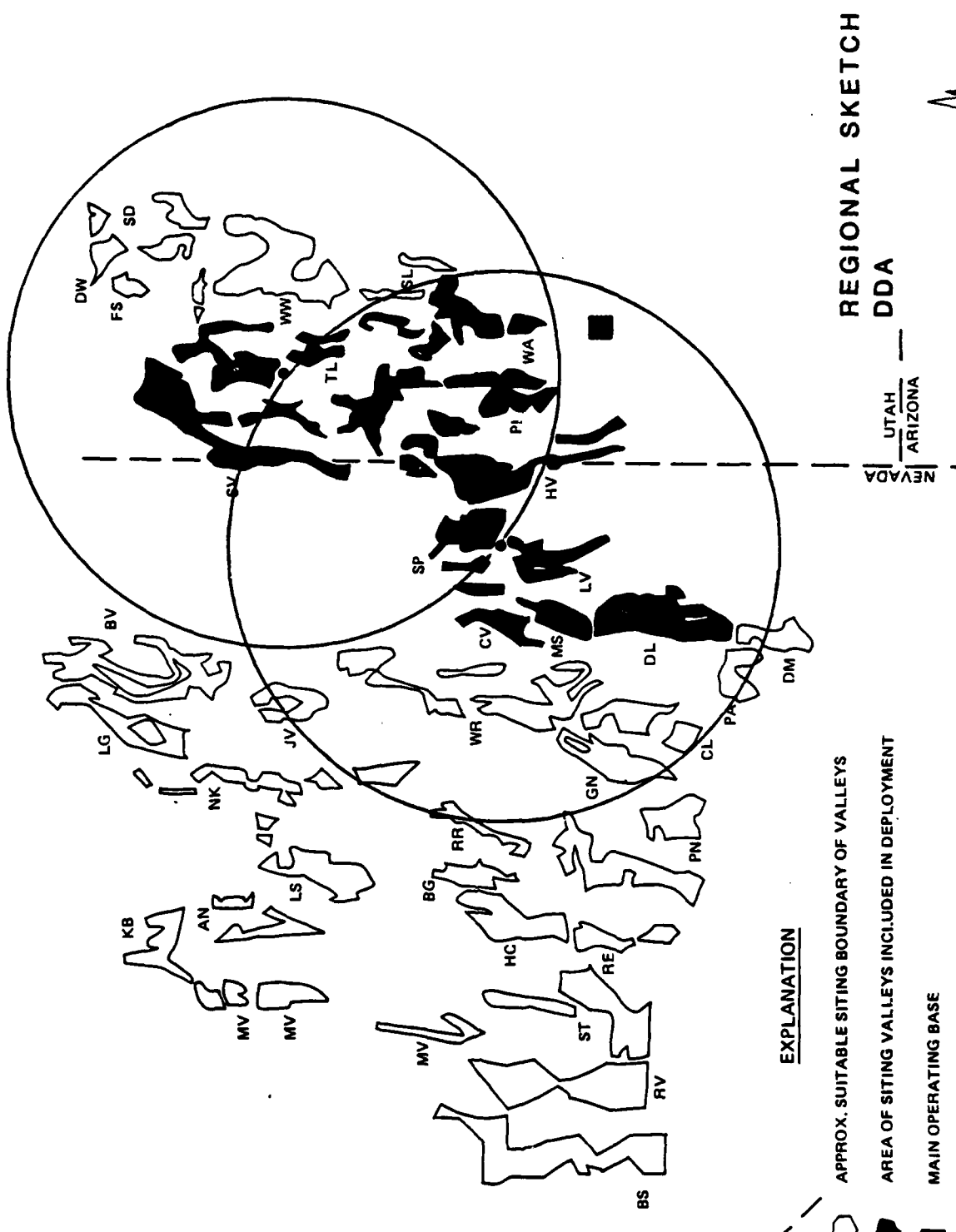
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | 23 | Hot Creek | HC | |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | 94 |
| Sevier Lake | SL | 57 | Lake | LV | |
| Snake | SV | 390 | Little Smoky | LS | |
| Tule | TL | 198 | Long | LG | |
| Wah Wah | WA | 175 | Monitor | MV | |
| Whirlwind | WW | 215 | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | 138 | Stone Cabin | ST | |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 2646 |
| | | | TOTAL VALLEYS | | 17 |
| | | | TOTAL ASCs | | 2 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

8) Best 2300 shelters and 15 percent - Milford MOB

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 279 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 363 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | 585 | Little Smoky | LS | |
| Tule | TL | 297 | Long | LG | |
| Wah Wah | WA | 263 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | |
| Coal | CL | | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2639 |
| | | | TOTAL VALLEYS | | 10 |
| | | | TOTAL ASCs | | 2 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

DDA

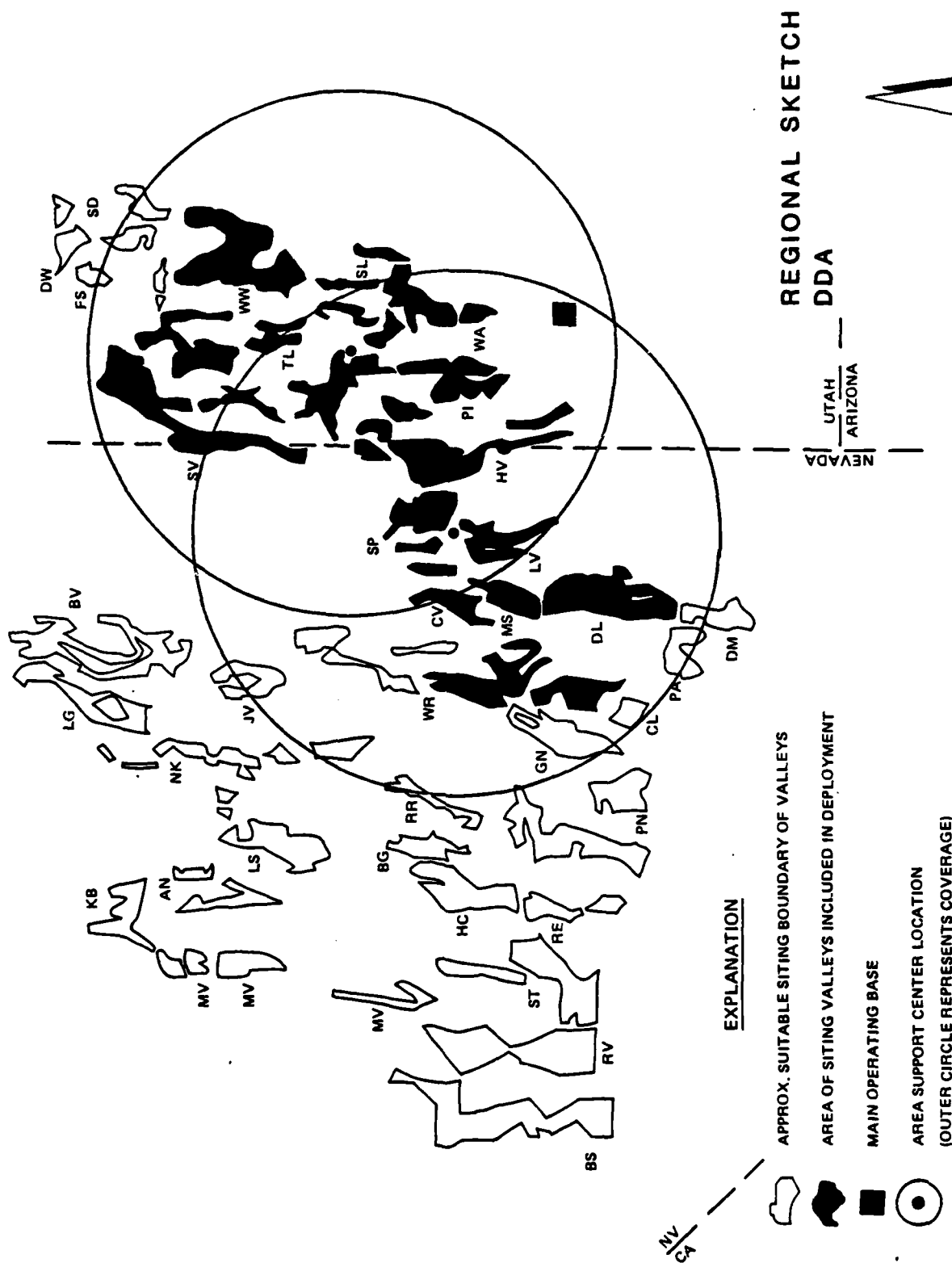
UTAH
ARIZONA
NEVADA



E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

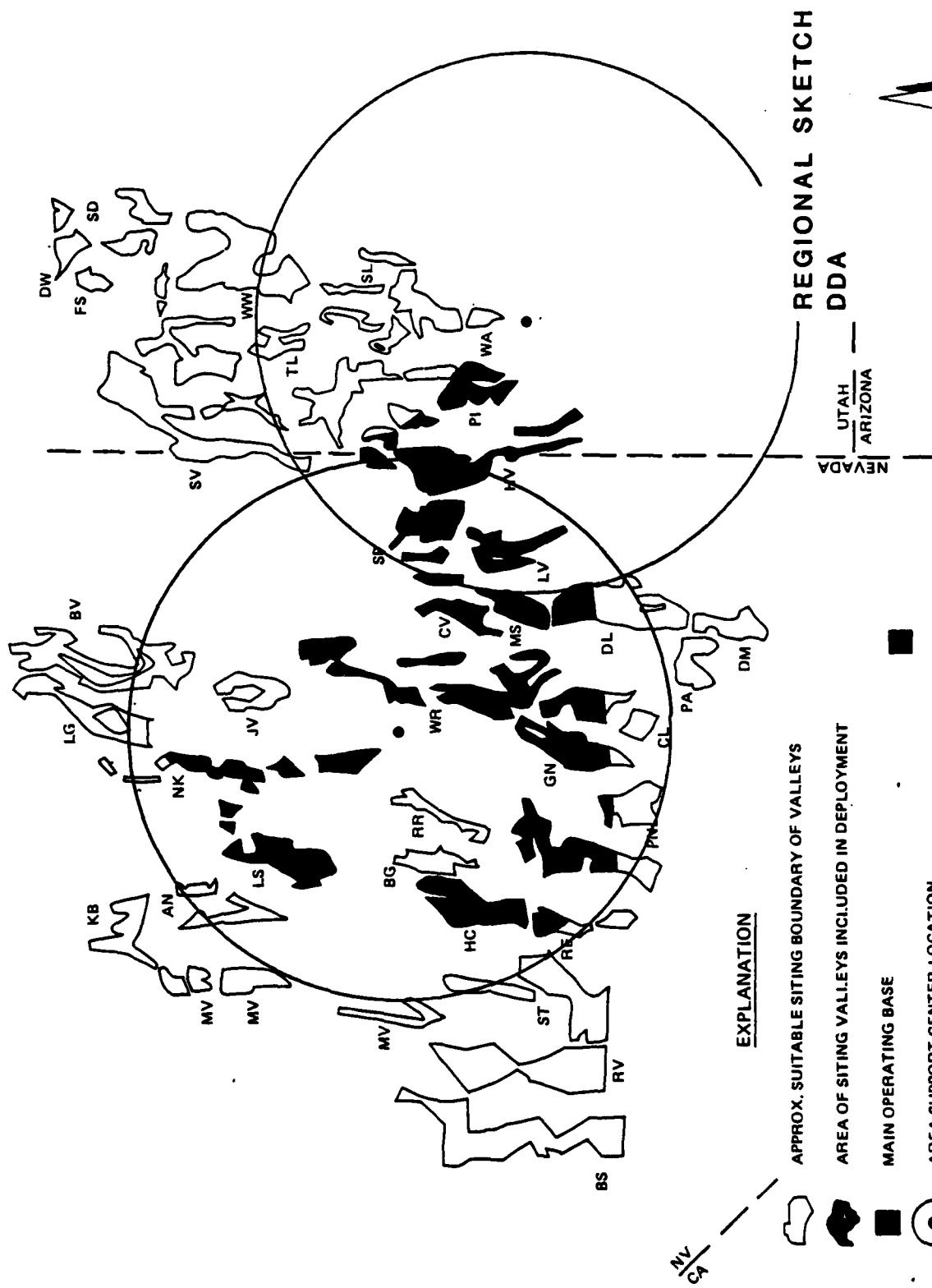
8) Best 2300 shelters - Milford MOB

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 230 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 115 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 23 | Lake | LV | 161 |
| Snake | SV | 437 | Little Smoky | LS | |
| Tule | TL | 230 | Long | LG | |
| Wah Wah | WA | 115 | Monitor | MV | |
| Whirlwind | WW | 276 | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 69 | Reveille | RE | 92 |
| Coal | CL | 92 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 230 | White River | WR | 161 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2300 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 2 |



- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 9) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid all MOAs and Restricted Areas

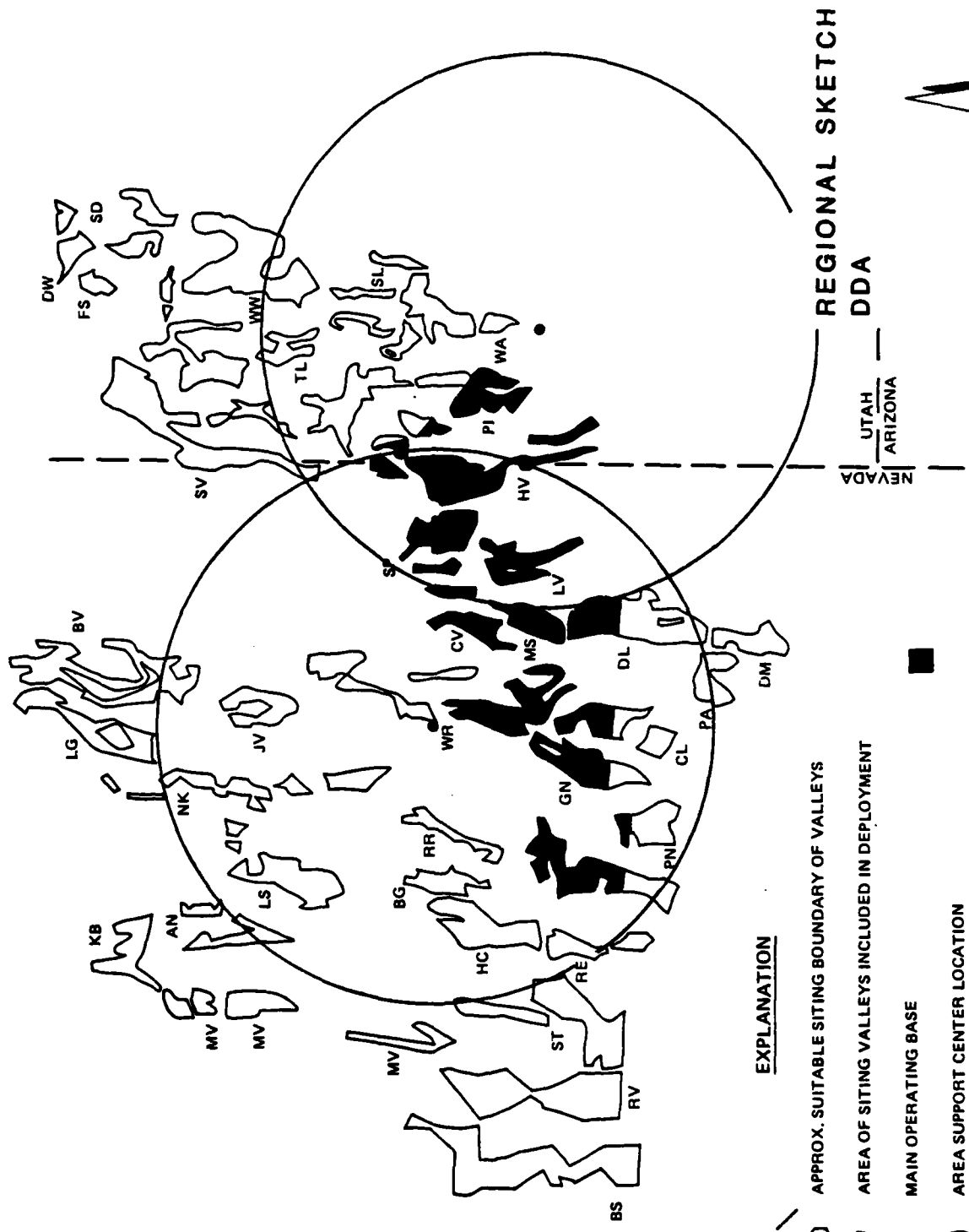
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 300 |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | 166 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | 191 |
| Sevier Lake | SL | | Lake | LV | 195 |
| Snake | SV | 26 | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | 165 |
| Big Sand Springs | BG | | Penoyer | PN | 35 |
| Big Smoky | BS | | Railroad | RR | 355 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | 45 |
| Coal | CL | 115 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 95 | White River | WR | 398 |
| Garden | GN | 110 | | | |
| | | | TOTAL SHELTERS | | 2644 |
| | | | TOTAL VALLEYS | | 17 |
| | | | TOTAL ASCs | | 2 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

9) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 450 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | 39 | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 52 |
| Big Smoky | BS | | Railroad | RR | 260 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 172 | Spring | SP | 182 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 142 | White River | WR | 398 |
| Garden | GN | 165 | | | |
| | | | TOTAL SHELTERS | | 2635 |
| | | | TOTAL VALLEYS | | 13 |
| | | | TOTAL ASCs | | 2 |



REGIONAL SKETCH

DDA

NEVADA
UTAH
ARIZONA



EXPLANATION

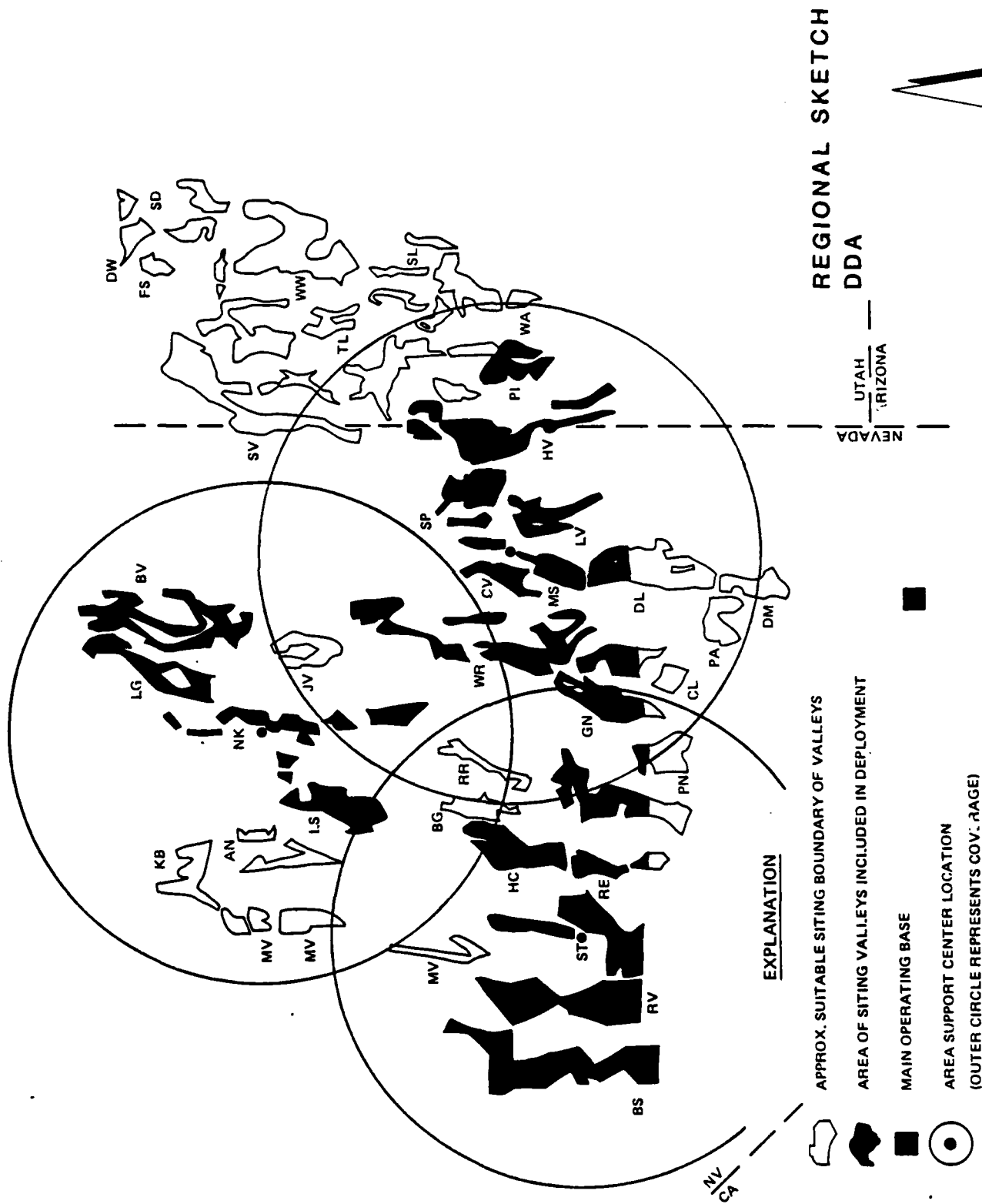
- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

9) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid all MOAs and Restricted Areas

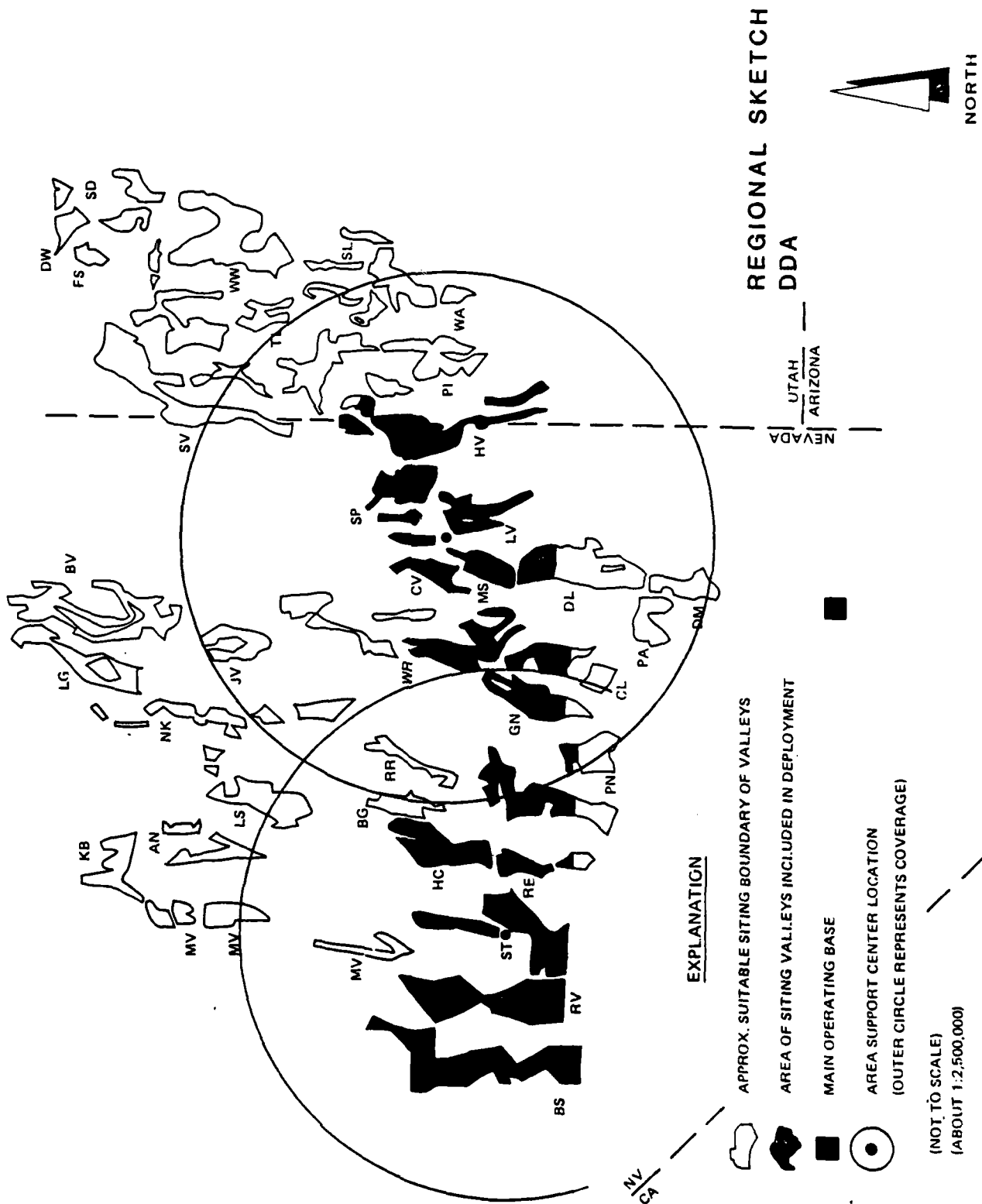
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VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 168 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | 161 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | 94 |
| Sevier Lake | SL | | Lake | LV | 137 |
| Snake | SV | | Little Smoky | LS | 80 |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 69 |
| Whirlwind | WW | | Muleshoe | MS | 96 |
| Antelope | AN | | Newark | NK | 24 |
| Big Sand Springs | BG | | Penoyer | PN | 213 |
| Big Smoky | BS | 189 | Railroad | RR | 256 |
| Butte | BV | 264 | Ralston | RV | 59 |
| Cave | CV | 70 | Reveille | RE | 68 |
| Coal | CL | 106 | Spring | SP | 159 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 191 |
| Dry Lake | DL | 89 | White River | WR | |
| Garden | GN | 86 | | | |
| | | | TOTAL SHELTERS | | 2678 |
| | | | TOTAL VALLEYS | | 21 |
| | | | TOTAL ASCs | | 3 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

9) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid all MOAs and Restricted Areas

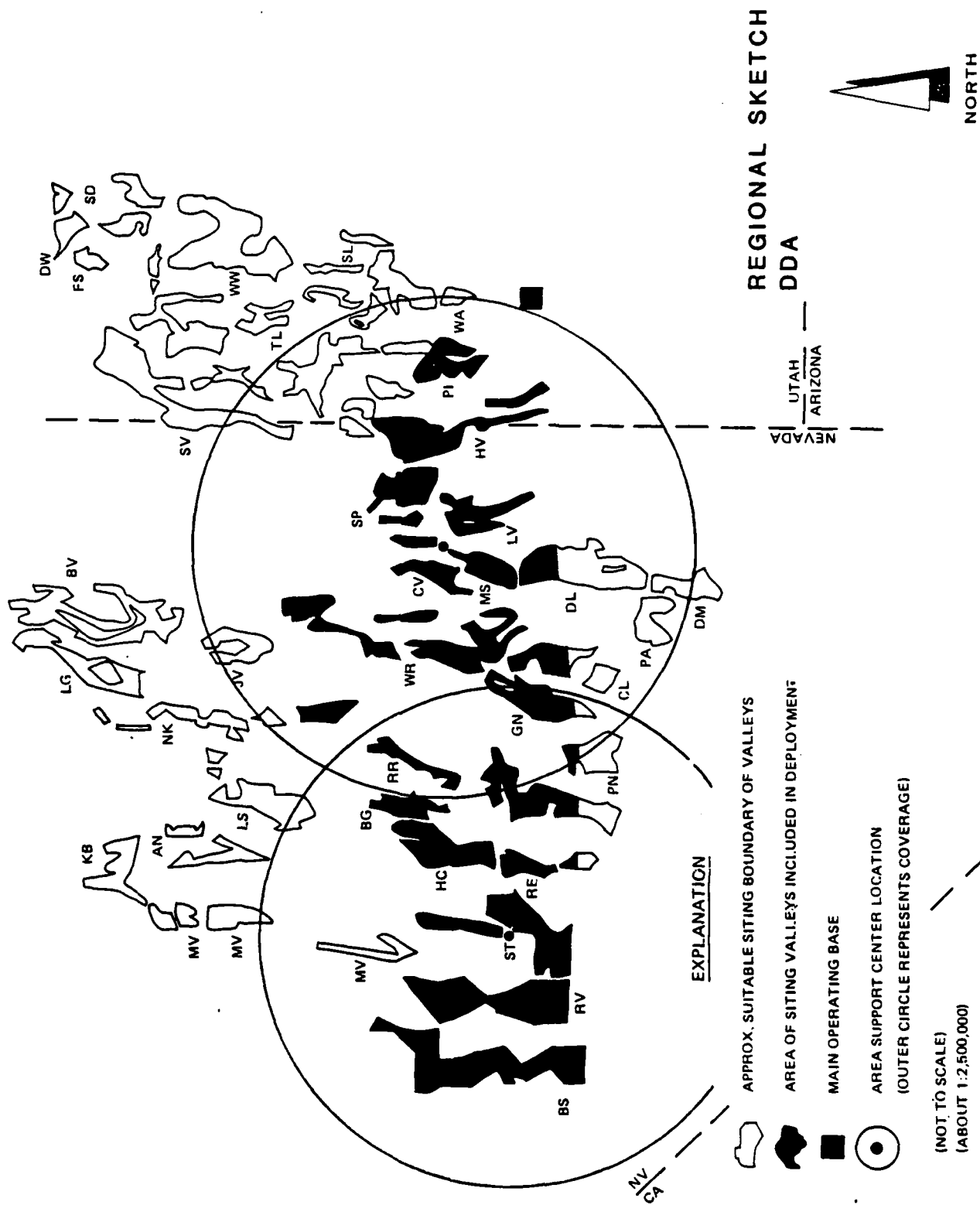
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 252 |
| Fish Springs Flat | FS | | Hot Creek | HC | 148 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 36 |
| Big Smoky | BS | 284 | Railroad | RR | 156 |
| Butte | BV | | Ralston | RV | 384 |
| Cave | CV | 105 | Reveille | RE | 88 |
| Coal | CL | 159 | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 238 |
| Dry Lake | DL | 134 | White River | WR | 190 |
| Garden | GN | 129 | | | |
| | | | TOTAL SHELTERS | | 2650 |
| | | | TOTAL VALLEYS | | 16 |
| | | | TOTAL ASCs | | 2 |



E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

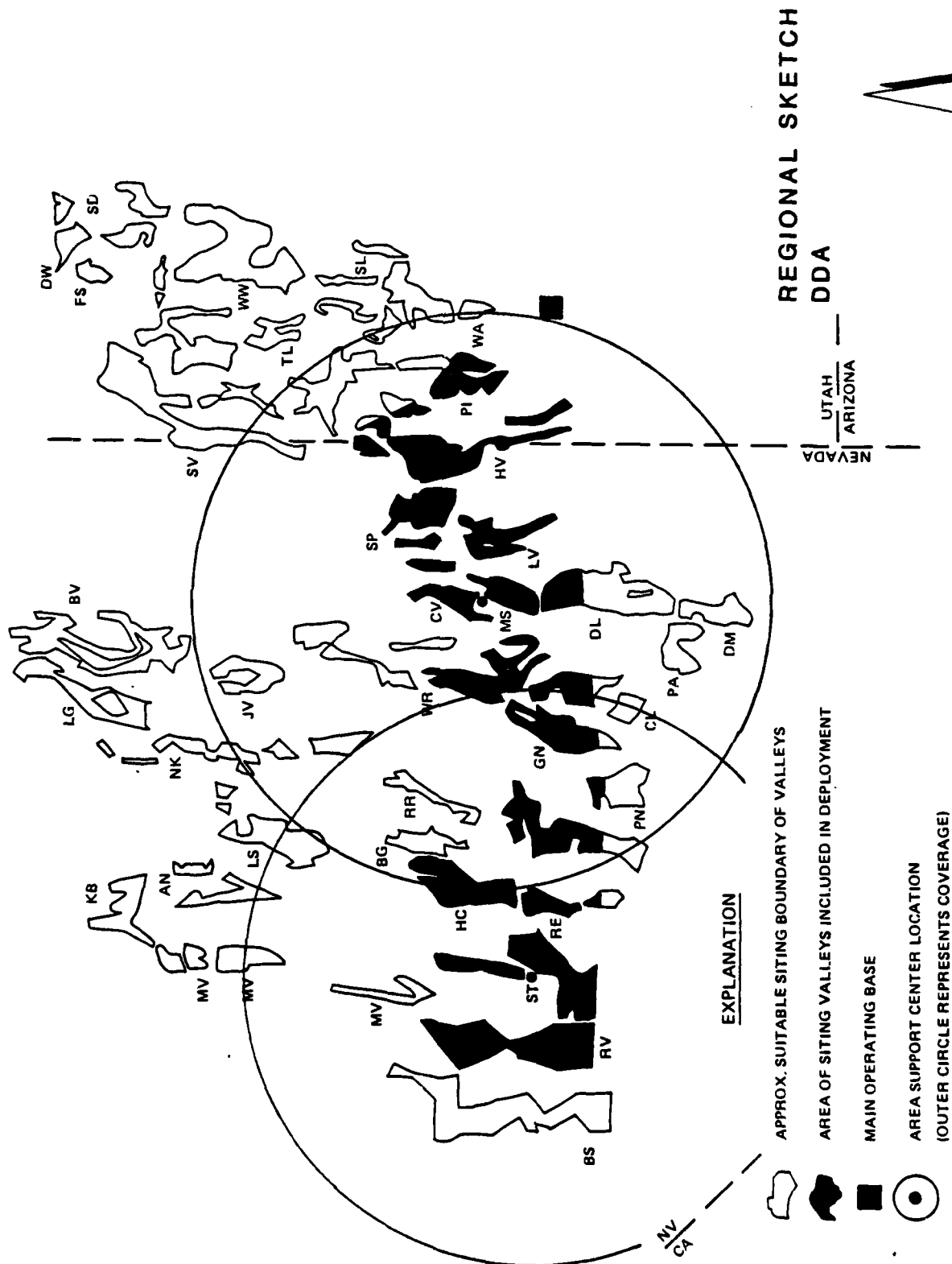
9) Best 2300 shelters - Coyote MOB, Milford ASC, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 161 |
| Fish Springs Flat | FS | | Hot Creek | HC | 138 |
| Pine | PI | 69 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 161 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | 69 | Penoyer | PN | 23 |
| Big Smoky | BS | 230 | Railroad | RR | 276 |
| Butte | RV | | Ralston | RV | 207 |
| Cave | CV | 69 | Reveille | RE | 69 |
| Coal | CL | 69 | Spring | SP | 92 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 184 |
| Dry Lake | DL | 69 | White River | WR | 276 |
| Garden | GN | 92 | | | |
| | | | TOTAL SHELTERS | | 2323 |
| | | | TOTAL VALLEYS | | 18 |
| | | | TOTAL ASCs | | 2 |



- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 10) Best 2300 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

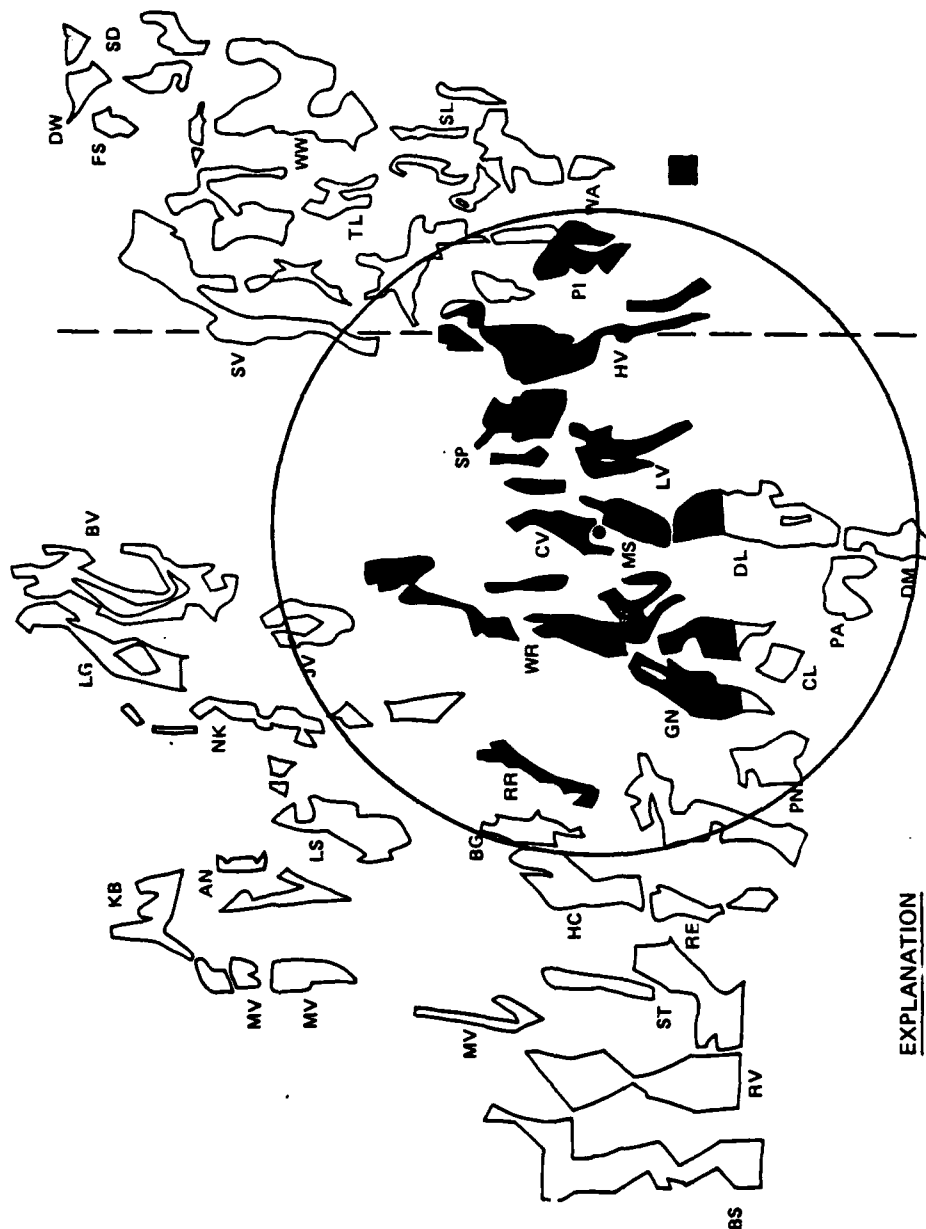
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 300 |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | 166 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | 26 | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 35 |
| Big Smoky | BS | | Railroad | RR | 173 |
| Butte | BV | | Ralston | RV | 312 |
| Cave | CV | 79 | Reveille | RE | 73 |
| Coal | CL | 115 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 331 |
| Dry Lake | DL | 95 | White River | WR | 265 |
| Garden | GN | 110 | | | |
| | | | TOTAL SHELTERS | | 2640 |
| | | | TOTAL VALLEYS | | 17 |
| | | | TOTAL ASCs | | 2 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

10) Best 2300 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 450 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | 200 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 172 | Spring | SP | 182 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 142 | White River | WR | 597 |
| Garden | GN | 165 | | | |
| | | | TOTAL SHELTERS | | 2683 |
| | | | TOTAL VALLEYS | | 11 |
| | | | TOTAL ASCs | | 1 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION*
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

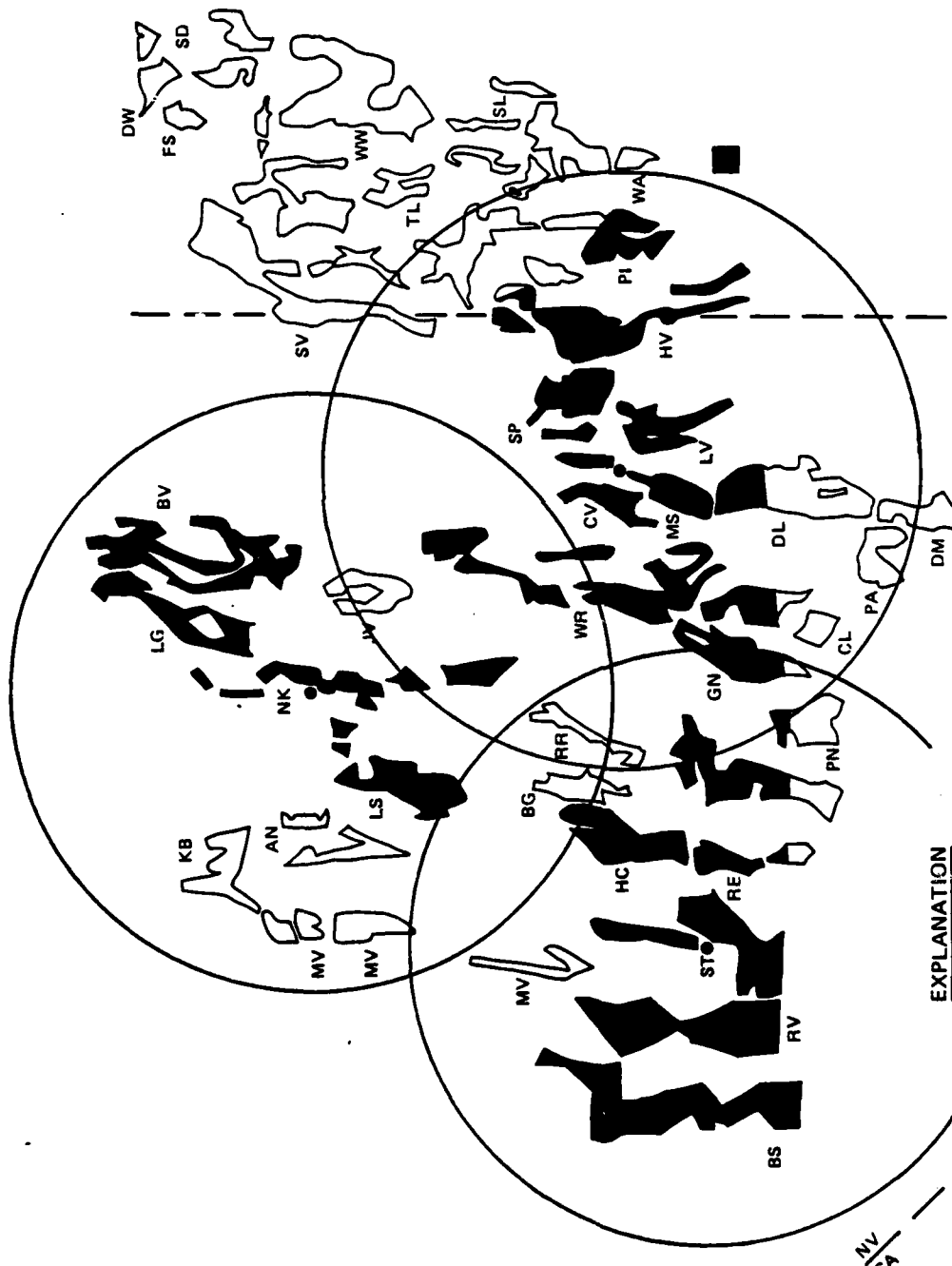
NEVADA
UTAH
ARIZONA

DDA



- C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water
- 10) Best 2300 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 168 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | 161 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | 94 |
| Sevier Lake | SL | | Lake | LV | 137 |
| Snake | SV | | Little Smoky | LS | 80 |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 69 |
| Whirlwind | WW | | Muleshoe | MS | 96 |
| Antelope | AN | | Newark | NK | 24 |
| Big Sand Springs | BG | 189 | Penoyer | PN | 213 |
| Big Smoky | BS | 264 | Railroad | RR | 256 |
| Butte | BV | 70 | Ralston | RV | 59 |
| Cave | CV | 106 | Reveille | RE | 68 |
| Coal | CL | | Spring | SP | 159 |
| Delamar/Pahroc | DM | 89 | Stone Cabin | ST | 191 |
| Dry Lake | DL | 86 | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2678 |
| | | | TOTAL VALLEYS | | 21 |
| | | | TOTAL ASCs | | 3 |



REGIONAL SKETCH

DDA
UTAH
ARIZONA
NEVADA



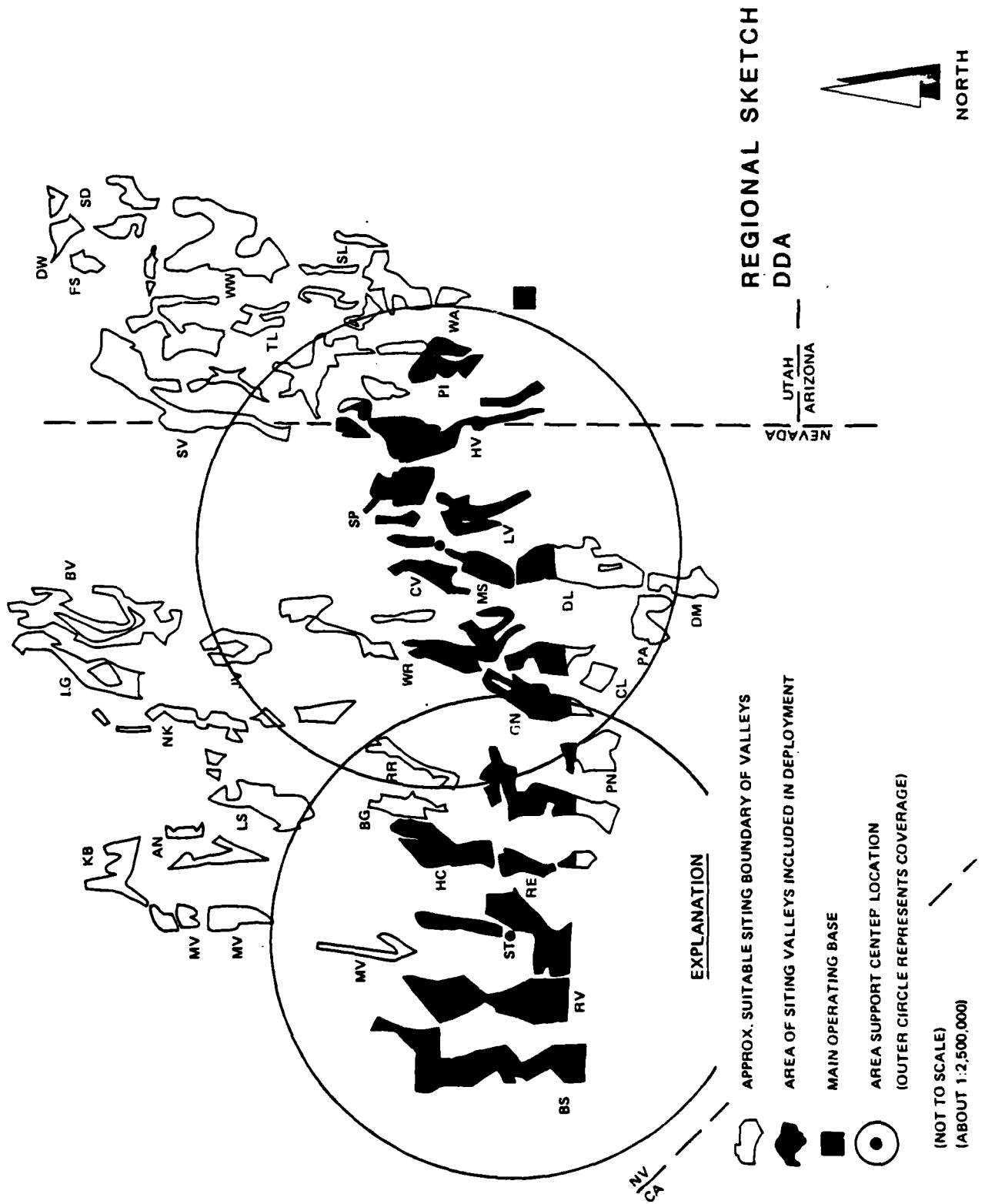
EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

- D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water
- 10) Best 2300 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

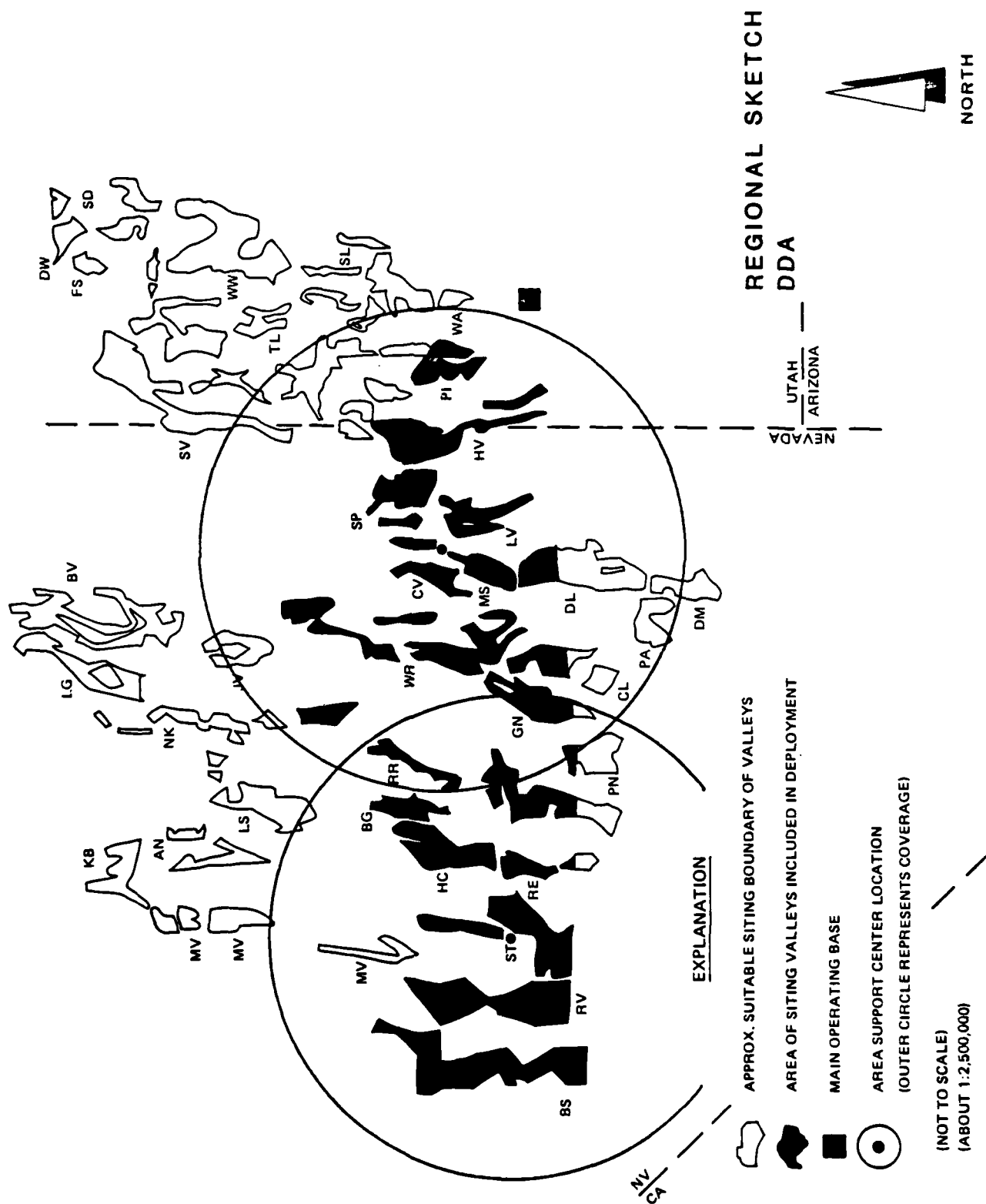
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VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 252 |
| Fish Springs Flat | FS | | Hot Creek | HC | 148 |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 36 |
| Big Smoky | BS | 284 | Railroad | RR | 156 |
| Butte | BV | | Ralston | RV | 384 |
| Cave | CV | 105 | Reveille | RE | 88 |
| Coal | CL | 159 | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 238 |
| Dry Lake | DL | 134 | White River | WR | 190 |
| Garden | GN | 129 | | | |
| | | | TOTAL SHELTERS | | 2892 |
| | | | TOTAL VALLEYS | | 17 |
| | | | TOTAL ASCs | | 2 |



F) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

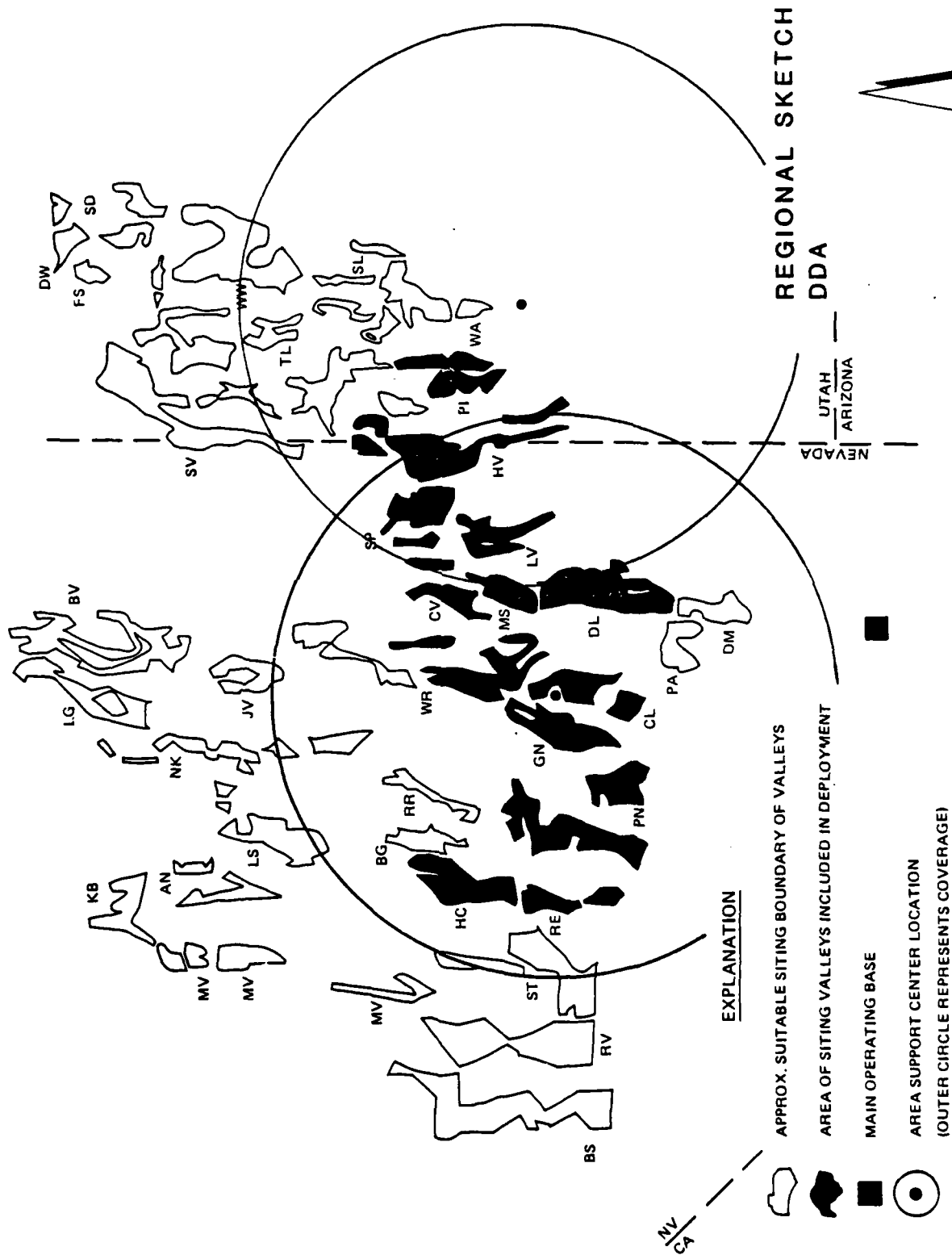
10) Best 2300 shelters - Milford MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 161 |
| Fish Springs Flat | FS | | Hot Creek | HC | 138 |
| Pine | PI | 69 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 161 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | 69 | Penoyer | PN | 23 |
| Big Smoky | BS | 230 | Railroad | RR | 276 |
| Butte | BV | | Ralston | RV | 207 |
| Cave | CV | 69 | Reveille | RE | 69 |
| Coal | CL | 69 | Spring | SP | 92 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 184 |
| Dry Lake | DL | 69 | White River | WR | 276 |
| Garden | GN | 92 | | | |
| | | | TOTAL SHELTERS | | 2323 |
| | | | TOTAL VALLEYS | | 18 |
| | | | TOTAL ASCs | | 2 |



- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 11) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid Delamar/Pahroc valleys

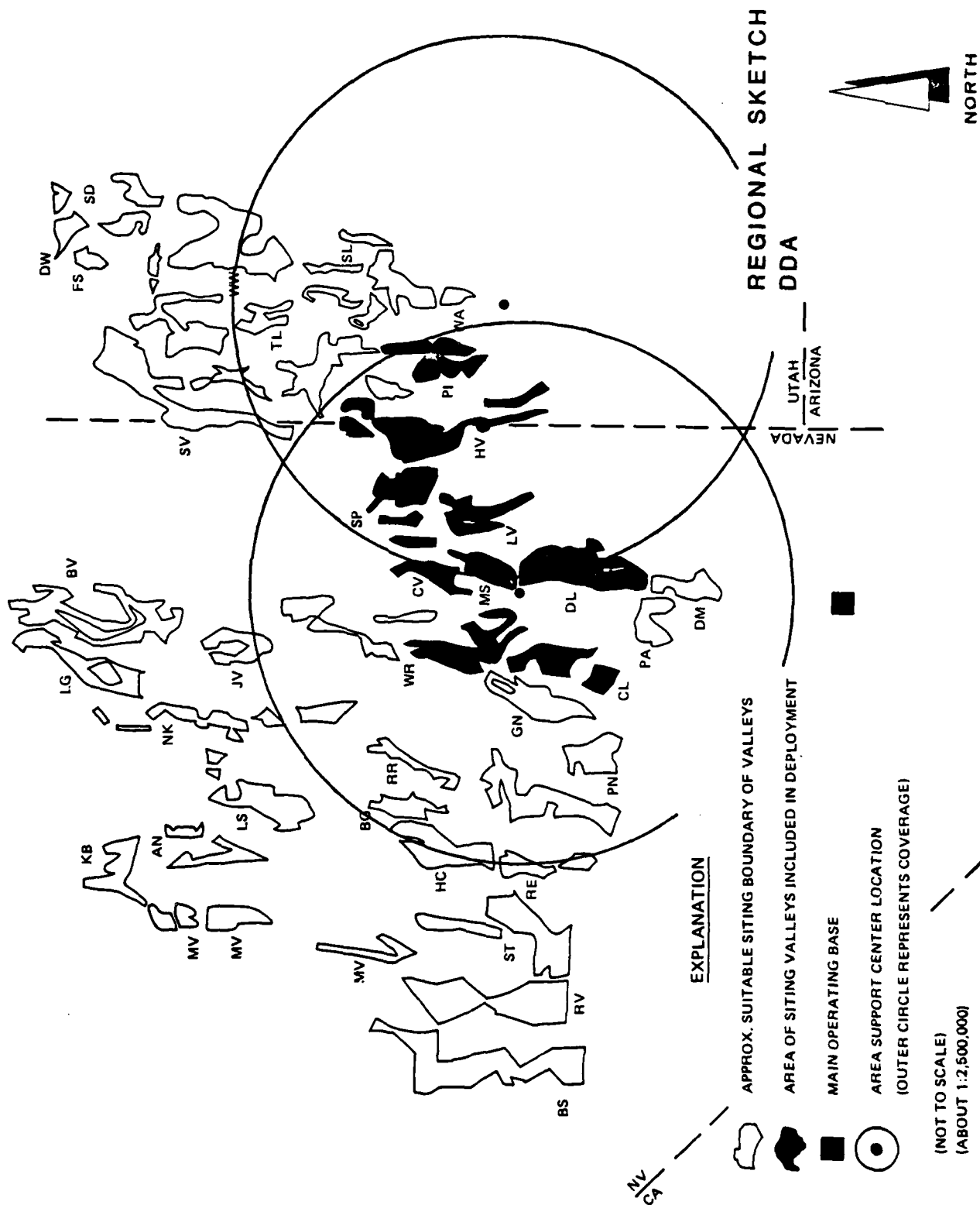
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 333 |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 212 |
| Big Smoky | BS | | Railroad | RR | 273 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | 91 |
| Coal | CL | 219 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | 161 | | | |
| | | | TOTAL SHELTERS | | 2726 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 2 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

11) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid Delamar/Pahroc valleys

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 500 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 374 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 328 | Spring | SP | 182 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2734 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 2 |



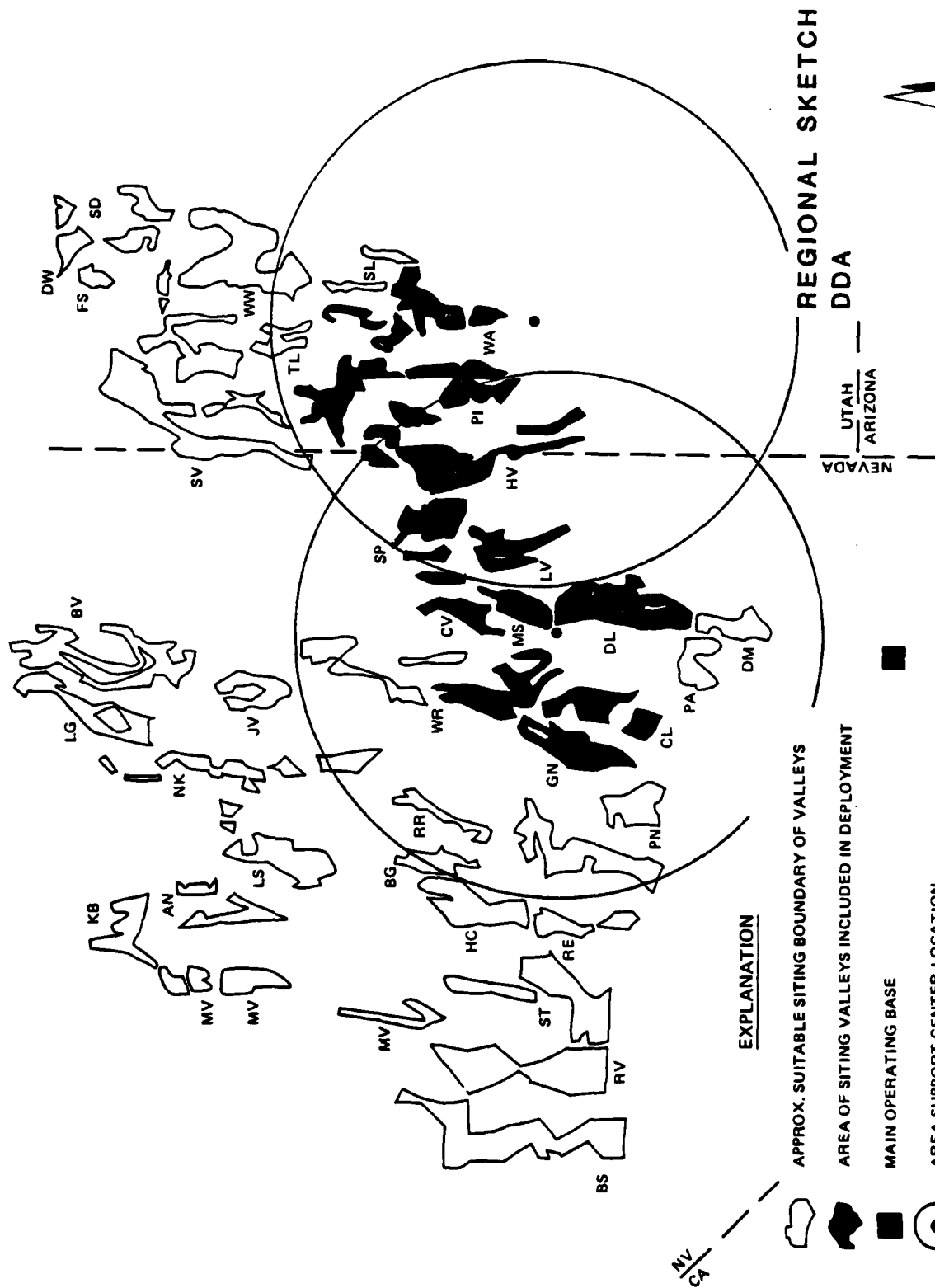
C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

11) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid Delamar/Pahroc valleys

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | 148 | Little Smoky | LS | |
| Tule | TL | 40 | Long | LG | |
| Wah Wah | WA | 175 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 146 |
| Big Smoky | BS | | Railroad | RR | 164 |
| Butte | BV | | Ralston | RV | 256 |
| Cave | CV | 70 | Reveille | RE | 74 |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 159 |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 2711 |
| | | | TOTAL VALLEYS | | 19 |
| | | | TOTAL ASCs | | 3 |

- D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water
- 11) Best 2300 shelters and 15 percent - Coyote MOB, Milford ASC, avoid Delamar/Pahroc valleys

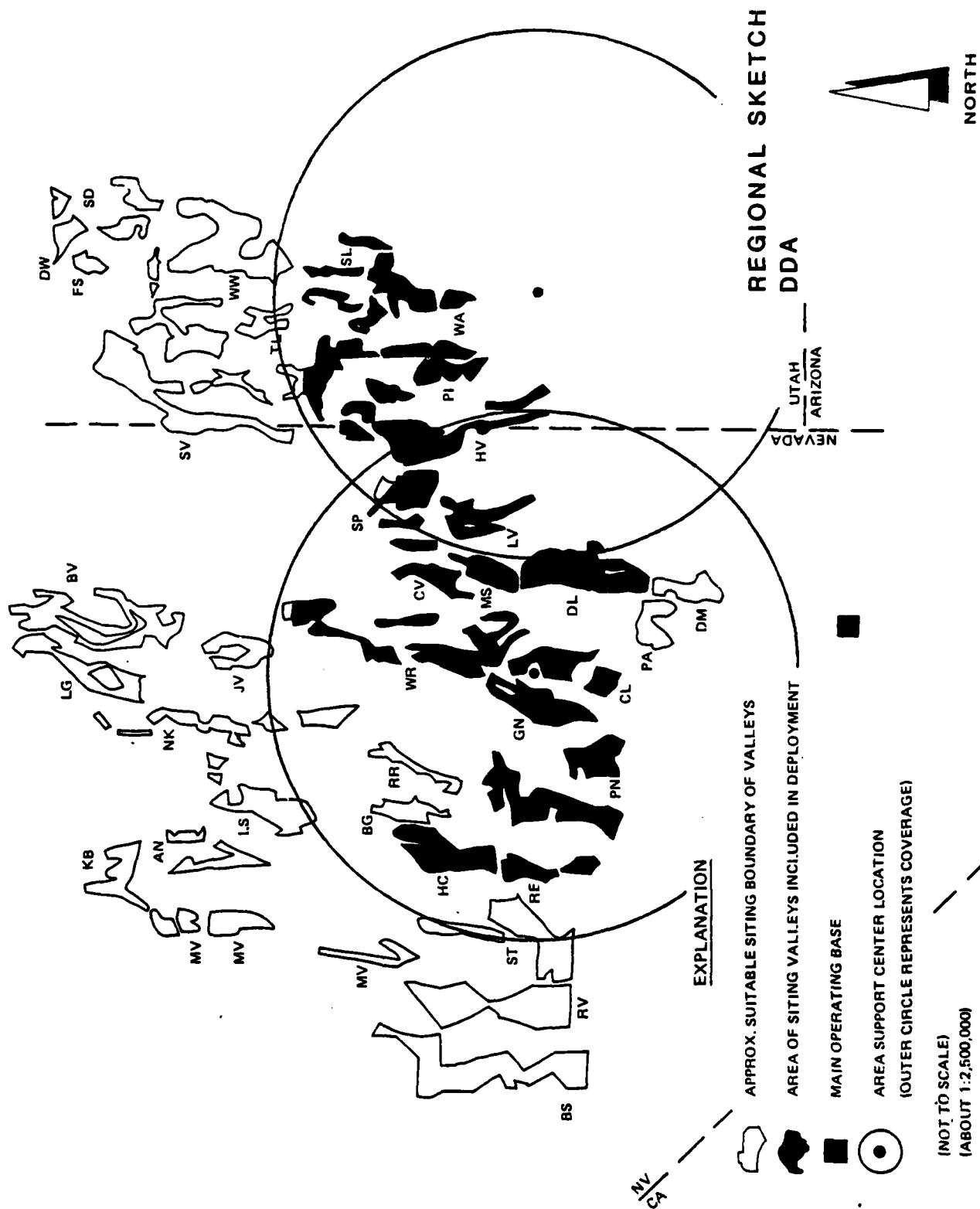
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 279 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 363 | Jakes | JV | |
| Sevier Desert | SD | | Koben | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | 222 | Little Smoky | LS | |
| Tule | TL | 60 | Long | LG | |
| Wah Wah | WA | 263 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | 102 |
| Coal | CL | 302 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 190 |
| Dry Lake | DL | 400 | White River | WR | |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 2720 |
| | | | TOTAL VALLEYS | | 12 |
| | | | TOTAL ASCs | | 2 |



E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

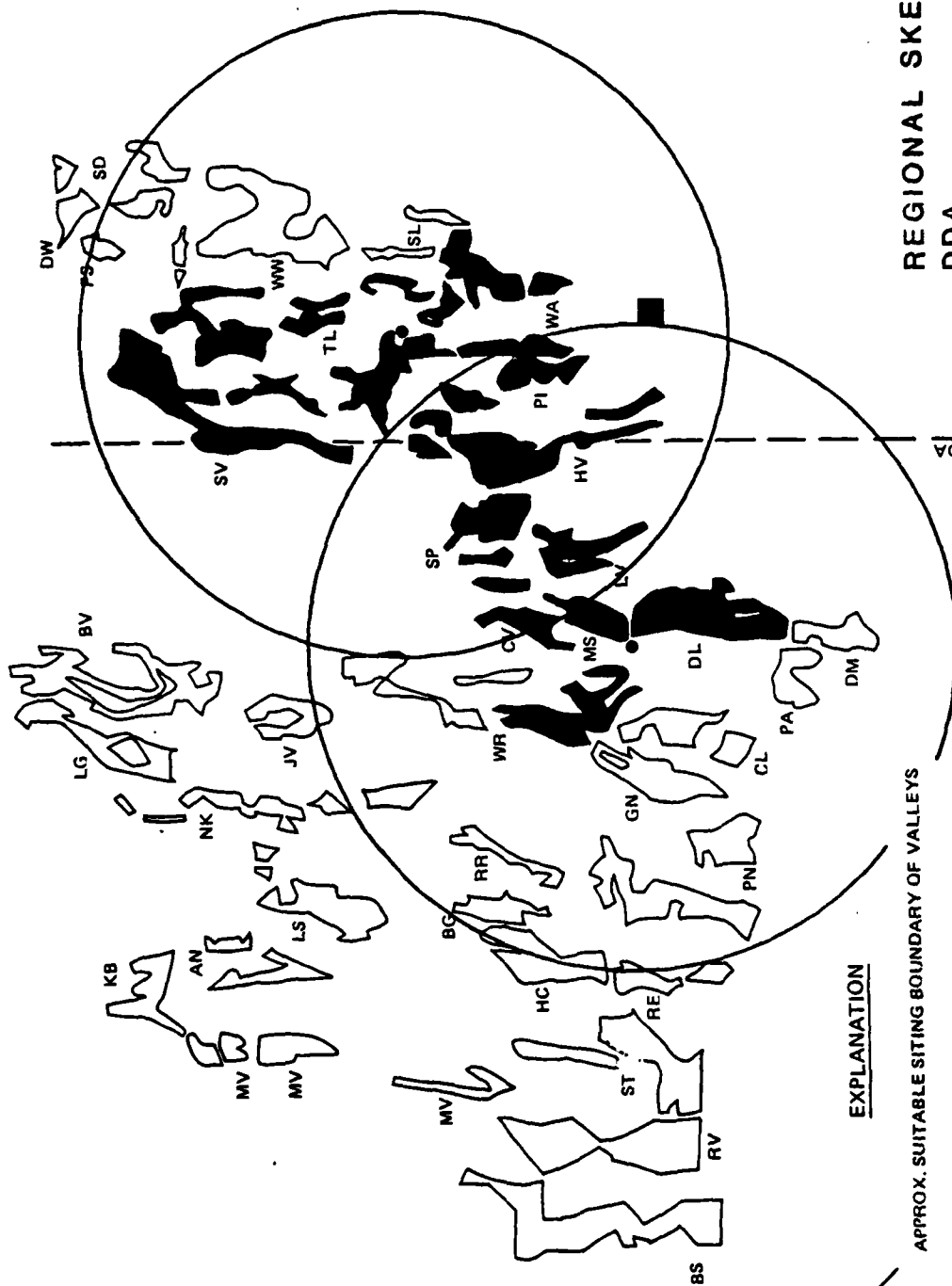
11) Best 2300 shelters - Coyote MOB, Milford ASC, avoid Delamar/Pahroc valleys

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 230 |
| Fish Springs Flat | FS | | Hot Creek | HC | 138 |
| Pine | PI | 115 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 23 | Lake | LV | 161 |
| Snake | SV | 92 | Little Smoky | LS | |
| Tule | TL | 46 | Long | LG | |
| Wah Wah | WA | 115 | Monitor | MV | |
| Whirlwind | WW | 23 | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 115 |
| Big Smoky | BS | | Railroad | RR | 184 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 69 | Reveille | RE | 69 |
| Coal | CL | 138 | Spring | SP | 92 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 230 | White River | WR | 253 |
| Garden | GN | 138 | | | |
| | | | TOTAL SHELTERS | | 2300 |
| | | | TOTAL VALLEYS | | 19 |
| | | | TOTAL ASCs | | 2 |



- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 12) Best 2300 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 333 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | 650 | Little Smoky | LS | |
| Tule | TL | 367 | Long | LG | |
| Wah Wah | WA | 213 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | 121 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 265 |
| Dry Lake | DL | 284 | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2833 |
| | | | TOTAL VALLEYS | | 11 |
| | | | TOTAL ASCs | | 2 |



MV
CA

EXPLANATION



- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

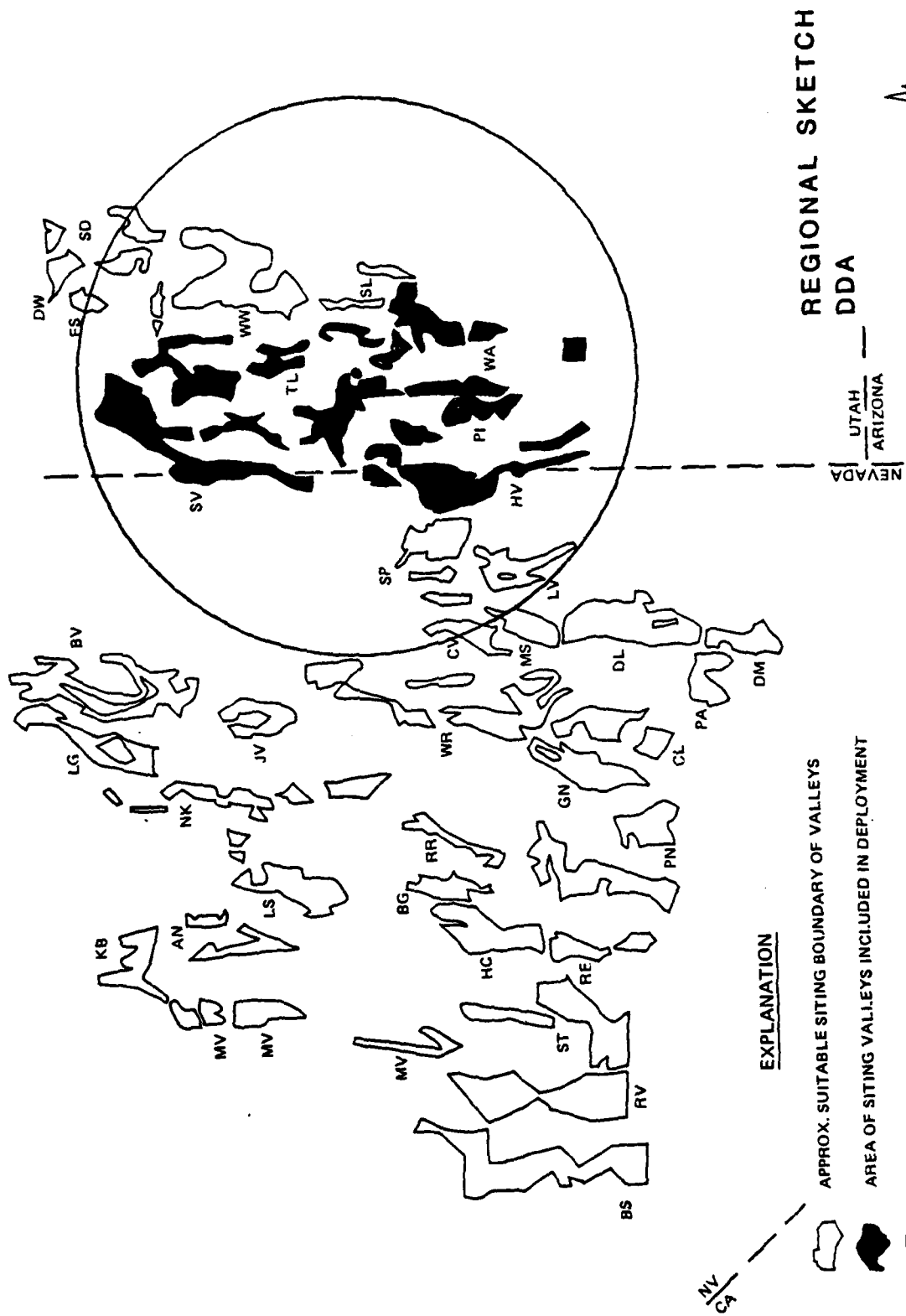
REGIONAL SKETCH

NEVADA ——— DDA
UTAH ———
ARIZONA



- B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
- 12) Best 2300 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

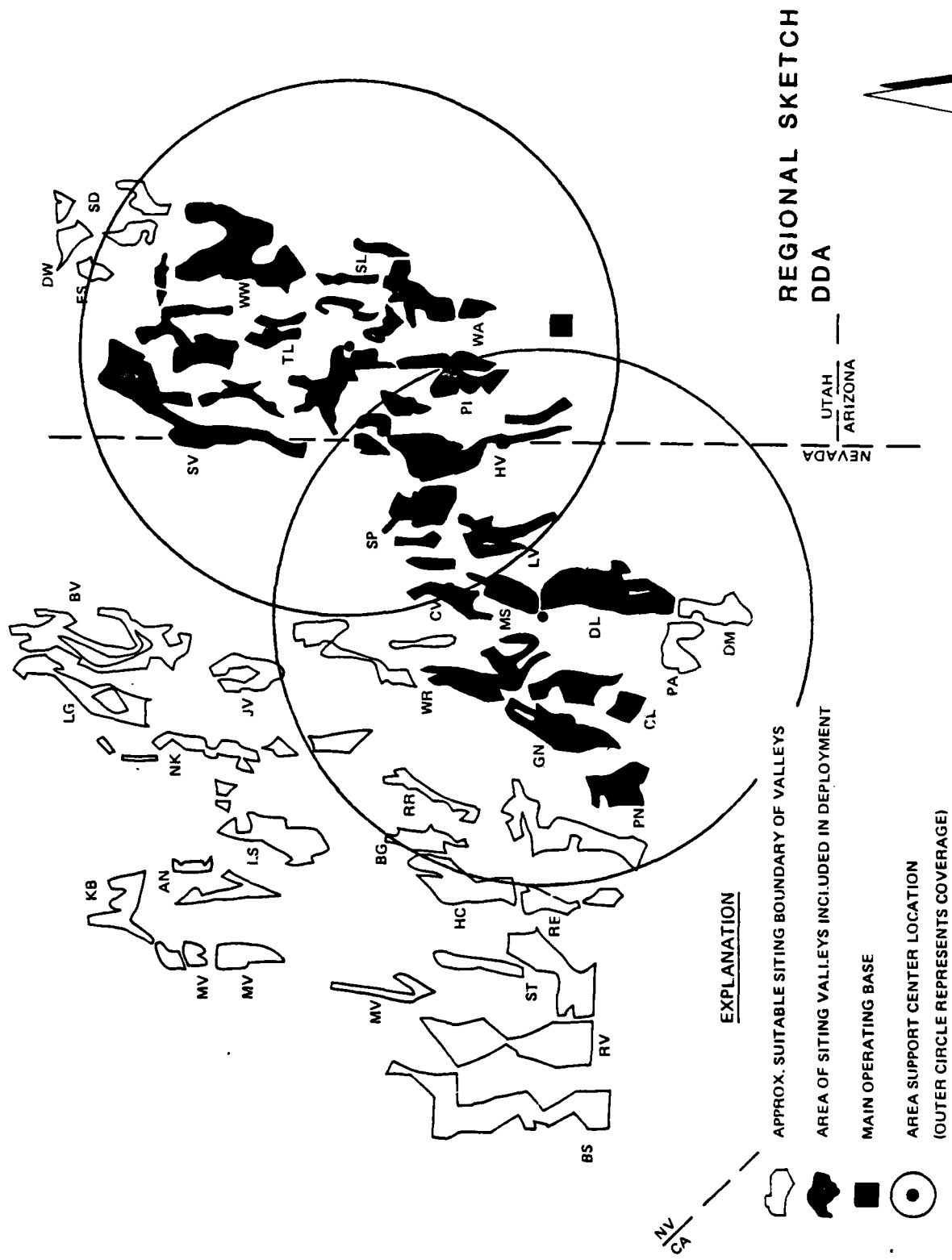
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 500 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 374 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | 975 | Little Smoky | LS | |
| Tule | TL | 550 | Long | LG | |
| Wah Wah | WA | 320 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2719 |
| | | | TOTAL VALLEYS | | 5 |
| | | | TOTAL ASCs | | 1 |



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

12) Best 2300 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

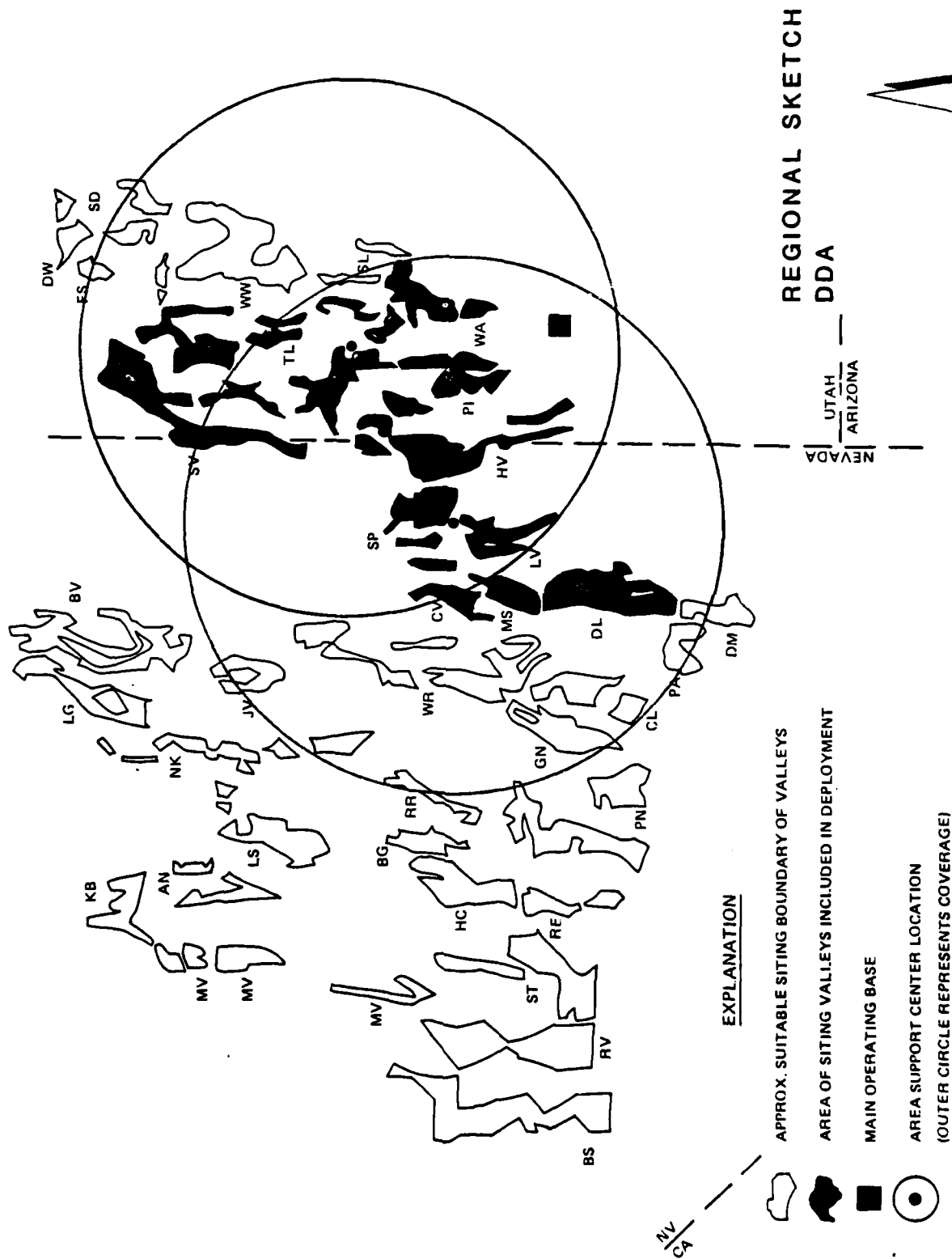
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Duquay | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | 23 | Hot Creek | HC | |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 57 | Lake | LV | 94 |
| Snake | SV | 390 | Little Smoky | LS | |
| Tule | TL | 198 | Long | LG | |
| Wah Wah | WA | 175 | Monitor | MV | |
| Whirlwind | WW | 215 | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 146 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 2654 |
| | | | TOTAL VALLEYS | | 17 |
| | | | TOTAL ASCs | | 2 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

12) Best 2300 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

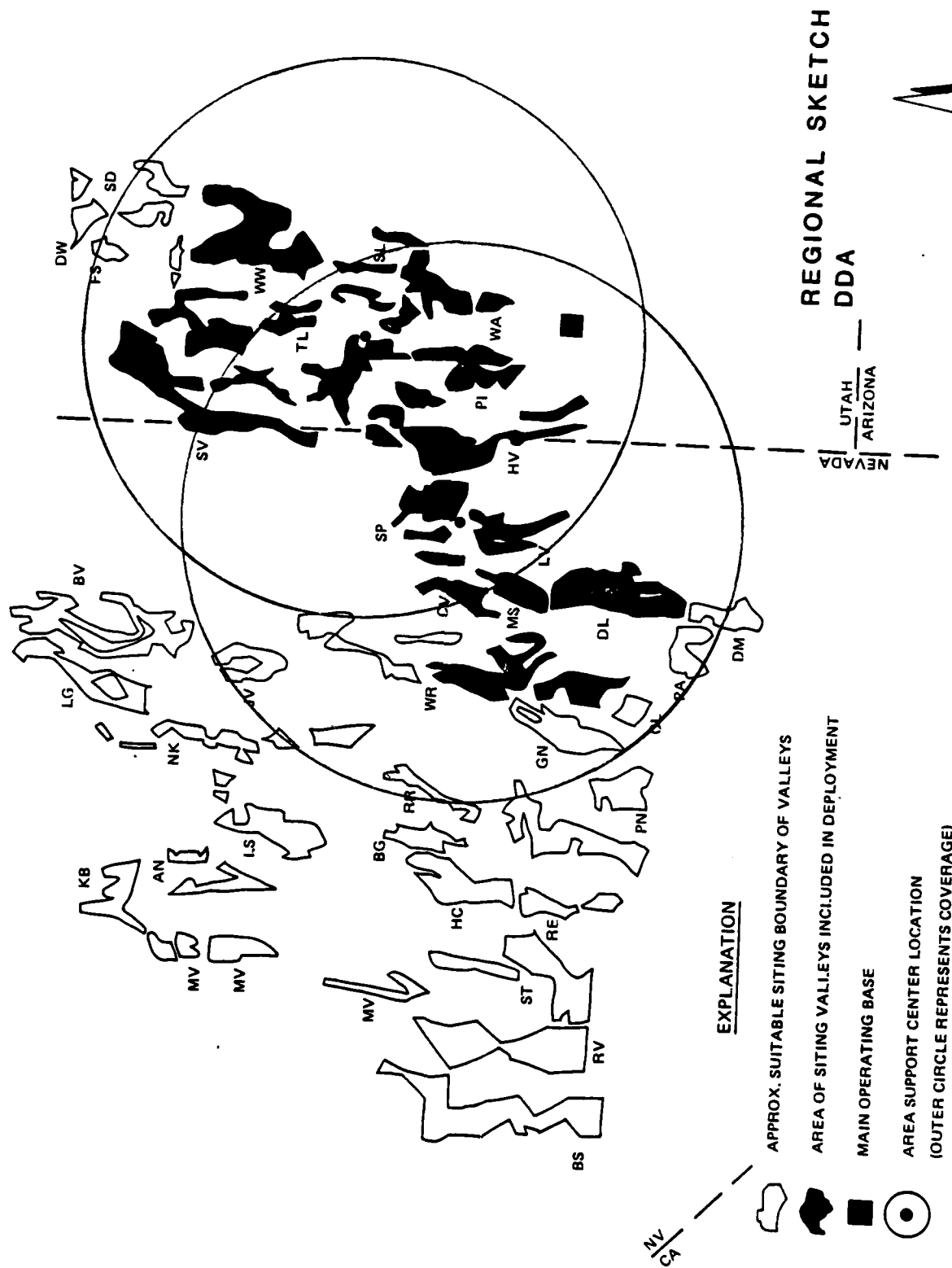
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 279 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 363 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | 585 | Little Smoky | LS | |
| Tule | TL | 297 | Long | LG | |
| Wah Wah | WA | 263 | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | |
| Coal | CL | | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2639 |
| | | | TOTAL VALLEYS | | 10 |
| | | | TOTAL ASCs | | 2 |



E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

12) Best 2300 shelters - Milford MOB, avoid Delamar/Pahroc valleys

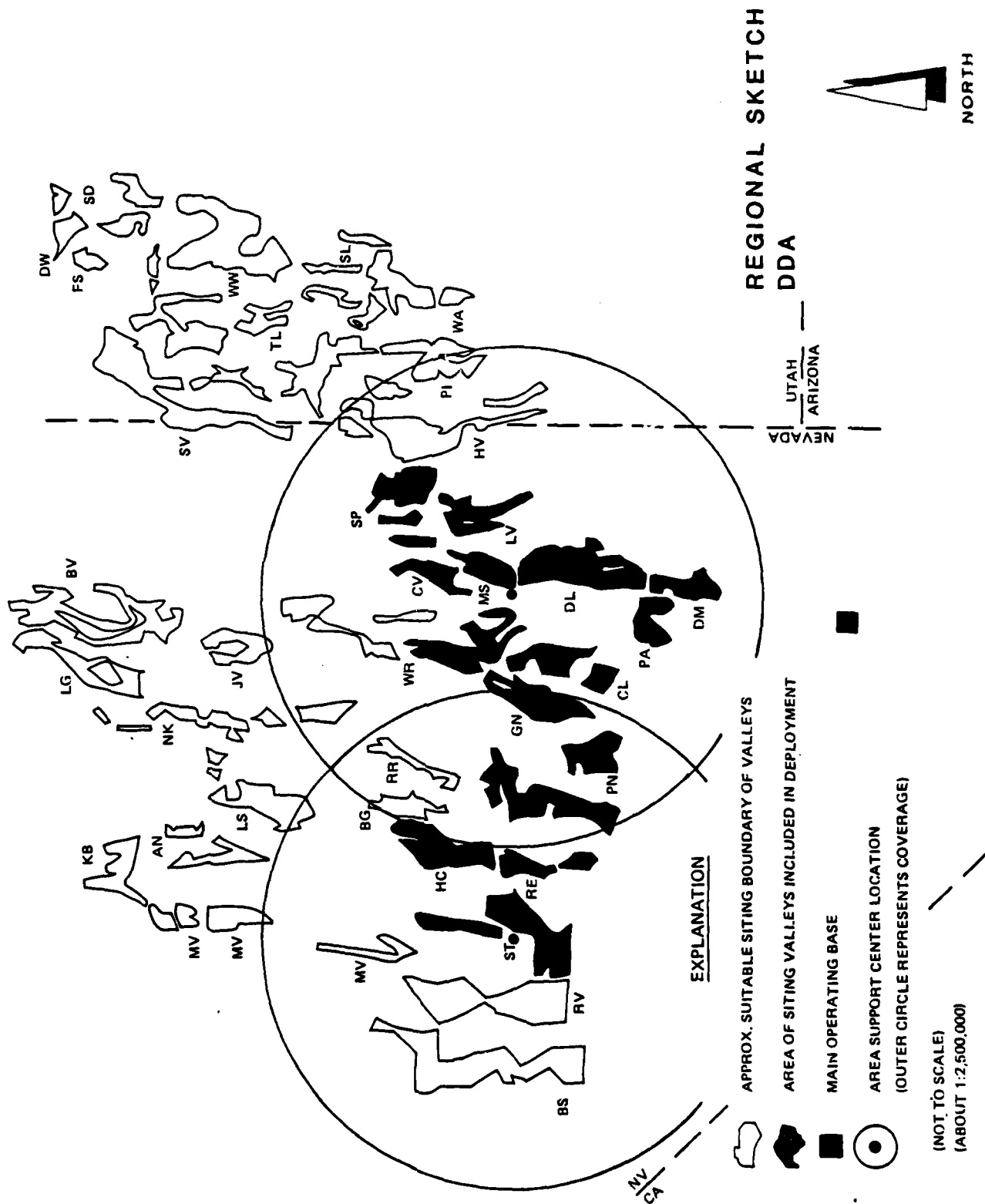
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 230 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 115 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 23 | Lake | LV | 161 |
| Snake | SV | 437 | Little Smoky | LS | |
| Tule | TL | 230 | Long | LG | |
| Wah Wah | WA | 115 | Monitor | MV | |
| Whirlwind | WW | 276 | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 69 | Reveille | RE | |
| Coal | CL | 92 | Spring | SP | 92 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 230 | White River | WR | 161 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 2300 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 2 |



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

13-7) Best 2300 shelters and 15 percent - Coyote MOB, Nevada only

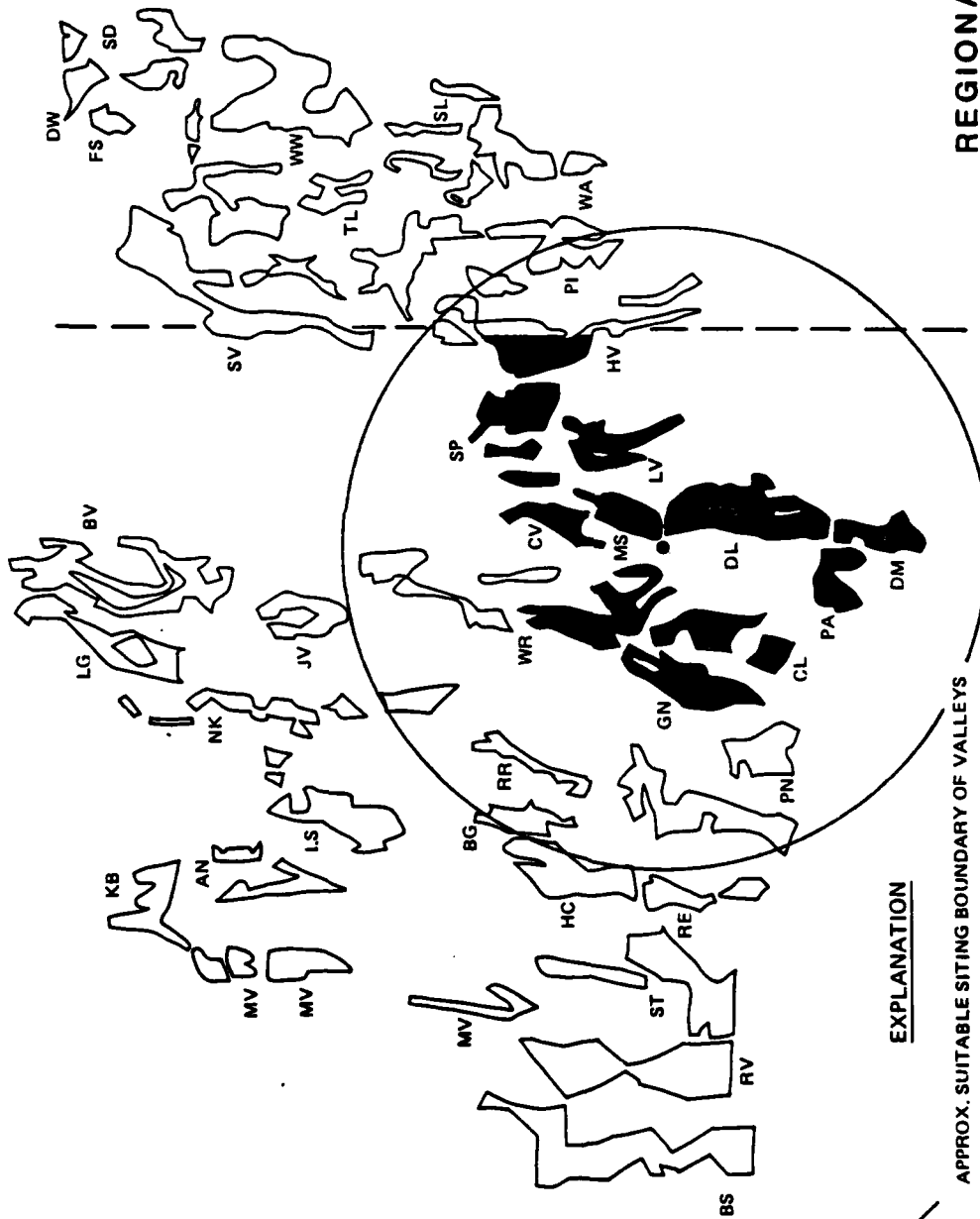
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 212 |
| Big Smoky | BS | | Railroad | RR | 273 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | 91 |
| Coal | CL | 219 | Spring | SP | 121 |
| Delamar/Pahroc | DM | 170 | Stone Cabin | ST | 331 |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | 161 | | | |
| | | | TOTAL SHELTERS | | 2645 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 2 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

13-7) Best 2300 shelters and 15 percent - Coyote MOB, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 312 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Pencyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 328 | Spring | SP | 182 |
| Delamar/Pahroc | DM | 255 | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | 242 | | | |
| | | | TOTAL SHELTERS | | 2669 |
| | | | TOTAL VALLEYS | | 10 |
| | | | TOTAL ASCs | | 1 |



NV
CA

EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

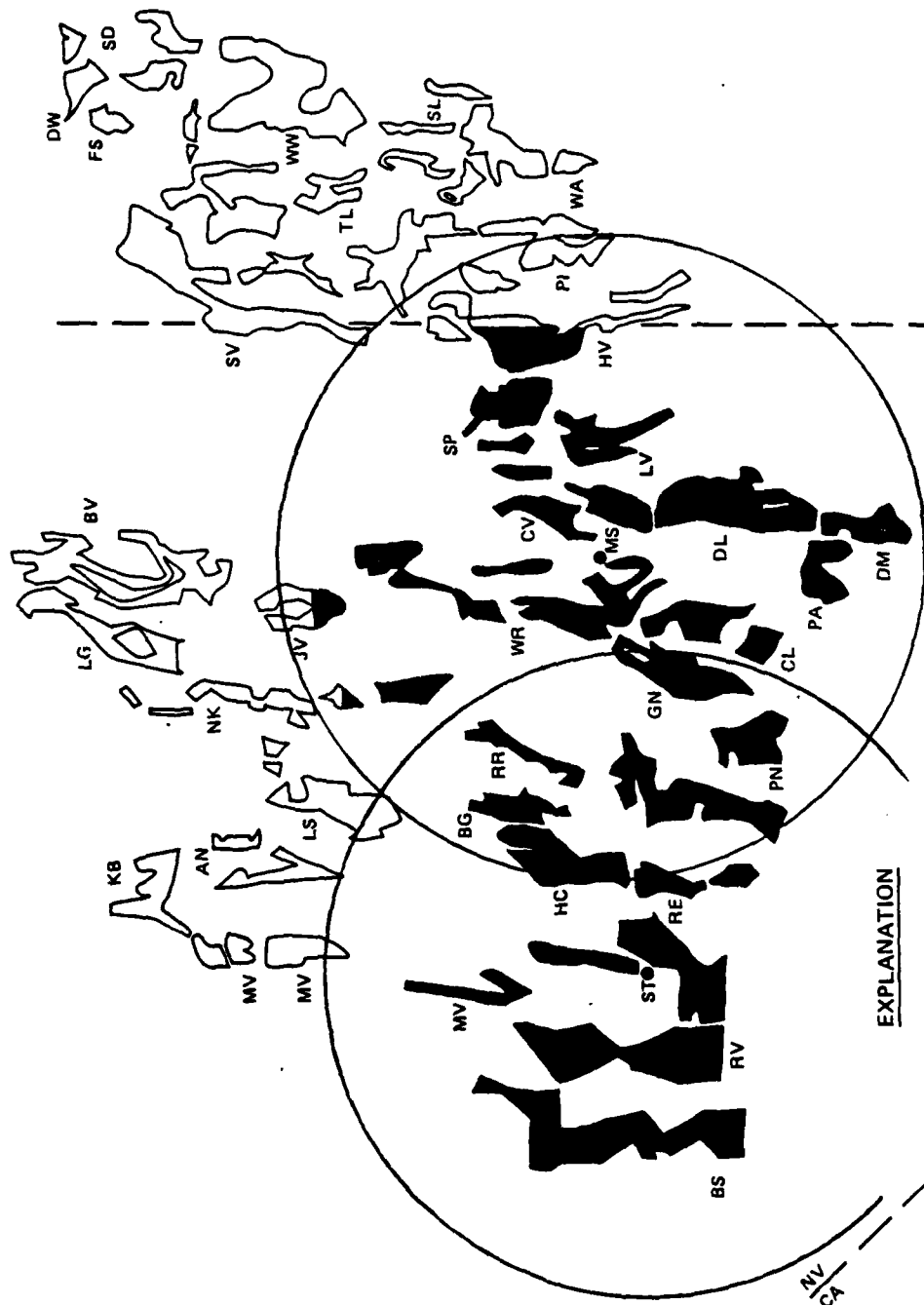
NEVADA
UTAH
ARIZONA
DDA



NORTH

- C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water
- 13-7) Best 2300 shelters and 15 percent - Coyote MOB, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 116 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | 33 |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 28 |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | 57 | Penoyer | PN | 146 |
| Big Smoky | BS | 189 | Railroad | RR | 263 |
| Butte | BV | | Ralston | RV | 256 |
| Cave | CV | 70 | Reveille | RE | 74 |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | 138 | Stone Cabin | ST | 159 |
| Dry Lake | DL | 267 | White River | WR | 191 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 2644 |
| | | | TOTAL VALLEYS | | 20 |
| | | | TOTAL ASCS | | 2 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

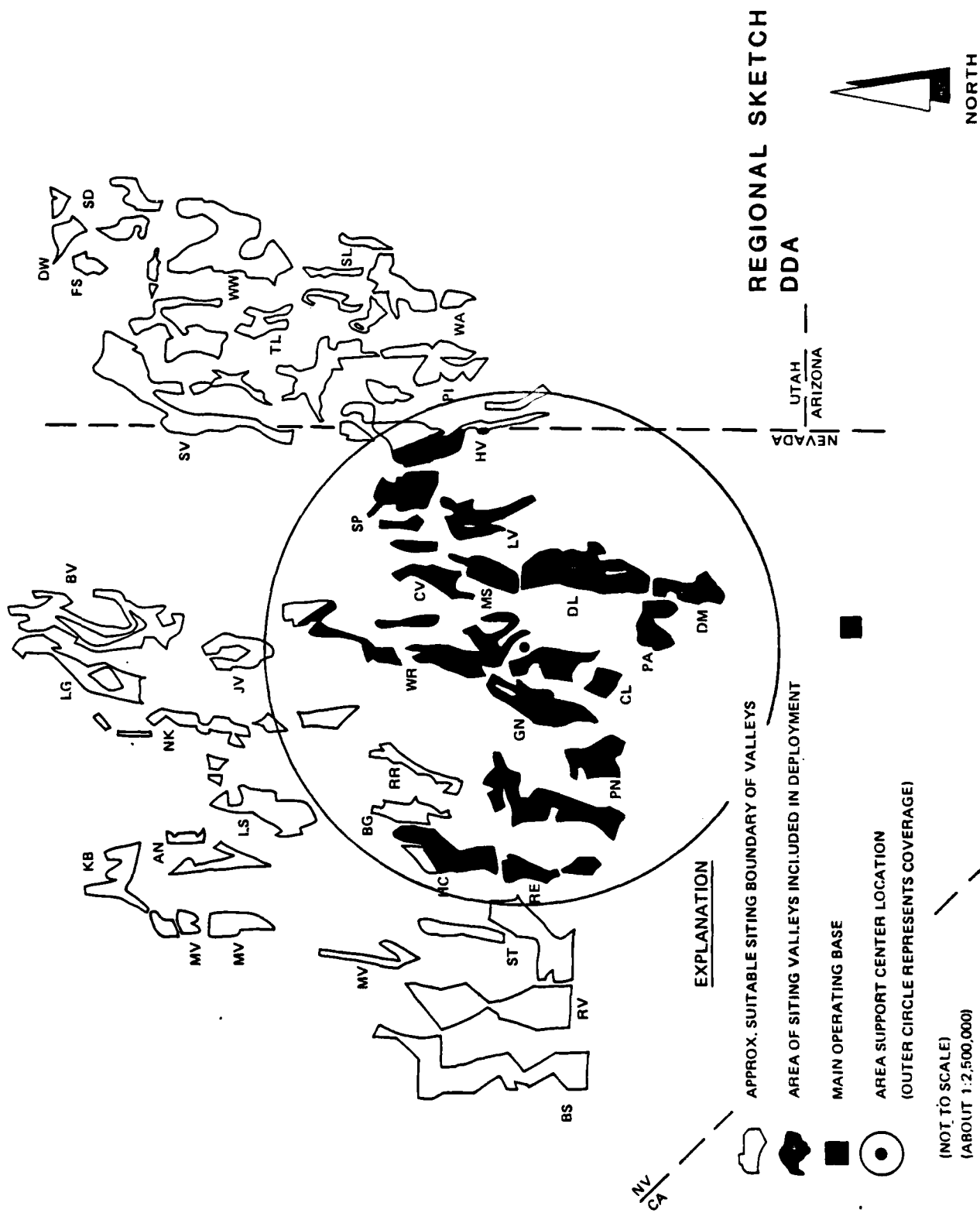
NEVADA
UTAH
ARIZONA
CALIFORNIA



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

13-7) Best 2300 shelters and 15 percent - Coyote MOB, Nevada only

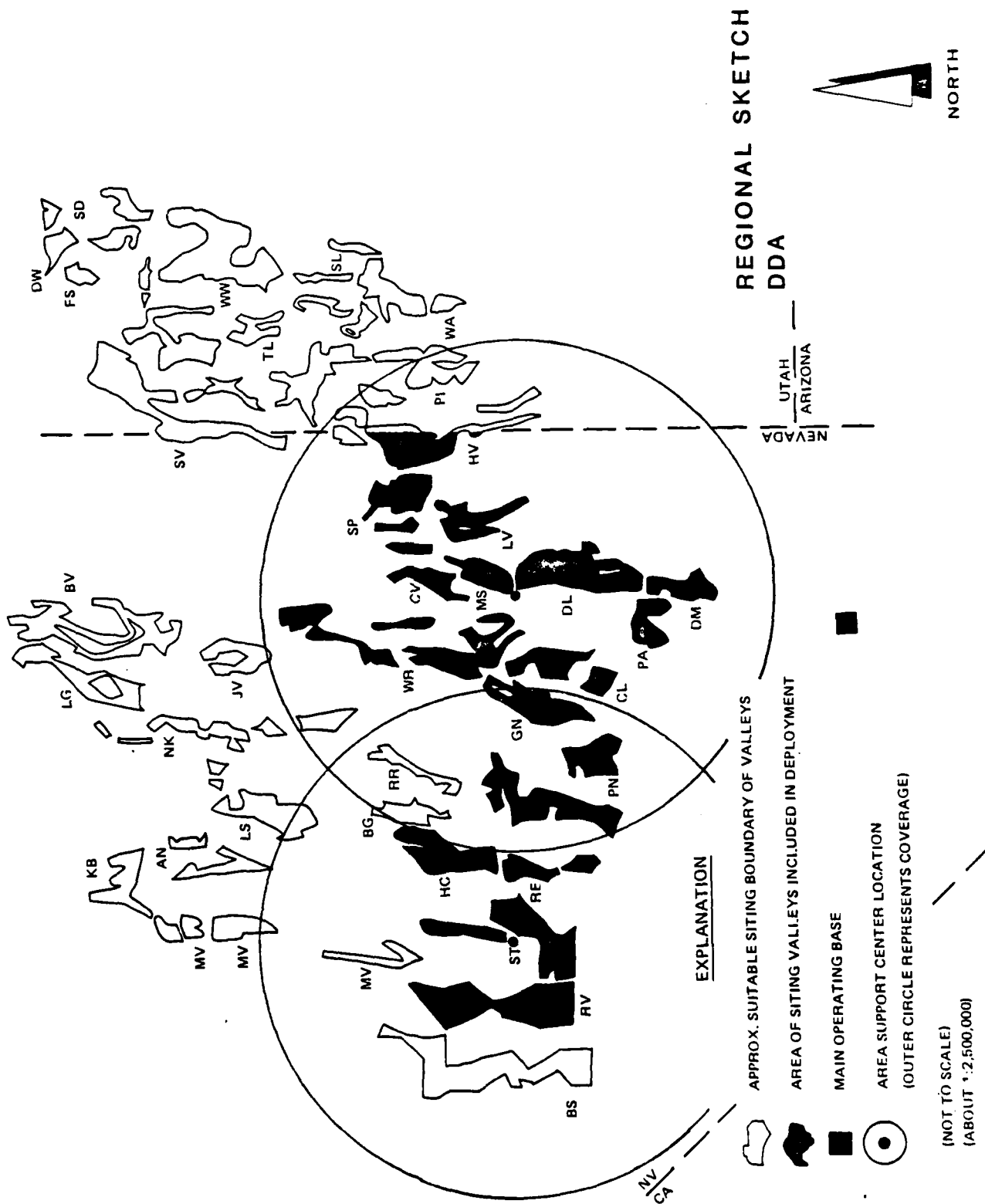
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VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 139 |
| Fish Springs Flat | FS | | Hot Creek | HC | 123 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 219 |
| Big Smoky | BS | | Railroad | RR | 246 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | 111 |
| Coal | CL | 302 | Spring | SP | 102 |
| Delamar/Pahroc | DM | 207 | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | 271 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 2659 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 1 |



E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

13-7) Best 2300 shelters - Coyote MOB, Nevada only

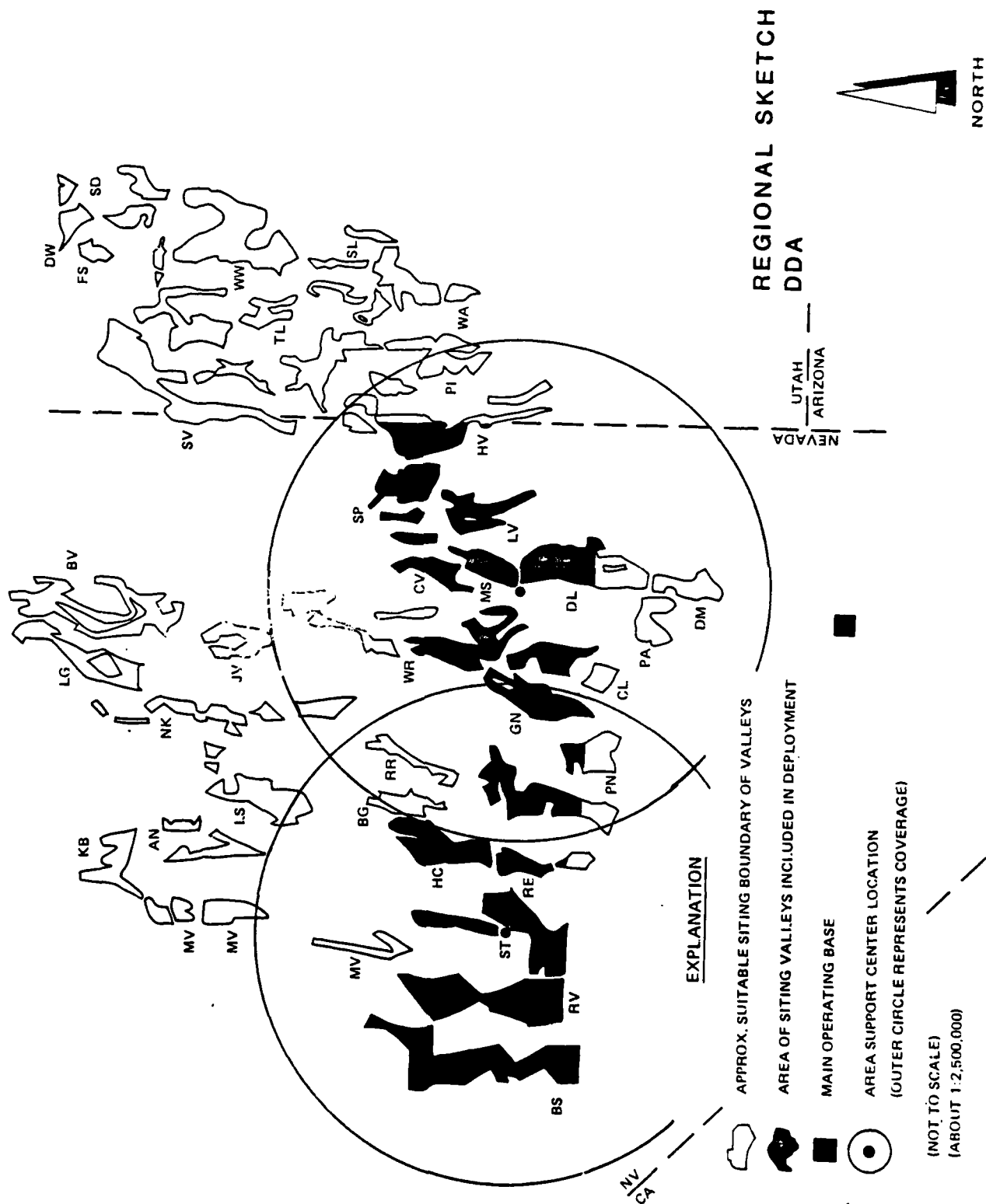
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 138 |
| Fish Springs Flat | FS | | Hot Creek | HC | 138 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 161 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 115 |
| Big Smoky | BS | | Railroad | RR | 184 |
| Butte | BV | | Ralston | RV | 207 |
| Cave | CV | 69 | Reveille | RE | 69 |
| Coal | CL | 138 | Spring | SP | 92 |
| Delamar/Pahroc | DM | 138 | Stone Cabin | ST | 184 |
| Dry Lake | DL | 230 | White River | WR | 276 |
| Garden | GN | 138 | | | |
| | | | TOTAL SHELTERS | | 2346 |
| | | | TOTAL VALLEYS | | 16 |
| | | | TOTAL ASCs | | 2 |



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

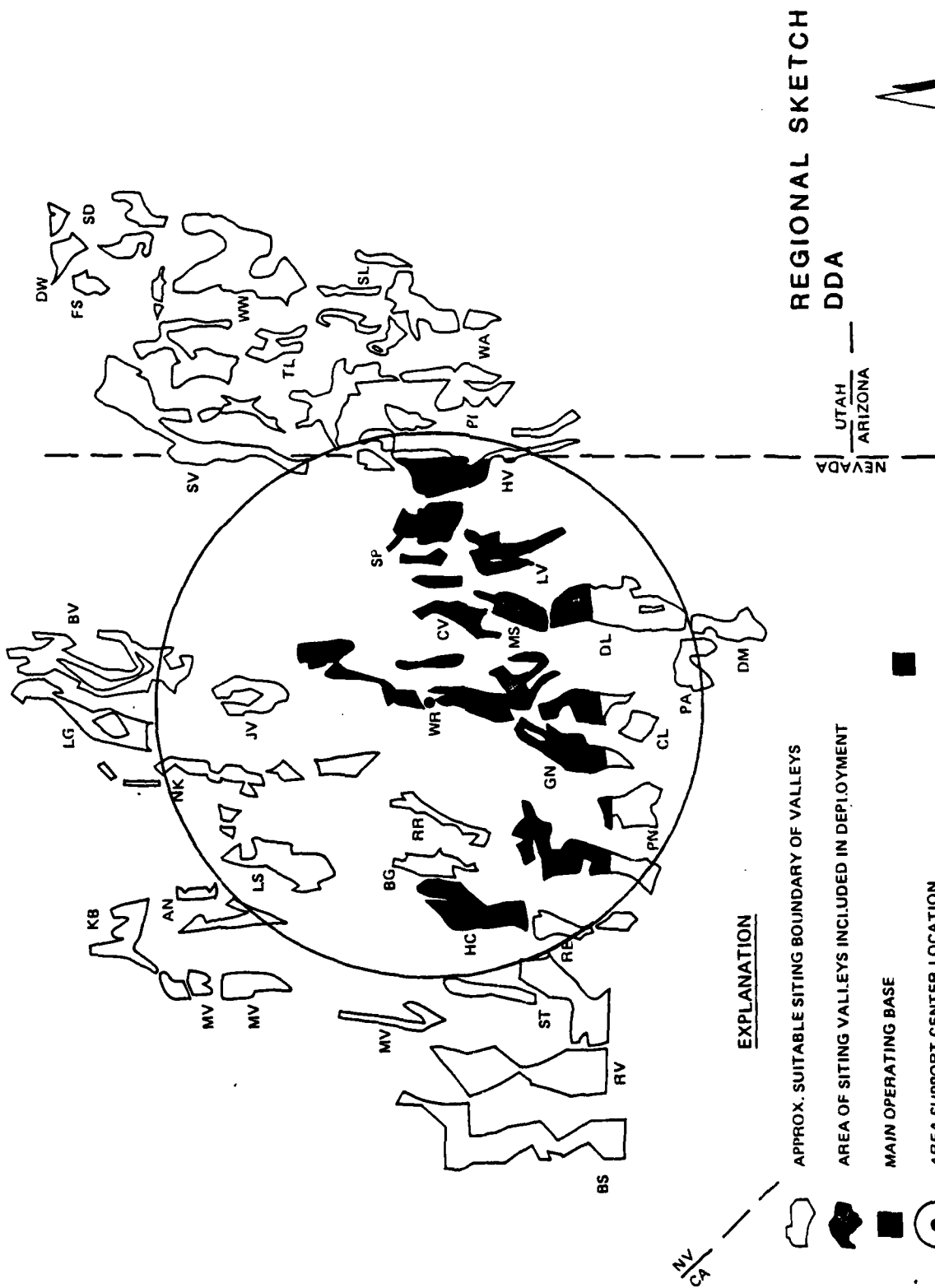
13-9) Best 2300 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 208 |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 35 |
| Big Smoky | BS | 430 | Railroad | RR | 173 |
| Butte | BV | | Ralston | RV | 312 |
| Cave | CV | 72 | Reveille | RE | 73 |
| Coal | CL | 115 | Spring | SP | 121 |
| Delamar/pahroc | DM | | Stone Cabin | ST | 331 |
| Dry Lake | DL | 95 | White River | WR | 265 |
| Garden | GN | 110 | | | |
| | | | TOTAL SHELTERS | | 2786 |
| | | | TOTAL VALLEYS | | 16 |
| | | | TOTAL ASCs | | 2 |



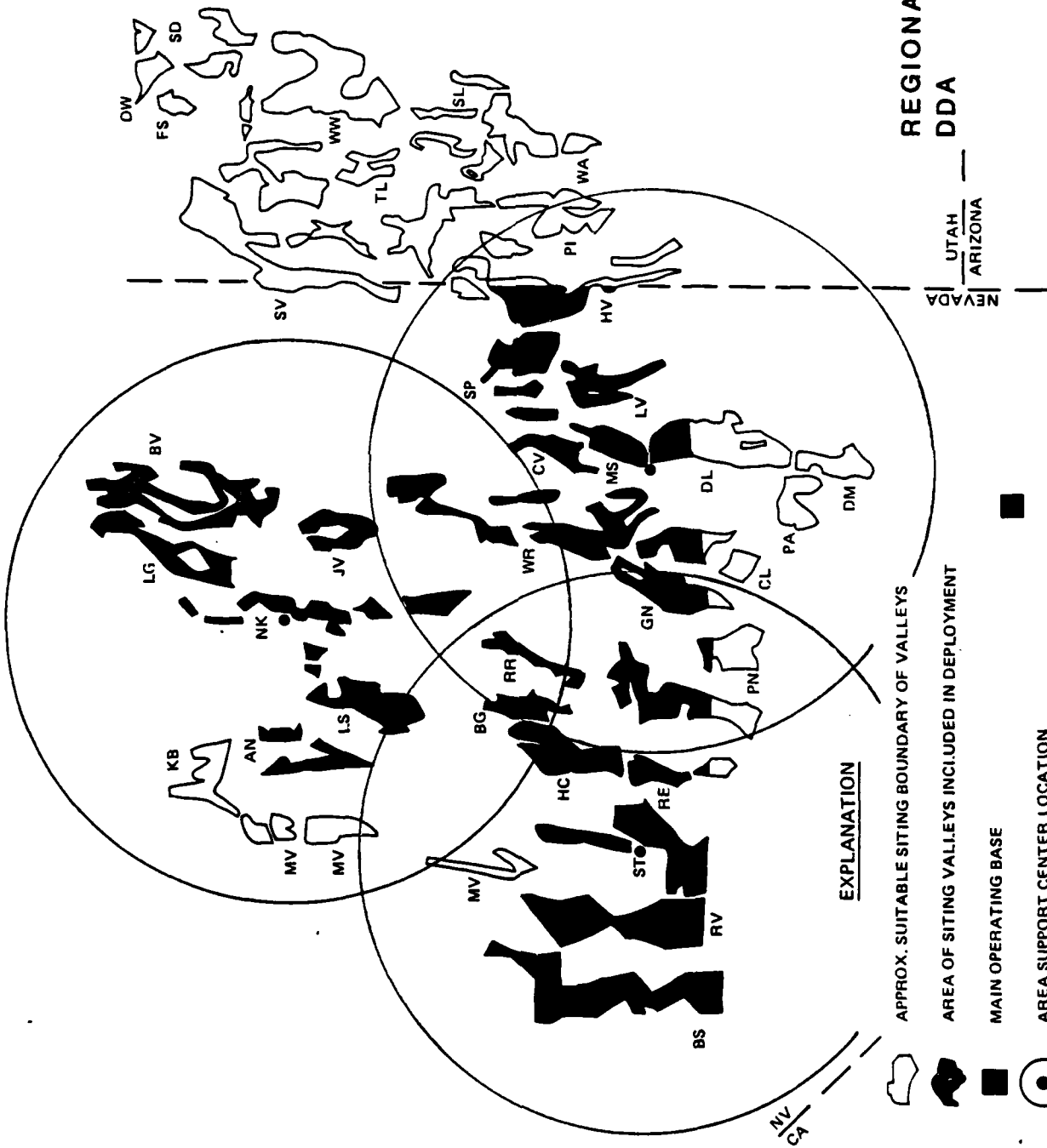
- B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
- 13-9) Best 2300 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas,
Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 312 |
| Fish Springs Flat | FS | | Hot Creek | HC | 225 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 52 |
| Big Smoky | BS | | Railroad | RR | 260 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 172 | Spring | SP | 182 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 142 | White River | WR | 597 |
| Garden | GN | 165 | | | |
| | | | TOTAL SHELTERS | | 2633 |
| | | | TOTAL VALLEYS | | 12 |
| | | | TOTAL ASCS | | 1 |



- C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water
- 13-9) Best 2300 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas,
Nevada only

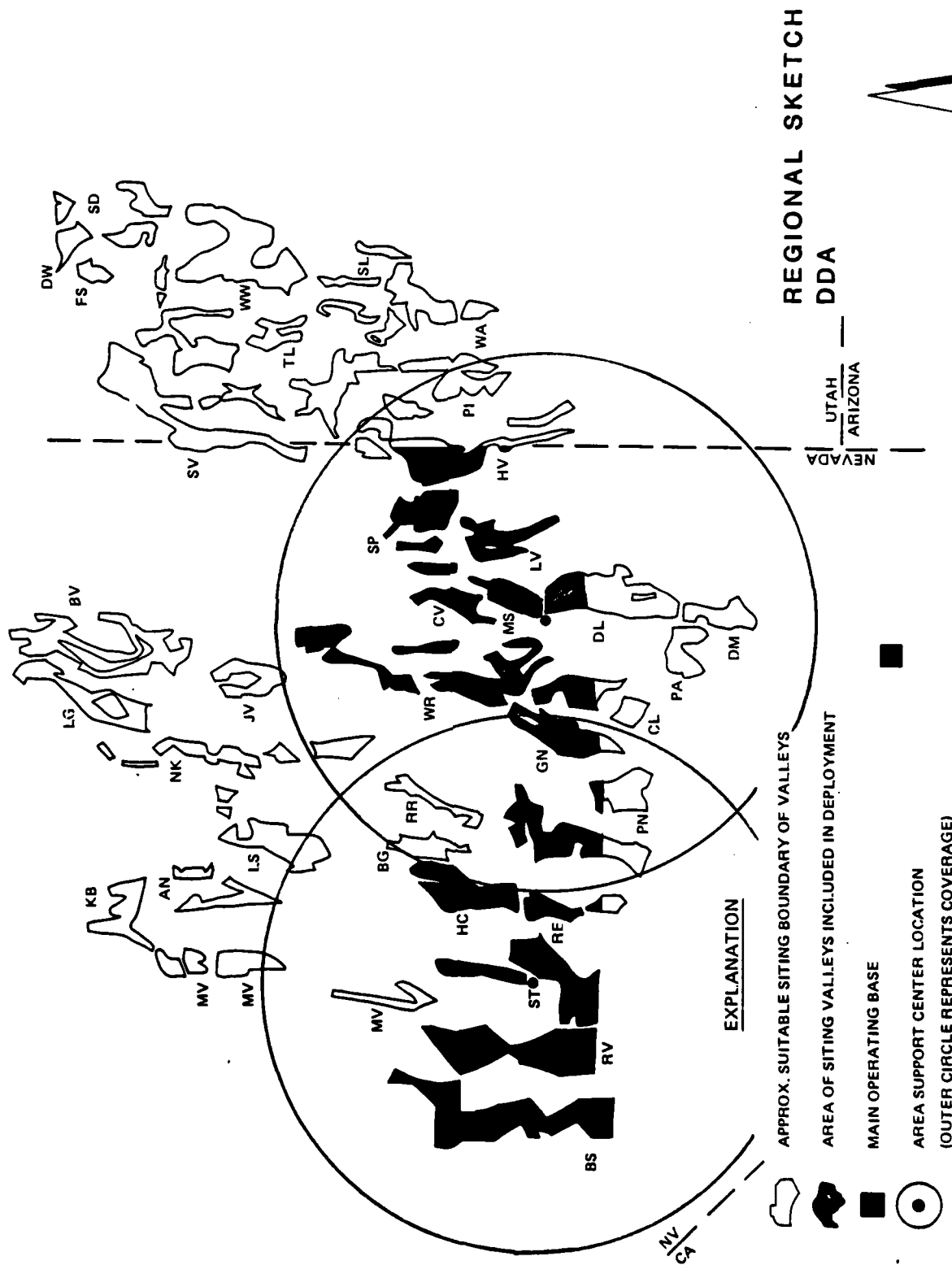
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 116 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | 83 |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | 137 |
| Tule | TL | | Long | LG | 80 |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | 51 | Newark | NK | 96 |
| Big Sand Springs | BG | 57 | Penoyer | PN | 24 |
| Big Smoky | BS | 189 | Railroad | RR | 213 |
| Butte | BV | 264 | Ralston | RV | 256 |
| Cave | CV | 70 | Reveille | RE | 59 |
| Coal | CL | 106 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 159 |
| Dry Lake | DL | 89 | White River | WR | 191 |
| Garden | GN | 86 | | | |
| | | | TOTAL SHELTERS | | 2656 |
| | | | TOTAL VALLEYS | | 23 |
| | | | TOTAL ASCs | | 3 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

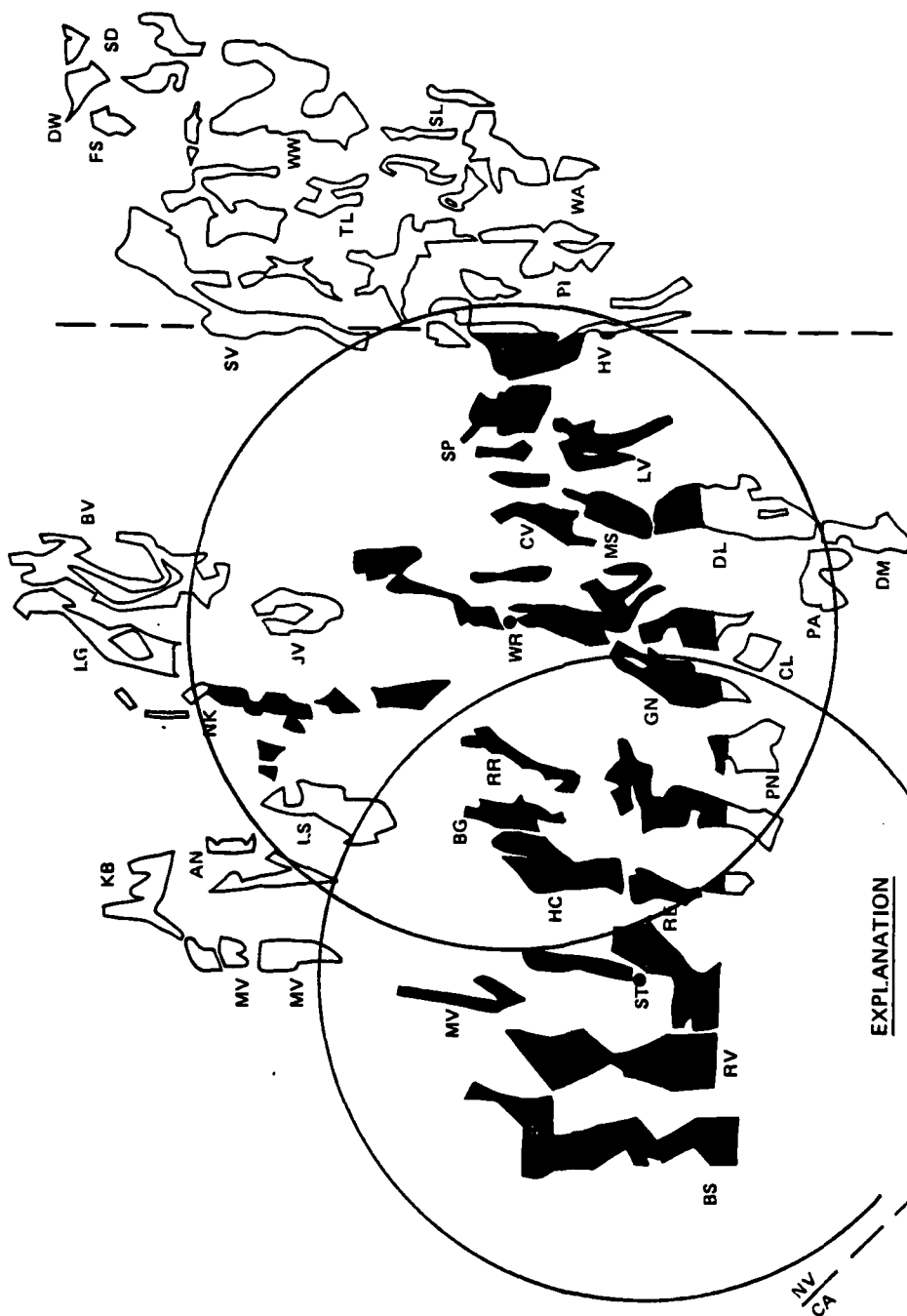
13-9) Best 2300 shelters and 15 percentpercent - Coyote MOB, avoid all MOAs and Restricted Areas, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 174 |
| Fish Springs Flat | FS | | Hot Creek | HC | 148 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 36 |
| Big Smoky | RS | 284 | Railroad | RR | 156 |
| Butte | BV | | Ralston | RV | 384 |
| Cave | CV | 105 | Reveille | RE | 88 |
| Coal | CL | 159 | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 238 |
| Dry Lake | DL | 134 | White River | WR | 286 |
| Garden | GN | 129 | | | |
| | | | TOTAL SHELTERS | | 2668 |
| | | | TOTAL VALLEYS | | 16 |
| | | | TOTAL ASCs | | 2 |



E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers
 13-9) Best 2300 shelters - Coyote MOB, avoid all MOAs and Restricted Areas, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 138 |
| Fish Springs Flat | FS | | Hot Creek | HC | 138 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 161 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 46 |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | 92 |
| Big Sand Springs | BG | 69 | Penoyer | PN | 23 |
| Big Smoky | BS | 230 | Railroad | RR | 230 |
| Butte | BV | | Ralston | RV | 207 |
| Cave | CV | 69 | Reveille | RE | 46 |
| Coal | CL | 69 | Spring | SP | 92 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 184 |
| Dry Lake | DL | 69 | White River | WR | 276 |
| Garden | GN | 92 | | | |
| | | | TOTAL SHELTERS | | 2300 |
| | | | TOTAL VALLEYS | | 19 |
| | | | TOTAL ASCs | | 2 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

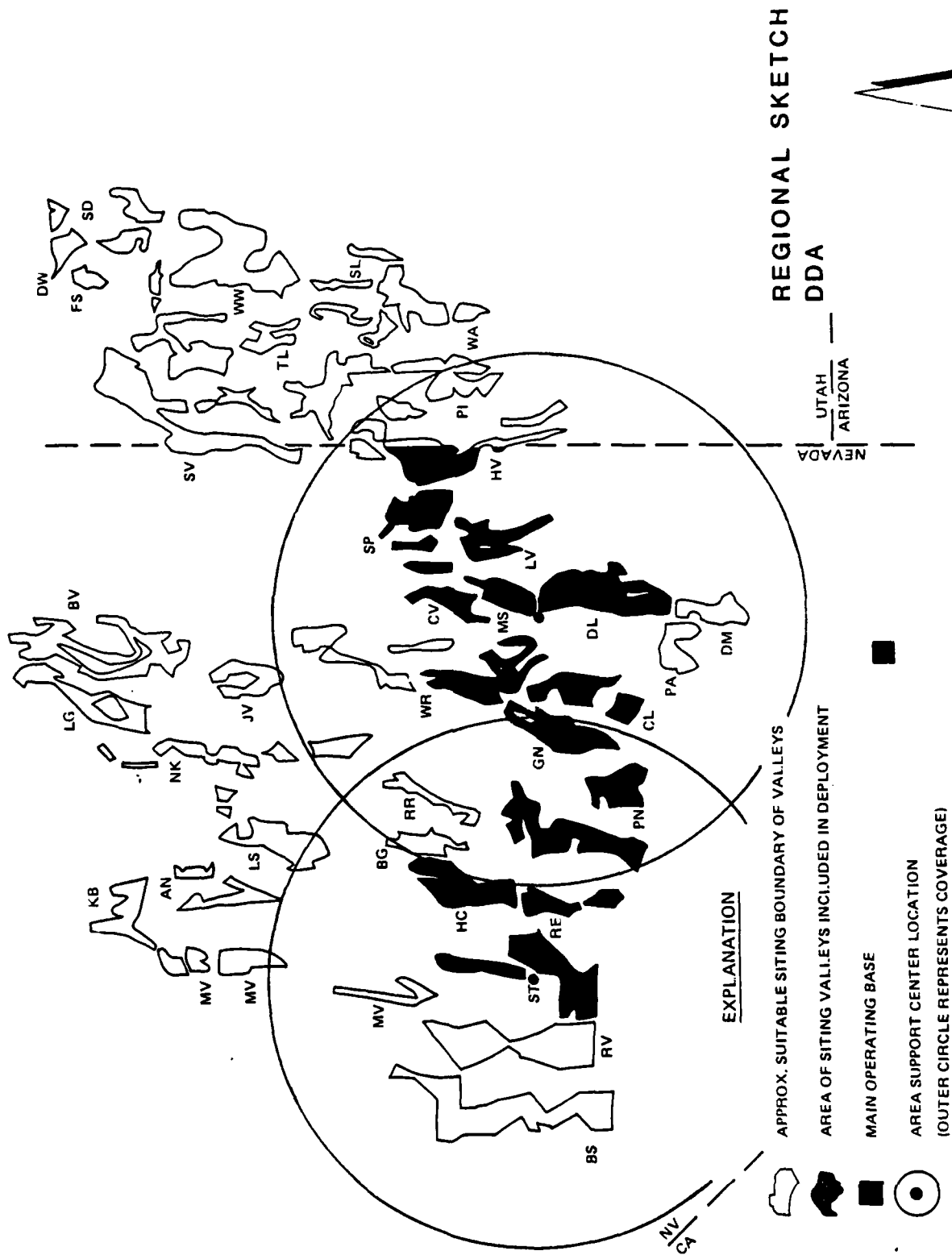
DDA

NEVADA
UTAH
ARIZONA



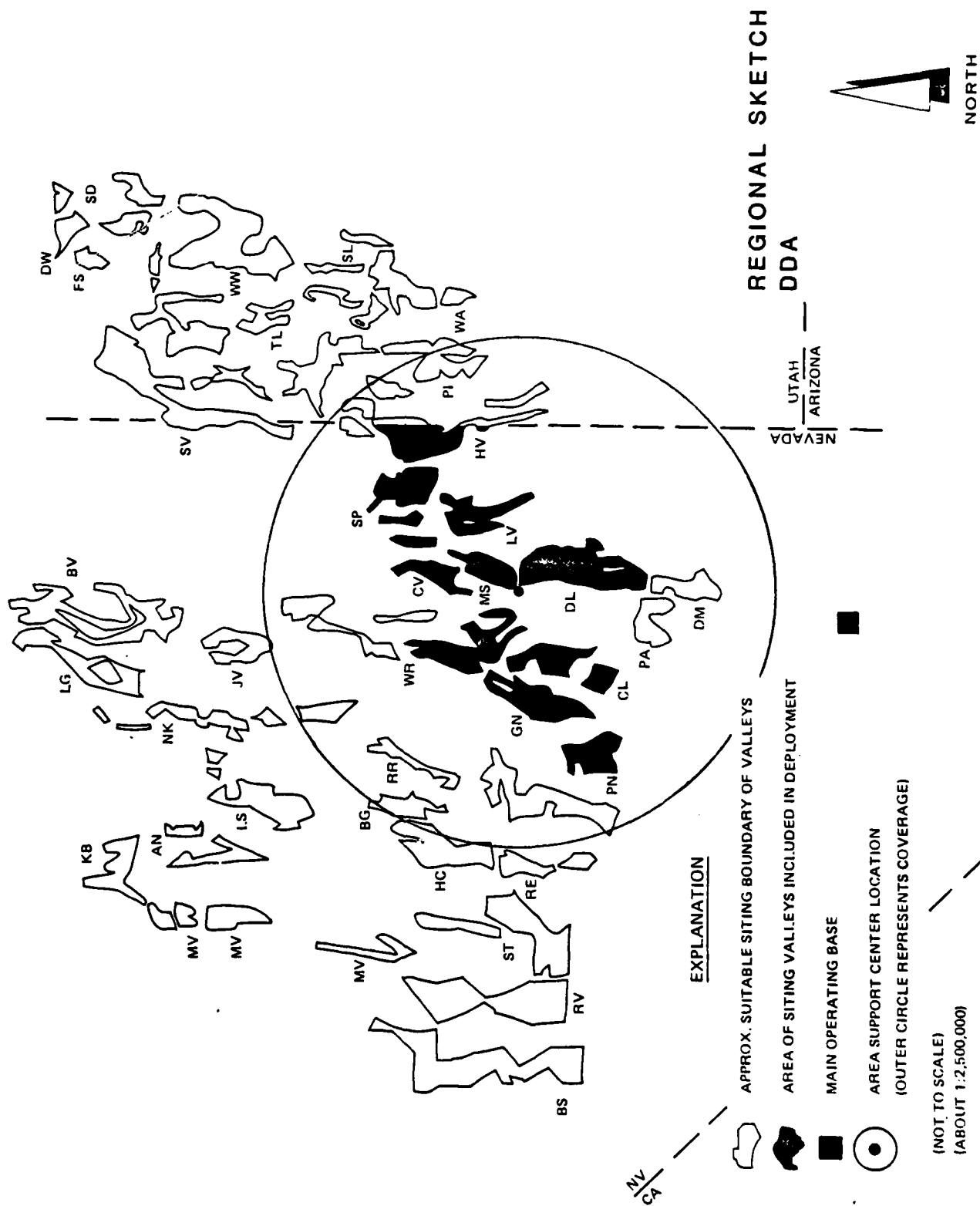
- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 13-11) Best 2300 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 208 |
| Fish Springs Flat | FS | | Hot Creek | HC | 167 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 212 |
| Big Smoky | BS | | Railroad | RR | 273 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | 91 |
| Coal | CL | 219 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 331 |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | 161 | | | |
| | | | TOTAL SHELTERS | | 2683 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 2 |



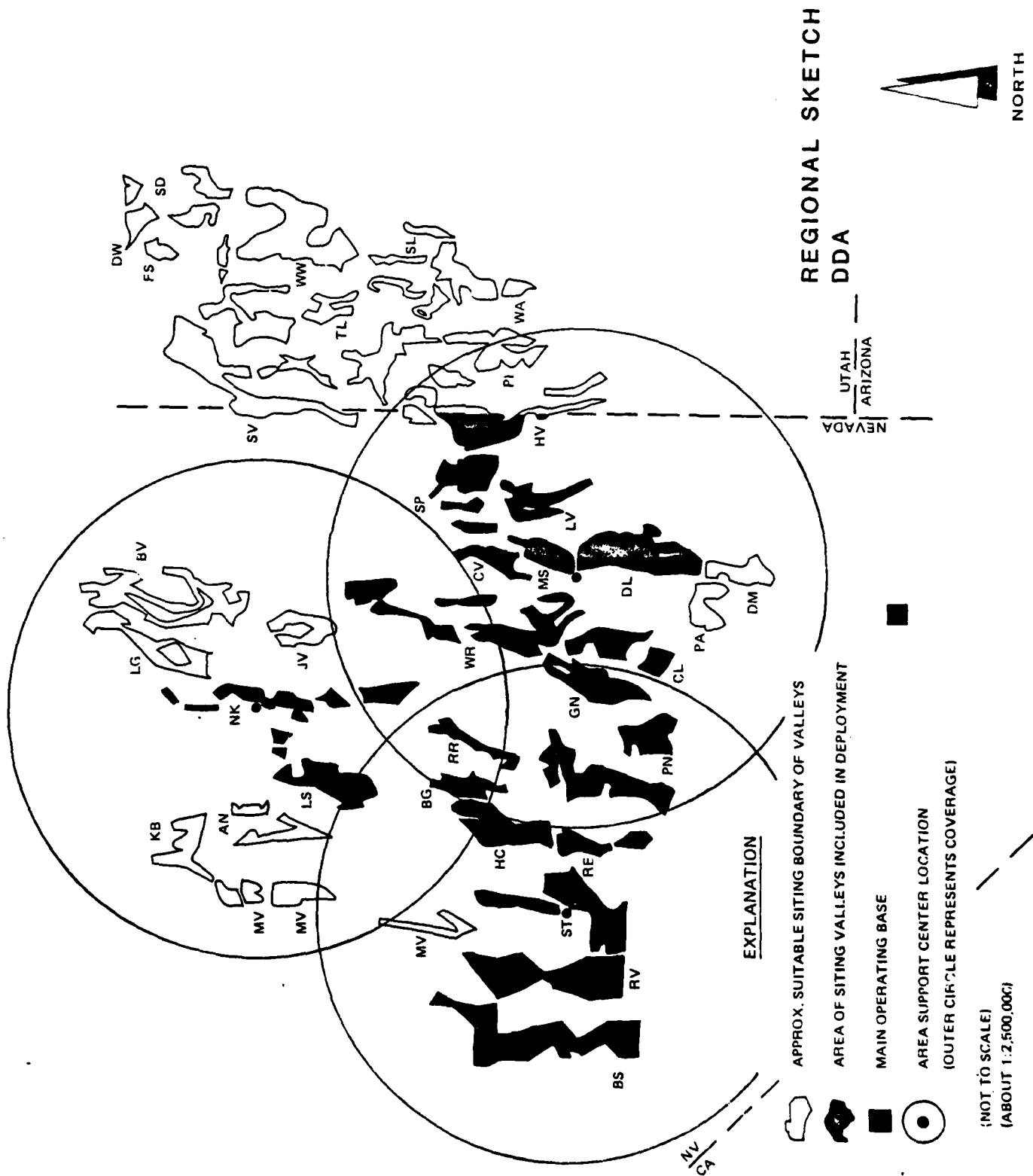
- B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
- 13-11) Best 2300 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 312 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 318 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 328 | Spring | SP | 82 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | 242 | | | |
| | | | TOTAL SHELTERS | | 2732 |
| | | | TOTAL VALLEYS | | 10 |
| | | | TOTAL ASCs | | 1 |



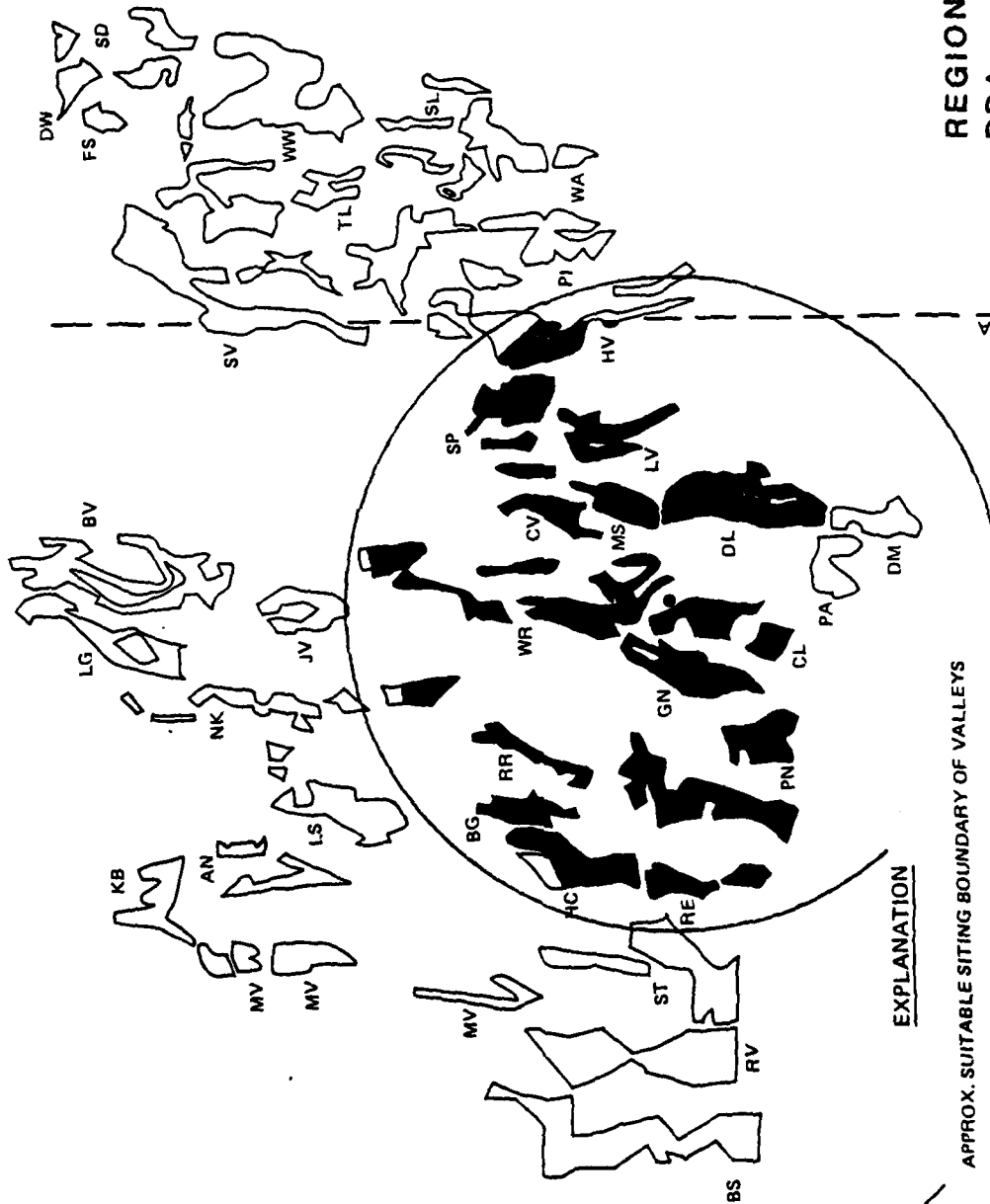
- C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water
- 13-11) Best 2300 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 116 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | 137 |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | 96 |
| Big Sand Springs | BG | 57 | Penoyer | PN | 146 |
| Big Smoky | BS | 189 | Railroad | RR | 273 |
| Butte | BV | | Ralston | RV | 256 |
| Cave | CV | 70 | Reveille | RE | 74 |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 159 |
| Dry Lake | DL | 267 | White River | WR | 191 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 2688 |
| | | | TOTAL VALLEYS | | 19 |
| | | | TOTAL ASCs | | 3 |



- D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water
- 13-11) Best 2300 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 139 |
| Fish Springs Flat | FS | | Hot Creek | HC | 123 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | 86 | Penoyer | PN | 219 |
| Big Smoky | BS | | Railroad | RR | 375 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | 111 |
| Coal | CL | 302 | Spring | SP | 102 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | 271 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 2667 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



NORTH

EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

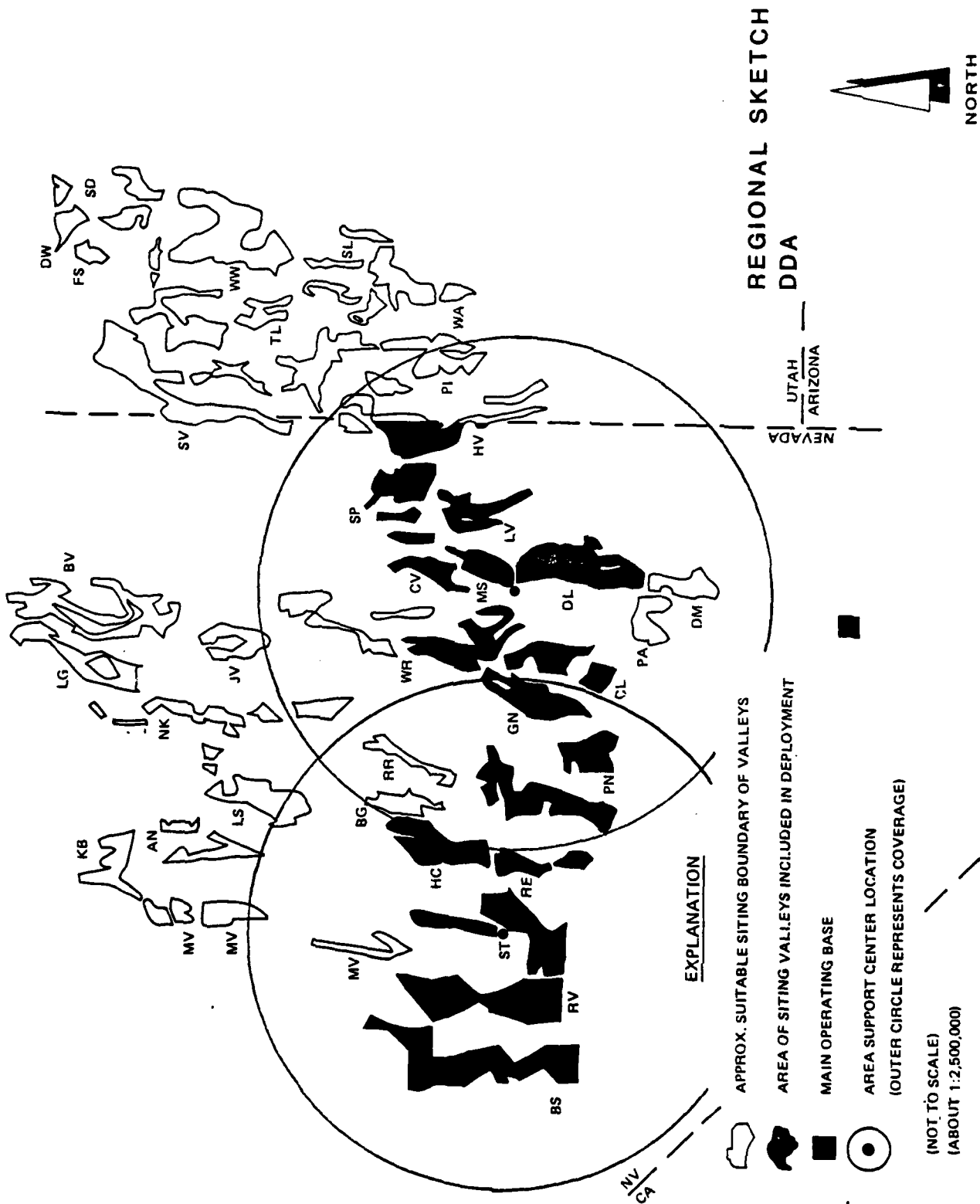


NV
CA

E) Horizontal shelters - 23:1 clustered using Ertec's 15 May numbers

13-11) Best 2300 shelters - Coyote MOB, avoid Delamar/Pahroc valleys, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Duqway | DW | | Hamlin | HV | 138 |
| Fish Springs Flat | FS | | Hot Creek | HC | 138 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 161 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 115 |
| Big Smoky | BS | 230 | Railroad | RR | 184 |
| Butte | BV | | Ralston | RV | 207 |
| Cave | CV | 69 | Reveille | RE | 69 |
| Coal | CL | 138 | Spring | SP | 92 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | 184 |
| Dry Lake | DL | 230 | White River | WR | 184 |
| Garden | GN | 138 | | | |
| | | | TOTAL SHELTERS | | 2346 |
| | | | TOTAL VALLEYS | | 16 |
| | | | TOTAL ASCs | | 2 |



4.0 1150 SHELTER OPTIONS

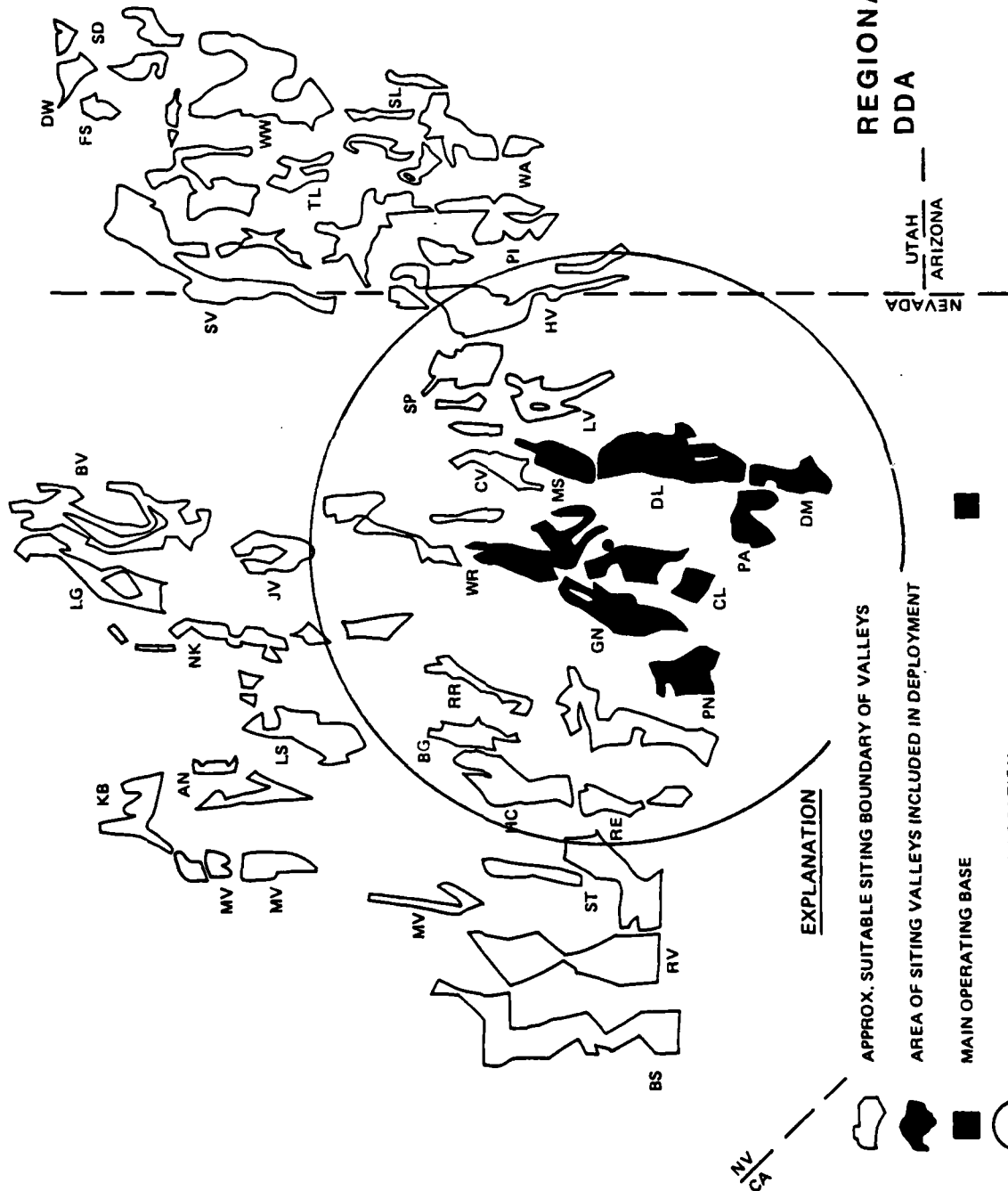
4.0 1150 SHELTER OPTIONS

This section contains options for 1150 shelters as specified in Section 1.1.

A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

14) Best 1150 shelters and 15 percent - Coyote MOB

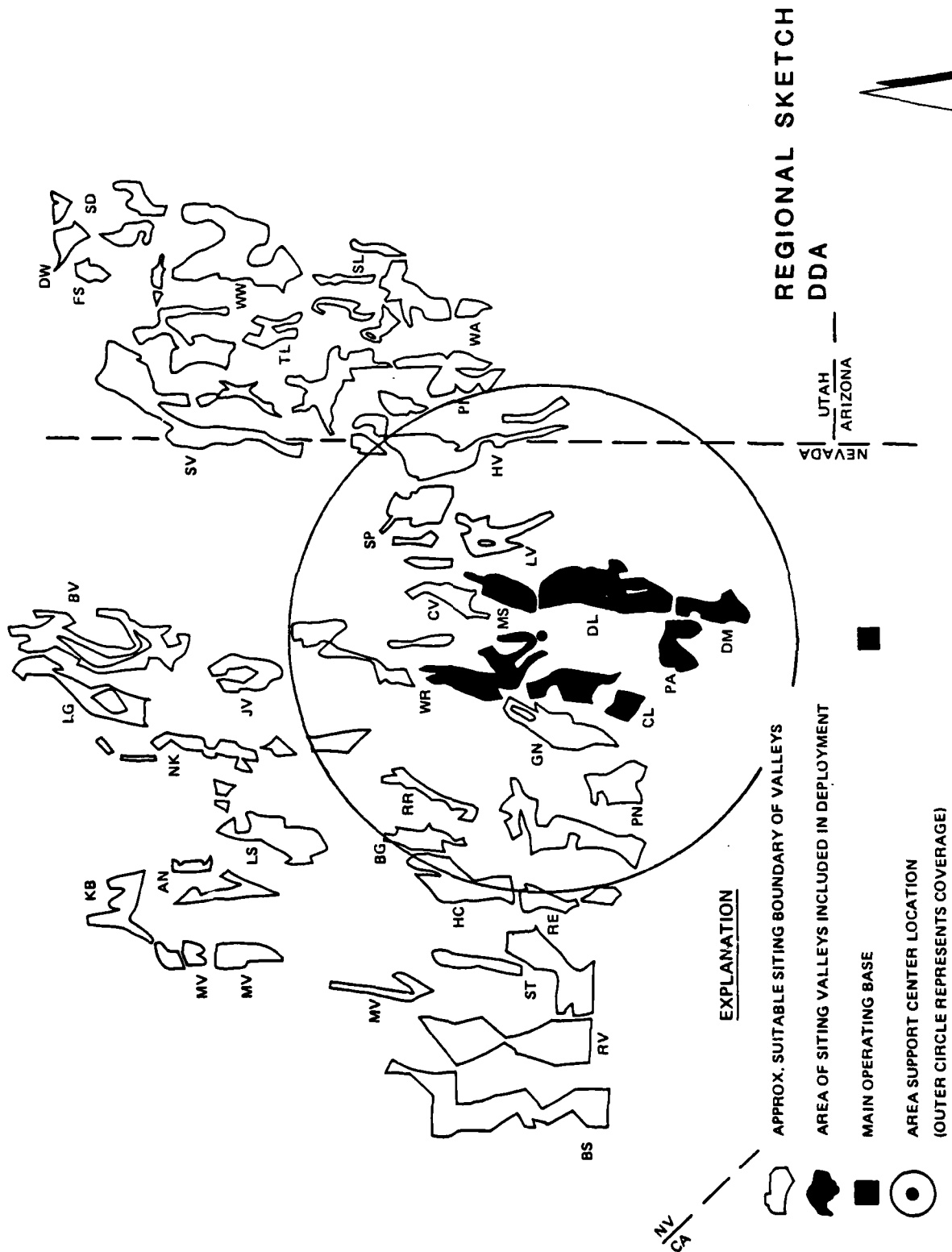
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 81 |
| Whirlwind | WW | | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 212 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 219 | Reveille | RE | |
| Coal | CL | 170 | Spring | SP | |
| Delamar/Pahroc | DM | 284 | Stone Cabin | ST | |
| Dry Lake | DL | 161 | White River | WR | 265 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1392 |
| | | | TOTAL VALLEYS | | 7 |
| | | | TOTAL ASCs | | 1 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

14) Best 1150 shelters and 15 percent - Coyote MOB

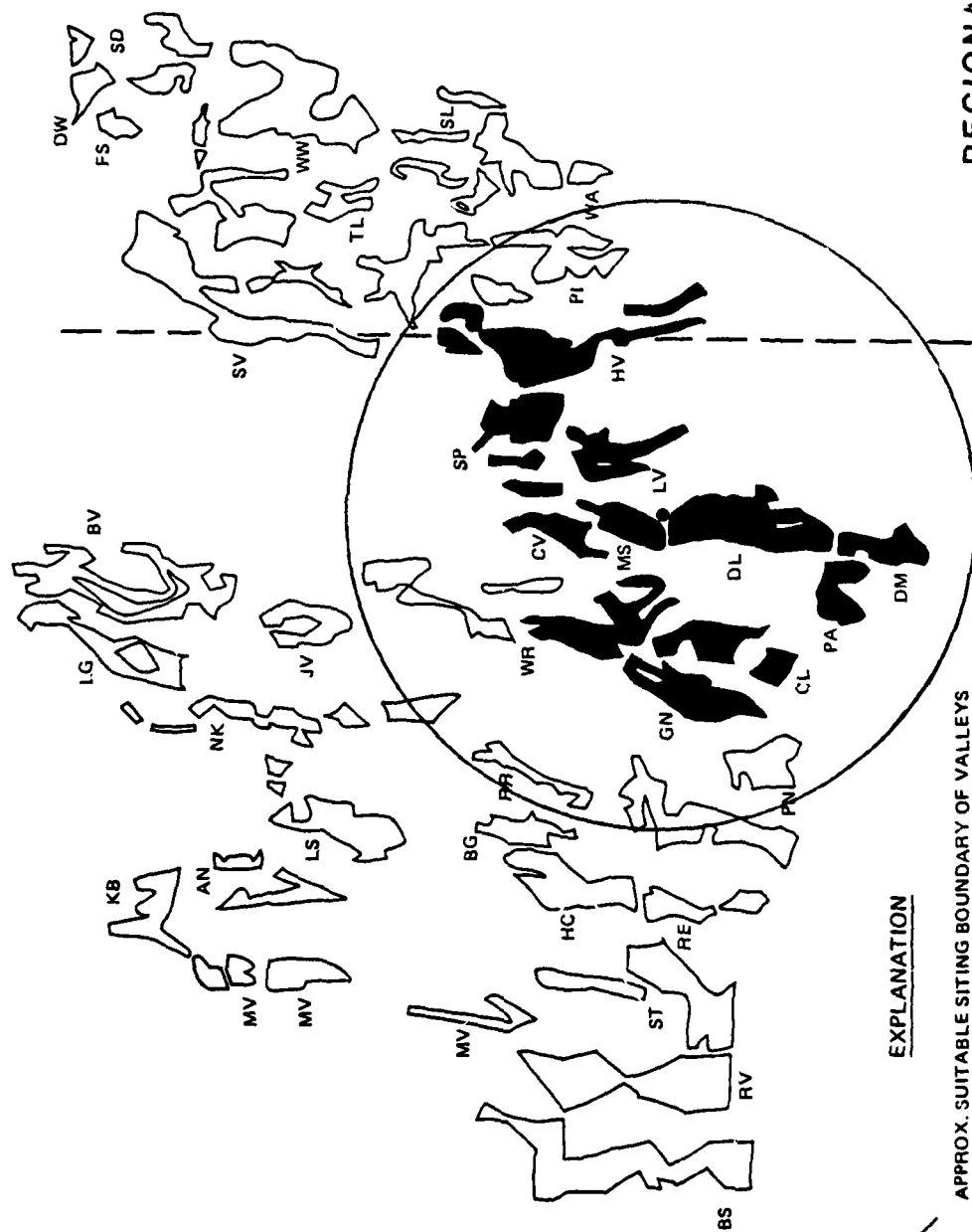
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | 328 | Spring | SP | |
| Delamar/Pahroc | DM | 255 | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1529 |
| | | | TOTAL VALLEYS | | 5 |
| | | | TOTAL ASCS | | 1 |



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

14) Best 1150 shelters and 15 percent - Coyote MOB

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | 138 | Stor. Cabin | ST | |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 1346 |
| | | | TOTAL VALLEYS | | 10 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



NORTH

EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION

(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)

(ABOUT 1:2,500,000)



MV
CA

D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

14) Best 1150 shelters and 15 percent - Coyote MOB

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | 302 | Spring | SP | |
| Delamar/Pahroc | DM | 207 | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | 190 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 1392 |
| | | | TOTAL VALLEYS | | 6 |
| | | | TOTAL ASCs | | 1 |

AD-A113 150

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NU SITING INVESTIGATION. REGIONAL STUDIES FOR VALLEY CLUSTERING--ETC(U)

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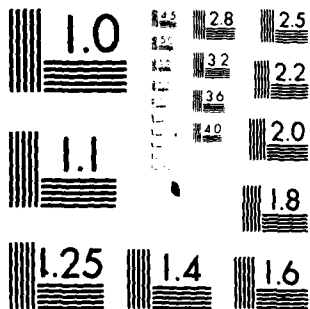
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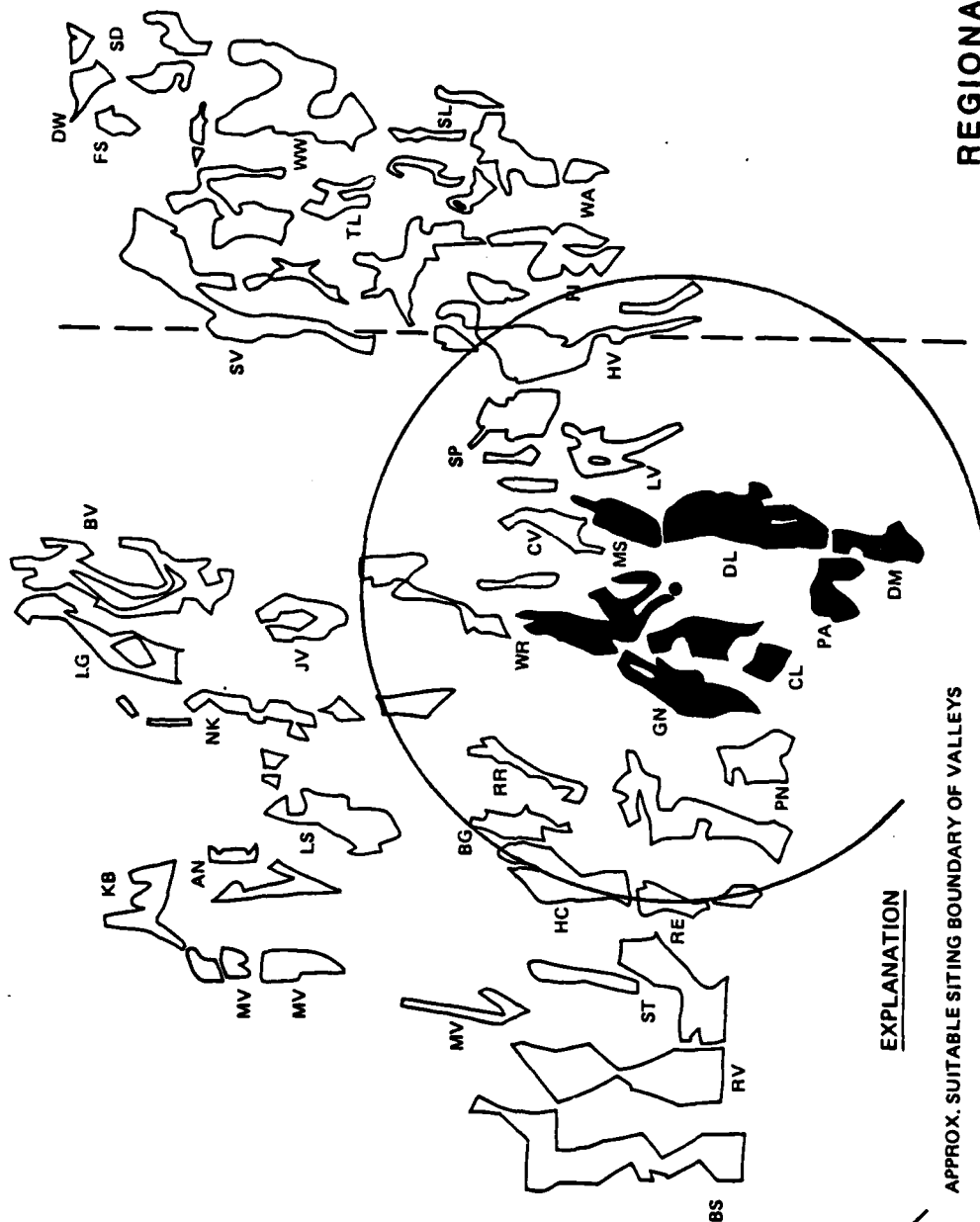
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



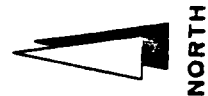
EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

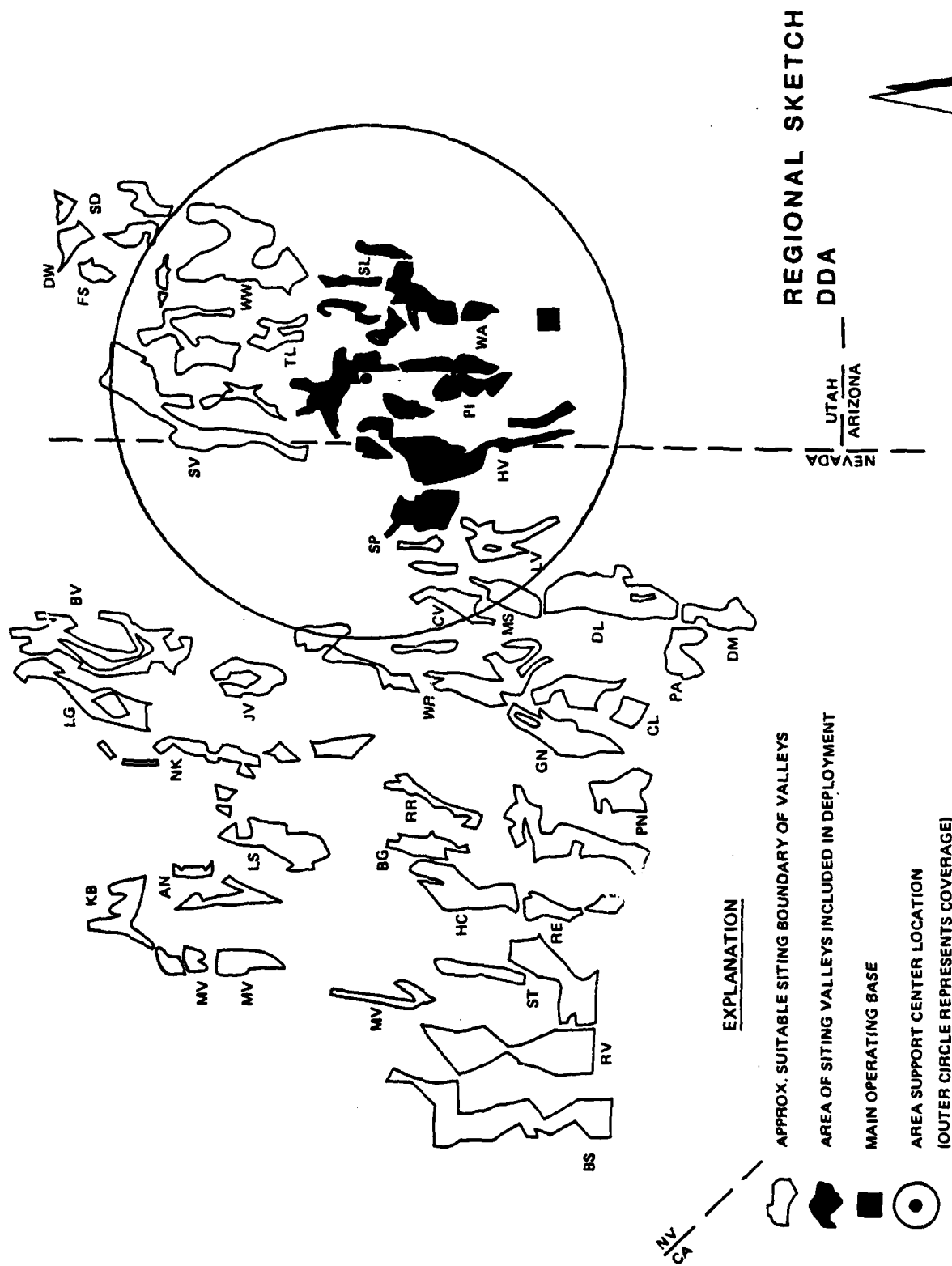
NEVADA
UTAH
ARIZONA
DDA



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

15) Best 1150 shelters and 15 percent - Milford MOB

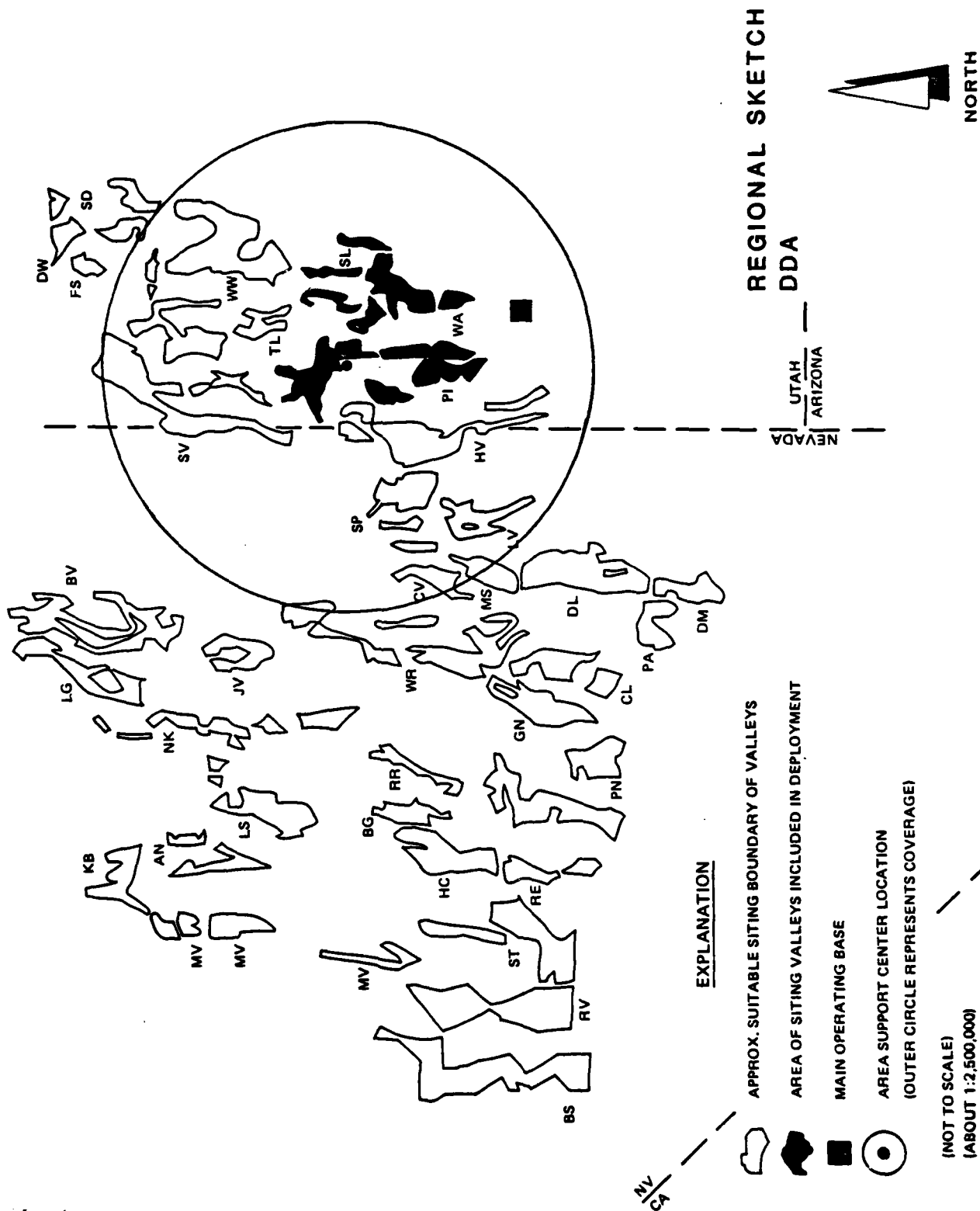
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 333 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 70 | Lake | LV | |
| Snake | SV | 247 | Little Smoky | LS | |
| Tule | TL | 77 | Long | LG | |
| Wah Wah | WA | 213 | Monitor | MV | |
| Whirlwind | WW | 29 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | 121 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1339 |
| | | | TOTAL VALLEYS | | 8 |
| | | | TOTAL ASCs | | 1 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

15) Best 1150 shelters and 15 percent - Milford MOB

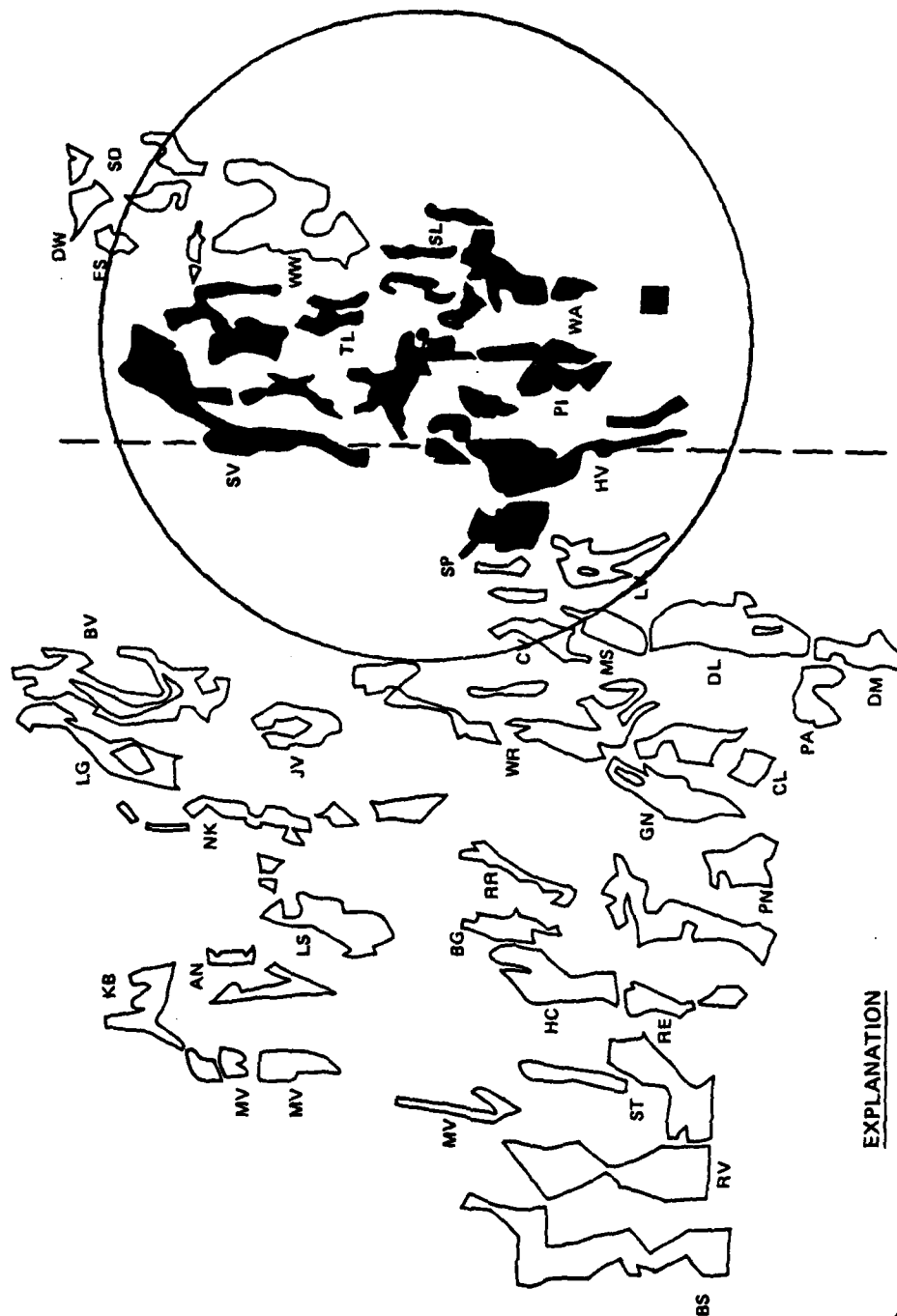
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 374 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 105 | Lake | LV | |
| Snake | SV | 370 | Little Smoky | LS | |
| Tule | TL | 116 | Long | LG | |
| Wah Wah | WA | 320 | Monitor | MV | |
| Whirlwind | WW | 44 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1329 |
| | | | TOTAL VALLEYS | | 6 |
| | | | TOTAL ASCs | | 1 |



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

15) Best 1150 shelters and 15 percent - Milford MOB

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 57 | Lake | LV | |
| Snake | SV | 390 | Little Smoky | LS | |
| Tule | TL | 198 | Long | LG | |
| Wah Wah | WA | 175 | Monitor | MV | |
| Whirlwind | WW | 21 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | 68 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1337 |
| | | | TOTAL VALLEYS | | 8 |
| | | | TOTAL ASCS | | 1 |



REGIONAL SKETCH

NEVADA ——— UTAH ——— ARIZONA ——— DDA



EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

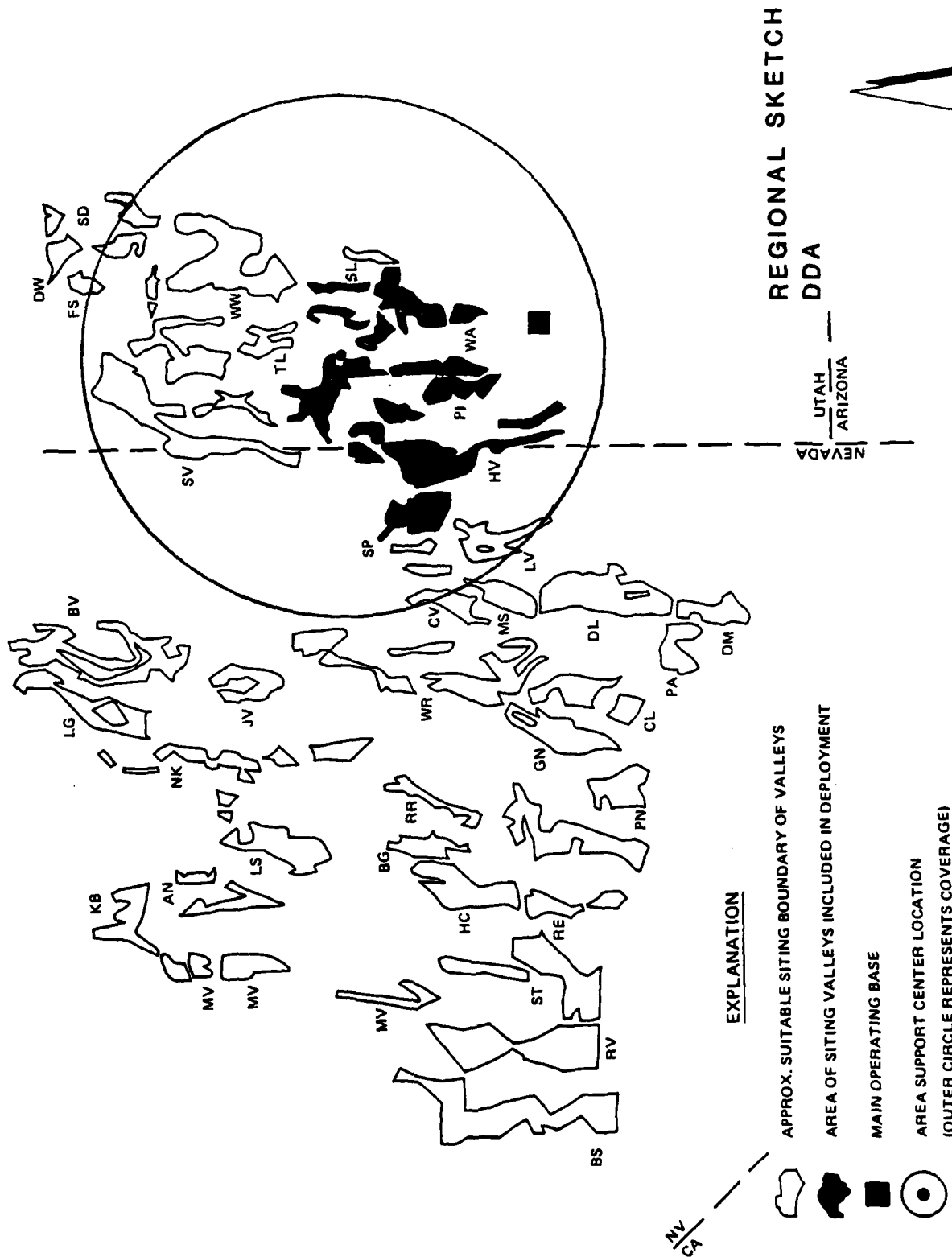
(NOT TO SCALE)
(ABOUT 1:2,500,000)

NV
CA

D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

15) Best 1150 shelters and 15 percent - Milford MOB

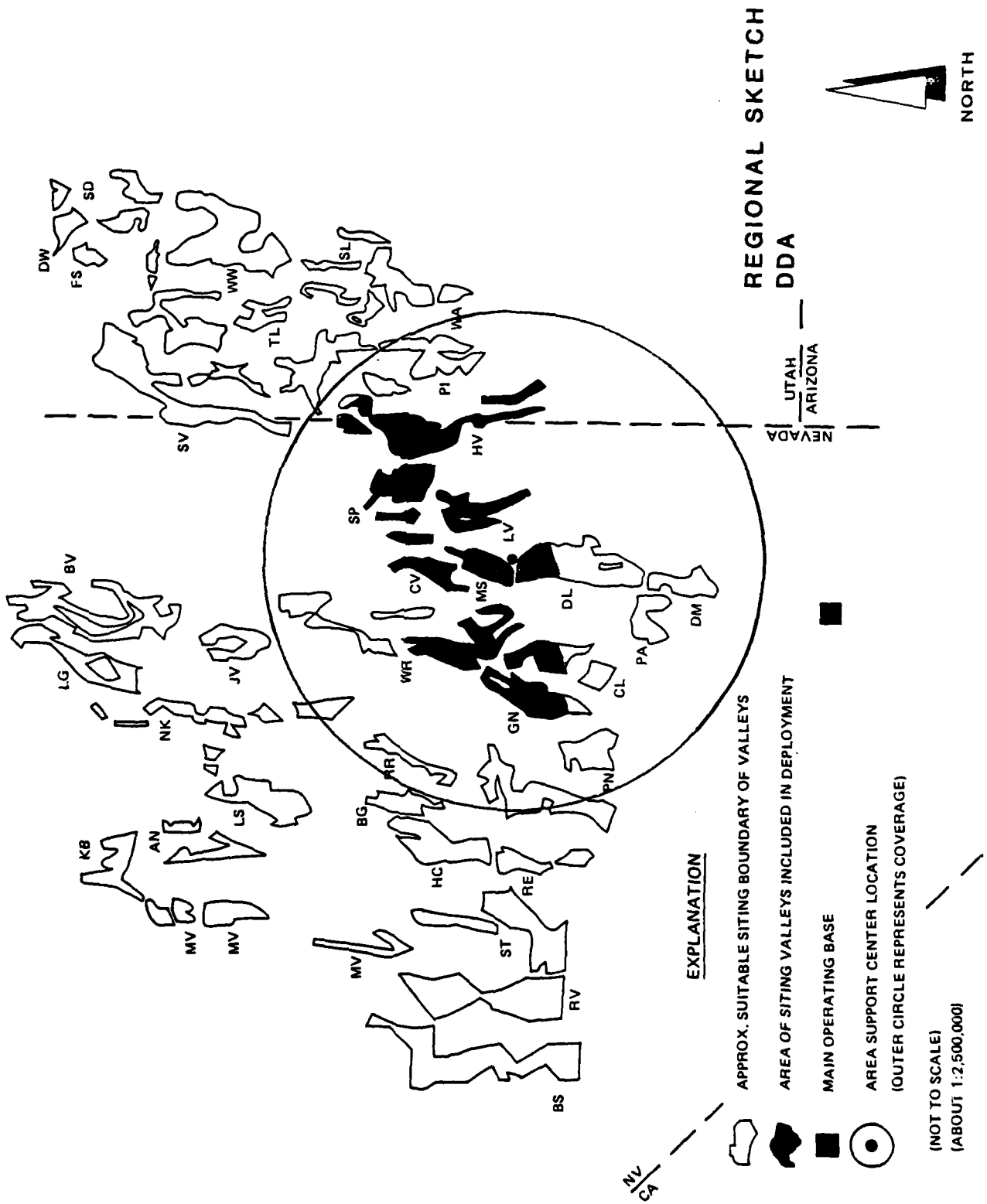
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 279 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 363 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | 222 | Little Smoky | LS | |
| Tule | TL | 62 | Long | LG | |
| Wah Wah | WA | 263 | Monitor | MV | |
| Whirlwind | WW | 32 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | 102 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1323 |
| | | | TOTAL VALLEYS | | 7 |
| | | | TOTAL ASCs | | 1 |



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

16) Best 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

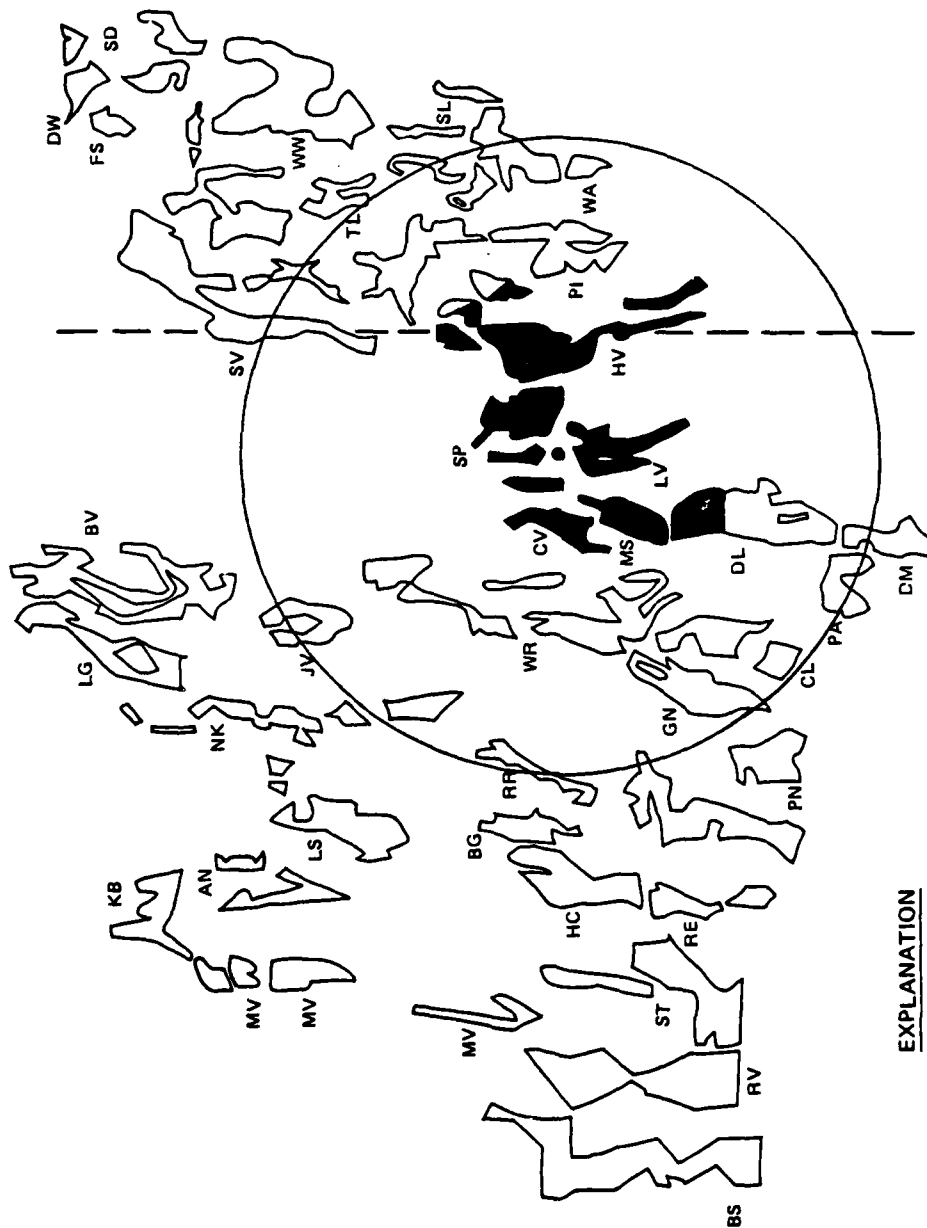
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 300 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Devier Desert | SD | | Kobeh | KB | |
| Devier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| ile | TL | | Long | LG | |
| Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | |
| Coal | CL | 115 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 95 | White River | WR | 265 |
| Garden | GN | 110 | | | |
| | | | TOTAL SHELTERS | | 1357 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 1 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

16) Best 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 450 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | 39 | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | 182 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 142 | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1339 |
| | | | TOTAL VALLEYS | | 7 |
| | | | TOTAL ASCs | | 1 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

DDA

NEVADA
UTAH
ARIZONA

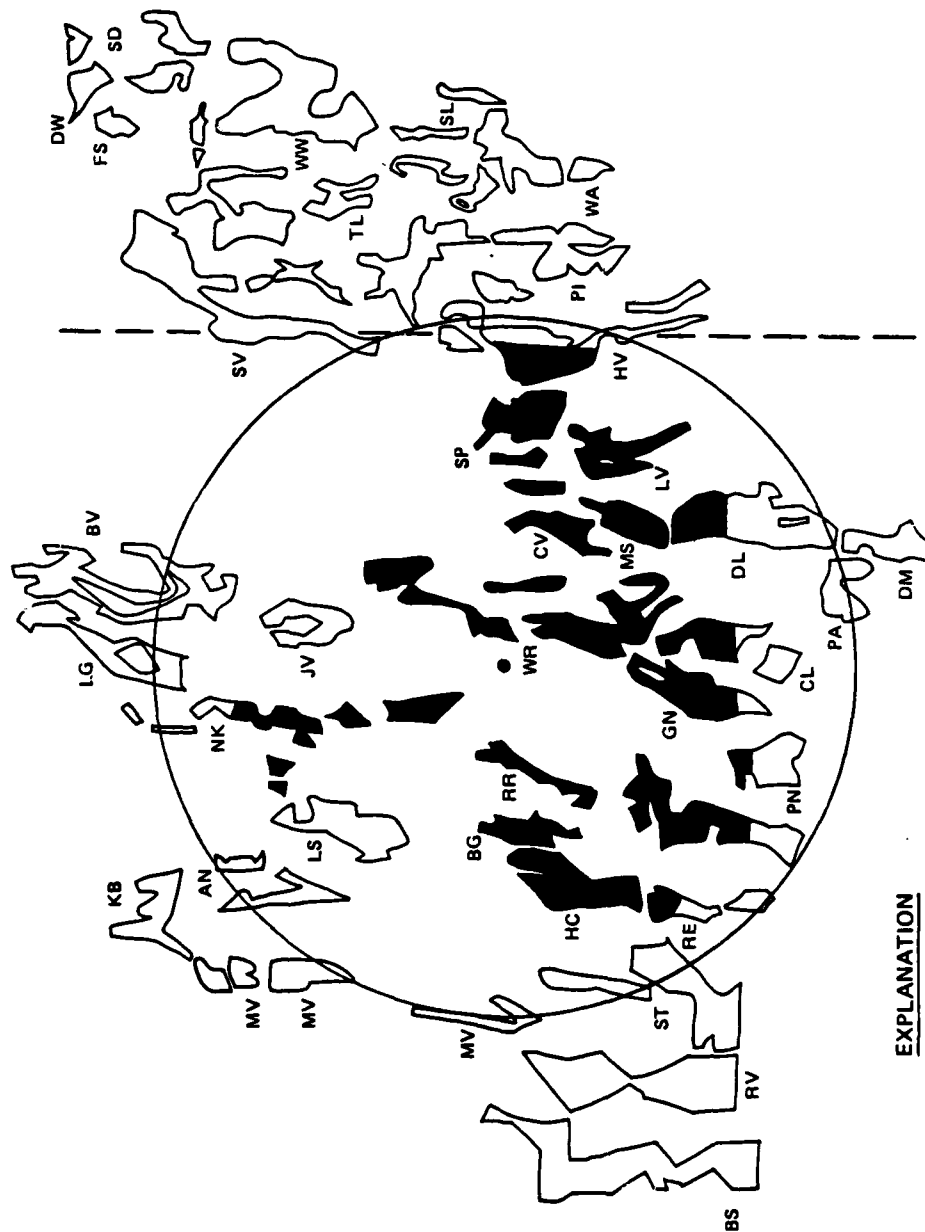


NORTH

C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

16) Best 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 115 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KR | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | 77 |
| Big Sand Springs | BG | 57 | Penoyer | PN | 24 |
| Big Smoky | BS | | Railroad | RR | 213 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | 22 |
| Coal | CL | 106 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 89 | White River | WR | 191 |
| Garden | GN | 86 | | | |
| | | | TOTAL SHELTERS | | 1380 |
| | | | TOTAL VALLEYS | | 15 |
| | | | TOTAL ASCS | | 1 |



REGIONAL SKETCH

DDA

NEVADA
UTAH
ARIZONA



NORTH

EXPLANATION

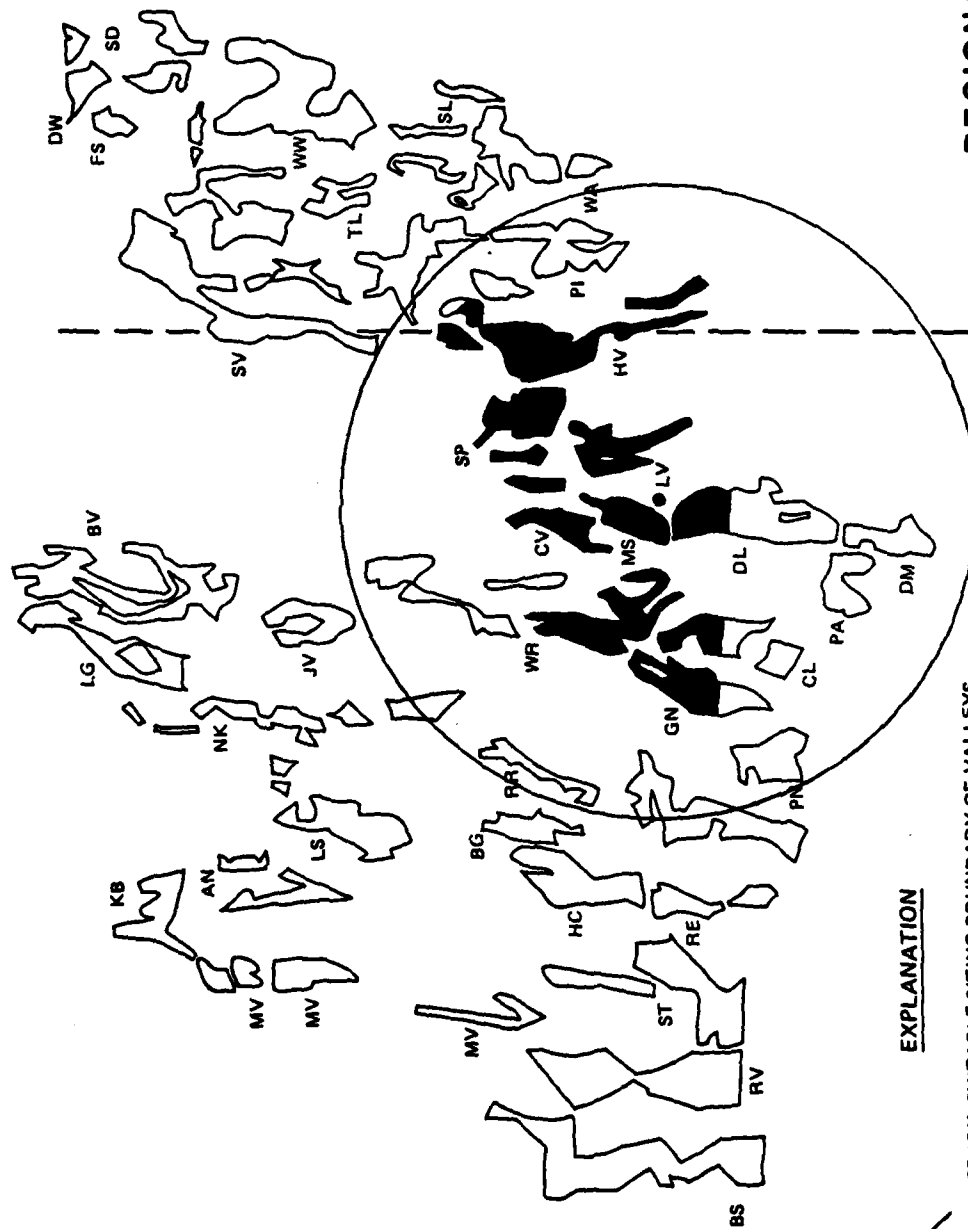
- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

16) Best 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 252 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | 102 |
| Coal | CL | 159 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 134 | White River | WR | 190 |
| Garden | GN | 129 | | | |
| | | | TOTAL SHELTERS | | 1316 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 1 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

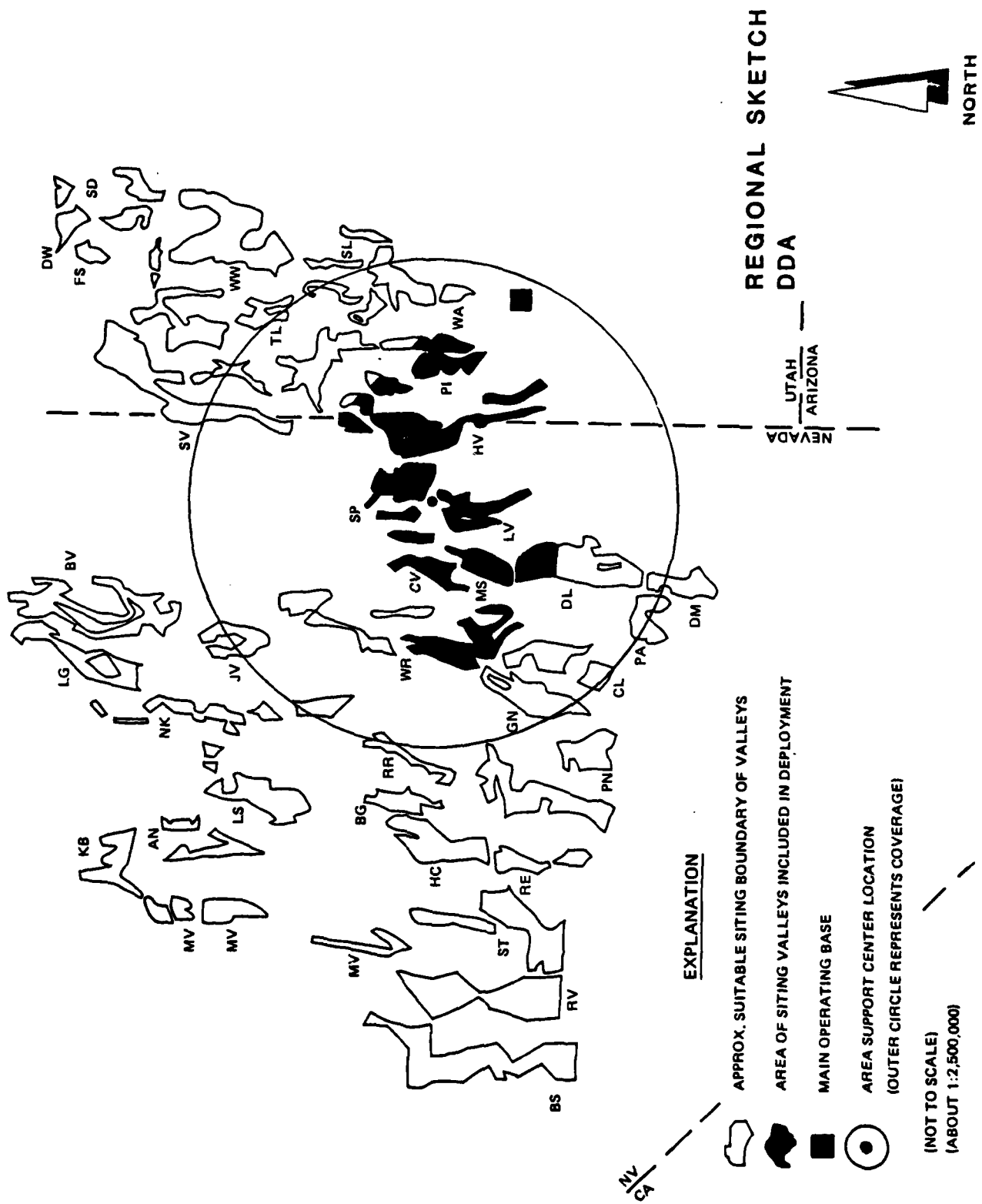
NEVADA — DDA
UTAH —
ARIZONA —



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

17) Best 1150 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

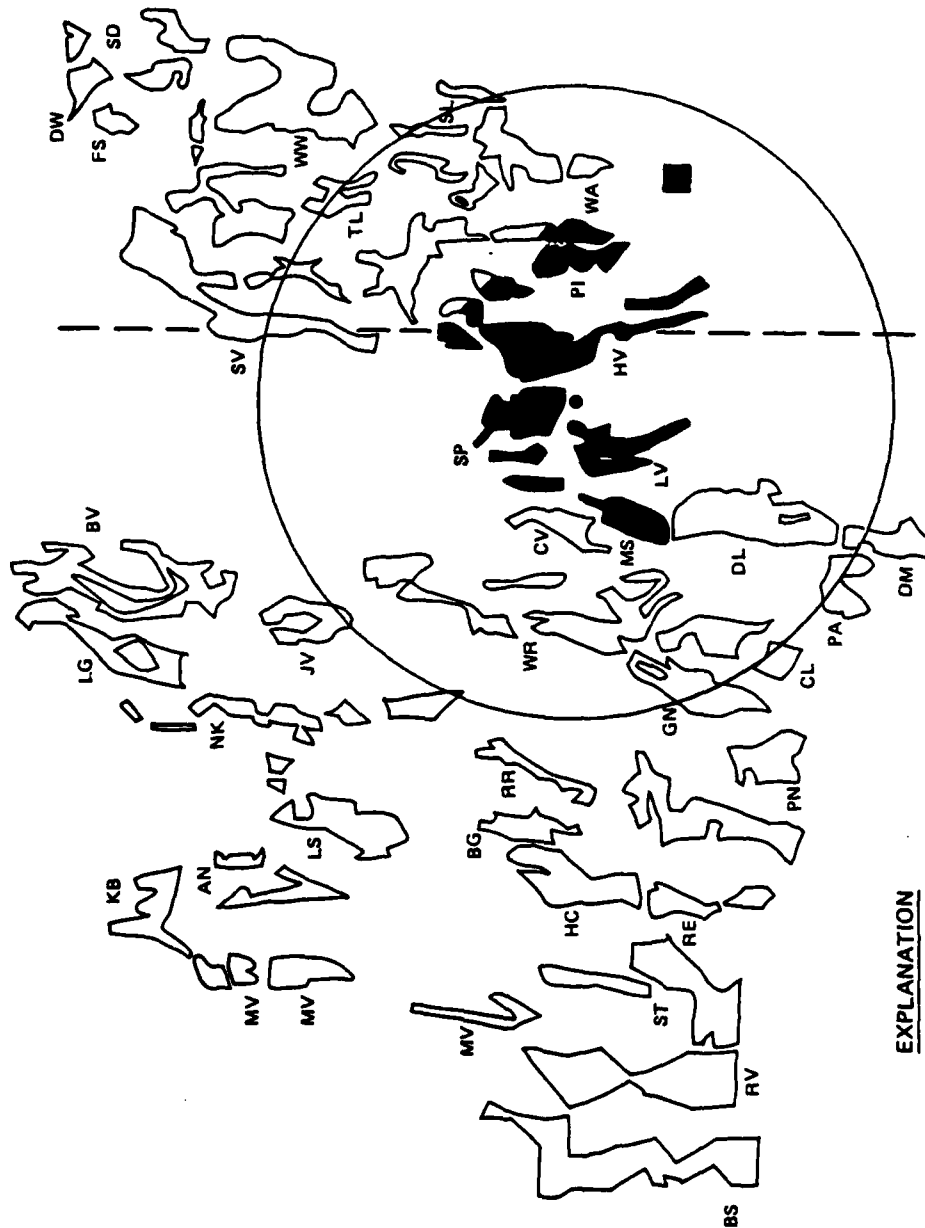
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 300 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 166 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | 26 | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | |
| Coal | CL | | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 95 | White River | WR | 265 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1324 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 1 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

17) Best 1150 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 450 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | 39 | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | 182 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1328 |
| | | | TOTAL VALLEYS | | 6 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



EXPLANATION

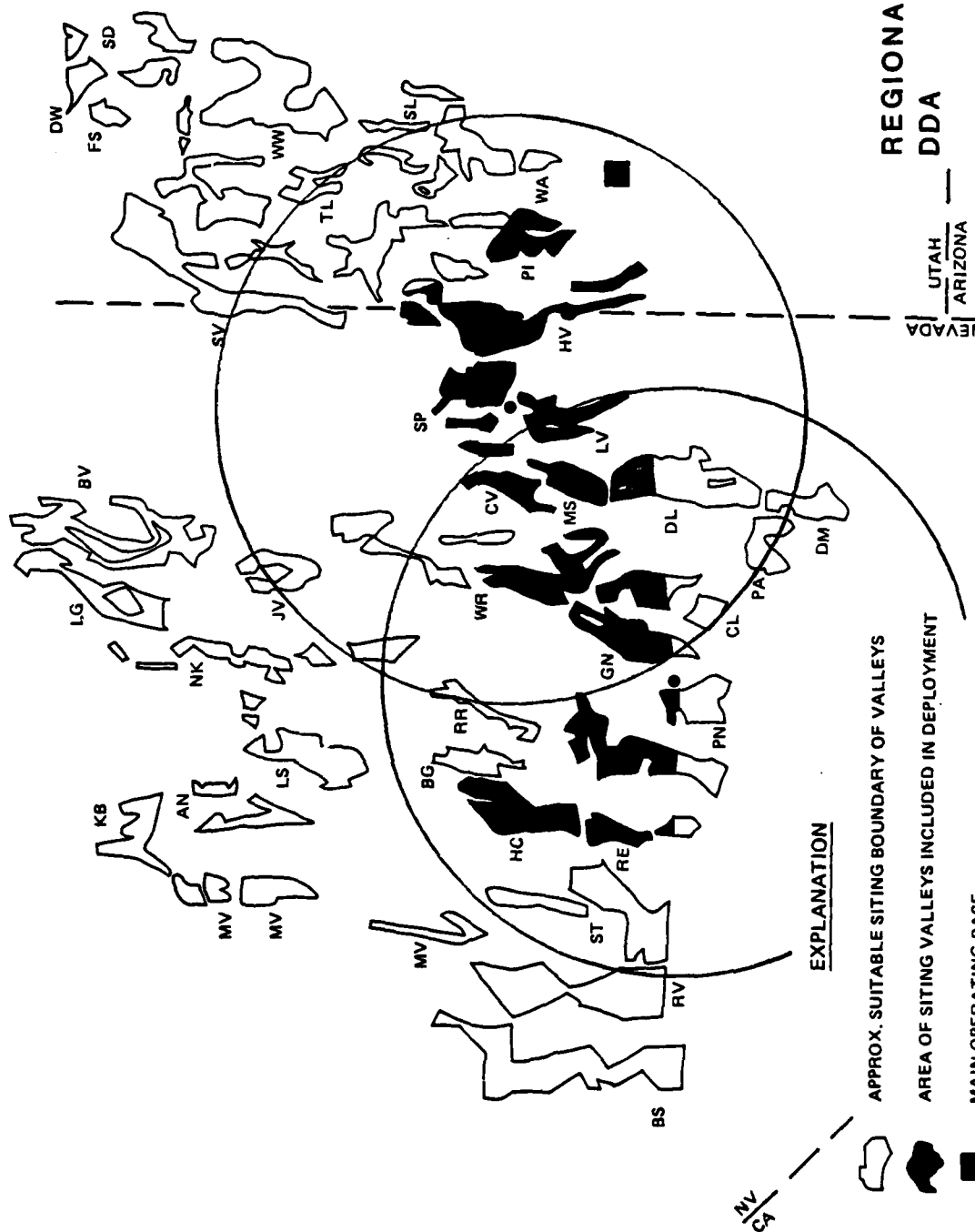
- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

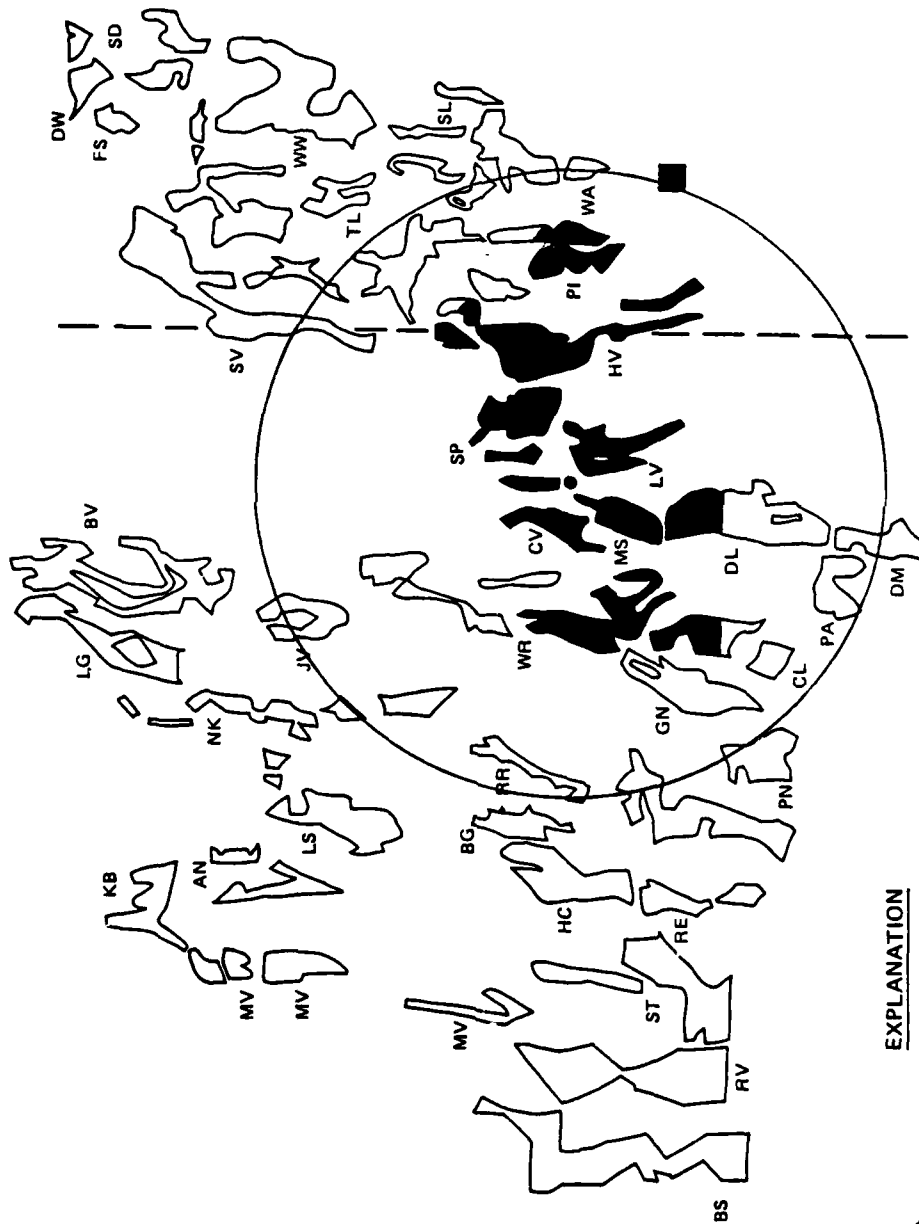
17) Best 1150 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 168 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | 161 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KR | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 24 |
| Big Smoky | BS | | Railroad | RR | 104 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | 59 |
| Coal | CL | 106 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 89 | White River | WR | 127 |
| Garden | GN | 86 | | | |
| | | | TOTAL SHELTERS | | 1324 |
| | | | TOTAL VALLEYS | | 14 |
| | | | TOTAL ASCs | | 2 |



- D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water
- 17) Best 1150 shelters and 15 percent - Milford MOB, avoid all MOAs and Restricted Areas

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 252 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | 102 |
| Coal | CL | 159 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 134 | White River | WR | 190 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1429 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 1 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)
- (NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

DDA

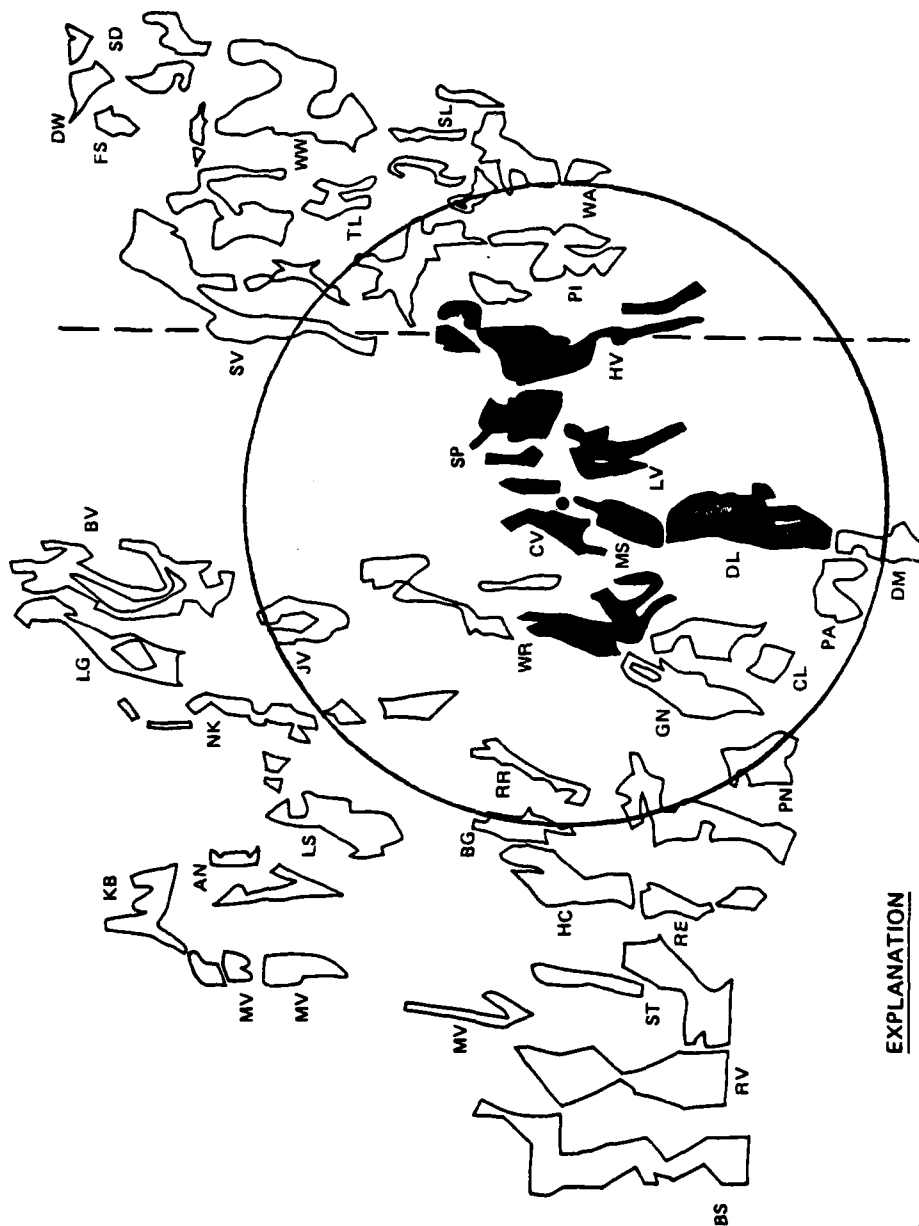
UTAH
ARIZONA
NEVADA



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

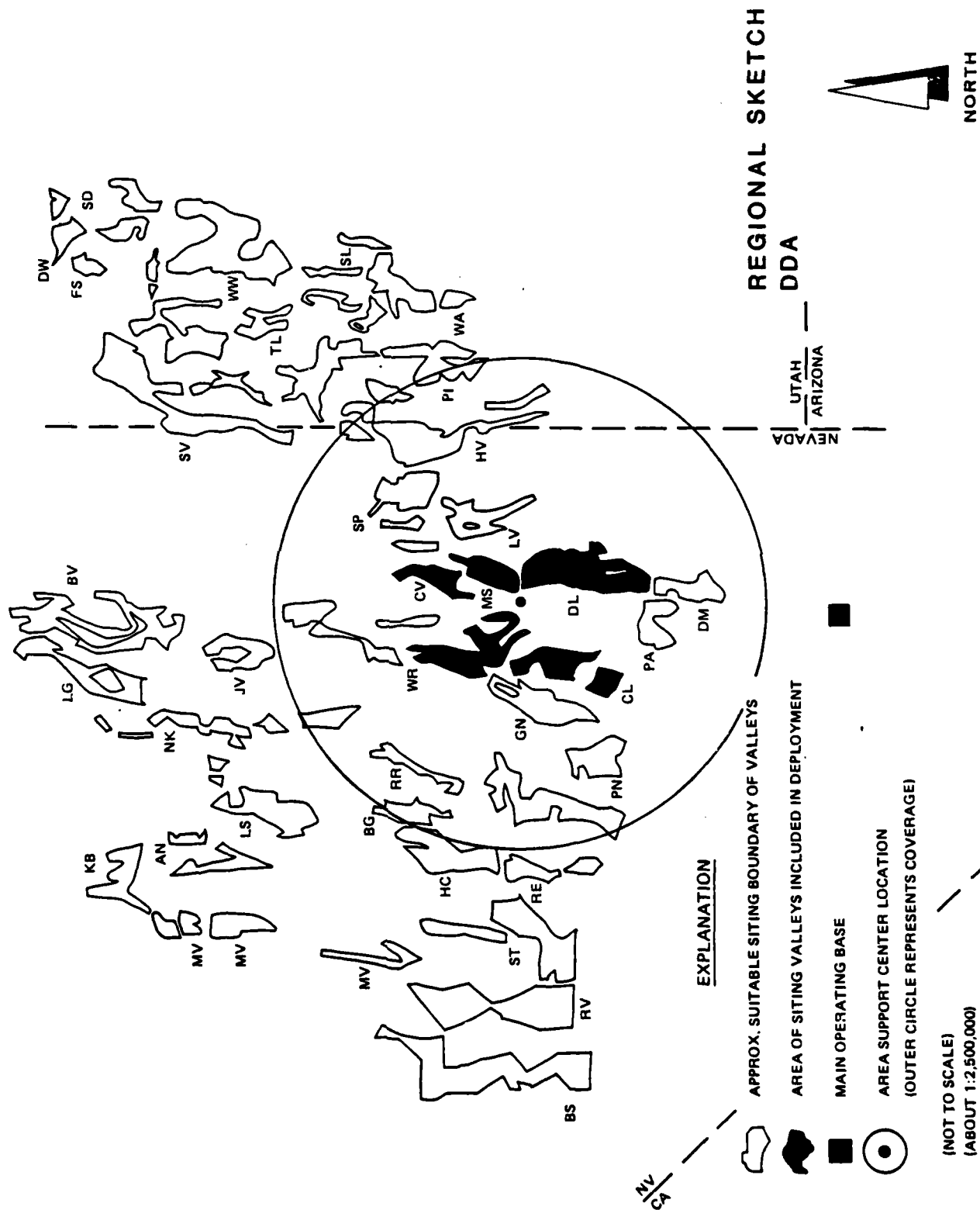
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 333 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | |
| Coal | CL | | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1354 |
| | | | TOTAL VALLEYS | | 7 |
| | | | TOTAL ASCs | | 1 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

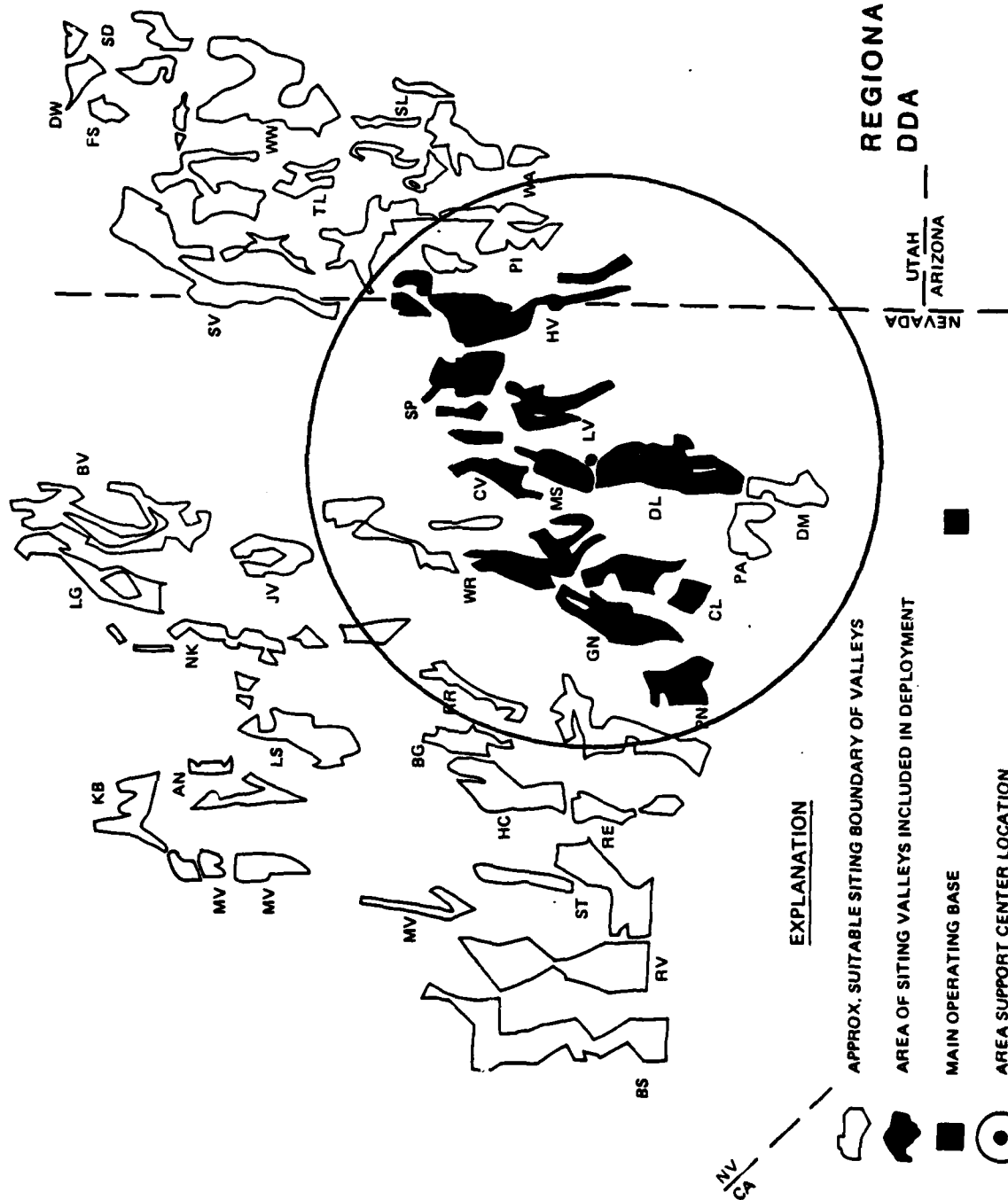
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 122 |
| Whirlwind | WW | | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 328 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1392 |
| | | | TOTAL VALLEYS | | 5 |
| | | | TOTAL ASCs | | 1 |



C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

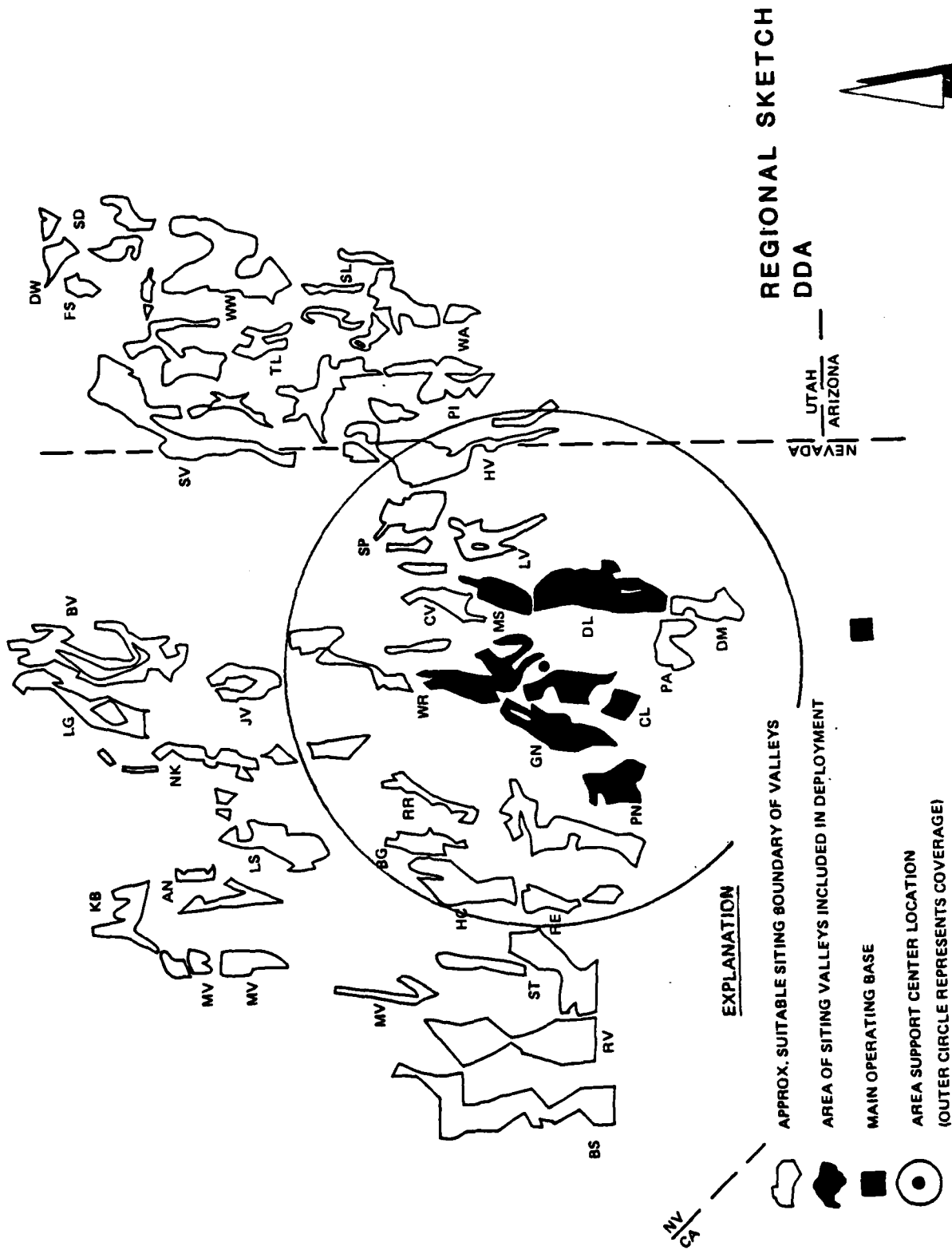
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | 94 |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 146 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 1354 |
| | | | TOTAL VALLEYS | | 10 |
| | | | TOTAL ASCs | | 1 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys

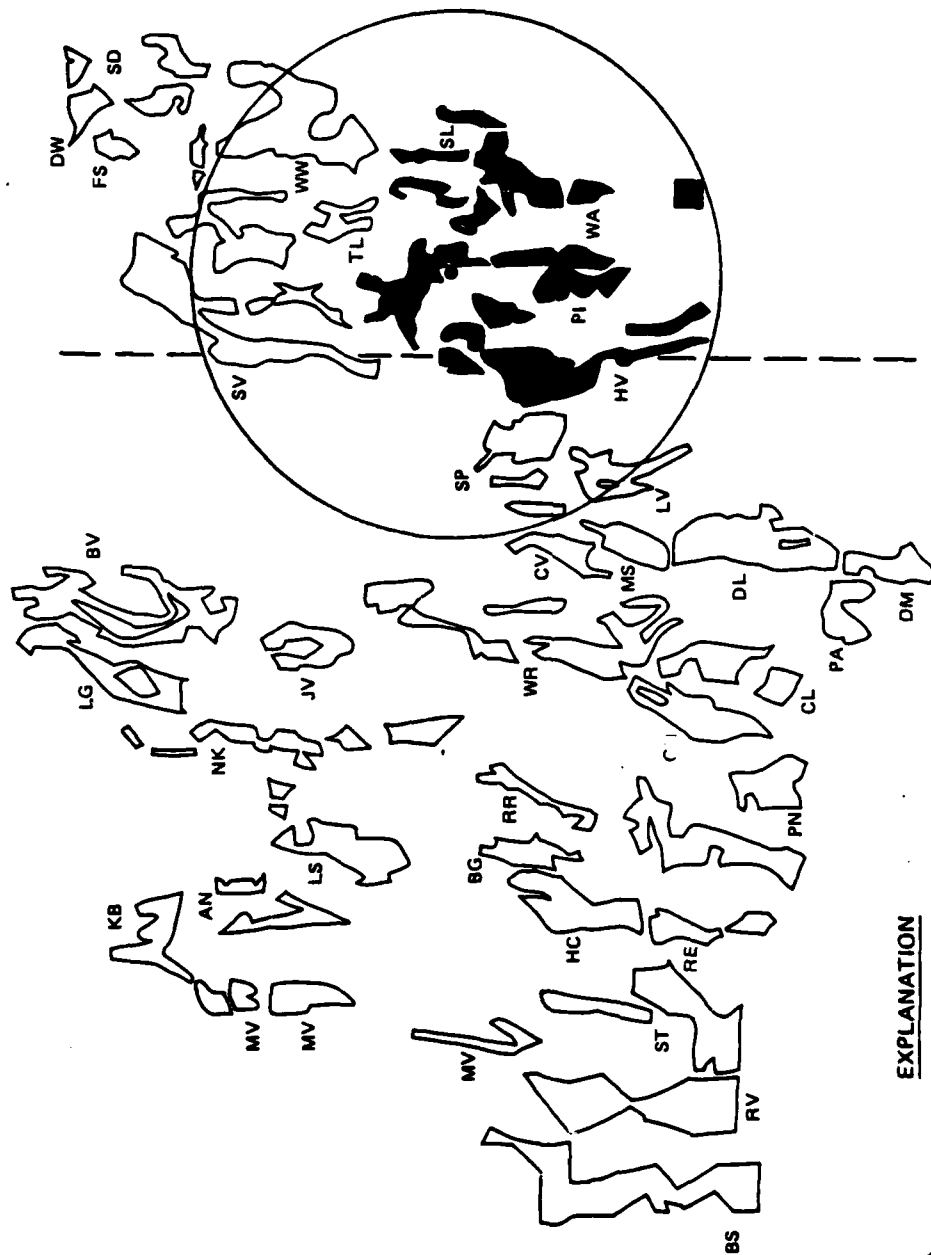
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 104 |
| Whirlwind | WW | | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 219 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | 302 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | 190 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 1404 |
| | | | TOTAL VALLEYS | | 6 |
| | | | TOTAL ASCs | | 1 |



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

19) Best 1150 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 333 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 249 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 70 | Lake | LV | |
| Snake | SV | 247 | Little Smoky | LS | |
| Tule | TL | 77 | Long | LG | |
| Wah Wah | WA | 213 | Monitor | MV | |
| Whirlwind | WW | 29 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | 121 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1339 |
| | | | TOTAL VALLEYS | | 8 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

DDA

NEVADA
UTAH
ARIZONA



NORTH

EXPLANATION

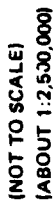
- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water

19) Best 1150 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

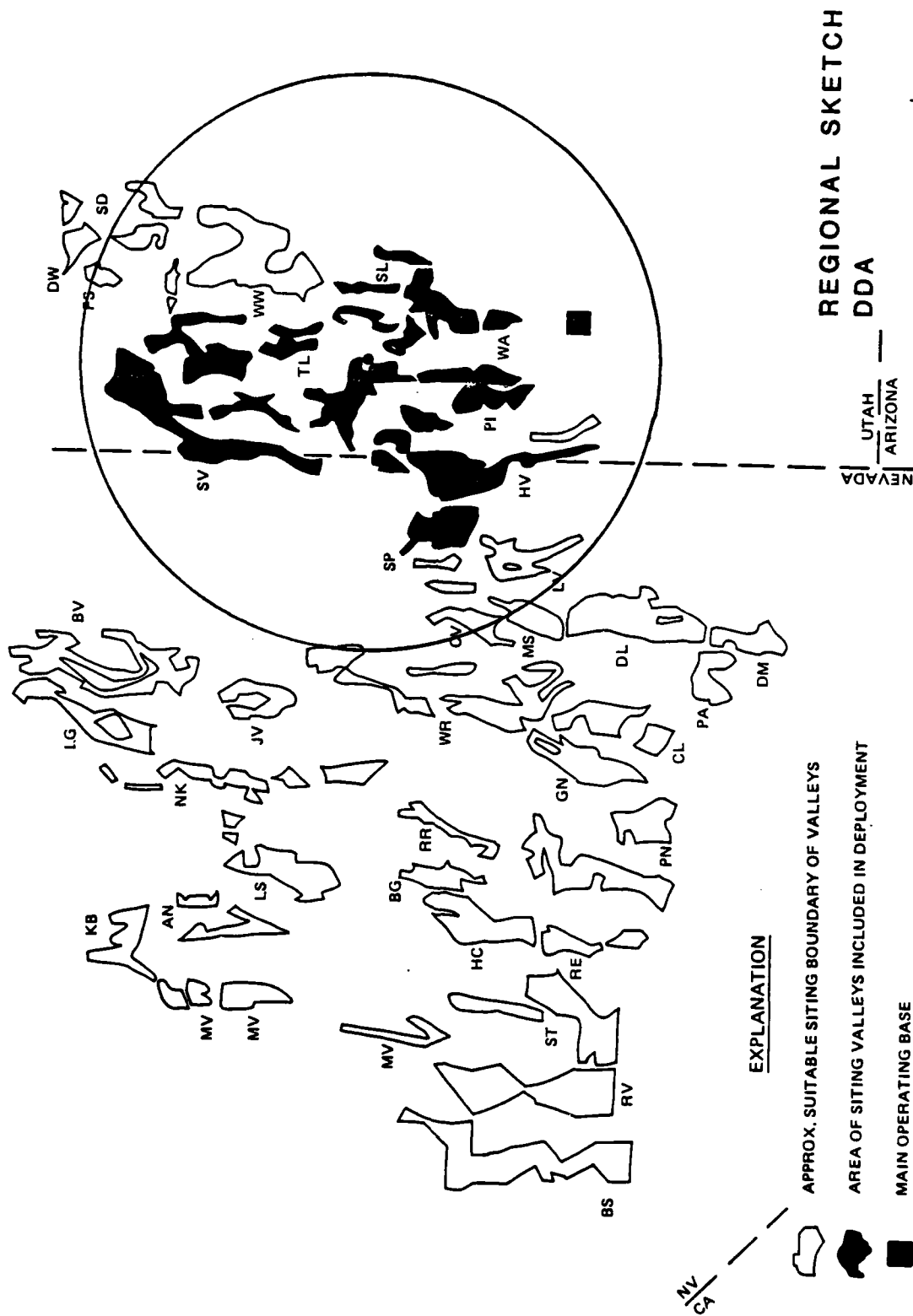
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 374 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 105 | Lake | LV | |
| Snake | SV | 370 | Little Smoky | LS | |
| Tule | TL | 116 | Long | LG | |
| Wah Wah | WA | 320 | Monitor | MV | |
| Whirlwind | WW | 44 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1329 |
| | | | TOTAL VALLEYS | | 6 |
| | | | TOTAL ASCs | | 1 |



C) Horizontal shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

19) Best 1150 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

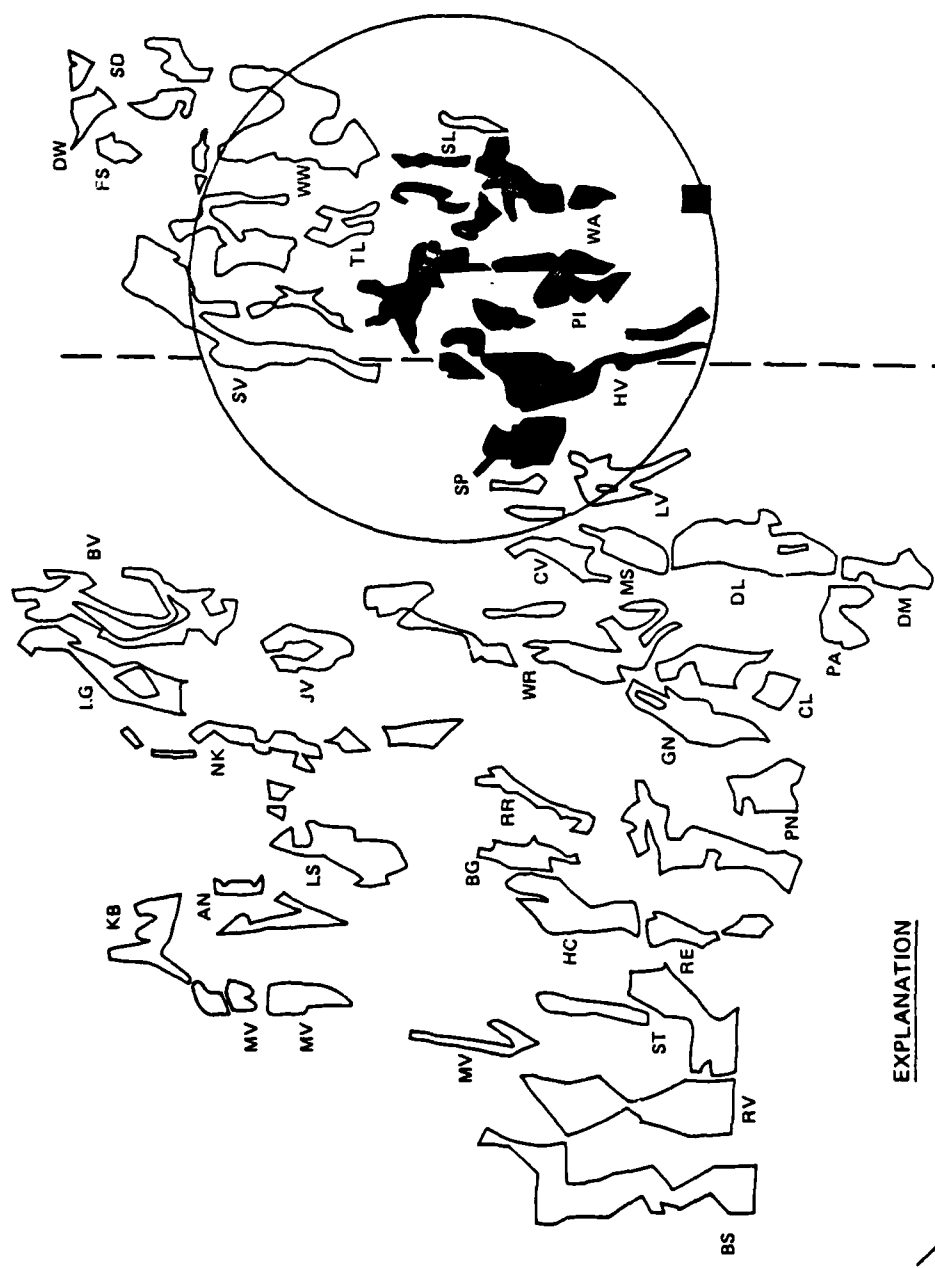
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 186 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 242 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | 57 | Lake | LV | |
| Snake | SV | 390 | Little Smoky | LS | |
| Tule | TL | 198 | Long | LG | |
| Wah Wah | WA | 175 | Monitor | MV | |
| Whirlwind | WW | 21 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | 68 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1337 |
| | | | TOTAL VALLEYS | | 8 |
| | | | TOTAL ASCs | | 1 |



D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

19) Best 1150 shelters and 15 percent - Milford MOB, avoid Delamar/Pahroc valleys

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 279 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | 363 | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | 222 | Little Smoky | LS | |
| Tule | TL | 62 | Long | LG | |
| Wah Wah | WA | 263 | Monitor | MV | |
| Whirlwind | WW | 32 | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | 102 |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | | White River | WR | |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1323 |
| | | | TOTAL VALLEYS | | 7 |
| | | | TOTAL ASCs | | 1 |



CA
NV

EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

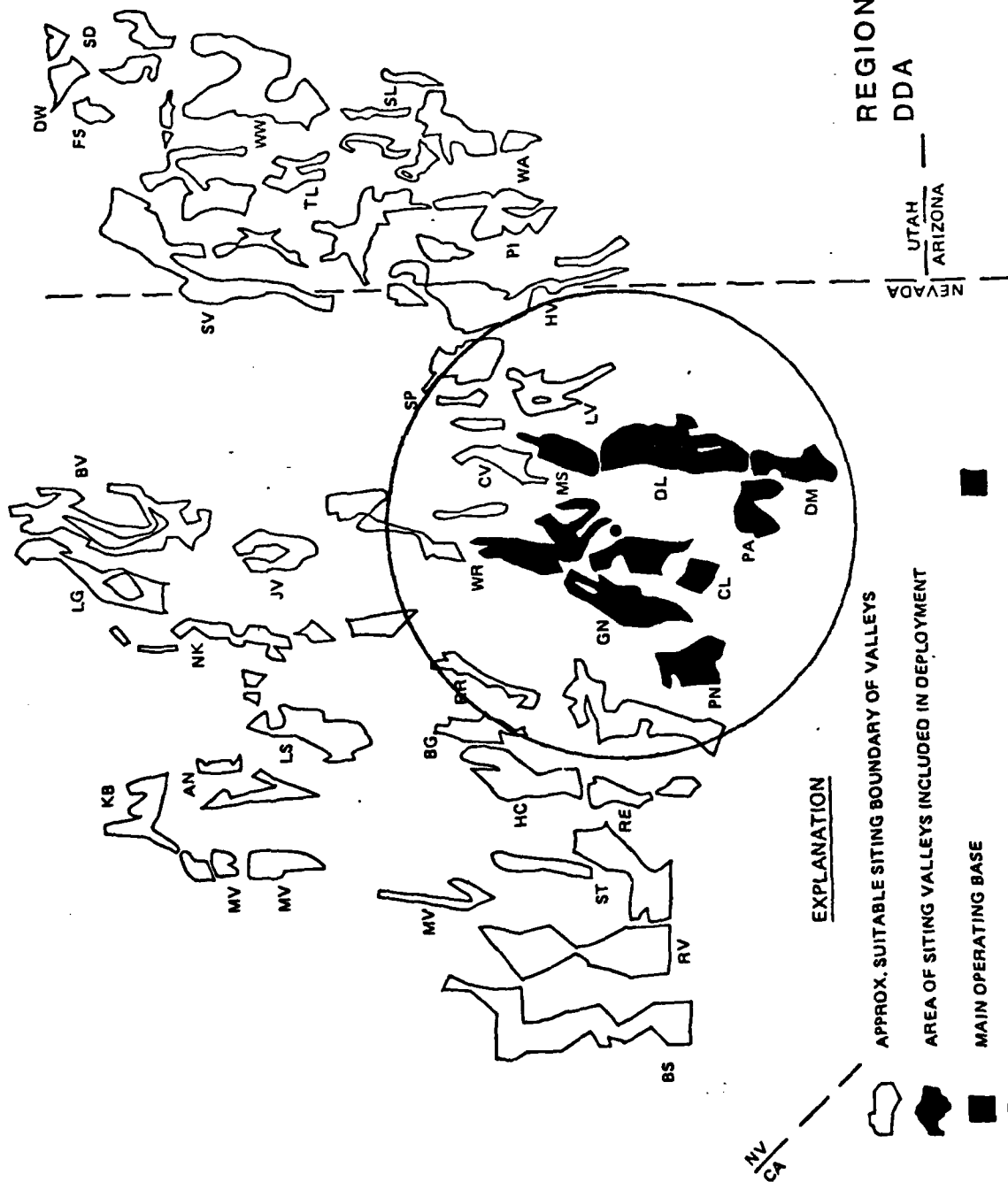
NEVADA
UTAH
ARIZONA
DDA



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

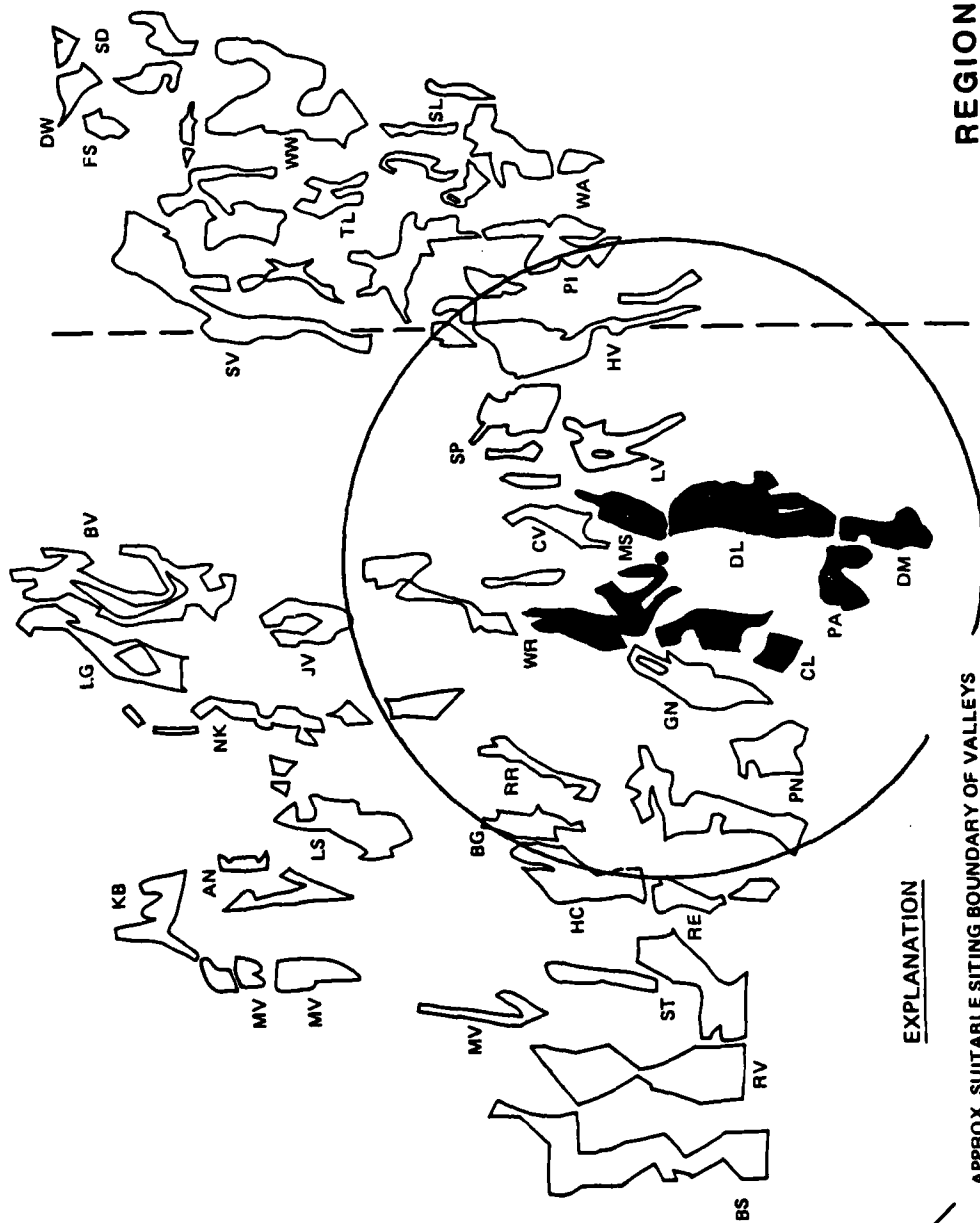
20-14) Best 1150 shelters and 15 percent - Coyote MOB, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 81 |
| Whirlwind | WW | | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 212 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | 219 | Spring | SP | |
| Delamar/Pahroc | DM | 170 | Stone Cabin | ST | |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | 161 | | | |
| | | | TOTAL SHELTERS | | 1392 |
| | | | TOTAL VALLEYS | | 7 |
| | | | TOTAL ASCs | | 1 |



B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
 20-14) Best 1150 shelters and 15 percent - Coyote MOB, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | 328 | Spring | SP | |
| Delamar/Pahroc | DM | 255 | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1529 |
| | | | TOTAL VALLEYS | | 5 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

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NEVADA
UTAH
ARIZONA



NORTH

EXPLANATION



APPROX. SITTING BOUNDARY OF VALLEYS



AREA OF SITTING VALLEYS INCLUDED IN DEPLOYMENT



MAIN OPERATING BASE



AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

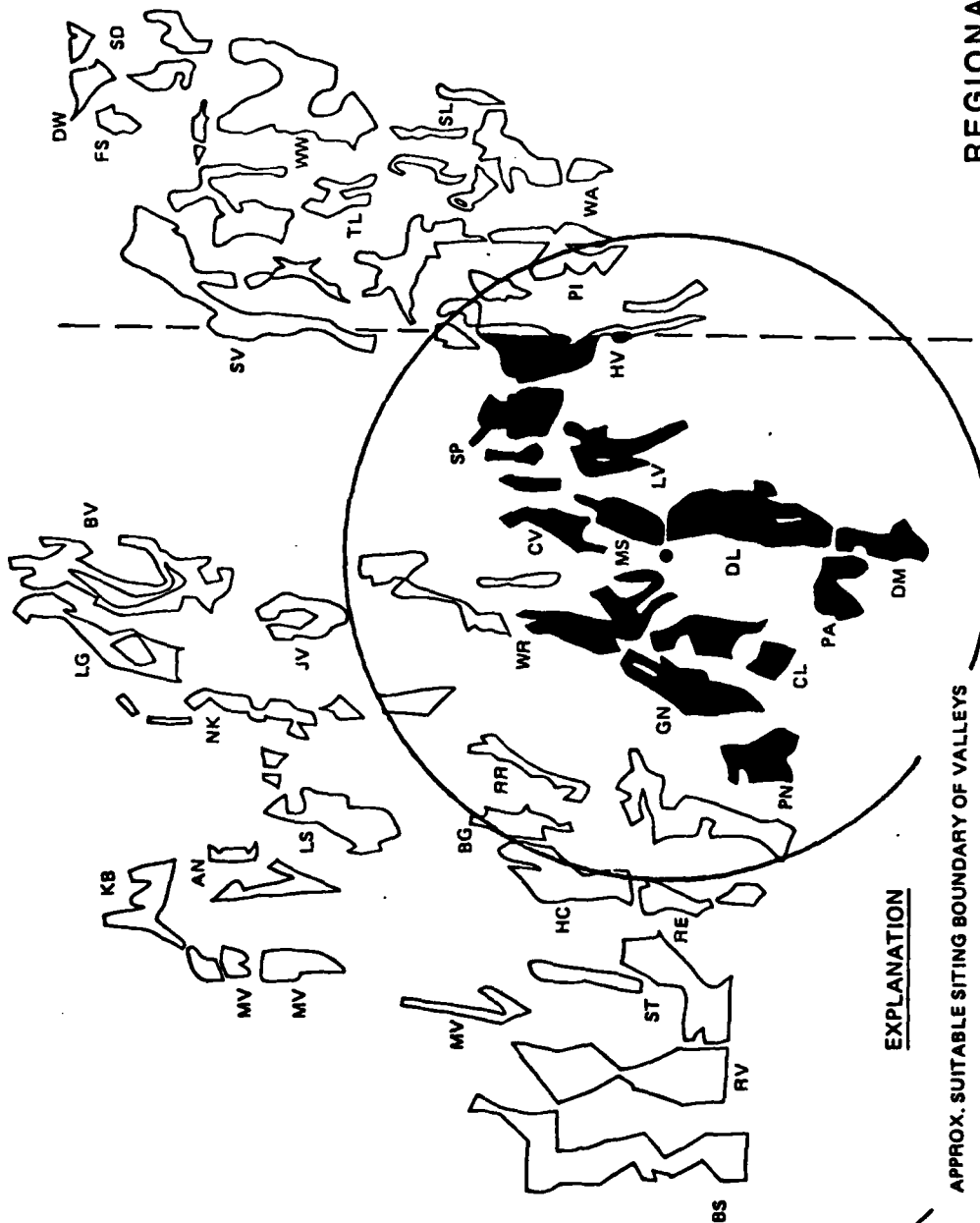
(NOT TO SCALE)

(ABOUT 1:2,500,000)

C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

20-14) Best 1150 shelters and 15 percent - Coyote MOB, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 116 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 146 |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | 138 | Stone Cabin | ST | |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 1422 |
| | | | TOTAL VALLEYS | | 11 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

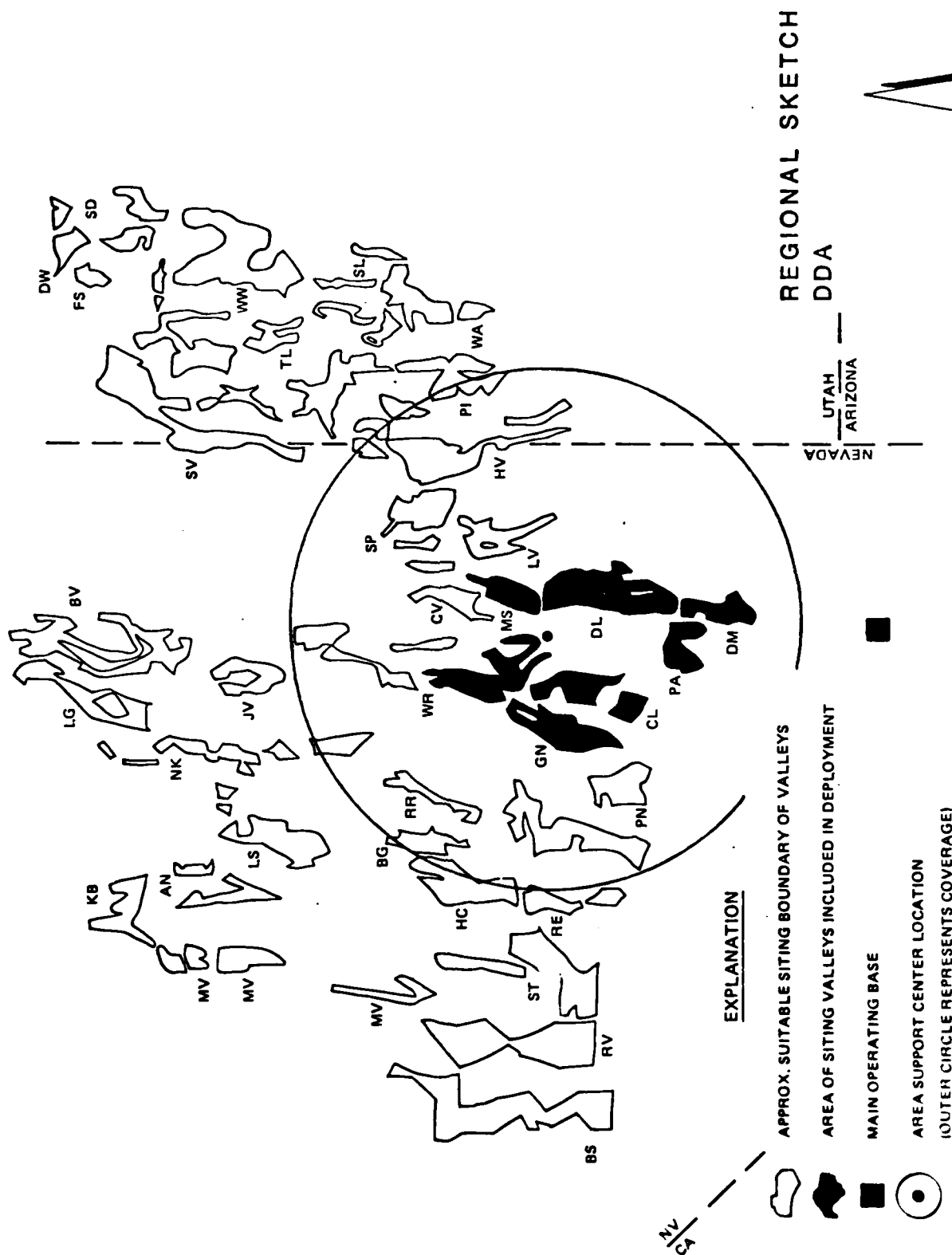
(NOT TO SCALE)
(ABOUT 1:2,500,000)

NV
CA

D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

20-14) Best 1150 shelters and 15 percent - Coyote MOB, Nevada only

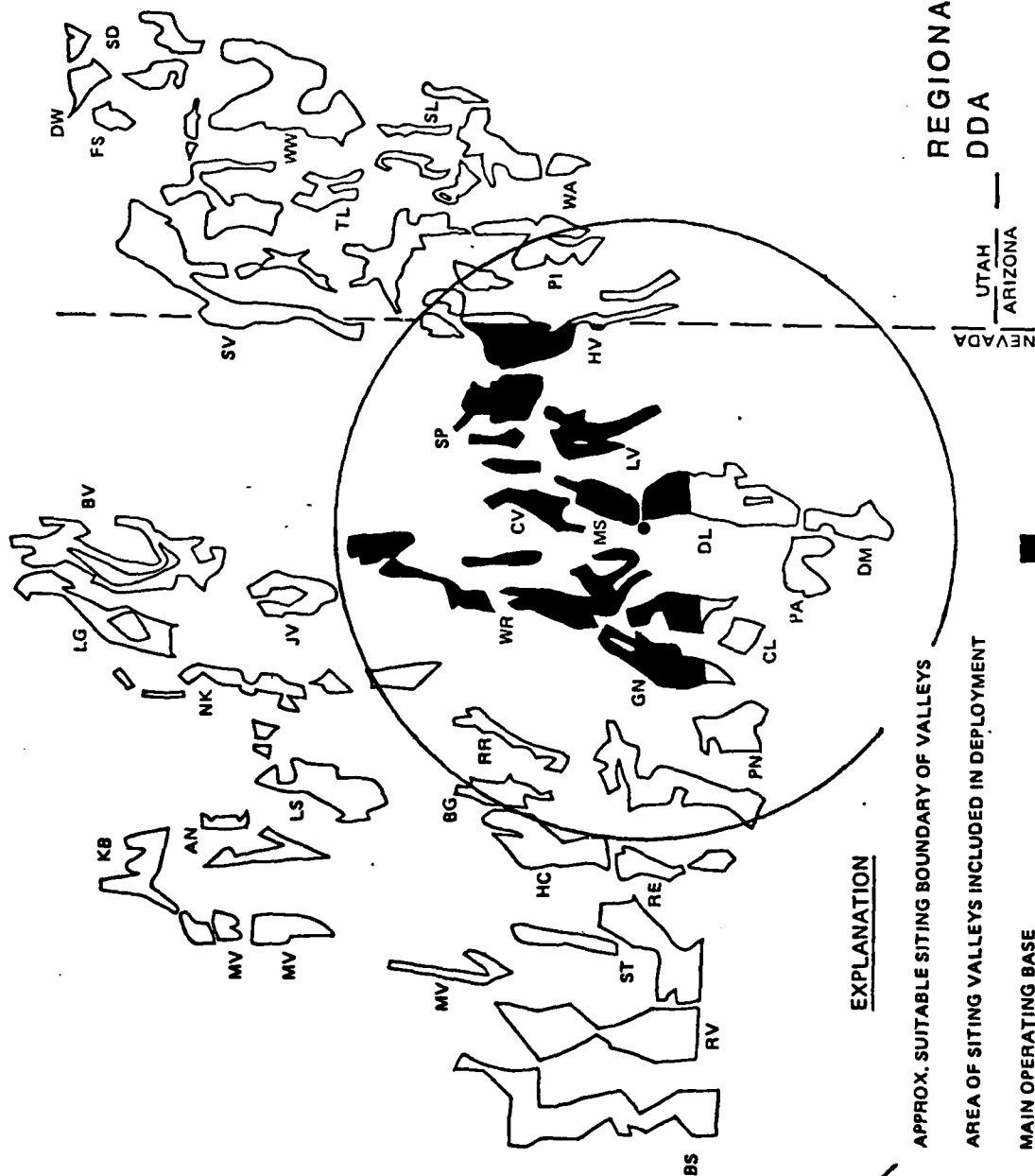
| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | | Reveille | RE | |
| Coal | CL | 302 | Spring | SP | |
| Delamar/Pahroc | DM | 207 | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | 190 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 1392 |
| | | | TOTAL VALLEYS | | 6 |
| | | | TOTAL ASCs | | 1 |



A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water

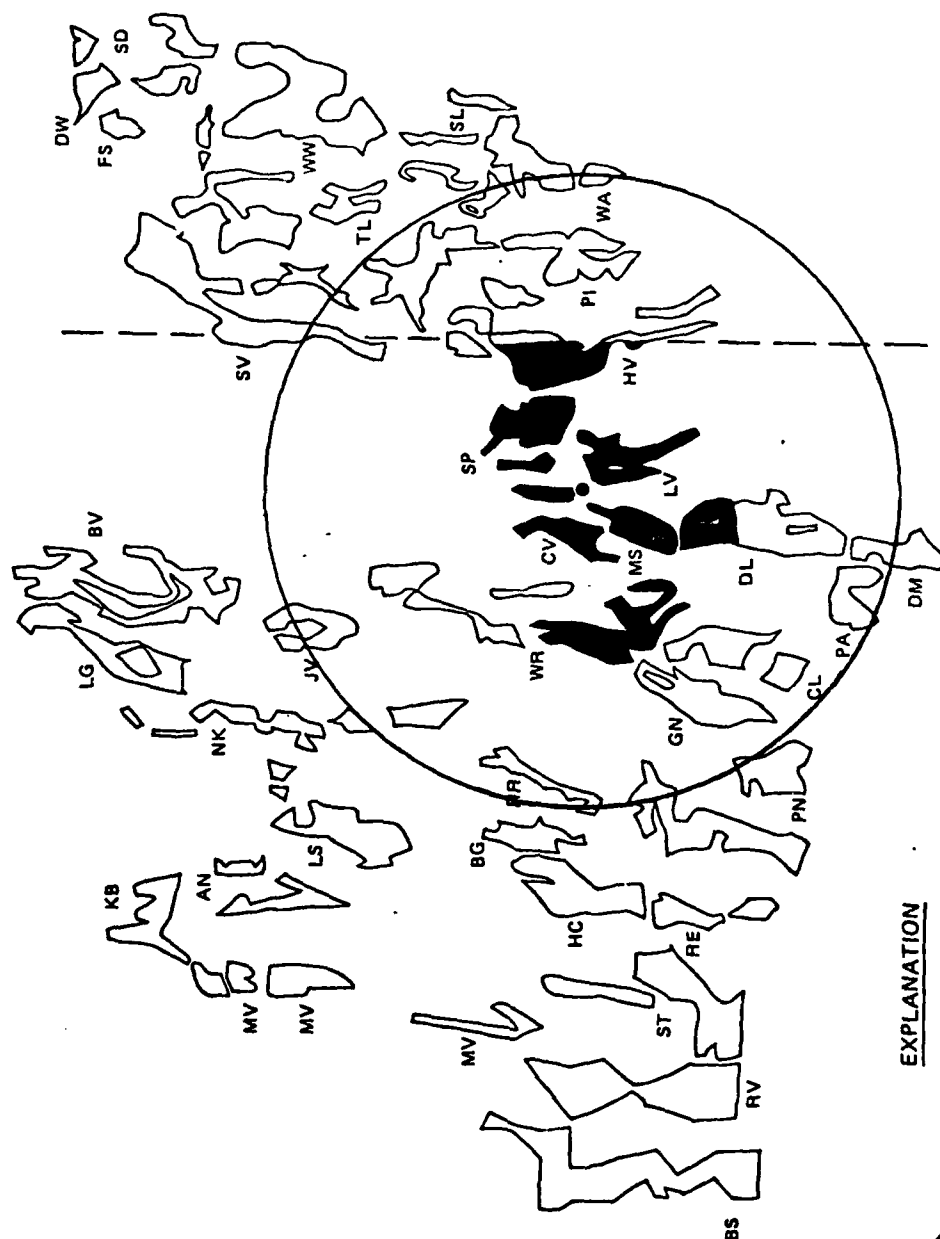
20-16) Best 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 208 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | 121 |
| Coal | CL | 115 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 95 | White River | WR | 398 |
| Garden | GN | 110 | | | |
| | | | TOTAL SHELTERS | | 1398 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 1 |



- R) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
- 20-16) Best 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 312 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 286 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | | Spring | SP | 182 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 142 | White River | WR | 398 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1560 |
| | | | TOTAL VALLEYS | | 7 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

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NEVADA



NORTH

EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION

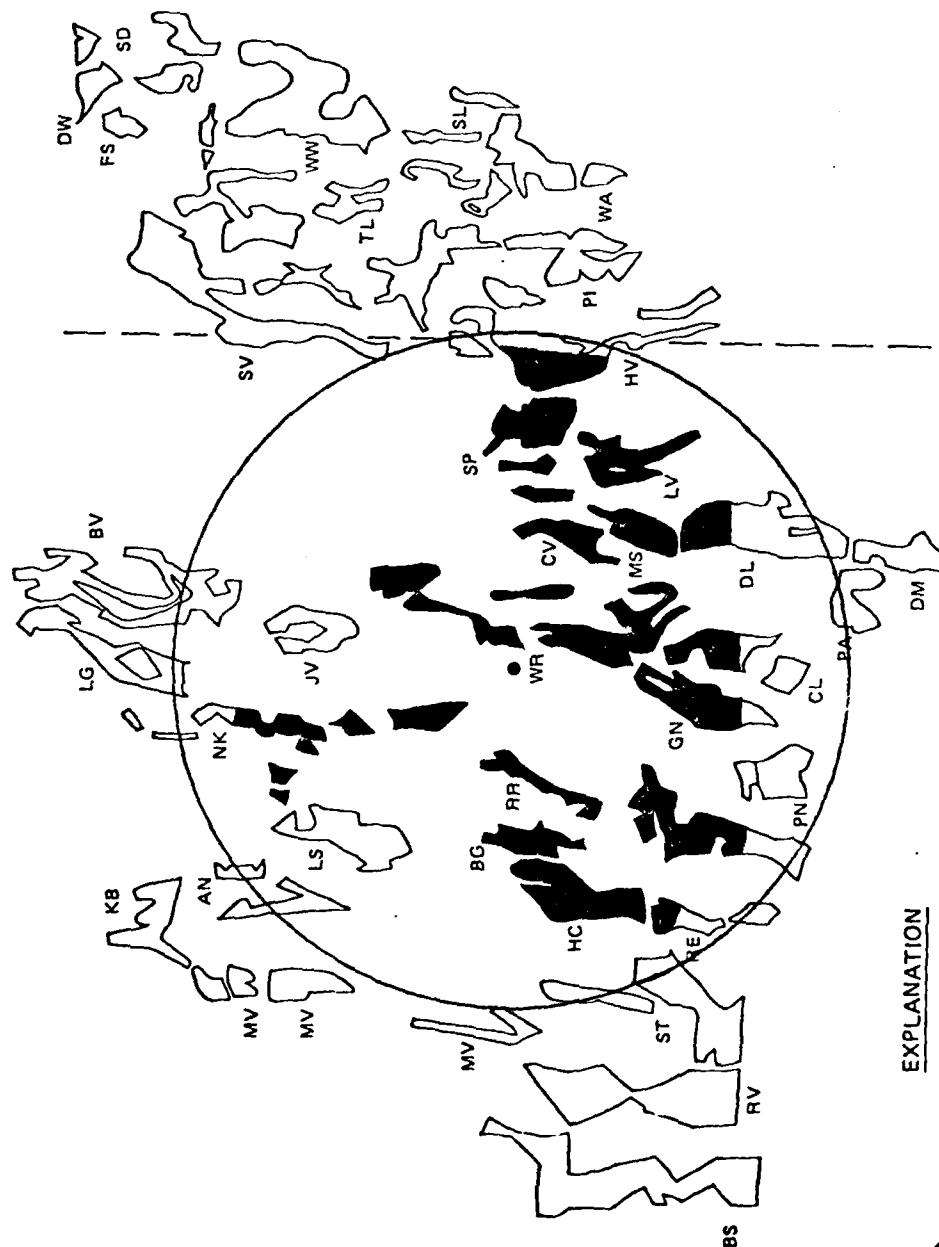
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

20-16) About 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 115 |
| Fish Springs Flat | FS | | Hot Creek | HC | 99 |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | 77 |
| Big Sand Springs | BG | 57 | Penoyer | PN | 24 |
| Big Smoky | BS | | Railroad | RR | 213 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | 22 |
| Coal | CL | 106 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 89 | White River | WR | 191 |
| Garden | GN | 86 | | | |
| | | | TOTAL SHELTERS | | 1380 |
| | | | TOTAL VALLEYS | | 15 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



NORTH

EXPLANATION

APPROX. SUITABLE SITING BOUNDARY OF VALLEYS

AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT

MAIN OPERATING BASE

AREA SUPPORT CENTER LOCATION

(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)

CA
NV

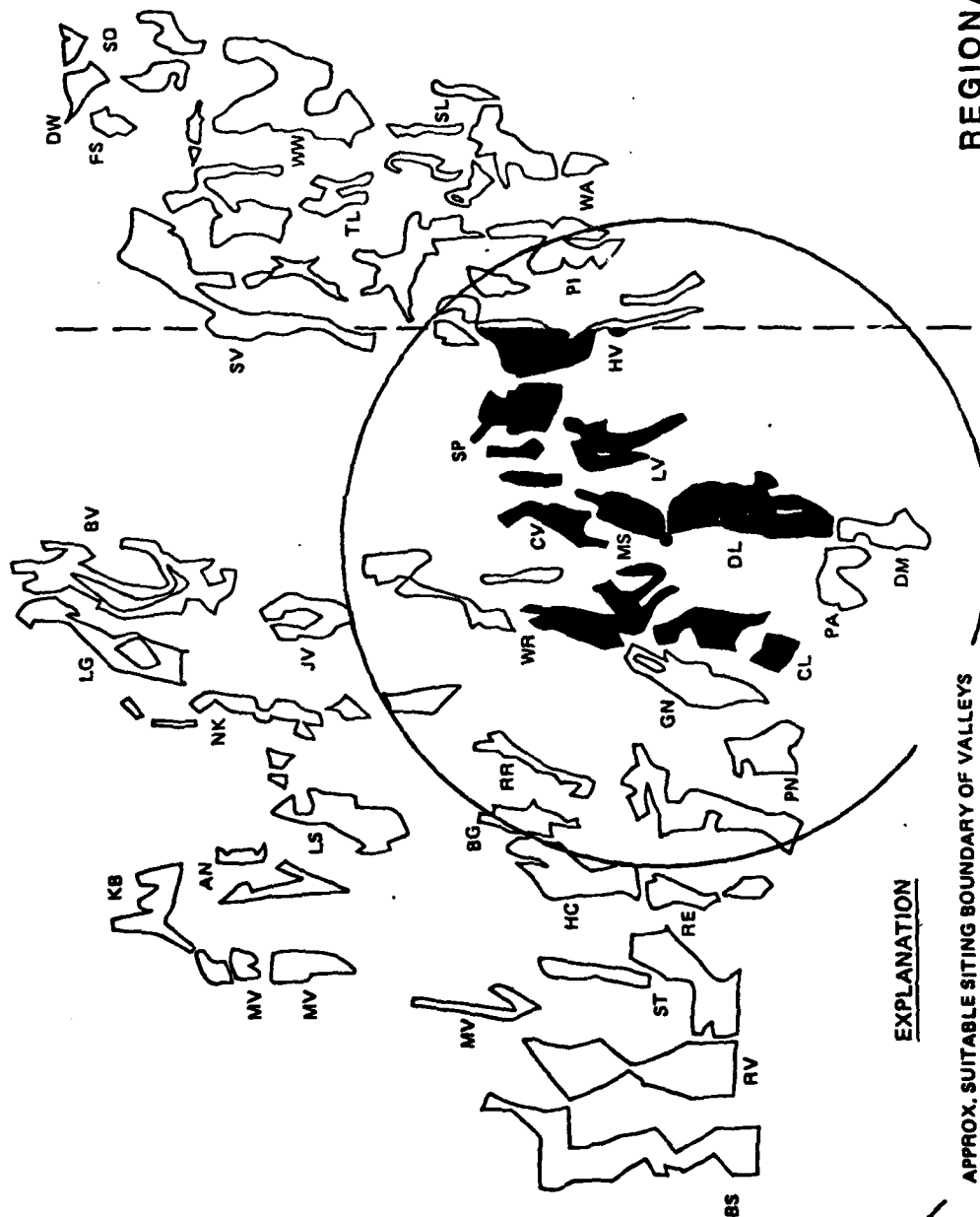
D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

20-16) Rest 1150 shelters and 15 percent - Coyote MOB, avoid all MOAs and Restricted Areas,
Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | 174 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 141 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 104 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 105 | Reveille | RE | 102 |
| Coal | CL | 159 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 134 | White River | WR | 286 |
| Garden | GN | 129 | | | |
| | | | TOTAL SHELTERS | | 1334 |
| | | | TOTAL VALLEYS | | 9 |
| | | | TOTAL ASCs | | 1 |

- A) Horizontal shelters - 2/3 hex, 5200-foot spacing, 50 feet to both rock and water
- 20-18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys,
Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Duquay | DW | | Hamlin | HV | 208 |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 191 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 81 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 79 | Reveille | RE | |
| Coal | CL | 219 | Spring | SP | 121 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 284 | White River | WR | 265 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1448 |
| | | | TOTAL VALLEYS | | 8 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

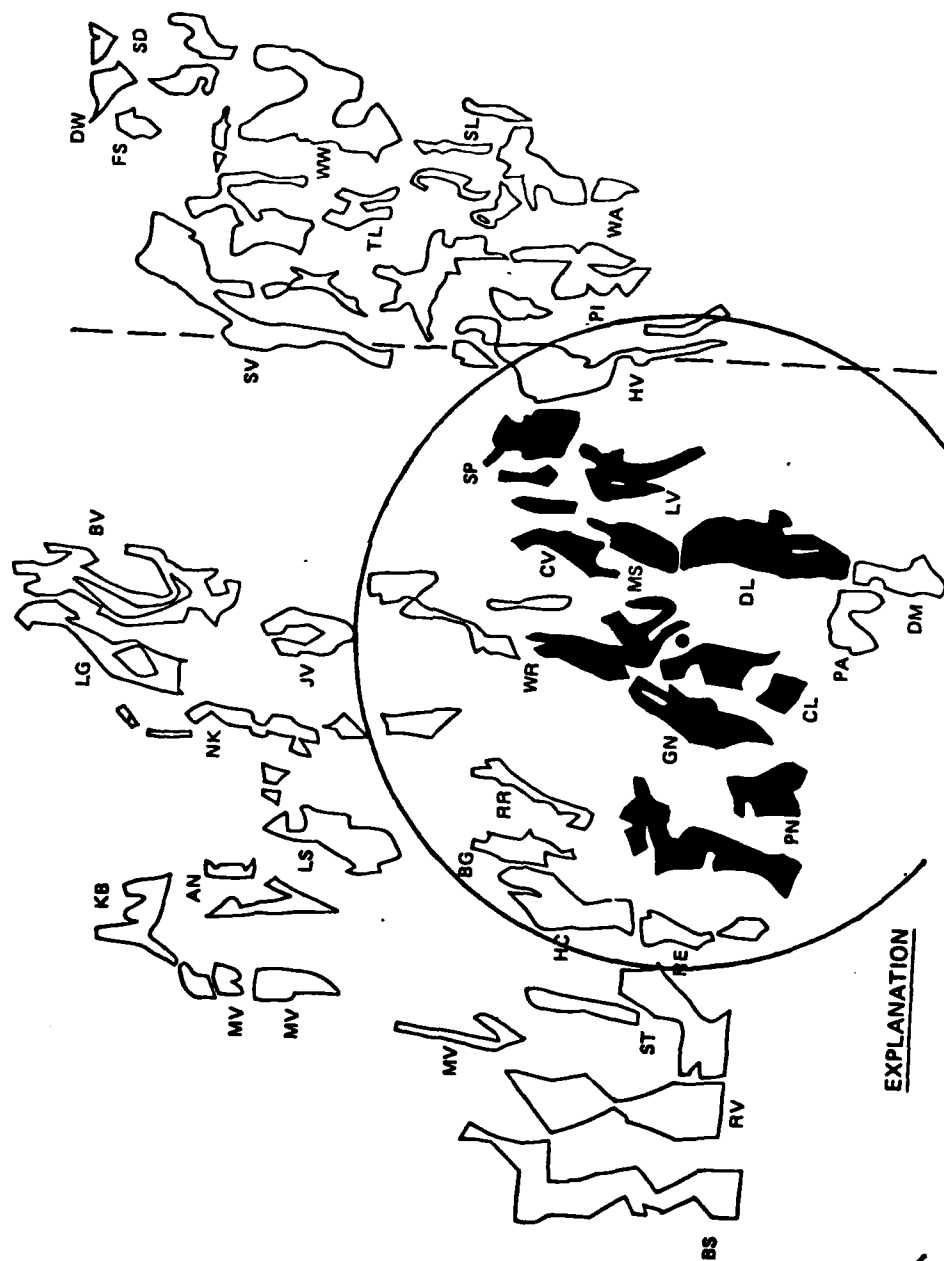
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B) Horizontal shelters - full hex, 5200-foot spacing, 50 feet to both rock and water
 20-18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys,
 Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS. | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 122 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Peroyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 118 | Reveille | RE | |
| Coal | CL | 328 | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 426 | White River | WR | 398 |
| Garden | GN | | | | |
| | | | TOTAL SHELTERS | | 1392 |
| | | | TOTAL VALLEYS | | 5 |
| | | | TOTAL ASCs | | 1 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION (OUTER CIRCLE REPRESENTS COVERAGE)

NV
CA

REGIONAL SKETCH

DDA

UTAH
ARIZONA

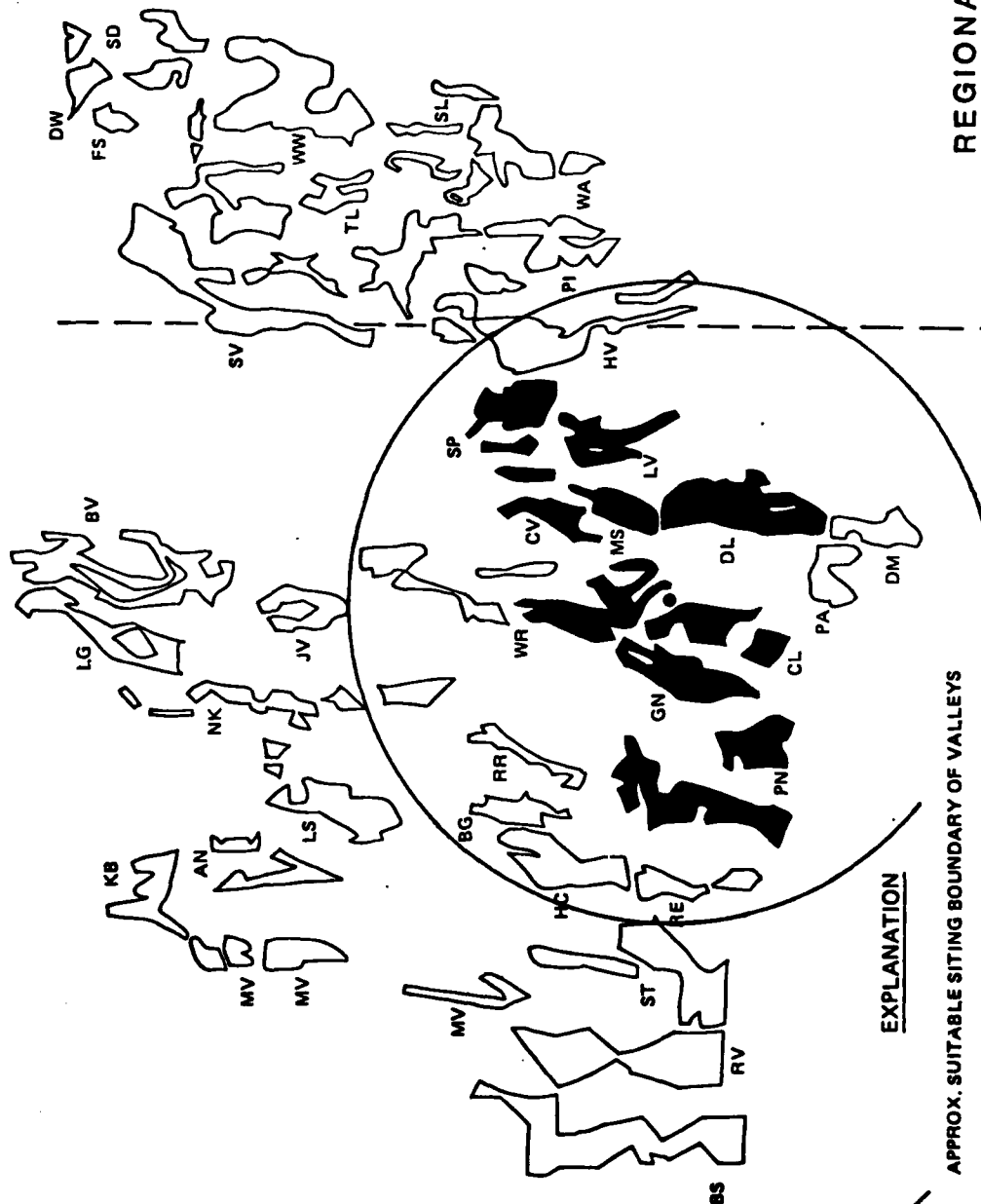
NEVADA

(NOT TO SCALE)

C) Vertical shelters - 2/3 hex, 5200-foot spacing, 150 feet to both rock and water

20-18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys,
Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | 94 |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | |
| Whirlwind | WW | | Muleshoe | MS | 69 |
| Antelope | AN | | Newark | NK | |
| Big Sand Springs | BG | | Penoyer | PN | 146 |
| Big Smoky | BS | | Railroad | RR | 164 |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 70 | Reveille | RE | |
| Coal | CL | 201 | Spring | SP | 68 |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 267 | White River | WR | 127 |
| Garden | GN | 126 | | | |
| | | | TOTAL SHELTERS | | 1332 |
| | | | TOTAL VALLEYS | | 10 |
| | | | TOTAL ASCs | | 1 |



REGIONAL SKETCH

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ARIZONA
NEVADA



EXPLANATION

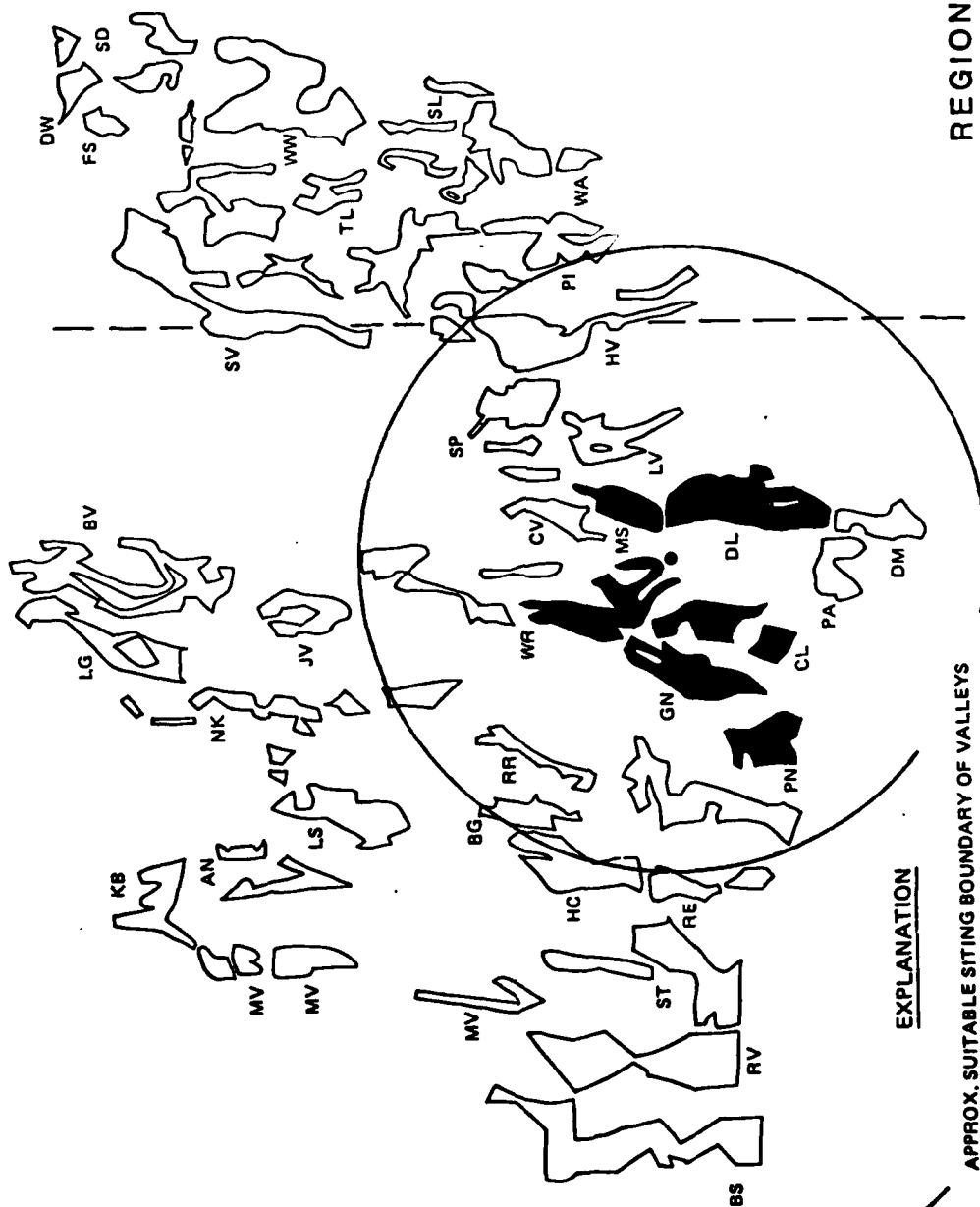
- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION
(OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

D) Vertical shelters - full hex, 5200-foot spacing, 150 feet to both rock and water

20-18) Best 1150 shelters and 15 percent - Coyote MOB, avoid Delamar/Pahroc valleys, Nevada only

| <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> | <u>VALLEY</u> | <u>ABBRE-
VIATION</u> | <u>NUMBER OF
SHELTERS USED</u> |
|-------------------|---------------------------|------------------------------------|----------------|---------------------------|------------------------------------|
| Dugway | DW | | Hamlin | HV | |
| Fish Springs Flat | FS | | Hot Creek | HC | |
| Pine | PI | | Jakes | JV | |
| Sevier Desert | SD | | Kobeh | KB | |
| Sevier Lake | SL | | Lake | LV | |
| Snake | SV | | Little Smoky | LS | |
| Tule | TL | | Long | LG | |
| Wah Wah | WA | | Monitor | MV | 104 |
| Whirlwind | WW | | Muleshoe | MS | |
| Antelope | AN | | Newark | NK | 219 |
| Big Sand Springs | BG | | Penoyer | PN | |
| Big Smoky | BS | | Railroad | RR | |
| Butte | BV | | Ralston | RV | |
| Cave | CV | 302 | Reveille | RE | |
| Coal | CL | | Spring | SP | |
| Delamar/Pahroc | DM | | Stone Cabin | ST | |
| Dry Lake | DL | 400 | White River | WR | 190 |
| Garden | GN | 189 | | | |
| | | | TOTAL SHELTERS | | 1404 |
| | | | TOTAL VALLEYS | | 6 |
| | | | TOTAL ASCS | | 1 |



EXPLANATION

- APPROX. SUITABLE SITING BOUNDARY OF VALLEYS
- AREA OF SITING VALLEYS INCLUDED IN DEPLOYMENT
- MAIN OPERATING BASE
- AREA SUPPORT CENTER LOCATION (OUTER CIRCLE REPRESENTS COVERAGE)

(NOT TO SCALE)
(ABOUT 1:2,500,000)

REGIONAL SKETCH

DDA

UTAH
ARIZONA
NEVADA



NORTH

APPENDIX A

GLOSSARY

APPENDIX AGLOSSARY

AFRCE-MX - Air Force Regional Civil Engineers - MX

ASC - Area Support Center

CMF - Cluster Maintenance Facility

DDA - Designated Deployment Area

Depth to Rock - Estimated depth to material with seismic velocity in excess of 7000 feet per second.

Depth to Water - Estimated depth to first encountered water.

DTN - Designated Transportation Network

MOA - Military Overflight Area

MOB - Main Operating Base

TRW - Defense and Space Systems Group of TRW Inc.

Valley Clustering - Shelters within one valley are interconnected by cluster road. Number of CMFs and barriers vary with valley size.

23:1 Clustering - Shelters are in clusters of 23 shelters. Each cluster has a CMF and barrier to the DTN.

APPENDIX B
MILITARY OVERFLIGHT AREAS (MOAs)
AND RESTRICTED AREAS

APPENDIX B

MOAs and Restricted Areas

UTAH

Military Overflight Areas

Gandy
Sevier A
Sevier B

Restricted Areas

R-6402
R-6405
R-6407

NEVADA

Military Overflight Area

Desert

Restricted Areas

R-4806
R-4807
R-4808N
R-4809

