AD-A150 263 SIMULATION OF CRITICAL MATERIALS RESOURCE STRATEGIES 1/2
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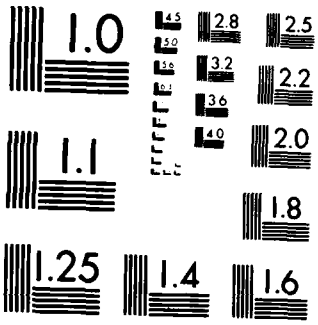

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AD-A150 263

SIMULATION OF CRITICAL MATERIALS RESOURCE STRATEGIES

APPENDIX D - DATA BASE
VOLUME 4
THROUGH SCENARIO 47

FINAL REPORT

CONTRACT EMW-C-0906

ARTICLE III A

Submitted to:
Mr. Michael Pfetsch
FEMA
Program Manager
Donohoe Building, Room 617
500 "C" Street, S.W.
Washington, D.C. 20472

September 13, 1983

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This report addresses preliminary efforts to quantify strategic relationships of materials to force elements.
The results of the preliminary materials are emergency but requires further model development.

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SCENARIO 36

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WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

gion	1	2	3	4	5	6	7	8	9	1
eight	10.0	10.0	7.0	5.0	7.0	2.0	2.0	5.0	2.0	6.0
COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	0.1071

Level of Conflict 3 Media 2

gion	1	2	3	4	5	6	7	8	9	1
egion	11									
eight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
eight	9.0									
COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.09[illegible]	[illegible]
COEF	0.1200									

Level of Conflict 3 Media 3

gion	1	2	3	4	5	6	7
eight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
COEF	0.1786	0.1786	0.1786	0.1429	0.1071	0.0714	0.1429

Level of Conflict 3 Media 4

egion	1	2	3	4
eight	10.0	4.0	2.0	1.0
COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS

or the Importance of Controlling EACH region within its own Media

edia 1

gion	1	2	3	4	5	6	7	8	9	10
COEF	0.0114	0.0114	0.0170	0.0114	0.0113	0.0045	0.0045	0.0114	0.0045	0.0114

edia 2

egion	1	2	3	4	5	6	7	8	9	10

edia 11

egion

COEF	0.0171	0.0171	0.0154	0.0068	0.0119	0.0085	0.0017	0.0136	0.0119	0.0085
COEF	0.0154									

dia 3

egion	1	2	3	4	5	6	7
COEF	0.0228	0.0228	0.0228	0.0183	0.0137	0.0091	0.0183

dia 4

egion	1	2	3	4
COEF	0.0752	0.0301	0.0150	0.0075

portance of controlling ANY Region

thin its Media as compared to the Importance

controlling ANY Region of any other Media

dia 1

egion	1	2	3	4	5	6	7	8	9	10
COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0060

dia 2

egion	1	2	3	4	5	6	7	8	9	10

edia 11

egion

COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
COEF	0.0033									

dia 3

gion	1	2	3	4	5	6	7
COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

edia 4

gion	1	2	3	4
COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOC 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.141	10.000
2	1	AIR INTERDICTION	0.117	8.2[illegible]
3	3	ARMY GROUND	0.104	7.3[illegible]
4	16	ATTACK SUBS	0.072	5.1[illegible]
5	19	SURFACE COMBATANTS	0.060	4.247
6	12	THEATER NUCLEAR WEAPON	0.054	3.81[illegible]
7	8	RAPID DEPLOY	0.051	3.7[illegible]
8	6	CAS	0.044	3.1[illegible]
9	14	ASW(LAND BASED)	0.043	3.09[illegible]
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.710
11	15	ASW(SEA BASED)	0.033	2.315
12	23	AIR SUPERIORITY(SHIP BASED)	0.032	2.2[illegible]
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.065
14	10	STRATEGIC BOMBER	0.025	1.794
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.020	1.41[illegible]
16	29	ASAT(SPACE BASED)	0.013	0.914
17	18	MINE WARFARE	0.012	0.891
18	2	AMPHIBIOUS ASSAULT	0.011	0.777
19	13	SPECIAL OPERATIONS	0.010	0.725
20	28	ASAT(LAND BASED)	0.007	0.510
21	20	AIR DEFENSE(LAND BASED)	0.004	0.278
22	9	SPCE-BASED WEAPON(LND CNTRL)	0.003	0.21[illegible]
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.002	0.118
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOG 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.52
CAS	1.[illegible]
ICBM	0.00
STRATEGIC BOMBER	1.7[illegible]
SLBM	0.00
ASW(SEA BASED)	1.[illegible]
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.26
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.[illegible]
	34.99

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.91
CAS	1.91
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	3.01
ASW(SEA BASED)	1.11
ATTACK SUBS	7.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.18

NICKEL

AIR INTERDICTION	5.60
ARMY GROUND	4.92
CAS	1.72
STRATEGIC BOMBER	1.79
ASW(SEA BASED)	1.71
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
	41.21

FLUORSPAR ACID

AIR INTERDICTION	7.1[illegible]
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	3.[illegible]
[illegible]	1.09
ICBM	0.[illegible]
STRATEGIC BOMBER	1.7[illegible]
SLBM	0.[illegible]
ASW(LAND BASED)	0.[illegible]
ASW(SEA BASED)	.4[illegible]
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.21
AIR SUPERIORITY(LAND BASED)	1.91
AIR SUPERIORITY(SHIP BASED)	2.[illegible]
INTERCEPTOR AIRCRAFT	0.0[illegible]
ABM(LAND BASED)	0.00
	1[illegible].57

PYRETHRUM

ARMY GROUND	0.[illegible]
CIVIL DEFENSE	.00
ASW(SEA BASED)	0.00
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.21
	14.60

COMMODITY NORMALIZED IMPORTANCE

NICKEL	10.00	(41.21)
TIN	9.99	(41.18)
FLUORSPAR ACID	9.60	(39.57)
COBALT	8.48	(34.99)
PYRETHRUM	3.54	(14.60)

COBRA	CAS	72	7838
A-10	CAS	45	4[illegible]
COBRA	CAS	10[illegible]	[illegible]
F-4	AIR	7	[illegible]
F-16	AIR INTERDICTION	31	[illegible]
		4	[illegible]
ART. ACRFT	CAS	0	4[illegible]
RADIO RLAY	AIR INTERDICTION	0	1[illegible]
	CAS	2	1[illegible]
F-111	AIR INTERDICTION	12	[illegible]
A-6	AIR INTERDICTION	38	[illegible]
F-15	AIR INTERDICTION	57	[illegible]
A-7	AIR INTERDICTION	51	7[illegible]
F-14	AIR INTERDICTION	40	1[illegible]
F-18	AIR INTERDICTION	21	[illegible]
S-3	ASW(SEA BASED)	6	[illegible]
SH-2	ASW(SEA BASED)	15	1[illegible]
SH-60B	ASW(SEA BASED)	13	[illegible]
S-3	ASW(SEA BASED)	26	2[illegible]
ATT. SUBS	ASW(SEA BASED)	24	1[illegible]
FRIGATES	ASW SEA BASED)	14	4[illegible]
DSTROYERS	ASW(SEA BASED)	3	4[illegible]
M-48	ARMY GROUND	57	[illegible]
M-60	ARMY GROUND	64	[illegible]
M-1	ARMY GROUND	[illegible]	[illegible]
M-551	ARMY GROUND	[illegible]	[illegible]
M-901	ARMY GROUND	54	2[illegible]
M-2/M-3	ARMY GROUND	47	4[illegible]
M-113	ARMY GROUND	5	2[illegible]
MLRS	ARMY GROUND	2	[illegible]
TOWED ART.	ARMY GROUND	27	1[illegible]
SELF-PROP	ARMY GROUND	34	1[illegible]
FERSHING	ARMY GROUND	18	0[illegible]
GLCMS	ARMY GROUND	30	1[illegible]
INFANTRY	ARMY GROUND	7	5[illegible]
MORTERS	ARMY GROUND	36	[illegible]
POLES LNCH	ARMY GROUND	1	5[illegible]

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5556
M-1	5.2402
M-60	4.7162
F-15	4.4444
M-901	4.1921
A-7	4.0000
COBRA	3.7478
M-2/M-3	3.6681
F-14	3.3333
A-6	3.0000
M-48	2.9345
MORTERS	2.8530
SELF-PROP.	2.7948
S-3	2.6842
GLCMS	2.3290
TOWED ART.	2.0961
ATT. SUBS	1.8640
SH-60B	1.8247
MLRS	1.5721
PERSHING	1.3974
SH-2	1.1743
FRIGATES	1.1194
DSTROYERS	0.6710
INFANTRY	0.[illegible]
SH-3	0.4697
RADIO RLAY	0.46[illegible]
M-113	0.4076
ART. ACRFT	0.3811
POLES LNCH	0.1[illegible]
[illegible]	0.0[illegible]

TIA	CAS	72. 7382	
A-10	CAS	64. 6521	
COBRA	CAS	108. 5150	
F-4	AIR INTERDICTION	11. 1111	
	CAS	11. 6780	
F-16	AIR INTERDICTION	7. 4075	
	CAS	6. 6047	
	OCA	1. 1245	
AST ACRFT	CAS	1. 1275	
RADIO RLAY	LAR INTERDICTION	16. 3813	
	CAS	12. 8813	
F-111	AIR INTERDICTION	43. 6042	
	AIR INTERDICTION	5. 0000	
A-6	AIR INTERDICTION	51. 7515	
F-15	AIR INTERDICTION	48. 5150	
A-7	AIR INTERDICTION	80. 8630	
F-14	AIR INTERDICTION	5. 0000	
F-18	AIR INTERDICTION	16. 0221	
SH-3	ASW(SEA BASED)	29. 2582	
S-3	ASW(SEA BASED)	34. 7334	
SH-60B	ASW(SEA BASED)	14. 4701	
ATT. SUBS	ASW(SEA BASED)	0. 6811	
FRIGATES	ASW(SEA BASED)	4. 2185	
DSTROYERS	ASW(SEA BASED)	6. 7748	
M-48	ARMY GROUND	37. 6655	
M-60	ARMY GROUND	0. 0113	
M-1	ARMY GROUND	6. 7748	
M-55	ARMY GROUND	6. 7748	
M-901	ARMY GROUND	0. 7028	
M-2/M-3	ARMY GROUND	10. 1654	
M-113	ARMY GROUND	4. 5198	
T-58	ARMY GROUND	6. 0265	
TOWED ART.	ARMY GROUND	15. 8185	
SELF-PROP.	ARMY GROUND	26. 3156	
FERSHING	ARMY GROUND	60. 2649	
GLCMS	ARMY GROUND	5. 8120	
INFANTRY	ARMY GROUND	0. 2250	
MORTERS	ARMY GROUND		
FOLES LNCH	ARMY GROUND		

NORMALIZED VALUES

F-111	10. 0000
F-16	8. 6787
F-4	8. 5622
F-18	6. 2500
A-10	5. 6216
COBRA	4. 9970
INFANTRY	4. 6579
F-15	4. 4444
A-7	4. 0000
F-14	3. 7500
A-6	3. 3750
M-1	2. 9112
S-3	2. 6842
GLCMS	2. 0378
SH-60B	1. 5658
FERSHING	1. 2227
FRIGATES	1. 1184
ATT. SUBS	1. 1184
SH-2	1. 0066
MLRS	0. 7840
DSTROYERS	0. 6710
M-2/M-3	0. 5240
M-901	0. 5240
M-60	0. 5240
SELF-PROP.	0. 4658
RADIO RLAY	0. 4608
MORTERS	0. 4076
SH-3	0. 4076
TOWED ART.	0. 3473
M-48	0. 3271
ART. ACRFT	0. 2811
M-113	0. [illegible]
FOLES LNCH	0. [illegible]

NICKEL			
A-10	CAS		72.7334
COBRA	CAS		4.4881
F-4	AIR	INTERDICTION	11.6363
	CAS		5.4570
F-16	AIR	INTERDICTION	71.8785
	CAS		4.4775
ART. ACRFT	CAS		1.4145
RADIO RLAY	AIR	INTERDICTION	3.2345
	CAS		2.7275
F-111	AIR	INTERDICTION	125.8115
A-6	AIR	INTERDICTION	83.8144
F-15	AIR	INTERDICTION	17.5028
A-7	AIR	INTERDICTION	51.7525
F-14	AIR	INTERDICTION	43.5180
F-18	AIR	INTERDICTION	80.8638
SH-3	ASW(SEA	BASED)	6.5471
SH-2	ASW(SEA	BASED)	17.3142
SH-60B	ASW(SEA	BASED)	27.0103
S-3	ASW(SEA	BASED)	34.7254
ATT. SUBS	ASW(SEA	BASED)	43.4104
FRIGATES	ASW(SEA	BASED)	26.0463
DSTROYERS	ASW(SEA	BASED)	15.4273
M-48	ARMY	GROUND	42.1854
M-60	ARMY	GROUND	67.7551
M-1	ARMY	GROUND	75.3311
M-551	ARMY	GROUND	0.7555
M-901	ARMY	GROUND	47.4582
M-2/M-3	ARMY	GROUND	54.2384
M-113	ARMY	GROUND	5.2722
MLRS	ARMY	GROUND	20.3394
TOWED ART	ARMY	GROUND	36.1589
SELF-PROP.	ARMY	GROUND	48.2119
PERSHING	ARMY	GROUND	16.0794
GLCMS	ARMY	GROUND	22.5983
INFANTRY	ARMY	GROUND	37.6655
MORTERS	ARMY	GROUND	15.8195
ROLES LNCH	ARMY	GROUND	0.2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	6.4216
F-18	6.2500
M-1	5.8224
A-10	5.6216
M-60	5.2402
F-15	4.4444
M-2/M-3	4.1921
A-7	4.0000
F-14	3.7500
COBRA	3.7478
SELF-PROP.	3.7263
M-901	3.6681
ATT. SUBS	3.3552
M-48	3.2605
A-6	3.0000
INFANTRY	2.9112
TOWED ART.	2.7948
S-3	2.6842
SH-60B	2.0877
FRIGATES	2.0131
GLCMS	1.7467
MLRS	1.5721
PERSHING	1.3974
SH-2	1.3421
MORTERS	1.2227
DSTROYERS	1.2079
SH-3	0.5368
RADIO RLAY	0.4608
M-113	0.4074
ART. ACRFT	0.1974
M-551	0.0592
ROLES LNCH	0.01[illegible]

FLUORSPAR ACID

A-10	CAS	90.9170
COBRA	CAS	48.4991
F-4	AIR INTERDICTION	129.3813
	CAS	9.0917
F-16	AIR INTERDICTION	89.8431
	CAS	50.5094
ART. ACRFT	CAS	3.6347
RADIO RLAY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	161.7266
A-6	AIR INTERDICTION	49.5180
F-15	AIR INTERDICTION	71.8765
A-7	AIR INTERDICTION	64.6904
F-14	AIR INTERDICTION	50.9039
F-18	AIR INTERDICTION	89.8481
SH-3	ASW(SEA BASED)	6.9407
SH-2	ASW(SEA BASED)	17.3640
SH-60B	ASW(SEA BASED)	33.7117
S-3	ASW(SEA BASED)	43.4104
ATT. SUBS	ASW(SEA BASED)	29.9409
FRIGATES	ASW(SEA BASED)	20.2592
DSTROYERS	ASW(SEA BASED)	12.1549
M-48	ARMY GROUND	12.6556
M-60	ARMY GROUND	20.3384
M-1	ARMY GROUND	22.5993
M-551	ARMY GROUND	0.2240
M-901	ARMY GROUND	54.2334
M-2/M-3	ARMY GROUND	54.2334
M-113	ARMY GROUND	6.0245
MLRS	ARMY GROUND	16.9405
TOWED ART.	ARMY GROUND	22.5993
SELF-PROP.	ARMY GROUND	30.1324
PERSHING	ARMY GROUND	15.8195
GLCMS	ARMY GROUND	26.3659
INFANTRY	ARMY GROUND	60.2649
MORTERS	ARMY GROUND	26.3659
ROLES LNCH	ARMY GROUND	0.2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5506
F-15	4.4444
A-7	4.0000
INFANTRY	3.7268
M-2/M-3	3.3537
M-901	3.3537
F-14	3.3333
A-6	3.0000
COBRA	2.9982
S-3	2.6842
SH-60B	2.0877
SELF-PROP.	1.8632
ATT. SUBS	1.7895
MORTERS	1.6301
GLCMS	1.6303
TOWED ART.	1.3974
M-1	1.3974
M-60	1.2576
FRIGATES	1.2526
SH-2	1.0737
MLRS	1.0480
PERSHING	0.9784
M-48	0.7825
DSTROYERS	0.7514
SH-3	0.4505
M-113	0.3774
RADIO RLAY	0.3104
[illegible]	[illegible]
[illegible]	[illegible]

PYRETHRUM

ATT. SUBS	ASW(SEA BASED)	4.8234
M-48	ARMY GROUND	4.2185
M-60	ARMY GROUND	6.7798
SELF-PROP.	ARMY GROUND	6.0245
INFANTRY	ARMY GROUND	7.5331
MORTERS	ARMY GROUND	5.2732

NORMALIZED VALUES

INFANTRY	10.0000
M-60	9.0000
SELF-PROP.	8.0000
MORTERS	7.0000
ATT. SUBS	6.4034
M-48	5.6000

ALL COMMODITIES

A-10	CAS	3.0912
COBRA	CAS	2.1012
F-4	AIR INTERDICTION	4.1432
	CAS	0.[illegible]
F-16	AIR INTERDICTION	3.0548
	CAS	1.7178
ART. ACRFT	CAS	0.1333
RADIO RLAY	AIR INTERDICTION	0.1294
	CAS	0.1091
F-111	AIR INTERDICTION	5.4937
A-6	AIR INTERDICTION	1.6931
F-15	AIR INTERDICTION	2.4439
A-7	AIR INTERDICTION	2.1995
F-14	AIR INTERDICTION	1.9407
F-18	AIR INTERDICTION	3.2345
SH-3	ASW(SEA BASED)	0.2518
SH-2	ASW(SEA BASED)	0.6295
SH-60B	ASW(SEA BASED)	1.0467
S-3	ASW(SEA BASED)	1.4760
ATT. SUBS	ASW(SEA BASED)	1.1574
FRIGATES	ASW(SEA BASED)	0.7514
DSTROYERS	ASW(SEA BASED)	0.4515
M-48	ARMY GROUND	1.0124
M-60	ARMY GROUND	1.6272
M-1	ARMY GROUND	2.0379
M-551	ARMY GROUND	0.0128
M-901	ARMY GROUND	1.6271
M-2/M-3	ARMY GROUND	1.6271
M-113	ARMY GROUND	0.1733
MLRS	ARMY GROUND	0.6760
TOWED ART.	ARMY GROUND	0.9040
SELF-PROP.	ARMY GROUND	1.2656
PERSHING	ARMY GROUND	0.6780
GLCMS	ARMY GROUND	1.0546
INFANTRY	ARMY GROUND	1.7326
MORTERS	ARMY GROUND	0.8964
ROLES LNCH	ARMY GROUND	0.0226

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.0585
F-18	5.8824
A-10	5.6216
F-15	4.4444
A-7	4.0000
COBRA	3.8218
M-1	3.6989
F-14	3.5294
INFANTRY	3.1510
A-6	3.0882
M-2/M-3	2.9592
M-901	2.9592
M-60	2.9592
S-3	2.6842
SELF-PROP.	2.3016
ATT. SUBS	2.1052
GLCMS	1.9180
SH-60B	1.9080
M-48	1.8413
TOWED ART.	1.6440
MORTERS	1.6303
FRIGATES	1.3664
PERSHING	1.2330
MLRS	1.2290
SH-2	1.1447
DSTROYERS	0.8210
SH-3	0.4779
RADIO RLAY	0.4387
M-113	0.3151
ART. ACRFT	0.2425
ROLES LNCH	0.0411
M-551	0.0233

CRITICALITY OF SHORTFALL
ALL FE'S
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FE/ COMMODITY IMPORT.	CRITIC-ALITY	NORMALIZED FE'S-SHORTFALL CRITICALITY
COBALT	85.4	43.8	-48.7	402.5	8.5	3418.1	7.8
TIN	42.0	190.6	353.8	0.0	10.0	0.0	0.0
NICKEL	200.0	32.2	-83.9	437.7	10.0	4377.1	10.0
FLUORSPAR ACID	1400.0	895.0	-36.1	389.9	9.6	3744.3	8.6
YTTRIUM	500.0	0.0	-100.0	453.8	3.5	1607.4	3.7

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1350.	6.43	1.92	0.520	3.343
MOROCCO	450.	2.14	1.50	0.667	1.429
BOTSWANNA	250.	1.19	0.71	1.404	1.671
SOUTH AFRICA	150.	0.71	1.19	0.841	0.601
ZAIRE	12500.	59.52	0.71	1.404	83.549
ZAMBIA	3500	16.67	0.71	1.404	23.393
PHILIPPINES	50.	0.24	0.92	1.087	0.259
AUSTRALIA	400.	1.90	0.92	1.087	2.066
NEW CALEDONIA	250.	1.19	0.92	1.087	1.293
CANADA	1100	5.24	2.89	0.346	1.813
US	1000.	4.76	2.56	0.391	1.863
TOTAL:	21000.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.92	1.087	0.161
US	16100.	23.82	2.56	0.391	9.319
THAILAND	5900.	8.73	0.92	1.087	9.483
INDONESIA	5800	8.58	0.92	1.087	9.322
UK	100.	0.15	1.96	0.510	0.075
BOLIVIA	10300.	15.24	0.98	1.020	15.549
BRAZIL	2400.	3.55	0.86	1.162	4.125
PRC	3000.	4.44	2.47	0.405	1.796
MALAYSIA	23900.	35.36	0.92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

URCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
NLAND	1000.	0.33	1.92	0.520	0.171
UTH AFRICA	5000	1.64	1.19	0.841	1.3[illegible]
ILIPPINES	5000.	1.64	0.92	1.087	1.78[illegible]
STRALIA	25000.	8.21	0.92	1.087	8.[illegible]
NADA	150000.	49.29	2.89	0.346	17.054
S	88000	28.91	2.56	0.391	11.311
EECE	600.	0.20	1.96	0.510	0.101
THERLANDS	200.	0.07	1.96	0.510	0.034
S	100.	0.03	1.96	0.510	0.017
GOSLAVIA	500.	0.16	1.96	0.510	0.084
SR	5000	1.64	0.94	1.061	1.742
1 REPUB.	15000.	4.93	1.53	0.656	3.220
TAMALA	4000.	1.31	1.53	0.656	0.861
DONESIA	5000.	1.64	0.92	1.087	1.78[illegible]
TOTAL:	304400.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUORSPAR ACID

URCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
UTH AFRICA	190.	22.36	1.19	0.841	18.8[illegible]
S	70.	8.70	2.56	0.391	3.402
ALY	65.	8.07	1.96	0.510	4.1[illegible]
AIN	100.	12.42	1.96	0.510	6.3[illegible]
ST AFRICA	25.	3.11	0.71	1.404	4.3[illegible]
AILAND	15.	1.86	0.92	1.087	2.025
ICO	350.	43.48	2.56	0.391	17.011
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

URCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
UTH AFRICA	2000.	1.01	1.19	0.841	0.852
STRALIA	1500.	0.76	0.92	1.087	0.825
	11000.	5.57	1.96	0.510	2.842
NYA	80000	40.51	0.71	1.404	56.8[illegible]
ANDA	25000.	12.66	0.71	1.404	17.767
NZANIA	78000.	39.49	0.71	1.404	55.4[illegible]
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	%(1/CI) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	3.343	7.81	26.11	4.00
MOROCCO	1.429	7.81	11.16	1.71
BOTSWANNA	1.671	7.81	13.05	2.00
SOUTH AFRICA	0.601	7.81	4.69	0.72
ZAIRE	83.548	7.81	652.43	100.00
ZAMBIA	23.393	7.81	182.68	28.00
PHILIPPINES	0.259	7.81	2.02	0.31
AUSTRALIA	2.070	7.81	16.16	2.48
NEW CALEDONIA	1.293	7.81	10.10	1.55
CANADA	1.813	7.81	14.16	2.17
U S	1.863	7.81	14.55	2.23
TIN				
AUSTRALIA	0.161	0.00	0.00	0.00
U S	9.319	0.00	0.00	0.00
THAILAND	9.483	0.00	0.00	0.00
INDONESIA	9.322	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.548	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
PRC	1.796	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
NICKEL				
FINLAND	0.171	10.00	1.71	0.26
SOUTH AFRICA	1.381	10.00	13.81	2.11
PHILIPPINES	1.785	10.00	17.85	2.74
AUSTRALIA	8.924	10.00	89.24	13.68
CANADA	17.054	10.00	170.54	26.14
U S	11.311	10.00	113.11	17.34
GREECE	0.101	10.00	1.01	0.15
NETHERLANDS	0.034	10.00	0.34	0.05
FRG	0.017	10.00	0.17	0.03
YUGOSLAVIA	0.084	10.00	0.84	0.13
USSR	1.742	10.00	17.42	2.67
DOM. REPUB.	3.230	10.00	32.30	4.95
GUATAMALA	0.861	10.00	8.61	1.32
INDONESIA	1.785	10.00	17.85	2.74
FLUORSPAR ACID				
SOUTH AFRICA	18.803	8.55	160.85	24.65
U S	3.402	8.55	29.10	4.46
ITALY	4.120	8.55	35.24	5.40
SPAIN	6.338	8.55	54.22	8.31
EAST AFRICA	4.359	8.55	37.29	5.72
THAILAND	2.025	8.55	17.32	2.65
MEXICO	17.011	8.55	145.52	22.30
PYRETHRUM				
SOUTH AFRICA	0.852	3.67	3.13	0.48
AUSTRALIA	0.825	3.67	3.03	0.46
UK	2.842	3.67	10.44	1.60
KENYA	56.855	3.67	208.79	32.00
RWANDA	17.767	3.67	65.25	10.00
TANZANIA	55.433	3.67	203.57	31.20

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

SOURCE	COMMODITY	VALUE
ZAIRE	COBALT	100.00
KENYA	PYRETHRUM	32.00
TANZANIA	PYRETHRUM	31.20
ZAMBIA	COBALT	28.00
CANADA	NICKEL	26.14
SOUTH AFRICA	FLUORSPAR ACID	24.65
MEXICO	FLUORSPAR ACID	22.30
U S	NICKEL	17.34
AUSTRALIA	NICKEL	13.68
RWANDA	PYRETHRUM	10.00
SPAIN	FLUORSPAR ACID	8.31
EAST AFRICA	FLUORSPAR ACID	5.72
ITALY	FLUORSPAR ACID	5.40
DOM. REPUB	NICKEL	4.95
U S	FLUORSPAR ACID	4.46
FINLAND	COBALT	4.00
INDONESIA	NICKEL	2.74
PHILIPPINES	NICKEL	2.74
USSR	NICKEL	2.67
THAILAND	FLUORSPAR ACID	2.65
AUSTRALIA	COBALT	2.48
U S	COBALT	2.23
CANADA	COBALT	2.17
SOUTH AFRICA	NICKEL	2.12
BOTSWANNA	COBALT	2.00
MOROCCO	COBALT	1.71
UK	PYRETHRUM	1.60
NEW CALEDONIA	COBALT	1.55
GUATAMALA	NICKEL	1.32
SOUTH AFRICA	COBALT	0.72
SOUTH AFRICA	PYRETHRUM	0.48
AUSTRALIA	PYRETHRUM	0.46
PHILIPPINES	COBALT	0.31
FINLAND	NICKEL	0.26
GREECE	NICKEL	0.15
YUGOSLAVIA	NICKEL	0.13
NETHERLANDS	NICKEL	0.05
FRG	NICKEL	0.03
MALAYSIA	TIN	0.00
PRC	TIN	0.00
BRAZIL	TIN	0.00
BOLIVIA	TIN	0.00
UK	TIN	0.00
INDONESIA	TIN	0.00
THAILAND	TIN	0.00
U S	TIN	0.00
AUSTRALIA	TIN	0.00

SCENARIO 37

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

egion	1	2	3	4	5	6	7	8	9	1
eight	10.0	10.0	7.0	5.0	7.0	2.0	2.0	5.0	2.0	6.0
/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	0.1071

Level of Conflict 3 Media 2

egion	1	2	3	4	5	6	7	8	9	1
egion	11									
eight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
eight	9.0									
/COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0933	0.0667
/COEF	0.1200									

Level of Conflict 3 Media 3

egion	1	2	3	4	5	6	7
eight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
/COEF	0.1786	0.1786	0.1786	0.1429	0.1071	0.0714	0.1429

Level of Conflict 3 Media 4

egion	1	2	3	4
eight	10.0	4.0	2.0	1.0
/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
or the Importance of Controlling EACH region within its own Media

edia 1

egion	1	2	3	4	5	6	7	8	9	10
/COEF	0.0229	0.0229	0.0160	0.0114	0.0160	0.0046	0.0046	0.0114	0.0046	0.0137

edia 2

egion	1	2	3	4	5	6	7	8	9	10
edia 11										
egion										
/COEF	0.0171	0.0171	0.0154	0.0068	0.0119	0.0085	0.0017	0.0136	0.0119	0.0085
/COEF	0.0154									

edia 3

egion	1	2	3	4	5	6	7
/COEF	0.0228	0.0228	0.0228	0.0183	0.0137	0.0091	0.0183

edia 4

egion	1	2	3	4
/COEF	0.0752	0.0301	0.0150	0.0075

Importance of controlling ANY Region
within its Media as compared to the Importance
f controlling ANY Region of any other Media

edia 1

egion	1	2	3	4	5	6	7	8	9	10
/COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.00[illegible]

edia 2

egion	1	2	3	4	5	6	7	8	9	10
edia 11										
egion										
I/COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
I/COEF	0.0033									

edia 3

egion	1	2	3	4	5	6	7
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

edia 4

egion	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOI 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.141	10.000
2	1	AIR INTERDICTION	0.117	8.2[illegible]
3	3	ARMY GROUND	0.104	7.382
4	16	ATTACK SUBS	0.072	5.13[illegible]
5	19	SURFACE COMBATANTS	0.060	4.24[illegible]
6	12	THEATER NUCLEAR WEAPON	0.054	3.81[illegible]
7	8	RAPID DEPLOY	0.052	3.70[illegible]
8	6	CAS	0.044	3.132
9	14	ASW(LAND BASED)	0.043	3.063
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.910
11	15	ASW(SEA BASED)	0.033	2.315
12	23	AIR SUPERIORITY(SHIP BASED)	0.032	2.276
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.065
14	10	STRATEGIC BOMBER	0.025	1.784
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.020	1.416
16	29	ASAT(SPACE BASED)	0.013	0.924
17	18	MINE WARFARE	0.013	0.891
18	2	AMPHIBIOUS ASSAULT	0.011	0.757
19	13	SPECIAL OPERATIONS	0.010	0.725
20	28	ASAT(LAND BASED)	0.007	0.510
21	20	AIR DEFENSE(LAND BASED)	0.004	0.278
22	9	SPCE-BASED WEAPON(LND CNTRL)	0.003	0.211
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.002	0.118
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	2.77
CAS	1.75
ICBM	0.00
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(SEA BASED)	1.27
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.51
	33.24

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.91
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	3.08
ASW(SEA BASED)	1.11
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.18

NICKEL

AIR INTERDICTION	15.60
ARMY GROUND	4.92
CAS	1.72
STRATEGIC BOMBER	1.79
ASW(SEA BASED)	1.71
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
	41.21

FLUORSPAR ACID

AIR INTERDICTION	7.13
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	3.69
LAS	1.05
ICBM	0.00
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(LAND BASED)	3.08
ASW(SEA BASED)	1.62
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	39.57

PYRETHRUM

ARMY GROUND	2.68
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.14
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
	17.08

COMMODITY NORMALIZED IMPORTANCE

NICKEL	10.00	(41.21)
TIN	9.99	(41.18)
FLUORSPAR ACID	9.60	(39.57)
COBALT	8.07	(33.24)
PYRETHRUM	4.14	(17.08)

COBALT

A-10	CAS	72.7336
COBRA	CAS	49.4891
F-4	AIR INTERDICTION	102.5050
	CAS	7.2734
F-16	AIR INTERDICTION	71.8785
	CAS	40.4075
ART. ACRFT	CAS	3.6817
RADIO RLAY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	38.8144
F-15	AIR INTERDICTION	57.5028
A-7	AIR INTERDICTION	51.7825
F-14	AIR INTERDICTION	43.1271
F-18	AIR INTERDICTION	71.8785
SH-3	ASW(SEA BASED)	6.0775
SH-2	ASW(SEA BASED)	15.1937
SH-60B	ASW(SEA BASED)	23.6346
S-3	ASW(SEA BASED)	34.7284
ATT. SUBS	ASW(SEA BASED)	24.1169
FRIGATES	ASW(SEA BASED)	14.4701
DESTROYERS	ASW(SEA BASED)	8.6821
M-48	ARMY GROUND	12.6556
M-60	ARMY GROUND	20.3394
M-1	ARMY GROUND	22.5993
M-551	ARMY GROUND	0.2260
M-901	ARMY GROUND	20.3394
M-2/M-3	ARMY GROUND	20.3394
M-113	ARMY GROUND	2.2599
MLRS	ARMY GROUND	20.3394
TOWED ART.	ARMY GROUND	27.1192
SELF-PROP.	ARMY GROUND	36.1589
PERSHING	ARMY GROUND	18.0795
GLCMS	ARMY GROUND	30.1324
INFANTRY	ARMY GROUND	7.5331
MORTERS	ARMY GROUND	36.9122
RCLES LNCH	ARMY GROUND	1.5820

NORMALIZED VALUES	
F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5556
F-15	4.4444
A-7	4.0000
COBRA	3.7478
F-14	3.3333
A-6	3.0000
MORTERS	2.8530
SELF-PROP.	2.7948
S-3	2.6842
GLCMS	2.3290
TOWED ART.	2.0961
ATT. SUBS	1.8640
SH-60B	1.8267
M-1	1.7467
M-2/M-3	1.5721
M-901	1.5721
M-60	1.5721
MLRS	1.5721
PERSHING	1.3974
SH-2	1.1743
FRIGATES	1.1184
M-48	0.9782
DESTROYERS	0.6710
INFANTRY	0.5822
SH-3	0.4697
RADIO RLAY	0.4608
ART. ACRFT	0.2811
M-113	0.1747
RCLES LNCH	0.1223
M-551	0.0175

TIN		
A-10	CAS	72.7336
COBRA	CAS	64.6511
F-4	AIR INTERDICTION	100.5[illegible]
	CAS	7.2764
F-16	AIR INTERDICTION	71.8785
	CAS	40.40[illegible]5
ART ACRFT	CAS	3.6367
RADIO RLAY	AIR INTERDICTION	3.2340
	CAS	2.7275
F-111	AIR INTERDICTION	129.3913
A-6	AIR INTERDICTION	49.6442
F-15	AIR INTERDICTION	57.5028
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	43.5180
F-18	AIR INTERDICTION	80.8636
SH-3	ASW(SEA BASED)	5.2093
SH-2	ASW(SEA BASED)	13.0231
SH-60B	ASW(SEA BASED)	20.2582
S-3	ASW(SEA BASED)	34.7264
ATT. SUBS	ASW(SEA BASED)	14.4701
FRIGATES	ASW(SEA BASED)	14.4701
DSTROYERS	ASW(SEA BASED)	8.6821
M-48	ARMY GROUND	4.2185
M-60	ARMY GROUND	6.7798
M-1	ARMY GROUND	37.6655
M-551	ARMY GROUND	0.0753
M-901	ARMY GROUND	6.7798
M-2/M-3	ARMY GROUND	6.7798
M-113	ARMY GROUND	0.7533
MLRS	ARMY GROUND	10.1697
TOWED ART.	ARMY GROUND	4.5199
SELF-PROP.	ARMY GROUND	6.0265
PERSHING	ARMY GROUND	15.8195
GLCMS	ARMY GROUND	26.3659
INFANTRY	ARMY GROUND	60.2649
MORTERS	ARMY GROUND	5.2782
RCLES LNCH	ARMY GROUND	0.2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5632
F-18	6.2500
A-10	5.6216
COBRA	4.9970
INFANTRY	4.6579
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
M-1	2.9112
S-3	2.6842
GLCMS	2.0378
SH-60B	1.5658
PERSHING	1.2227
FRIGATES	1.1184
ATT. SUBS	1.1184
SH-2	1.0066
MLRS	0.7860
DSTROYERS	0.6710
M-2/M-3	0.5240
M-901	0.5240
M-60	0.5240
SELF-PROP.	0.4658
RADIO RLAY	0.4008
MORTERS	0.4076
SH-3	0.4026
TOWED ART.	0.3493
M-48	0.3261
ART. ACRFT	0.2811
M-113	0.0582
RCLES LNCH	0.0175
M-551	0.0058

NAVY SL	CAS		72	7338
A-10	CAS		48	4331
COBRA	AIR	INTERDICTION	77	6[illegible]
F-4	CAS		5	4591
F-16	AIR	INTERDICTION	71	6785
	CAS		40	4075
ART. ACRFT	CAS		2	4245
RADIO RLAY	AIR	INTERDICTION	3	2347
	CAS		2	7275
F-111	AIR	INTERDICTION	129	8313
A-6	AIR	INTERDICTION	38	8144
F-15	AIR	INTERDICTION	57	5028
A-7	AIR	INTERDICTION	51	7525
F-14	AIR	INTERDICTION	48	5180
F-18	AIR	INTERDICTION	80	8633
SH-3	ASW(SEA BASED)		6	9427
SH-2	ASW(SEA BASED)		17	3642
SH-60B	ASW(SEA BASED)		27	0109
S-3	ASW(SEA BASED)		34	7234
ATT. SUBS	ASW(SEA BASED)		43	4104
FRIGATES	ASW(SEA BASED)		26	0463
DSTROYERS	ASW(SEA BASED)		15	6278
M-48	ARMY	GROUND	42	1854
M-60	ARMY	GROUND	67	7980
M-1	ARMY	GROUND	75	3311
M-551	ARMY	GROUND	0	7533
M-901	ARMY	GROUND	47	4586
M-2/M-3	ARMY	GROUND	54	2384
M-113	ARMY	GROUND	5	2732
MLRS	ARMY	GROUND	20	3324
TOWED ART.	ARMY	GROUND	36	1589
SELF-PROP.	ARMY	GROUND	48	2119
PERSHING	ARMY	GROUND	18	0795
GLCMS	ARMY	GROUND	22	5993
INFANTRY	ARMY	GROUND	37	6655
MORTERS	ARMY	GROUND	15	8195
RCLES LNCH	ARMY	GROUND	0	2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	6.4216
F-18	6.2500
M-1	5.8224
A-10	5.6216
M-60	5.2402
F-15	4.4444
M-2/M-3	4.1921
A-7	4.0000
F-14	3.7500
COBRA	3.7478
SELF-PROP.	3.7263
M-901	3.6681
ATT. SUBS	3.3552
M-48	3.2605
A-6	3.0000
INFANTRY	2.9112
TOWED ART.	2.7948
S-3	2.6842
SH-60B	2.0877
FRIGATES	2.0131
GLCMS	1.7467
MLRS	1.5721
PERSHING	1.3974
SH-2	1.3421
MORTERS	1.2227
DSTROYERS	1.2079
SH-3	0.5368
RADIO RLAY	0.4608
M-113	0.4076
ART. ACRFT	0.1877
M-551	0.0[illegible]
RCLES LNCH	0.01[illegible]

FLUORSPAR ACID		
A-10	CAS	90.9170
COBRA	CAS	48.4[illegible]1
F-4	AIR INTERDICTION	129.3813
	CAS	9.0917
F-16	AIR INTERDICTION	89.8481
	CAS	50.5[illegible]4
ART. ACRFT	CAS	3.6367
RADIO RLAY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	161.7266
A-6	AIR INTERDICTION	48.5180
F-15	AIR INTERDICTION	71.8785
A-7	AIR INTERDICTION	64.6903
F-14	AIR INTERDICTION	53.9089
F-18	AIR INTERDICTION	89.8481
SH-3	ASW(SEA BASED)	6.9457
SH-2	ASW(SEA BASED)	17.3642
SH-60B	ASW(SEA BASED)	33.7637
S-3	ASW(SEA BASED)	43.4104
ATT. SUBS	ASW(SEA BASED)	28.9403
FRIGATES	ASW(SEA BASED)	20.2582
DSTROYERS	ASW(SEA BASED)	12.154[illegible]
M-48	ARMY GROUND	11.6556
M-60	ARMY GROUND	20.3394
M-1	ARMY GROUND	22.5993
M-551	ARMY GROUND	0.2260
M-901	ARMY GROUND	54.2384
M-2/M-3	ARMY GROUND	54.2384
M-113	ARMY GROUND	6.0265
MLRS	ARMY GROUND	16.9485
TOWED ART.	ARMY GROUND	22.5993
SELF-PROP	ARMY GROUND	30.1324
PERSHING	ARMY GROUND	15.8195
GLCMS	ARMY GROUND	26.3659
INFANTRY	ARMY GROUND	60.2649
MORTERS	ARMY GROUND	26.3659
ROLES LNCH	ARMY GROUND	0.2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5756
F-15	4.4444
A-7	4.0000
INFANTRY	3.7268
M-2/M-3	3.3537
M-901	3.3537
F-14	3.3333
A-6	3.0000
COBRA	2.9982
S-3	2.6842
SH-60B	2.0877
SELF-PROP.	1.8632
ATT. SUBS	1.7895
MORTERS	1.6303
GLCMS	1.6303
TOWED ART.	1.3974
M-1	1.3974
M-60	1.2576
FRIGATES	1.2526
SH-2	1.0737
MLRS	1.0480
PERSHING	0.9782
M-48	0.7825
DSTROYERS	0.7516
SH-3	0.4295
M-113	0.3726
RADIO RLAY	0.3684
ART. AIRCRT	0.2249
ROLES LNCH	0.0140
M-551	0.0140

PYRETHRUM

ATT. SUBS	ASW(SEA BASED)	14.4701
M-48	ARMY GROUND	29.5278
M-60	ARMY GROUND	47.4536
M-113	ARMY GROUND	5.2732
TOWED ART.	ARMY GROUND	31.6390
SELF-PROP.	ARMY GROUND	42.1854
INFANTRY	ARMY GROUND	75.3911
MORTERS	ARMY GROUND	36.9122

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-48	3.9200
ATT. SUBS	1.9209
M-113	0.7000

ALL COMMODITIES

A-10	CAS	3.0912
COBRA	CAS	2.1012
F-4	AIR INTERDICTION	4.1402
	CAS	[illegible]
F-16	AIR INTERDICTION	3.0543
	CAS	1.7173
ART. ACRFT	CAS	0.1333
RADIO RLAY	AIR INTERDICTION	0.1224
	CAS	0.1091
F-111	AIR INTERDICTION	5.4987
A-6	AIR INTERDICTION	1.6981
F-15	AIR INTERDICTION	2.4499
A-7	AIR INTERDICTION	2.1995
F-14	AIR INTERDICTION	1.9407
F-18	AIR INTERDICTION	3.2345
SH-3	ASW(SEA BASED)	0.2513
SH-2	ASW(SEA BASED)	0.6295
SH-60B	ASW(SEA BASED)	1.0467
S-3	ASW(SEA BASED)	1.4760
ATT. SUBS	ASW(SEA BASED)	1.2541
FRIGATES	ASW(SEA BASED)	0.7524
DSTROYERS	ASW(SEA BASED)	0.4515
M-48	ARMY GROUND	1.0124
M-60	ARMY GROUND	1.6272
M-1	ARMY GROUND	1.5920
M-551	ARMY GROUND	0.0123
M-901	ARMY GROUND	1.2582
M-2/M-3	ARMY GROUND	1.3540
M-113	ARMY GROUND	0.1959
MLRS	ARMY GROUND	0.6760
TOWED ART.	ARMY GROUND	1.2204
SELF-PROP.	ARMY GROUND	1.6272
PERSHING	ARMY GROUND	0.6750
GLCMS	ARMY GROUND	1.0546
INFANTRY	ARMY GROUND	2.4106
MORTERS	ARMY GROUND	1.2128
ROLES LNCH	ARMY GROUND	0.0226

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.0585
F-18	5.8824
A-10	5.6216
F-15	4.4444
INFANTRY	4.3829
A-7	4.0000
COBRA	3.8213
F-14	3.5294
A-6	3.0882
SELF-PROP.	2.9574
M-60	2.9592
M-1	2.8770
S-3	2.6842
M-2/M-3	2.4660
M-901	2.3427
ATT. SUBS	2.2807
TOWED ART.	2.2194
MORTERS	2.2057
GLCMS	1.9180
SH-60B	1.9035
M-48	1.8413
FRIGATES	1.3684
PERSHING	1.2330
MLRS	1.2290
SH-2	1.1447
DSTROYERS	0.8210
SH-3	0.4579
RADIO RLAY	0.4337
M-113	0.3562
ART. ACRFT	0.2425
ROLES LNCH	0.0411
M-551	0.0238

CRITICALITY OF SHORTFALL
ALL FE'S
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FE/ COMMODITY IMPORT.	CRITIC-ALITY	NORMALIZED FE/SHORTFALL CRITICALITY
OBALT	85.4	4[illegible].8	-4[illegible].7	402.5	8.1	3246.9	[illegible]
IN	42.0	190.6	353.8	0.0	10.0	0.0	0.0
ICKEL	200.0	32.2	-83.9	437.7	10.0	4377.1	10.0
LUORSPAR ACID	1400.0	895.0	-36.1	289.9	9.6	3744.3	8.[illegible]
YRETHRUM	500.0	0.0	-100.0	453.8	4.1	1860.7	4.[illegible]

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

OURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
INLAND	1350.	6.43	1.92	0.520	3.343
OROCCO	450.	2.14	1.50	0.667	1.429
OTSWANNA	250.	1.19	0.71	1.404	1.671
OUTH AFRICA	150.	0.71	1.19	0.841	0.601
AIRE	12500	59.52	0.71	1.404	83.519
AMBIA	3500.	16.67	0.71	1.404	23.3[illegible]
HILIPPINES	50.	0.24	0.92	1.087	0.2[illegible]
USTRALIA	400	1.90	0.92	1.087	2.070
EW CALEDONIA	250.	1.19	0.92	1.087	1.29[illegible]
ANADA	1100	5.24	2.89	0.34[illegible]	1.813
S	1000	4.76	2.56	0.391	1.863
TOTAL:	21000	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

OURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
USTRALIA	100.	0.15	0.92	1.087	0.161
S	16100.	23.82	2.56	0.391	9.319
HAILAND	5900.	8.73	0.92	1.087	9.483
NDONESIA	5800.	8.58	0.92	1.087	9.322
K	100.	0.15	1.96	0.510	0.075
OLIVIA	10300.	15.24	0.98	1.020	15.548
RAZIL	2400.	3.55	0.86	1.162	4.125
RC	3000.	4.44	2.47	0.405	1.79[illegible]
ALAYSIA	23900.	35.36	0.92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000	0.33	1.92	0.520	0.171
SOUTH AFRICA	5000	1.64	1.19	0.841	1.3[illegible]
PHILIPPINES	5000	1.64	0.92	1.087	1.7[illegible]
AUSTRALIA	25000	8.21	0.92	1.087	[illegible]
CANADA	150000	49.23	2.89	0.346	17.054
U.S.	85000	28.91	2.56	0.391	11.311
GREECE	600.	0.20	1.96	0.510	0.101
NETHERLANDS	200	0.07	1.96	0.510	[illegible]
[illegible]	100	0.03	1.96	0.510	0.017
YUGOSLAVIA	500	0.16	1.96	0.510	0.0[illegible]
USSR	5000	1.64	0.94	1.061	1.741
DOM. REPUB	15000	4.93	1.53	0.656	3.2[illegible]
GUATEMALA	4000.	1.31	1.53	0.656	0.8[illegible]
INDONESIA	5000	1.64	0.92	1.087	1.785
TOTAL:	304400.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180.	22.36	1.19	0.841	18.80[illegible]
U.S.	70.	8.70	2.56	0.391	3.402
ITALY	65.	8.07	1.96	0.510	4.1[illegible]
SPAIN	100.	12.42	1.96	0.510	6.338
EAST AFRICA	25.	3.11	0.71	1.404	4.3[illegible]
THAILAND	15.	1.86	0.92	1.087	2.025
MEXICO	350.	43.48	2.56	0.391	17.011
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	1.19	0.841	0.852
AUSTRALIA	1500.	0.76	0.92	1.087	0.825
[illegible]	11000.	5.57	1.96	0.510	2.842
KENYA	80000.	40.51	0.71	1.404	56.855
RWANDA	25000.	12.66	0.71	1.404	17.767
TANZANIA	78000.	39.49	0.71	1.404	55.433
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	%(1/CI) COMP IMP	PE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
BALT				
FINLAND	3.343	7.42	24.80	4.00
MOROCCO	1.429	7.42	10.60	1.71
BOTSWANNA	1.671	7.42	12.40	2.00
SOUTH AFRICA	0.601	7.42	4.46	0.72
ZAIRE	83.543	7.42	619.76	100.00
ZAMBIA	23.393	7.42	173.53	28.00
PHILIPPINES	0.259	7.42	1.92	0.31
AUSTRALIA	2.070	7.42	15.35	2.48
NEW CALEDONIA	1.293	7.42	9.60	1.55
CANADA	1.813	7.42	13.45	2.17
U S	1.863	7.42	13.82	2.23
N				
AUSTRALIA	0.161	0.00	0.00	0.00
U S	9.319	0.00	0.00	0.00
THAILAND	9.483	0.00	0.00	0.00
INDONESIA	9.322	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.548	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
PRC	1.796	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
CHEL				
FINLAND	0.171	10.00	1.71	0.28
SOUTH AFRICA	1.381	10.00	13.81	2.23
PHILIPPINES	1.785	10.00	17.85	2.88
AUSTRALIA	8.924	10.00	89.24	14.40
CANADA	17.054	10.00	170.54	27.52
U S	11.311	10.00	113.11	18.25
GREECE	0.101	10.00	1.01	0.16
NETHERLANDS	0.034	10.00	0.34	0.05
FRG	0.017	10.00	0.17	0.03
YUGOSLAVIA	0.084	10.00	0.84	0.14
USSR	1.742	10.00	17.42	2.81
DOM. REPUB.	3.230	10.00	32.30	5.21
GUATAMALA	0.861	10.00	8.61	1.39
INDONESIA	1.785	10.00	17.85	2.88
UORSPAR ACID				
SOUTH AFRICA	18.803	8.55	160.85	25.95
U S	3.402	8.55	29.10	4.70
ITALY	4.120	8.55	35.24	5.69
SPAIN	6.338	8.55	54.22	8.75
EAST AFRICA	4.359	8.55	37.29	6.02
THAILAND	2.025	8.55	17.32	2.79
MEXICO	17.011	8.55	145.52	23.48
YRETHRUM				
SOUTH AFRICA	0.852	4.30	3.66	0.59
AUSTRALIA	0.825	4.30	3.55	0.57
UK	2.842	4.30	12.21	1.97
KENYA	56.855	4.30	244.29	39.42
RWANDA	17.767	4.30	76.34	12.32
TANZANIA	55.433	4.30	238.18	38.43

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	39.42
3	TANZANIA	PYRETHRUM	38.43
4	ZAMBIA	COBALT	23.00
5	CANADA	NICKEL	27.52
6	SOUTH AFRICA	FLUORSPAR ACID	25.[illegible]
7	MEXICO	FLUORSPAR ACID	23.4[illegible]
8	U S	NICKEL	18.25
9	AUSTRALIA	NICKEL	14.4[illegible]
10	RWANDA	PYRETHRUM	11.[illegible]
11	SPAIN	FLUORSPAR ACID	8.75
12	EAST AFRICA	FLUORSPAR ACID	[illegible]
13	ITALY	FLUORSPAR ACID	5.[illegible]
14	DOM. REPUB	NICKEL	5.21
15	U S	FLUORSPAR ACID	4.70
16	FINLAND	COBALT	4.00
17	INDONESIA	NICKEL	2.88
18	PHILIPPINES	NICKEL	2.[illegible]
19	USSR	NICKEL	2.81
20	THAILAND	FLUORSPAR ACID	2.7[illegible]
21	AUSTRALIA	COBALT	2.49
22	U S	COBALT	2.23
23	SOUTH AFRICA	NICKEL	2.23
24	CANADA	COBALT	2.17
25	BOTSWANNA	COBALT	2.00
26	UK	PYRETHRUM	1.[illegible]
27	MOROCCO	COBALT	1.71
28	NEW CALEDONIA	COBALT	1.55
29	GUATAMALA	NICKEL	1.39
30	SOUTH AFRICA	COBALT	0.71
31	SOUTH AFRICA	PYRETHRUM	0.59
32	AUSTRALIA	PYRETHRUM	0.57
33	PHILIPPINES	COBALT	0.31
34	FINLAND	NICKEL	0.23
35	GREECE	NICKEL	0.16
36	YUGOSLAVIA	NICKEL	0.14
37	NETHERLANDS	NICKEL	0.05
38	FRG	NICKEL	0.03
39	MALAYSIA	TIN	0.00
40	PRC	TIN	0.00
41	BRAZIL	TIN	0.00
42	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
44	INDONESIA	TIN	0.00
45	THAILAND	TIN	0.00
46	U S	TIN	0.00
47	AUSTRALIA	TIN	0.00

SCENARIO 38

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

gion	1	2	3	4	5	6	7	8	9	1
ight	10.0	10.0	7.0	5.0	7.0	10.0	2.0	5.0	2.0	4.0
COEF	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0313	[illegible]

Level of Conflict 3 Media 2

gion	1	2	3	4	5	6	7	8	9	11
gion	11									
ight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	8.0	7.0	5.0
ight	9.0									
COEF	0.1190	0.1190	0.1071	0.0476	0.0833	0.0595	0.1190	0.0952	0.0833	0.0595
COEF	0.1071									

Level of Conflict 3 Media 3

gion	1	2	3	4	5	6	7
ight	10.0	10.0	10.0	10.0	4.0	4.0	10.0
COEF	0.1667	0.1667	0.1667	0.1667	0.1000	0.0667	0.1667

Level of Conflict 3 Media 4

gion	1	2	3	4
ight	10.0	4.0	2.0	1.0
COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
or the Importance of Controlling EACH region within its own Media

dia 1

gion	1	2	3	4	5	6	7	8	9	10
COEF	0.0200	0.0200	0.0140	0.0100	0.0140	0.0200	0.0040	0.0100	0.0040	0.0120

dia 2

gion	1	2	3	4	5	6	7	8	9	10

dia 11

gion

COEF	0.0152	0.0152	0.0137	0.0061	0.0107	0.0076	0.0152	0.0122	0.0107	0.0076
COEF	0.0137									

dia 3

gion	1	2	3	4	5	6	7
COEF	0.0213	0.0213	0.0213	0.0213	0.0128	0.0085	0.0213

dia 4

gion	1	2	3	4
COEF	0.0752	0.0301	0.0150	0.0075

portance of controlling ANY Region
thin its Media as compared to the Importance
controlling ANY Region of any other Media

dia 1

gion	1	2	3	4	5	6	7	8	9	10
COEF	0.0087	0.0087	0.0061	0.0043	0.0061	0.0087	0.0017	0.0043	0.0017	0.0052

dia 2

gion	1	2	3	4	5	6	7	8	9	10

dia 11

gion

COEF	0.0033	0.0033	0.0030	0.0013	0.0023	0.0017	0.0033	0.0026	0.0023	0.0017
COEF	0.0030									

dia 3

gion	1	2	3	4	5	6	7
COEF	0.0056	0.0056	0.0056	0.0056	0.0033	0.0022	0.0056

dia 4

gion	1	2	3	4
COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOC 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER-BATTLE GROUP	0.139	10.000
2	1	AIR INTERDICTION	0.110	7.943
3	3	ARMY GROUND	0.095	6.845
4	16	ATTACK SUBS	0.073	5.227
5	19	SURFACE COMBATANTS	0.060	4.291
6	8	RAPID DEPLOY	0.058	4.141
7	12	THEATER NUCLEAR WEAPON	0.054	3.858
8	14	ASW(LAND BASED)	0.043	3.093
9	6	CAS	0.040	2.902
10	22	AIR SUPERIORITY(LAND BASED)	0.038	2.731
11	15	ASW(SEA BASED)	0.032	2.312
12	23	AIR SUPERIORITY(SHIP BASED)	0.030	2.165
13	21	AIR DEFENSE(SHIP BASED)	0.027	1.954
14	10	STRATEGIC BOMBER	0.025	1.765
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.019	1.384
16	13	SPECIAL OPERATIONS	0.015	1.050
17	29	ASAT(SPACE BASED)	0.013	0.935
18	18	MINE WARFARE	0.013	0.924
19	2	AMPHIBIOUS ASSAULT	0.010	0.713
20	28	ASAT(LAND BASED)	0.007	0.516
21	20	AIR DEFENSE(LAND BASED)	0.004	0.264
22	9	SPCE-BASED WEAPON(LND CNTRL)	0.003	0.202
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.002	0.118
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.44
ARMY GROUND	2.54
CAS	1.[illegible]
ICBM	0.00
STRATEGIC BOMBER	1.76
SLBM	0.00
ASW(SEA BASED)	1.27
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.2[illegible]
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.16
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.5[illegible]
	31.96

TIN

AIR INTERDICTION	5.62
ARMY GROUND	1.73
CAS	1.77
STRATEGIC BOMBER	1.76
ASW(LAND BASED)	3.09
ASW(SEA BASED)	1.11
ATTACK SUBS	5.23
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.92
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.16
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	40.47

NICKEL

AIR INTERDICTION	5.33
ARMY GROUND	4.56
CAS	1.60
STRATEGIC BOMBER	1.76
ASW(SEA BASED)	1.71
ATTACK SUBS	5.23
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.92
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.16
INTERCEPTOR AIRCRAFT	0.00
	40.30

FLUORSPAR ACID

AIR INTERDICTION	6.79
AMPHIBIOUS ASSAULT	0.71
ARMY GROUND	3.42
CAS	1.90
ICBM	0.00
STRATEGIC BOMBER	1.76
SLBM	0.00
ASW(LAND BASED)	3.09
ASW(SEA BASED)	1.63
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.19
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	48.50

PYRETHRUM

ARMY GROUND	2.59
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.14
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.29
	16.92

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00	(40.47)
NICKEL	9.96	(40.30)
FLUORSPAR ACID	9.51	(38.50)
COBALT	8.00	(32.36)
PYRETHRUM	4.18	(16.92)

COBALT			
A-10	CAS		67.4018
COBRA	CAS		44.9111
F-4	AIR	INTERDICTION	99.5202
	CAS		6.7403
F-16	AIR	INTERDICTION	68.4168
	CAS		37.4460
ART. ACRFT	CAS		3.3701
RADIO RLAY	AIR	INTERDICTION	3.0733
	CAS		2.5276
F-111	AIR	INTERDICTION	113.1591
A-6	AIR	INTERDICTION	36.9451
F-15	AIR	INTERDICTION	54.7395
A-7	AIR	INTERDICTION	49.2601
F-14	AIR	INTERDICTION	41.0501
F-18	AIR	INTERDICTION	68.4168
SH-3	ASW(SEA BASED)		6.0683
SH-2	ASW(SEA BASED)		15.1706
SH-60B	ASW(SEA BASED)		23.5940
S-3	ASW(SEA BASED)		34.6761
ATT. SUBS	ASW(SEA BASED)		24.0907
FRIGATES	ASW(SEA BASED)		14.4484
DETROYERS	ASW(SEA BASED)		8.6660
M-48	ARMY	GROUND	11.7335
M-60	ARMY	GROUND	18.8575
M-1	ARMY	GROUND	20.9507
M-551	ARMY	GROUND	0.2070
M-901	ARMY	GROUND	18.8575
M-2/M-3	ARMY	GROUND	18.8575
M-113	ARMY	GROUND	2.0951
MLRS	ARMY	GROUND	18.8575
TOWED ART.	ARMY	GROUND	25.1436
SELF-PROP.	ARMY	GROUND	33.5244
PERSHING	ARMY	GROUND	16.7622
GLCMS	ARMY	GROUND	27.9370
INFANTRY	ARMY	GROUND	6.9842
MORTERS	ARMY	GROUND	34.2228
ROLES LNCH	ARMY	GROUND	1.4667

NORMALIZED VALUES

F-111	10.0000
F-16	8.5962
F-4	8.5473
F-18	5.5504
A-10	5.4732
F-15	4.4444
A-7	4.0000
COBRA	3.6488
F-14	3.3333
A-6	3.0000
S-3	2.8158
MORTERS	2.7789
SELF-PROP.	2.7222
GLCMS	2.2665
TOWED ART.	2.0417
ATT. SUBS	1.9594
SH-60B	1.9163
M-1	1.7014
MLRS	1.5313
M-2/M-3	1.5313
M-901	1.5313
M-60	1.5313
PERSHING	1.3611
SH-2	1.2319
FRIGATES	1.1732
M-48	0.9528
DETROYERS	0.7039
INFANTRY	0.5671
SH-3	0.4928
RADIO RLAY	0.4572
ART. ACRFT	0.2737
M-113	0.1701
ROLES LNCH	0.1191
M-551	0.0170

TIN		
A-10	CAS	67.4[illegible]
COBRA	CAS	59.9134
F-4	AIR INTERDICTION	99.5202
	CAS	6.7403
F-16	AIR INTERDICTION	63.4169
	CAS	37.4460
ART. ACRFT	CAS	3.3701
RADIO RLAY	AIR INTERDICTION	3.0788
	CAS	2.5276
F-111	AIR INTERDICTION	123.1503
A-6	AIR INTERDICTION	41.5632
F-15	AIR INTERDICTION	54.7330
A-7	AIR INTERDICTION	49.2601
F-14	AIR INTERDICTION	43.1814
F-18	AIR INTERDICTION	76.9689
SH-3	ASW(SEA BASED)	5.2014
SH-2	ASW(SEA BASED)	13.0036
SH-60B	ASW(SEA BASED)	20.2277
S-3	ASW(SEA BASED)	34.6761
ATT. SUBS	ASW(SEA BASED)	14.4484
FRIGATES	ASW(SEA BASED)	14.4484
DSTROYERS	ASW(SEA BASED)	8.6690
M-48	ARMY GROUND	3.9112
M-60	ARMY GROUND	6.2858
M-1	ARMY GROUND	34.9212
M-551	ARMY GROUND	0.0698
M-901	ARMY GROUND	6.2858
M-2/M-3	ARMY GROUND	6.2858
M-113	ARMY GROUND	0.6984
MLRS	ARMY GROUND	9.4287
TOWED ART.	ARMY GROUND	4.1905
SELF-PROP.	ARMY GROUND	5.5874
PERSHING	ARMY GROUND	14.6669
GLCMS	ARMY GROUND	24.4449
INFANTRY	ARMY GROUND	55.8740
MORTERS	ARMY GROUND	4.8890
ROLES LNCH	ARMY GROUND	0.2095

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5962
F-4	8.5473
F-18	6.2500
A-10	5.4732
COBRA	4.8651
INFANTRY	4.5371
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
M-1	2.8357
S-3	2.8158
GLCMS	1.9800
SH-60B	1.6425
PERSHING	1.1910
FRIGATES	1.1732
ATT. SUBS	1.1732
SH-2	1.0559
MLRS	0.7656
DSTROYERS	0.7039
M-2/M-3	0.5104
M-901	0.5104
M-60	0.5104
RADIO RLAY	0.4552
SELF-PROP.	0.4537
SH-3	0.4224
MORTERS	0.3970
TOWED ART.	0.3403
M-48	0.3176
ART. ACRFT	0.2737
M-113	0.0567
ROLES LNCH	0.0170
M-551	0.0057

NICKEL

A-10	CAS	67.4028
COBRA	CAS	44.9302
F-4	AIR INTERDICTION	73.8700
	CAS	5.0552
F-16	AIR INTERDICTION	68.4169
	CAS	37.4460
ART. ACRFT	CAS	12.2468
RADIO RLAY	AIR INTERDICTION	3.0799
	CAS	2.5276
F-111	AIR INTERDICTION	123.1503
A-6	AIR INTERDICTION	36.9451
F-15	AIR INTERDICTION	54.7335
A-7	AIR INTERDICTION	49.2601
F-14	AIR INTERDICTION	46.1914
F-18	AIR INTERDICTION	76.9689
SH-3	ASW(SEA BASED)	6.9311
SH-2	ASW(SEA BASED)	17.3381
SH-60B	ASW(SEA BASED)	26.9703
S-3	ASW(SEA BASED)	34.6741
ATT. SUBS	ASW(SEA BASED)	43.3452
FRIGATES	ASW(SEA BASED)	26.0071
DSTROYERS	ASW(SEA BASED)	15.6043
M-48	ARMY GROUND	39.1118
M-60	ARMY GROUND	62.8582
M-1	ARMY GROUND	69.8425
M-551	ARMY GROUND	0.6984
M-901	ARMY GROUND	44.0008
M-2/M-3	ARMY GROUND	50.2866
M-113	ARMY GROUND	4.8890
MLRS	ARMY GROUND	18.8575
TOWED ART.	ARMY GROUND	33.5244
SELF-PROP.	ARMY GROUND	44.6992
PERSHING	ARMY GROUND	16.7622
GLCMS	ARMY GROUND	20.9527
INFANTRY	ARMY GROUND	34.9212
MORTERS	ARMY GROUND	14.6669
ROLES LNCH	ARMY GROUND	0.2095

NORMALIZED VALUES

F-111	10.0000
F-16	8.5962
F-4	6.4105
F-18	6.2500
M-1	5.6713
A-10	5.4732
M-60	5.1042
F-15	4.4444
M-2/M-3	4.0834
A-7	4.0000
F-14	3.7500
COBRA	3.6488
SELF-PROP.	3.6296
M-901	3.5729
ATT. SUBS	3.5197
M-48	3.1778
A-6	3.0000
INFANTRY	2.8357
S-3	2.8158
TOWED ART.	2.7222
SH-60B	2.1900
FRIGATES	2.1118
GLCMS	1.7014
MLRS	1.5318
SH-2	1.4079
PERSHING	1.3611
DSTROYERS	1.2671
MORTERS	1.1910
SH-3	0.5632
RADIO RLAY	0.4502
M-113	0.3970
ART. ACRFT	0.1877
M-551	0.0567
ROLES LNCH	0.0170

FLUORSPAR ACID			
A-10	CAS		84 2536
COBRA	CAS		44 9[illegible]
F-4	AIR INTERDICTION		1[illegible] 1[illegible]
	CAS		8 4254
F-16	AIR INTERDICTION		85 5210
	CAS		4[illegible] 8[illegible]
ART. ACRFT	CAS		3 3701
RADIO RLAY	AIR INTERDICTION		3 0789
	CAS		5 5276
F-111	AIR INTERDICTION		15[illegible] 9378
A-6	AIR INTERDICTION		46 1814
F-15	AIR INTERDICTION		68 4166
A-7	AIR INTERDICTION		61 5751
F-14	AIR INTERDICTION		51 31[illegible]
F-18	AIR INTERDICTION		85 5210
SH-3	ASW(SEA BASED)		6 9[illegible]
SH-2	ASW(SEA BASED)		17 3381
SH-60B	ASW(SEA BASED)		33 7129
S-3	ASW(SEA BASED)		42 3452
ATT. SUBS	ASW(SEA BASED)		28 8968
FRIGATES	ASW(SEA BASED)		20 2277
DESTROYERS	ASW(SEA BASED)		12 1367
M-48	ARMY GROUND		11 7335
M-60	ARMY GROUND		18 8575
M-1	ARMY GROUND		20 9527
M-551	ARMY GROUND		0 2095
M-901	ARMY GROUND		50.2866
M-2/M-3	ARMY GROUND		50.2866
M-113	ARMY GROUND		5 5874
MLRS	ARMY GROUND		15.7146
TOWED ART.	ARMY GROUND		20.9527
SELF-PROP.	ARMY GROUND		27.9370
PERSHING	ARMY GROUND		14 6669
GLCMS	ARMY GROUND		24.4449
INFANTRY	ARMY GROUND		55.8740
MORTERS	ARMY GROUND		24 444[illegible]
ROLES LNCH	ARMY GROUND		0.2095

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5962
F-4	8.5473
F-18	5.5556
A-10	5.4732
F-15	4.4444
A-7	4.0000
INFANTRY	3.4296
F-14	3.3333
M-2/M-3	3.2667
M-901	3.2667
A-6	3.0000
COBRA	2.9191
S-3	2.8108
SH-60B	2.1900
ATT. SUBS	1.8772
SELF-PROP.	1.8148
MORTERS	1.5880
GLCMS	1.5880
TOWED ART.	1.3611
M-1	1.3611
FRIGATES	1.3140
M-60	1.2250
SH-2	1.1263
MLRS	1.0208
PERSHING	0.9528
DSTROYERS	0.7884
M-48	0.7622
SH-3	0.4905
RADIO RLAY	0.[illegible]
M-113	0.[illegible]
ART. ACRFT	0.[illegible]
ROLES LNCH	0.0134
M-551	0.0134

FIRETHRU

ATT. SUBS	ASW(SEA BASED)	14 4434
M-48	ARMY GROUND	27 3733
M-60	ARMY GROUND	44 6008
M-113	ARMY GROUND	4 8690
TOWED ART.	ARMY GROUND	29 3338
SELF-PROP.	ARMY GROUND	39 1118
INFANTRY	ARMY GROUND	67 8425
MORTERS	ARMY GROUND	34 2129

NORMALIZED VALUES

INFANTRY	10 0000
M-60	6 3919
SELF-PROP.	5 6001
MORTERS	4 9000
TOWED ART	4 2000
M-48	3 9200
ATT. SUBS	2 0687
M-113	0 7000

ALL COMMODITIES

A-10	CAS	2.8646
COBRA	CAS	1.94[illegible]
F-4	AIR INTERDICTION	3.9405
	CAS	0.2696
F-16	AIR INTERDICTION	[illegible]
	CAS	1.5[illegible]
ART. ACRFT	CAS	0.1236
RADIO RLAY	AIR INTERDICTION	0.1232
	CAS	0.1011
F-111	AIR INTERDICTION	5.2329
A-6	AIR INTERDICTION	1.6143
F-15	AIR INTERDICTION	2.3262
A-7	AIR INTERDICTION	2.0934
F-14	AIR INTERDICTION	1.8473
F-18	AIR INTERDICTION	3.0789
SH-3	ASW(SEA BASED)	0.2514
SH-2	ASW(SEA BASED)	0.6285
SH-60B	ASW(SEA BASED)	1.0411
S-3	ASW(SEA BASED)	1.4737
ATT. SUBS	ASW(SEA BASED)	1.2511
FRIGATES	ASW(SEA BASED)	0.7513
DSTROYERS	ASW(SEA BASED)	0.4503
M-48	ARMY GROUND	0.9337
M-60	ARMY GROUND	1.5084
M-1	ARMY GROUND	1.4667
M-551	ARMY GROUND	0.0119
M-901	ARMY GROUND	1.1943
M-2/M-3	ARMY GROUND	1.2572
M-113	ARMY GROUND	0.1816
MLRS	ARMY GROUND	0.6391
TOWED ART.	ARMY GROUND	1.1314
SELF-PROP.	ARMY GROUND	1.5086
PERSHING	ARMY GROUND	0.6286
GLCMS	ARMY GROUND	0.9778
INFANTRY	ARMY GROUND	2.2350
MORTERS	ARMY GROUND	1.1245
ROLES LNCH	ARMY GROUND	0.0210

NORMALIZED VALUES

F-111	10.0000
F-16	8.5962
F-4	8.0445
F-18	5.8874
A-10	5.4732
F-15	4.4444
INFANTRY	4.2702
A-7	4.0000
COBRA	3.7204
F-14	3.5294
A-6	3.0882
M-60	2.8824
SELF-PROP.	2.8824
S-3	2.8158
M-1	2.8023
M-2/M-3	2.4020
ATT. SUBS	2.3925
M-901	2.2819
TOWED ART.	2.1618
MORTERS	2.1494
SH-60B	1.9968
GLCMS	1.8682
M-48	1.7935
FRIGATES	1.4355
PERSHING	1.2010
MLRS	1.2010
SH-2	1.2008
DSTROYERS	0.8613
SH-3	0.4803
RADIO RLAY	0.4[illegible]
M-113	0.3470
ART. ACRFT	0.2361
ROLES LNCH	0.0400
M-551	0.0[illegible]

CRITICALITY OF SHORTFALL
ALL FE S
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FE COMODITY IMPORT.	CRITIC-ALITY	NET FE SHORTFALL CRITICALITY
COBALT	95.4	43.8	-48.7	412.5	8.0	3218.4	7.4
TIN	42.0	150.6	358.8	0.0	10.0	- 0.0	0.0
NICKEL	200.0	32.2	-83.9	437.7	10.0	4358.1	10.[illegible]
FLUORSPAR ACID	1400.0	895.0	-36.1	389.9	9.5	3708.3	9.5
PYRETHRUM	500.0	0.0	-100.0	453.8	4.2	1897.6	4.4

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1350.	6.43	1.72	0.580	3.731
MOROCCO	450.	2.14	2.05	0.487	1.043
BOTSWANNA	250.	1.19	1.76	0.569	0.675
SOUTH AFRICA	150.	0.71	2.31	0.432	0.30[illegible]
ZAIRE	12500.	59.52	1.76	0.569	33.892
ZAMBIA	3500.	16.67	1.76	0.569	9.49[illegible]
PHILIPPINES	50.	0.24	0.82	1.216	0.29[illegible]
AUSTRALIA	400.	1.90	0.82	1.216	2.316
NEW CALEDONIA	250.	1.19	0.82	1.216	1.447
CANADA	1100.	5.24	2.61	0.383	2.007
U S	1000.	4.76	2.31	0.432	2.055
TOTAL:	21000.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.82	1.216	0.190
U S	16100.	23.82	2.31	0.432	10.299
THAILAND	5900.	8.73	0.82	1.216	10.611
INDONESIA	5800.	8.58	0.82	1.216	10.431
UK	100.	0.15	1.76	0.569	0.084
BOLIVIA	10300.	15.24	0.90	1.117	17.014
BRAZIL	2400.	3.55	0.90	1.117	3.964
PRC	3000.	4.44	2.33	0.429	1.905
MALAYSIA	23900.	35.36	0.82	1.216	42.983
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000.	0.33	1.72	0.580	0.191
SOUTH AFRICA	5000.	1.64	2.31	0.432	0.710
PHILIPPINES	5000.	1.64	0.82	1.216	1.997
AUSTRALIA	25000.	8.21	0.82	1.216	9.991
CANADA	150000.	49.25	2.61	0.383	18.87
U S	88000.	28.91	2.31	0.432	12.501
GREECE	600.	0.20	1.76	0.569	0.112
NETHERLANDS	200.	0.07	1.76	0.569	0.037
FRG	100	0.03	1.76	0.569	0.018
YUGOSLAVIA	500.	0.16	1.76	0.569	0.094
USSR	5000	1.64	0.86	1.160	1.907
DOM REPUB	15000	4.93	1.39	0.727	3.581
GUATAMALA	4000	1.31	1.39	0.727	0.955
INDONESIA	5000.	1.64	0.82	1.216	1.997
TOTAL:	304400.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOREPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	190.	23.59	2.31	0.432	9.689
U S	70.	8.70	2.31	0.432	3.760
ITALY	65.	8.07	1.76	0.569	4.591
SPAIN	100	12.42	1.76	0.569	7.073
EAST AFRICA	25.	3.11	1.76	0.569	1.768
THAILAND	15.	1.86	0.82	1.216	2.265
MEXICO	350	43.48	2.31	0.432	18.801
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	2.31	0.432	0.438
AUSTRALIA	1500.	0.76	0.82	1.216	0.923
UK	11000.	5.57	1.76	0.569	3.171
KENYA	80000.	40.51	1.76	0.569	23.063
RWANDA	25000.	12.66	1.76	0.569	7.207
TANZANIA	78000.	39.49	1.76	0.569	22.487
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOG 3)

SOURCE	%(1/CI) CUMF. I.P.	PE/SUPERFALL CRITICALITY	TOTAL	NORMALIZED T. I.P.
COBALT				
FINLAND	3.731	7.38	27.55	11.01
MOROCCO	1.043	7.38	7.70	3.08
BOTSWANNA	0.678	7.38	5.01	2.00
SOUTH AFRICA	0.309	7.38	2.28	0.91
ZAIRE	33.872	7.38	250.29	100.00
ZAMBIA	9.490	7.38	70.03	28.00
PHILIPPINES	0.289	7.38	2.14	0.85
AUSTRALIA	2.316	7.38	17.10	6.83
NEW CALEDONIA	1.447	7.38	10.68	4.27
CANADA	2.007	7.38	14.82	5.92
U S	2.059	7.38	15.21	6.08
TIN				
AUSTRALIA	0.180	0.00	0.00	0.00
U S	10.289	0.00	0.00	0.00
THAILAND	10.611	0.00	0.00	0.00
INDONESIA	10.431	0.00	0.00	0.00
UK	0.084	0.00	0.00	0.00
BOLIVIA	17.014	0.00	0.00	0.00
BRAZIL	3.964	0.00	0.00	0.00
PRC	1.995	0.00	0.00	0.00
MALAYSIA	42.983	0.00	0.00	0.00
NICKEL				
FINLAND	0.191	10.00	1.91	0.76
SOUTH AFRICA	0.710	10.00	7.10	2.84
PHILIPPINES	1.997	10.00	19.97	7.98
AUSTRALIA	9.985	10.00	99.85	39.94
CANADA	18.877	10.00	188.77	75.42
U S	12.501	10.00	125.01	49.9[illegible]
GREECE	0.112	10.00	1.12	0.45
NETHERLANDS	0.037	10.00	0.37	0.15
FRG	0.019	10.00	0.19	0.07
YUGOSLAVIA	0.094	10.00	0.94	0.3[illegible]
USSR	1.905	10.00	19.05	7.61
DOM. REPUB.	3.582	10.00	35.82	14.31
GUATAMALA	0.955	10.00	9.55	3.82
INDONESIA	1.997	10.00	19.97	7.98
FLUORSPAR ACID				
SOUTH AFRICA	9.669	8.51	82.28	32.87
U S	3.760	8.51	32.00	12.78
ITALY	4.597	8.51	39.12	15.63
SPAIN	7.073	8.51	60.19	24.05
EAST AFRICA	1.768	8.51	15.05	6.01
THAILAND	2.265	8.51	19.28	7.70
MEXICO	18.801	8.51	159.98	63.92
PYRETHRUM				
SOUTH AFRICA	0.438	4.35	1.91	0.76
AUSTRALIA	0.923	4.35	4.02	1.61
UK	3.171	4.35	13.81	5.52
KENYA	23.063	4.35	100.42	40.13
RWANDA	7.207	4.35	31.38	12.54
TANZANIA	22.487	4.35	97.91	39.12

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	CANADA	NICKEL	70.42
3	MEXICO	FLUORSPAR ACID	63.92
4	U S	NICKEL	44.95
5	KENYA	PYRETHRUM	40.12
6	AUSTRALIA	NICKEL	39.84
7	TANZANIA	PYRETHRUM	39.12
8	SOUTH AFRICA	FLUORSPAR ACID	32.87
9	ZAMBIA	COBALT	28.00
10	SPAIN	FLUORSPAR ACID	24.05
11	ITALY	FLUORSPAR ACID	15.63
12	DOM. REPUB.	NICKEL	14.31
13	U S	FLUORSPAR ACID	12.73
14	RWANDA	PYRETHRUM	12.54
15	FINLAND	COBALT	11.01
16	INDONESIA	NICKEL	7.96
17	PHILIPPINES	NICKEL	7.95
18	THAILAND	FLUORSPAR ACID	7.70
19	USSR	NICKEL	7.61
20	AUSTRALIA	COBALT	6.93
21	U S	COBALT	6.08
22	EAST AFRICA	FLUORSPAR ACID	6.01
23	CANADA	COBALT	5.92
24	UK	PYRETHRUM	5.52
25	NEW CALEDONIA	COBALT	4.27
26	GUATAMALA	NICKEL	3.86
27	MOROCCO	COBALT	3.08
28	SOUTH AFRICA	NICKEL	2.94
29	BOTSWANNA	COBALT	2.00
30	AUSTRALIA	PYRETHRUM	1.61
31	SOUTH AFRICA	COBALT	0.91
32	PHILIPPINES	COBALT	0.90
33	SOUTH AFRICA	PYRETHRUM	0.76
34	FINLAND	NICKEL	0.76
35	GREECE	NICKEL	0.45
36	YUGOSLAVIA	NICKEL	0.37
37	NETHERLANDS	NICKEL	0.15
38	FRG	NICKEL	0.07
39	MALAYSIA	TIN	0.00
40	PRC	TIN	0.00
41	BRAZIL	TIN	0.00
42	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
44	INDONESIA	TIN	0.00
45	THAILAND	TIN	0.00
46	U S	TIN	0.00
47	AUSTRALIA	TIN	0.00

SCENARIO 39

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	2.0	2.0	5.0	2.0	[illegible]
I/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	0.1071

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
Weight	9.0									
I/COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0933	[illegible]
I/COEF	0.1200									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
I/COEF	0.1786	0.1786	0.1786	0.1429	0.1071	0.0714	0.1429

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
or the Importance of Controlling EACH region within its own Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0228	0.0228	0.0170	0.0114	0.0160	0.0046	0.0046	0.0114	0.0041	[illegible]

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0171	0.0171	0.0154	0.0068	0.0119	0.0085	0.0017	0.0136	0.0119	0.0025
I/COEF	0.0154									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0228	0.0228	0.0228	0.0183	0.0137	0.0091	0.0183

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0150	0.0075

Importance of controlling ANY Region
within its Media as compared to the Importance
of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0040

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
I/COEF	0.0033									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LD 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.141	10.000
2	1	AIR INTERDICTION	0.117	8.2[illegible]
3	3	ARMY GROUND	0.104	7.3[illegible]
4	16	ATTACK SUBS	0.072	5.1[illegible]
5	19	SURFACE COMBATANTS	0.060	4.2[illegible]
6	12	THEATER NUCLEAR WEAPON	0.054	3.81[illegible]
7	8	RAPID DEPLOY	0.052	3.7[illegible]
8	6	CAS	0.044	3.1[illegible]
9	14	ASW(LAND BASED)	0.04[illegible]	3.0[illegible]
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.910
11	15	ASW(SEA BASED)	0.03[illegible]	2.31[illegible]
12	23	AIR SUPERIORITY(SHIP BASED)	0.032	2.2[illegible]
13	21	AIR DEFENCE(SHIP BASED)	0.029	2.048
14	10	STRATEGIC BOMBER	0.025	1.7[illegible]
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.020	1.416
16	29	ASAT(SPACE BASED)	0.013	0.924
17	18	MINE WARFARE	0.013	0.891
18	2	AMPHIBIOUS ASSAULT	0.011	0.75[illegible]
19	13	SPECIAL OPERATIONS	0.010	0.72[illegible]
20	28	ASAT(LAND BASED)	0.007	0.5[illegible]
21	20	AIR DEFENSE(LAND BASED)	0.004	0.27[illegible]
22	9	SPCE-BASED WEAPON(LAND CNTRL)	0.003	0.21[illegible]
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.002	0.11[illegible]
24	27	ABM(SPACE BASED)	0.000	0.00[illegible]
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.66
ARMY GROUND	4.51
CAS	1.51
ICBM	0.00
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(SEA BASED)	1.20
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.21
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABAT(LAND BASED)	0.51

	34.59

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.61
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	0.06
ASW(SEA BASED)	1.01
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00

	40.78

NICKEL

AIR INTERDICTION	5.65
ARMY GROUND	4.92
CAS	1.40
STRATEGIC BOMBER	1.79
ASW(SEA BASED)	1.81
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00

	41.04

FLUORSPAR ACID

AIR INTERDICTION	7.02
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	3.[illegible]
CAS	[illegible].75
ICBM	0.00
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(LAND BASED)	3.05
ASW(SEA BASED)	1.54
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.[illegible]
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	39.11

PYRETHRUM

ARMY GROUND	2.6[illegible]
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.22
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
	17.15

COMMODITY NORMALIZED IMPORTANCE

NICKEL	10.00	(41.04)
TIN	9.94	(40.78)
FLUORSPAR ACID	9.53	(39.11)
COBALT	8.43	(34.59)
PYRETHRUM	4.18	(17.15)

COBRA	CAS	[illegible]	[illegible]
A-10	CAS	[illegible]	[illegible]
OV-10A	CAS	[illegible]	[illegible]
F-4	AIR INTERDICTION	55.0000	55.0000
F-16	AIR INTERDICTION	76.3018	76.3018
ATT. AGRFT	CAS	[illegible]	[illegible]
RADIO RLAY	ATT. INTE-UNCTION	5.7226	5.7226
F-111	CAS	4.4501	4.4501
A-6	AIR INTERDICTION	40.6716	40.6716
F-15	AIR INTERDICTION	76.3018	76.3018
A-7	AIR INTERDICTION	49.7811	49.7811
F-14	AIR INTERDICTION	76.3018	76.3018
F-18	AIR INTERDICTION	76.3018	76.3018
SP-3	ASW(SEA BASED)	4.5521	4.5521
S-3	ASW(SEA BASED)	12.6743	12.6743
SH-60B	ASW(SEA BASED)	15.1937	15.1937
S-2	ASW(SEA BASED)	15.6273	15.6273
ATT. SUBS	ASW(SEA BASED)	38.1754	38.1754
FRIGATES	ASW(SEA BASED)	21.7052	21.7052
DESTROYERS	ASW(SEA BASED)	13.0231	13.0231
M-48	ARMY GROUND	37.9669	37.9669
M-60	ARMY GROUND	41.0182	41.0182
M-1	ARMY GROUND	67.7980	67.7980
M-901	ARMY GROUND	0.2260	0.2260
M-2/M-3	ARMY GROUND	56.2384	56.2384
M-113	ARMY GROUND	47.4586	47.4586
MLRS	ARMY GROUND	5.2732	5.2732
TOWED ART.	ARMY GROUND	20.8394	20.8394
SELF-PROP.	ARMY GROUND	17.1182	17.1182
PERSHING	ARMY GROUND	86.1580	86.1580
GLCMS	ARMY GROUND	18.0785	18.0785
INFANTRY	ARMY GROUND	80.1324	80.1324
MORTERS	ARMY GROUND	7.5331	7.5331
ROLES LNCH	ARMY GROUND	36.5122	36.5122
	ARMY GROUND	1.5820	1.5820

NORMALIZED VALUES

F-16	10.0000
F-4	9.0000
F-18	6.5858
F-14	6.5858
F-15	6.5858
A-6	5.9272
F-111	5.9272
M-1	5.8518
M-60	5.2646
M-901	4.6814
M-2/M-3	4.0942
A-7	3.9515
M-48	3.2770
MORTERS	3.1860
ATT. SUBS	3.1224
SELF-PROP.	3.1210
A-10	3.0728
GLCMS	2.4008
COBRA	2.5407
TOWED ART.	2.3407
FRIGATES	1.8734
MLRS	1.7555
PERSHING	1.5405
S-3	1.3499
SH-60B	1.3114
SH-2	1.1803
DESTROYERS	1.1241
RADIO RLAY	0.8750
INFANTRY	0.7503
ART. AGRFT	0.5121
M-113	0.4561
[illegible]	0.3943
[illegible]	0.1865
[illegible]	0.0[illegible]

TIN		
A-10	CAS	35.6012
COBRA	CAS	39.5549
F-4	AIR INTERDICTION	68.6716
	CAS	35.6012
F-16	AIR INTERDICTION	76.3019
	CAS	39.5549
ART. ACRFT	CAS	5.5335
RADIO RLAY	AIR INTERDICTION	5.7226
	CAS	4.4501
F-111	AIR INTERDICTION	68.6716
A-6	AIR INTERDICTION	77.2555
F-15	AIR INTERDICTION	76.3019
A-7	AIR INTERDICTION	45.7811
F-14	AIR INTERDICTION	85.8395
F-18	AIR INTERDICTION	85.8395
SH-3	ASW(SEA BASED)	3.9049
SH-2	ASW(SEA BASED)	11.7206
SH-60B	ASW(SEA BASED)	13.0231
S-3	ASW(SEA BASED)	15.6278
ATT. SUBS	ASW(SEA BASED)	21.7052
FRIGATES	ASW(SEA BASED)	21.7052
DSTROYERS	ASW(SEA BASED)	13.0231
M-48	ARMY GROUND	4.2185
M-60	ARMY GROUND	6.7798
M-1	ARMY GROUND	37.6455
M-551	ARMY GROUND	0.0703
M-901	ARMY GROUND	6.7798
M-2/M-3	ARMY GROUND	6.7798
M-113	ARMY GROUND	0.7533
MLRS	ARMY GROUND	10.1697
TOWED ART	ARMY GROUND	4.5199
SELF-PROP	ARMY GROUND	6.0265
PERSHING	ARMY GROUND	15.8195
GLCMS	ARMY GROUND	26.3659
INFANTRY	ARMY GROUND	60.2649
MORTERS	ARMY GROUND	5.2732
ROLES LNCH	ARMY GROUND	0.2260

NORMALIZED VALUES

F-16	10.0000
F-4	9.0000
F-18	7.4090
F-14	7.4090
A-6	6.6681
F-15	6.5838
F-111	5.9272
INFANTRY	5.2016
A-7	3.9515
COBRA	3.4142
M-1	3.2510
A-10	3.0728
GLCMS	2.2757
FRIGATES	1.8734
ATT. SUBS	1.8734
PERSHING	1.3654
S-3	1.3489
SH-60B	1.1241
DSTROYERS	1.1241
SH-2	1.0116
RADIO RLAY	0.8780
MLRS	0.8778
M-2/M-3	0.5852
M-901	0.5852
M-60	0.5852
SELF-PROP.	0.5202
ART. ACRFT	0.5121
MORTERS	0.4551
TOWED ART.	0.3901
M-48	0.3641
SH-3	0.3372
M-113	0.0650
ROLES LNCH	0.0195
M-551	0.0061

NICKEL		
A-10	CAS	35.6612
COBRA	CAS	35.4678
F-4	AIR INTERDICTION	51.5067
	CAS	26.7009
F-16	AIR INTERDICTION	76.3018
	CAS	33.5519
ART. ACRFT	CAS	3.9557
RADIO RLAY	AIR INTERDICTION	5.7226
	CAS	4.4501
F-111	AIR INTERDICTION	68.6716
A-6	AIR INTERDICTION	68.6716
F-15	AIR INTERDICTION	76.3010
A-7	AIR INTERDICTION	45.7811
F-14	AIR INTERDICTION	85.8395
F-18	AIR INTERDICTION	85.8395
SH-3	ASW(SEA BASED)	[illegible]
SH-2	ASW(SEA BASED)	15.6278
SH-60B	ASW(SEA BASED)	17.8441
S-3	ASW(SEA BASED)	15.6278
ATT. SUBS	ASW(SEA BASED)	65.1157
FRIGATES	ASW(SEA BASED)	39.0694
DESTROYERS	ASW(SEA BASED)	23.4416
M-48	ARMY GROUND	42.1954
M-60	ARMY GROUND	67.7980
M-1	ARMY GROUND	79.3311
M-901	ARMY GROUND	0.7501
M-901	ARMY GROUND	47.4586
M-2/M-3	ARMY GROUND	54.2984
M-113	ARMY GROUND	5.2732
MLRS	ARMY GROUND	20.3374
TOWED ART	ARMY GROUND	36.1589
SELF-PROP.	ARMY GROUND	43.3119
PERSHING	ARMY GROUND	18.0795
GLCMS	ARMY GROUND	22.5993
INFANTRY	ARMY GROUND	37.6655
MORTERS	ARMY GROUND	15.8199
ROLES LNCH	ARMY GROUND	0.2260

NORMALIZED VALUES	
F-16	10.0000
F-18	7.4090
F-14	7.4090
F-4	6.7500
F-15	6.5858
M-1	6.5020
A-6	5.9272
F-111	5.9272
M-60	5.8518
ATT. SUBS	5.6203
M-2/M-3	4.4814
SELF-PROP.	4.1613
M-901	4.0962
A-7	3.9515
M-48	3.6411
FRIGATES	3.3722
INFANTRY	3.2510
TOWED ART.	3.1210
A-10	3.0728
COBRA	2.5607
DESTROYERS	2.0238
GLCMS	1.9504
MLRS	1.7555
PERSHING	1.7601
SH-60B	1.4987
MORTERS	1.3654
S-3	1.2489
SH-2	1.2489
RADIO RLAY	0.8780
M-113	0.4571
SH-3	0.4496
ART. ACRFT	[illegible]
M-901	[illegible]
ROLES LNCH	[illegible]

FLUOSPAR ACID		
A-10	CAS	44.5015
COBRA	CAS	29.6676
F-4	AIR INTERDICTION	85.8395
	CAS	44.5015
F-16	AIR INTERDICTION	95.3772
	CAS	49.4461
ART. ACRFT	CAS	5.9335
RADIO RLAY	AIR INTERDICTION	5.7226
	CAS	4.4501
F-111	AIR INTERDICTION	85.8395
A-6	AIR INTERDICTION	85.8395
F-15	AIR INTERDICTION	95.3772
A-7	AIR INTERDICTION	57.2263
F-14	AIR INTERDICTION	95.3772
F-18	AIR INTERDICTION	95.3772
SH-3	ASW(SEA BASED)	5.[illegible]
SH-2	ASW(SEA BASED)	15.6278
SH-60B	ASW(SEA BASED)	[illegible].7002
S-3	ASW(SEA BASED)	19.5347
ATT. SUBS	ASW(SEA BASED)	43.4104
FRIGATES	ASW(SEA BASED)	30.3873
DSTROYERS	ASW(SEA BASED)	18.2324
M-48	ARMY GROUND	12.6596
M-60	ARMY GROUND	20.3394
M-1	ARMY GROUND	21.5993
M-551	ARMY GROUND	0.2260
M-901	ARMY GROUND	54.2384
M-2/M-3	ARMY GROUND	54.2384
M-113	ARMY GROUND	6.0765
MLRS	ARMY GROUND	16.9490
TOWED ART.	ARMY GROUND	22.5993
SELF-PROP.	ARMY GROUND	30.1324
PERSHING	ARMY GROUND	15.8195
GLCMS	ARMY GROUND	26.3659
INFANTRY	ARMY GROUND	60.2649
MORTERS	ARMY GROUND	26.3659
ROLES LNCH	ARMY GROUND	0.2260

NORMALIZED VALUES

F-16	10.0000
F-4	9.0000
F-18	6.5858
F-14	6.5858
F-15	6.5858
A-6	5.9272
F-111	5.9272
INFANTRY	4.1613
A-7	3.9515
M-2/M-3	3.7451
M-901	3.7451
A-10	3.0728
ATT. SUBS	2.9975
FRIGATES	2.0987
SELF-PROP.	2.0806
COBRA	2.0485
MORTERS	1.8206
GLCMS	1.8204
TOWED ART.	1.5605
M-1	1.5605
SH-60B	1.4987
M-60	1.4044
S-3	1.3489
DSTROYERS	1.2589
MLRS	1.1704
PERSHING	1.0928
SH-2	1.0791
M-48	0.8739
RADIO RLAY	0.7024
M-113	0.4141
ART. ACRFT	0.4097
SH-3	[illegible]
ROLES LNCH	[illegible]
M-551	[illegible]

PYRETHRUM

ATT. SUBS	ASW(SEA BASED)	21.7052
M-48	ARMY GROUND	28.5798
M-60	ARMY GROUND	47.4586
M-113	ARMY GROUND	5.2732
TOWED ART.	ARMY GROUND	31.6390
SELF-PROP.	ARMY GROUND	42.1804
INFANTRY	ARMY GROUND	75.3311
MORTERS	ARMY GROUND	36.9122

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP.	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-48	3.9200
ATT. SUBS	2.8813
M-113	0.7000

ALL COMMODITIES

A-10	CAS	1.5130
COBRA	CAS	1.2876
F-4	AIR INTERDICTION	2.7489
	CAS	1.4240
F-16	AIR INTERDICTION	3.2428
	CAS	1.6812
AFT. ACRFT	CAS	0.2176
RADIO RLAY	AIR INTERDICTION	0.2289
	CAS	0.1780
F-111	AIR INTERDICTION	2.9185
A-6	AIR INTERDICTION	3.0044
F-15	AIR INTERDICTION	3.2438
A-7	AIR INTERDICTION	1.9457
F-14	AIR INTERDICTION	3.4366
F-18	AIR INTERDICTION	3.4326
SH-3	ASW(SEA BASED)	0.1908
SH-2	ASW(SEA BASED)	0.5665
SH-60B	ASW(SEA BASED)	0.4729
S-3	ASW(SEA BASED)	0.6641
ATT. SUBS	ASW(SEA BASED)	1.8811
FRIGATES	ASW(SEA BASED)	1.1287
DSTROYERS	ASW(SEA BASED)	0.6772
M-48	ARMY GROUND	1.2656
M-60	ARMY GROUND	2.0339
M-1	ARMY GROUND	2.0339
M-551	ARMY GROUND	0.0123
M-901	ARMY GROUND	1.6272
M-2/M-3	ARMY GROUND	1.6272
M-113	ARMY GROUND	0.2260
MLRS	ARMY GROUND	0.6780
TOWED ART.	ARMY GROUND	1.2204
SELF-PROP.	ARMY GROUND	1.6272
PERSHING	ARMY GROUND	0.6780
GLCMS	ARMY GROUND	1.0546
INFANTRY	ARMY GROUND	2.4106
MORTERS	ARMY GROUND	1.2128
ROLES LNCH	ARMY GROUND	0.0226

NORMALIZED VALUES

F-16	10.0000
F-4	8.4706
F-18	6.9732
F-14	6.9732
F-15	6.5858
A-6	6.1015
F-111	5.9272
INFANTRY	4.9956
M-1	4.1307
M-60	4.1307
A-7	3.9515
ATT. SUBS	3.8203
SELF-PROP.	3.3045
M-2/M-3	3.3045
M-901	3.3045
A-10	3.0728
COBRA	2.6109
M-48	2.5702
TOWED ART.	2.4784
MORTERS	2.4631
FRIGATES	2.2922
GLCMS	2.1418
PERSHING	1.3769
MLRS	1.3749
DSTROYERS	1.3758
SH-60B	1.3440
S-3	1.3489
SH-2	1.1504
RADIO RLAY	0.5264
M-113	0.4590
ART. AIRCRFT	0.4418
SH-3	0.3875
ROLES LNCH	0.0459
M-551	0.0000

CRITICALITY OF SHORTFALL
ALL FE S
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FE/ COMMODITY IMPORT.	CRITIC-ALITY	NORMALIZED FE/SHORTFALL CRITICALITY
OBALT	85.4	43.8	-48.7	402.5	8.4	3393.2	7.9
IN	42.0	190.6	303.8	0.0	9.9	0.0	0.0
ICKEL	200.0	32.2	-83.9	437.7	10.0	4377.1	10.0
LUORSPAR ACID	1400.0	895.0	-36.1	389.9	9.5	3715.4	8.5
YRETHRUM	500.0	0.0	-100.0	453.8	4.2	1896.4	4.3

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

OURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
INLAND	1350	6.43	1.92	0.520	5.343
OROCCO	450	2.14	1.50	0.667	1.429
OTSWANNA	250	1.19	0.71	1.404	1.671
OUTH AFRICA	150	0.71	1.19	0.841	0.601
AIRE	12500.	59.52	0.71	1.404	83.548
AMBIA	3500	16.67	0.71	1.404	23.393
HILIPPINES	56.	0.24	0.92	1.087	0.259
USTRALIA	400	1.90	0.92	1.087	2.070
EW CALEDONIA	250	1.19	0.92	1.087	1.293
ANADA	1100.	5.24	2.89	0.346	1.813
S	1000.	4.76	2.56	0.391	1.863
TOTAL:	21000.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

OURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
USTRALIA	100.	0.15	0.92	1.087	0.161
S	16100	23.82	2.56	0.391	9.319
HAILAND	5900.	8.73	0.92	1.087	9.483
NDONESIA	5800.	8.58	0.92	1.087	9.322
K	100.	0.15	1.96	0.510	0.075
OLIVIA	10300.	15.24	0.98	1.020	15.543
RAZIL	2400.	3.55	0.86	1.162	4.125
RC	3000.	4.44	2.47	0.405	1.796
ALAYSIA	23900.	35.36	0.92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000.	0.33	1.92	0.520	[illegible]
SOUTH AFRICA	5000.	1.64	1.19	0.841	1.3[illegible]
PHILIPPINES	5000.	1.64	0.92	1.087	1.78[illegible]
AUSTRALIA	25000.	8.21	0.92	1.087	8.9[illegible]
CANADA	150000.	49.28	2.89	0.346	17.0[illegible]
U S	88000.	28.91	2.56	0.391	11.3[illegible]
GREECE	600	0.20	1.96	0.510	0.1[illegible]
NETHERLANDS	200.	0.07	1.96	0.510	0.0[illegible]
FRG	100.	0.03	1.96	0.510	[illegible]
YUGOSLAVIA	500	0.16	1.96	0.510	0.08[illegible]
USSR	5000	1.64	0.94	1.061	1.74[illegible]
DOM REPUB	15000.	4.93	1.53	0.656	3.2[illegible]
GUATAMALA	4000.	1.31	1.53	0.656	0.8[illegible]
INDONESIA	5000.	1.64	0.92	1.087	1.[illegible]
TOTAL:	304400.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUORSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180.	22.36	1.19	0.841	18.8[illegible]
U S	70.	8.70	2.56	0.391	3.402
ITALY	65.	8.07	1.96	0.510	4.120
SPAIN	100.	12.42	1.96	0.510	6.33[illegible]
EAST AFRICA	25.	3.11	0.71	1.404	4.3[illegible]
THAILAND	15.	1.86	0.92	1.087	2.025
MEXICO	350.	43.48	2.56	0.391	17.011
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	1.19	0.841	0.852
AUSTRALIA	1500.	0.76	0.92	1.087	0.82[illegible]
UK	11000.	5.57	1.96	0.510	2.842
KENYA	80000.	40.51	0.71	1.404	56.80[illegible]
RWANDA	25000.	12.66	0.71	1.404	17.767
TANZANIA	78000.	39.49	0.71	1.404	55.43[illegible]
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOG 3)

SOURCE	%(1-C1) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	3.343	7.75	25.92	4.00
MOROCCO	1.429	7.75	11.08	1.71
BOTSWANNA	1.671	7.75	12.95	2.00
SOUTH AFRICA	0.601	7.75	4.66	0.7[illegible]
ZAIRE	83.549	7.75	647.68	100.00
ZAMBIA	23.382	7.75	181.3[illegible]	28.0[illegible]
PHILIPPINES	0.259	7.75	2.01	0.31
AUSTRALIA	2.070	7.75	16.04	2.43
NEW CALEDONIA	1.293	7.75	10.03	1.55
CANADA	1.81[illegible]	7.75	14.05	2.17
U S	1.863	7.75	14.44	2.2[illegible]
TIN				
AUSTRALIA	0.161	0.00	0.00	0.00
U S	9.319	0.00	0.00	0.00
THAILAND	9.483	0.00	0.00	0.00
INDONESIA	9.322	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.549	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
PRC	1.796	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
NICKEL				
FINLAND	0.171	10.00	1.71	0.26
SOUTH AFRICA	1.381	10.00	13.81	2.13
PHILIPPINES	1.785	10.00	17.85	2.76
AUSTRALIA	8.924	10.00	89.24	13.78
CANADA	17.054	10.00	170.54	26.33
U S	11.311	10.00	113.11	17.46
GREECE	0.101	10.00	1.01	0.16
NETHERLANDS	0.034	10.00	0.34	0.05
FRG	0.017	10.00	0.17	0.03
YUGOSLAVIA	0.084	10.00	0.84	0.13
USSR	1.742	10.00	17.42	2.69
DOM. REPUB.	3.230	10.00	32.30	4.99
GUATAMALA	0.861	10.00	8.61	1.33
INDONESIA	1.785	10.00	17.85	2.76
FLUORSPAR ACID				
SOUTH AFRICA	18.803	8.49	159.60	24.64
U S	3.402	8.49	28.88	4.46
ITALY	4.120	8.49	34.97	5.40
SPAIN	6.338	8.49	53.80	8.31
EAST AFRICA	4.359	8.49	37.00	5.71
THAILAND	2.025	8.49	17.19	2.65
MEXICO	17.011	8.49	144.40	22.29
VANADIUM				
SOUTH AFRICA	0.852	4.33	3.69	0.57
AUSTRALIA	0.825	4.33	3.58	0.55
UK	2.842	4.33	12.31	1.90
KENYA	56.855	4.33	246.33	38.03
RWANDA	17.767	4.33	76.98	11.89
TANZANIA	55.433	4.33	240.17	37.09

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	39.03
3	TANZANIA	PYRETHRUM	37.09
4	ZAMBIA	COBALT	28.00
5	CANADA	NICKEL	26.33
6	SOUTH AFRICA	FLUORSPAR ACID	24.64
7	MEXICO	FLUORSPAR ACID	22.29
8	U S	NICKEL	17.44
9	AUSTRALIA	NICKEL	13.78
0	RWANDA	PYRETHRUM	11.87
11	SPAIN	FLUORSPAR ACID	8.31
12	EAST AFRICA	FLUORSPAR ACID	5.71
3	ITALY	FLUORSPAR ACID	5.40
14	DOM. REPUB	NICKEL	4.97
15	U S	FLUORSPAR ACID	4.46
6	FINLAND	COBALT	4.00
7	INDONESIA	NICKEL	3.74
18	PHILIPPINES	NICKEL	2.76
19	USSR	NICKEL	2.69
0	THAILAND	FLUORSPAR ACID	2.65
21	AUSTRALIA	COBALT	2.48
22	U S	COBALT	2.23
3	CANADA	COBALT	2.17
4	SOUTH AFRICA	NICKEL	2.13
25	BOTSWANNA	COBALT	2.00
26	UK	PYRETHRUM	1.90
7	MOROCCO	COBALT	1.71
28	NEW CALEDONIA	COBALT	1.55
29	GUATAMALA	NICKEL	1.33
0	SOUTH AFRICA	COBALT	0.72
31	SOUTH AFRICA	PYRETHRUM	0.57
32	AUSTRALIA	PYRETHRUM	0.55
3	PHILIPPINES	COBALT	0.31
4	FINLAND	NICKEL	0.26
35	GREECE	NICKEL	0.16
36	YUGOSLAVIA	NICKEL	0.13
7	NETHERLANDS	NICKEL	0.05
38	FRG	NICKEL	0.03
39	MALAYSIA	TIN	0.00
0	PRC	TIN	0.00
1	BRAZIL	TIN	0.00
42	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
4	INDONESIA	TIN	0.00
45	THAILAND	TIN	0.00
46	U S	TIN	0.00
7	AUSTRALIA	TIN	0.00

SCENARIO 40

WEIGHTS on REGIONS by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	2.0	2.0	5.0	2.0	[illegible]
I/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	0.1071

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
Weight	9.0									
I/COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0933	[illegible]
I/COEF	0.1200									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
I/COEF	0.1786	0.1786	0.1786	0.1429	0.1071	0.0714	0.1429

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS

of the Importance of Controlling EACH region within its own Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0228	0.0228	0.0160	0.0114	0.0160	0.0046	0.0046	0.0114	0.0046	0.0137

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0171	0.0171	0.0154	0.0068	0.0119	0.0085	0.0017	0.0136	0.0119	0.0085
I/COEF	0.0154									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0228	0.0228	0.0228	0.0183	0.0137	0.0091	0.0183

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0150	0.0075

Importance of controlling ANY Region
within its Media as compared to the Importance
of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0060

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
I/COEF	0.0033									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOI 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.132	10.0[illegible]
2	1	AIR INTERDICTION	0.107	8.0[illegible]
3	3	ARMY GROUND	0.080	6.03[illegible]
4	16	ATTACK SUB	0.072	5.4[illegible]
5	19	SURFACE COMBATANTS	0.060	4.52[illegible]
6	12	THEATER NUCLEAR WEAPON	0.054	4.05[illegible]
7	9	RAPID DEPLOY	0.052	3.91[illegible]
8	14	ASW(LAND BASED)	0.043	3.28[illegible]
9	6	CAS	0.037	2.80[illegible]
10	22	AIR SUPERIORITY(LAND BASED)	0.034	2.5[illegible]
11	15	ASW(SEA BASED)	0.033	2.44[illegible]
12	2[illegible]	AIR SUPERIORITY(SEA-AIR BASED)	0.031	2.4[illegible]
13	10	STRATEGIC BOMBER	0.025	1.91[illegible]
14	21	AIR DEFENSE(SEA BASED)	0.021	1.60[illegible]
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.020	1.507
16	28	ASAT(SPACE BASED)	0.012	0.934
17	18	MINE WARFARE	0.012	0.942
18	2	AMPHIBIOUS ASSAULT	0.011	0.809
19	13	SPECIAL OPERATIONS	0.010	0.753
20	28	ASAT(LAND BASED)	0.007	0.54[illegible]
21	9	SPCE-BASED WEAPON(LNI CNTRL)	0.003	0.22[illegible]
22	20	AIR DEFENSE(LAND BASED)	0.003	0.1[illegible]
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.002	0.12[illegible]
24	27	ABM(SPACE BASED)	0.000	0.00[illegible]
25	26	ABM(LAND BASED)	0.000	0.00[illegible]
26	24	INTERCEPTOR AIRCRAFT	0.00[illegible]	0.0[illegible]
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.00[illegible]
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.57
ARMY GROUND	3.49
CAS	1.57
ICBM	0.00
STRATEGIC BOMBER	1.91
SLBM	0.00
ASW(SEA BASED)	1.85
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.52
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.43
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.54
	34.13

TIN

AIR INTERDICTION	5.76
ARMY GROUND	1.57
CAS	1.[illegible]
STRATEGIC BOMBER	1.91
ASW LAND BASED)	3.29
ASW(SEA BASED)	1.18
ATTACK SUBS	5.47
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.[illegible]
SURFACE COMBATANTS	4.52
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.43
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.32

NICKEL

AIR INTERDICTION	5.46
ARMY GROUND	4.02
CAS	1.54
STRATEGIC BOMBER	1.91
ASW(SEA BASED)	1.82
ATTACK SUBS	5.47
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.95
SURFACE COMBATANTS	4.52
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.43
INTERCEPTOR AIRCRAFT	0.00
	40.67

FLUORSPAR ACID

AIR INTERDICTION	3.[illegible]
AMPHIBIOUS ASSAULT	0.81
ARMY GROUND	3.[illegible]
CAS	1.94
ICBM	0.00
STRATEGIC BOMBER	1.91
SLBM	0.00
ASW(LAND BASED)	3.23
ASW(SEA BASED)	1.72
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.4[illegible]
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	39.04

PYRETHRUM

ARMY GROUND	2.1[illegible]
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.15
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
	16.87

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00	(41.32)
NICKEL	9.84	(40.67)
FLUORSPAR ACID	9.45	(39.04)
COBALT	8.26	(34.13)
PYRETHRUM	4.08	(16.87)

COBALT			
A-10	CAS		65.2187
COBRA	CAS		43.4779
F-4	AIR	INTERDICTION	100.9104
	CAS		6.5220
F-16	AIR	INTERDICTION	70.0947
	CAS		[illegible]
AFT. ACRFT	CAS		3.2210
RADIO RLAY	AIR	INTERDICTION	3.1543
	CAS		2.4457
F-111	AIR	INTERDICTION	126.1715
A-6	AIR	INTERDICTION	37.8512
F-15	AIR	INTERDICTION	56.0758
A-7	AIR	INTERDICTION	50.4682
F-14	AIR	INTERDICTION	42.0528
F-18	AIR	INTERDICTION	70.0947
SH-3	ASW(SEA BASED)		6.4693
SH-2	ASW(SEA BASED)		16.1732
SH-60B	ASW(SEA BASED)		25.1583
S-3	ASW(SEA BASED)		36.9674
ATT. SUBS	ASW(SEA BASED)		25.6718
FRIGATES	ASW(SEA BASED)		15.4031
DESTROYERS	ASW(SEA BASED)		9.2418
M-48	ARMY GROUND		31.0990
M-60	ARMY GROUND		49.8830
M-1	ARMY GROUND		55.4278
M-551	ARMY GROUND		0.1848
M-901	ARMY GROUND		44.3423
M-2/M-3	ARMY GROUND		38.7990
M-113	ARMY GROUND		4.3111
MLRS	ARMY GROUND		16.6293
TOWED ART.	ARMY GROUND		22.1711
SELF-PROP.	ARMY GROUND		29.5615
PERSHING	ARMY GROUND		14.7803
GLCMS	ARMY GROUND		24.6846
INFANTRY	ARMY GROUND		6.1586
MORTERS	ARMY GROUND		30.1774
ROLES LNCH	ARMY GROUND		1.2933

NORMALIZED VALUES

F-111	10.0000
F-4	8.5169
F-16	6.4273
F-18.	5.5506
A-10	5.1492
F-15	4.4446
M-1	4.3931
A-7	4.0000
M-60	3.9538
M-901	3.5145
COBRA	3.4461
F-14	3.3333
M-2/M-3	3.0752
A-6	3.0000
S-3	2.9300
M-48	2.4601
MORTERS	2.3918
SELF-PROP.	2.3430
ATT. SUBS	2.0347
SH-60B	1.9940
GLCMS	1.9525
TOWED ART.	1.7572
MLRS	1.3179
SH-2	1.2819
FRIGATES	1.2208
PERSHING	1.1715
DESTROYERS	0.7245
SH-3	0.5121
INFANTRY	0.4881
RADIO RLAY	0.4538
M-113	0.3417
AFT. ACRFT	[illegible]
ROLES LNCH	0.1025
M-551	0.0146

TIN	CAS		65	2.1967
A-10	CAS		57	3.7131
COBRA	CAS	INTERDICTION	100	8.8976
F-2	AIR		6	5.5120
F-16	CAS	INTERDICTION	70	0.0947
	CAS		32	2.2992
ART. ACRFT	CAS		3	2.1110
RADIO RLAY	AIR	INTERDICTION	8	1.5433
	CAS		2	0.4457
F-111	AIR	INTERDICTION	126	1.7008
A-6	AIR	INTERDICTION	42	5.5226
F-15	AIR	INTERDICTION	56	0.7558
A-7	AIR	INTERDICTION	50	4.6832
F-14	AIR	INTERDICTION	43	3.3140
F-18	AIR	INTERDICTION	78	8.5566
SH-2	ASW	SEA BASED	5	5.5451
ST-2	ASW	SEA BASED	13	8.8228
SH-60B	ASW(SEA BASED)		21	5.5433
S-3	ASW(SEA BASED)		36	9.9374
ATT. SUBS	ASW(SEA BASED)		15	4.0331
FRIGATES	ASW(SEA BASED)		15	4.0331
DSTROYERS	ASW(SEA BASED)		9	2.4418
M-48	ARMY	GROUND	9	4.4338
M-60	ARMY	GROUND	5	3.4118
M-1	ARMY	GROUND	30	7.9322
M-551	ARMY	GROUND	0	0.0000
M-901	ARMY	GROUND	10	5.4128
M-2/M-3	ARMY	GROUND	10	5.4128
M-113	ARMY	GROUND	5	3.5423
MLRS	ARMY	GROUND	0	0.4153
TOWED ART	ARMY	GROUND	8	3.1161
SELF-PROP	ARMY	GROUND	8	3.1161
PERSHING	ARMY	GROUND	4	2.2769
GLCMS	ARMY	GROUND	12	9.3832
INFANTRY	ARMY	GROUND	21	5.5558
MORTERS	ARMY	GROUND	49	2.2692
ROLES LNCH	ARMY	GROUND	4	3.3111
			0	0.1843

NORMALIZED VALUES

F-111	10.0000
F-4	8.5169
F-16	8.4273
F-18	6.2500
A-10	5.1692
COBRA	4.5948
F-15	4.4444
A-7	4.0000
INFANTRY	3.9050
F-14	3.7500
A-6	3.3750
S-3	2.9300
M-1	2.4406
SH-60B	1.7091
GLCMS	1.7084
FRIGATES	1.2208
ATT. SUBS	1.2208
SH-2	1.0987
PERSHING	1.0251
DSTROYERS	0.7325
MLRS	0.6590
RADIO RLAY	0.4438
SH-3	0.4395
M-2/M-3	0.4393
M-901	0.4393
M-60	0.4393
SELF-PROP.	0.3905
MORTERS	0.3417
TOWED ART.	0.2929
M-48	0.2733
ART. ACRFT	0.2585
M-113	0.0488
ROLES LNCH	0.0146
M-551	0.0000

NICKEL

A-10	CAS	65.2197
COBRA	CAS	43.4798
F-4	AIR INTERDICTION	79.7023
	CAS	4.8513
F-16 -	AIR INTERDICTION	70.0947
	CAS	36.2311
AFT ACRFT	CAS	2.1740
RADIO RLAY	AIR INTERDICTION	3.1543
	CAS	2.4457
F-111	AIR INTERDICTION	126.1703
A-6	AIR INTERDICTION	37.8512
F-15	AIR INTERDICTION	53.0758
A-7	AIR INTERDICTION	50.4682
F-14	AIR INTERDICTION	47.9140
F-18	AIR INTERDICTION	78.8566
SH-3	ASW(SEA BASED)	7.3935
SH-2	ASW(SEA BASED)	13.4337
SH-60B	ASW(SEA BASED)	29.7524
S-3	ASW(SEA BASED)	34.9674
ATT. SUBS	ASW(SEA BASED)	46.2092
FRIGATES	ASW(SEA BASED)	27.7255
DSTROYERS	ASW(SEA BASED)	16.6353
M-48	ARMY GROUND	34.4884
M-60	ARMY GROUND	55.4276
M-1	ARMY GROUND	61.5365
M-551	ARMY GROUND	0.6154
M-901	ARMY GROUND	31.7995
M-2/M-3	ARMY GROUND	44.3423
M-113	ARMY GROUND	4.3111
MLRS	ARMY GROUND	16.6283
TOWED ART.	ARMY GROUND	29.5615
SELF-PROP.	ARMY GROUND	39.4153
PERSHING	ARMY GROUND	14.7808
GLCMS	ARMY GROUND	18.4759
INFANTRY	ARMY GROUND	30.7932
MORTERS	ARMY GROUND	12.9332
ROLES LNCH	ARMY GROUND	0.1848

NORMALIZED VALUES

F-111	10.0000
F-16	8.4278
F-4	6.8877
F-18	6.2500
A-10	5.1692
M-1	4.8815
F-15	4.4444
M-60	4.3931
A-7	4.0000
F-14	3.7500
ATT. SUBS	3.6624
M-2/M-3	3.5145
COBRA	3.4461
SELF-PROP.	3.1240
M-901	3.0752
A-6	3.0000
S-3	2.9800
M-48	2.7330
INFANTRY	2.4406
TOWED ART.	2.3430
SH-60B	2.2789
FRIGATES	2.1975
SH-2	1.4650
GLCMS	1.4644
DSTROYERS	1.3185
MLRS	1.3179
PERSHING	1.1715
MORTERS	1.0251
SH-3	0.5860
RADIO RLAY	0.4883
M-113	0.3417
ART. ACRFT	0.1758
M-551	0.0488
ROLES LNCH	0.0147

FLUORSPAR ACID			
A-10	CAS		81.5247
COBRA	CAS		43.4799
F-4	AIR	INTERDICTION	124.1710
	CAS		8.1520
F-16	AIR	INTERDICTION	87.6184
	CAS		45.[illegible]
ART. ACRFT	CAS		3.2610
RADIO RLAY	AIR	INTERDICTION	3.1543
	CAS		2.4457
F-111	AIR	INTERDICTION	157.7131
A-6	AIR	INTERDICTION	47.3140
F-15	AIR	IN ERDICTION	70.0947
A-7	AIR	INTERDICTION	63.0853
F-14	AIR	INTERDICTION	52.5711
F-18	AIR	INTERDICTION	87.6184
S--3	ASW(SEA BASED)		7.3[illegible]
SH-2	ASW(SEA BASED)		18.4837
SH-60B	ASW(SEA BASED)		35.9415
S-3	ASW(SEA BASED)		46.2092
ATT. SUBS	ASW(SEA BASED)		30.8061
FRIGATES	ASW(SEA BASED)		21.5643
DSTROYERS	ASW(SEA BASED)		12.9386
M-48	ARMY GROUND		10.3465
M-60	ARMY GROUND		16.6283
M-1	ARMY GROUND		18.4759
M-551	ARMY GROUND		0.1848
M-901	ARMY GROUND		44.3423
M-2/M-3	ARMY GROUND		44.3423
M-113	ARMY GROUND		4.9269
MLRS	ARMY GROUND		13.8570
TOWED ART.	ARMY GROUND		18.4759
SELF-PROP.	ARMY GROUND		24.6346
PERSHING	ARMY GROUND		12.9332
GLCMS	ARMY GROUND		21.5553
INFANTRY	ARMY GROUND		49.2692
MORTERS	ARMY GROUND		21.5553
ROLES LNCH	ARMY GROUND		0.1848

NORMALIZED VALUES

F-111	10.0000
F-4	8.5169
F-16	8.4273
F-18	5.5556
A-10	5.1692
F-15	4.4444
A-7	4.0000
F-14	3.3333
INFANTRY	3.1240
A-6	3.0000
S-3	2.9300
M-2/M-3	2.8114
M-901	2.8116
COBRA	2.7569
SH-60B	2.2789
ATT. SUBS	1.9533
SELF-PROP.	1.5620
FRIGATES	1.3673
MORTERS	1.3667
GLCMS	1.3667
SH-2	1.1720
TOWED ART.	1.1715
M-1	1.1715
M-60	1.0548
MLRS	0.8786
DSTROYERS	0.8204
PERSHING	0.8200
M-48	0.6560
SH-3	0.4688
RADIO RLAY	0.[illegible]
M-113	0.3124
ART. ACRFT	0.2065
ROLES LNCH	0.0117
M-551	0.0117

PYRETHRUM

ATT. SUBS	ASW(SEA BASED)	15 4731
M-48	ARMY GROUND	24 1413
M-60	ARMY GROUND	36 7975
M-113	ARMY GROUND	4 3111
TOWED ART	ARMY GROUND	25 8643
SELF-PROP.	ARMY GROUND	34 4884
INFANTRY	ARMY GROUND	41 5965
MORTERS	ARMY GROUND	90 1774

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP.	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-48	3.9200
ATT. SUBS	2.0010
M-113	0.7000

ALL COMMODITIES

A-10	CAS	2.7719
COBRA	CAS	1.[illegible]
F-4	AIR INTERDICTION	4.0375
	CAS	0.2409
F-16	AIR INTERDICTION	2.[illegible]
	CAS	1.5[illegible]
ART. ACRFT	CAS	0.1196
RADIO RLAY	AIR INTERDICTION	0.1262
	CAS	0.0978
F-111	AIR INTERDICTION	5.3622
A-6	AIR INTERDICTION	1.6560
F-15	AIR INTERDICTION	2.3832
A-7	AIR INTERDICTION	2.1445
F-14	AIR INTERDICTION	1.8926
F-18	AIR INTERDICTION	3.1543
SH-3	ASW(SEA BASED)	0.2630
SH-2	ASW(SEA BASED)	0.6700
SH-60B	ASW(SEA BASED)	1.1142
S-3	ASW(SEA BASED)	1.5711
ATT. SUBS	ASW(SEA BASED)	1.3349
FRIGATES	ASW(SEA BASED)	0.8010
DSTROYERS	ASW(SEA BASED)	0.4806
M-48	ARMY GROUND	1.0347
M-60	ARMY GROUND	1.6628
M-1	ARMY GROUND	1.6628
M-551	ARMY GROUND	0.0105
M-901	ARMY GROUND	1.3303
M-2/M-3	ARMY GROUND	1.3303
M-113	ARMY GROUND	0.1948
MLRS	ARMY GROUND	0.5543
TOWED ART.	ARMY GROUND	0.9977
SELF-PROP	ARMY GROUND	1.[illegible]
PERSHING	ARMY GROUND	0.5543
GLCMS	ARMY GROUND	0.8622
INFANTRY	ARMY GROUND	1.9708
MORTERS	ARMY GROUND	0.9915
ROLES LNCH	ARMY GROUND	0.0185

NORMALIZED VALUES

F-111	10.0000
F-16	8.4278
F-4	8.0159
F-18	5.8824
A-10	5.1492
F-15	4.4444
A-7	4.0000
INFANTRY	3.67[illegible]
F-14	3.5294
COBRA	3.5137
M-1	3.1010
M-60	3.1010
A-6	3.0882
S-3	2.9300
ATT. SUBS	2.4895
M-2/M-3	2.4808
M-901	2.4808
SELF-PROP.	2.4808
SH-60B	2.0778
M-48	1.9295
TOWED ART.	1.8606
MORTERS	1.8491
GLCMS	1.6079
FRIGATES	1.4937
SH-2	1.2495
PERSHING	1.0337
MLRS	1.0337
DSTROYERS	0.8[illegible]
SH-3	0.4998
RADIO RLAY	0.4177
M-113	0.3046
ART. ACRFT	0.2[illegible]
ROLES LNCH	0.0[illegible]
M-[illegible]	0.0[illegible]

CRITICALITY OF SHORTFALL
ALL FE 3
(LOC 3

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FE/ COMODITY IMPORT	CRITIC-ALITY	NORMALIZED FE [illegible] CRITICALITY
ALT	85.4	43.8	-48.7	402.5	8.3	3325.1	[illegible]
N	41.0	190.6	350.8	0.0	10.0	0.0	[illegible]
EL	200.0	32.2	-83.9	437.7	9.9	4307.6	10.0
DASPAR ACID	1400.0	895.1	-36.1	389.9	9.4	3683.4	8.6
ETHRUM	500.0	0.0	-100.0	453.8	4.1	1952.9	4.5

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
URCE					
NLAND	1350.	7.71	1.92	0.520	4.011
ROCCO	450.	2.57	1.50	0.667	1.715
TSWANA	250.	1.43	0.71	1.404	[illegible]
UTH AFRICA	150.	0.86	1.19	0.841	0.721
IRE	12500.	71.43	0.71	1.404	[illegible]
ILIPPINES	50.	0.29	0.92	1.087	[illegible]
STRALIA	400.	2.29	0.92	1.087	[illegible]
W CALEDONIA	250.	1.43	0.92	1.087	[illegible]
NADA	1100.	6.29	2.89	0.346	[illegible]
S	1000.	5.71	2.56	0.391	[illegible]
TOTAL	17500.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
URCE					
STRALIA	100.	0.15	0.92	1.087	0.161
S	16100.	23.82	2.56	0.391	9.319
AILAND	5900.	8.73	0.92	1.087	9.483
DONESIA	5800.	8.58	0.92	1.087	9.322
	100.	0.15	1.96	0.510	0.075
LIVIA	10300.	15.24	0.98	1.020	15.548
AZIL	2400.	3.55	0.86	1.162	4.125
RC	3000.	4.44	2.47	0.405	1.796
ALAYSIA	23900.	35.36	0.92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000.	0.33	1.92	0.520	[illegible]
SOUTH AFRICA	5000.	1.64	1.19	0.841	1.381
PHILIPPINES	5000.	1.64	0.92	1.087	1.781
AUSTRALIA	25000.	8.21	0.92	1.087	8.9[illegible]
CANADA	150000.	49.22	2.99	0.343	16.[illegible]
US	88000.	28.91	2.56	0.391	11.311
GREECE	600.	0.20	1.96	0.510	0.101
NETHERLANDS	200.	0.07	1.96	0.510	0.034
US	100.	0.03	1.96	0.510	0.017
YUGOSLAVIA	500.	0.16	1.96	0.510	0.084
USSR	5000.	1.64	0.94	1.061	1.74[illegible]
US REFUG	15000.	4.93	1.52	0.[illegible]	3.2[illegible]
GUATAMALA	4000.	1.31	1.52	0.651	0.9[illegible]
INDONESIA	5000.	1.64	0.92	1.087	1.7[illegible]
TOTAL:	304400	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUORSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180.	22.36	1.19	0.841	18.[illegible]
US	70.	8.70	2.56	0.391	3.402
ITALY	65.	8.07	1.96	0.510	4.1[illegible]
SPAIN	100.	12.42	1.96	0.510	6.3[illegible]
WEST AFRICA	25.	3.11	0.71	1.404	4.3[illegible]
THAILAND	15.	1.86	0.92	1.087	2.025
MEXICO	350.	43.48	2.56	0.391	17.[illegible]
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	1.19	0.841	0.852
AUSTRALIA	1500.	0.76	0.92	1.087	0.825
[illegible]	11000.	5.57	1.96	0.510	2.842
KENYA	80000.	40.51	0.71	1.404	56.855
RWANDA	25000.	12.66	0.71	1.404	17.767
TANZANIA	78000.	39.49	0.71	1.404	55.438
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	% (1) COMP IMP	PE IMPORTANCE CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	4.612	7.72	35.97	4.00
MOROCCO	1.715	7.72	13.24	1.71
BOTSWANNA	2.005	7.72	15.48	2.00
SOUTH AFRICA	0.721	7.72	5.56	0.72
ZAIRE	100.257	7.72	773.87	100.00
PHILIPPINES	0.310	7.72	2.40	0.31
AUSTRALIA	2.483	7.72	19.17	2.48
NEW CALEDONIA	1.551	7.72	11.[illegible]	1.[illegible]
CANADA	2.175	7.72	16.79	2.17
U S	2.[illegible]	7.72	17.16	2.[illegible]
TIN				
AUSTRALIA	0.141	0.00	0.00	0.00
U S	9.319	0.00	0.00	0.00
THAILAND	9.433	0.00	0.00	0.00
INDONESIA	9.322	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.5[illegible]	0.00	0.00	0.00
BRAZIL	4.127	0.00	0.00	0.00
PRC	1.716	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
NICKEL				
FINLAND	0.171	10.00	1.71	0.22
SOUTH AFRICA	1.381	10.00	13.81	1.75
PHILIPPINES	1.785	10.00	17.85	2.31
AUSTRALIA	8.924	10.00	89.24	11.53
CANADA	17.054	10.00	170.54	22.04
U S	11.311	10.00	113.11	14.61
GREECE	0.101	10.00	1.01	0.13
NETHERLANDS	0.034	10.00	0.34	0.04
FRG	0.017	10.00	0.17	0.02
YUGOSLAVIA	0.094	10.00	0.94	0.11
USSR	1.742	10.00	17.42	2.25
DOM. REPUB	3.230	10.00	32.30	4.17
GUATAMALA	0.861	10.00	8.61	1.11
INDONESIA	1.785	10.00	17.85	2.31
FLUOROSPAR ACID				
SOUTH AFRICA	18.803	8.55	160.78	20.78
U S	3.402	8.55	29.09	3.76
ITALY	4.120	8.55	35.23	4.55
SPAIN	6.338	8.55	54.20	7.00
EAST AFRICA	4.359	8.55	37.27	4.82
THAILAND	2.025	8.55	17.31	2.24
MEXICO	17.011	8.55	145.46	18.80
PYRETHRUM				
SOUTH AFRICA	0.852	4.30	3.66	0.47
AUSTRALIA	0.825	4.30	3.55	0.46
UK	2.842	4.30	12.22	1.58
KENYA	56.855	4.30	244.55	31.60
RWANDA	17.767	4.30	76.42	9.87
TANZANIA	55.433	4.30	238.43	30.[illegible]

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	31.60
3	TANZANIA	PYRETHRUM	31.81
4	CANADA	NICKEL	22.04
5	SOUTH AFRICA	FLUORSPAR ACID	20.73
6	MEXICO	FLUORSPAR ACID	18.60
7	U S	NICKEL	14.62
8	AUSTRALIA	NICKEL	11.[illegible]
9	RWANDA	PYRETHRUM	9.87
10	SPAIN	FLUORSPAR ACID	7.00
11	EAST AFRICA	FLUORSPAR ACID	4.82
12	ITALY	FLUORSPAR ACID	4.55
13	DOM. REPUB.	NICKEL	4.17
14	FINLAND	COBALT	4.00
15	U S	FLUORSPAR ACID	3.76
16	AUSTRALIA	COBALT	2.48
17	INDONESIA	NICKEL	2.31
18	PHILIPPINES	NICKEL	2.31
19	USSR	NICKEL	2.25
20	THAILAND	FLUORSPAR ACID	2.24
21	U S	COBALT	2.23
22	CANADA	COBALT	2.17
23	BOTSWANNA	COBALT	2.00
24	SOUTH AFRICA	NICKEL	1.78
25	MOROCCO	COBALT	1.71
26	UK	PYRETHRUM	1.58
27	NEW CALEDONIA	COBALT	1.55
28	GUATAMALA	NICKEL	1.11
29	SOUTH AFRICA	COBALT	0.72
30	SOUTH AFRICA	PYRETHRUM	0.47
31	AUSTRALIA	PYRETHRUM	0.46
32	PHILIPPINES	COBALT	0.31
33	FINLAND	NICKEL	0.22
34	GREECE	NICKEL	0.13
35	YUGOSLAVIA	NICKEL	0.11
36	NETHERLANDS	NICKEL	0.04
37	FRG	NICKEL	0.02
38	MALAYSIA	TIN	0.00
39	PRC	TIN	0.00
40	BRAZIL	TIN	0.00
41	BOLIVIA	TIN	0.00
42	UK	TIN	0.00
43	INDONESIA	TIN	0.00
44	THAILAND	TIN	0.00
45	U S	TIN	0.00
46	AUSTRALIA	TIN	0.00

SCENARIO 41

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	2.0	2.0	5.0	2.0	[illegible]
I/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	[illegible]

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	[illegible]
Weight	9.0									
I/COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0933	[illegible]
I/COEF	0.1200									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
I/COEF	0.1786	0.1786	0.1786	0.1429	0.1071	0.0714	0.1429

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
or the Importance of Controlling EACH region within its own Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0228	0.0228	0.0160	0.0114	0.0160	0.0046	0.0046	0.0114	0.0046	[illegible]

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0171	0.0171	0.0154	0.0069	0.0119	0.0085	0.0017	0.0136	0.0119	[illegible]
I/COEF	0.0154									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0128	0.0128	0.0128	0.0183	0.0137	0.0091	0.0183

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0151	0.0075

Importance of controlling ANY Region
within its Media as compared to the Importance
of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0040

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
I/COEF	0.0033									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LPC 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED IMPORTANCE VALUE	NORMALIZED IMPORTANCE VALUE
1	17	CARRIER BATTLE GROUP	0.132	10.000
2	1	[illegible]	0.107	8.0[illegible]
3	3	[illegible]	0.0[illegible]	6.0[illegible]
4	16	[illegible]	0.072	5.46[illegible]
5	19	SURFACE COMBATANTS	[illegible].060	4.5[illegible]
6	10	[illegible]	[illegible].054	4.0[illegible]
7	9	RAPID DEPLOY[illegible]	0.0[illegible]	3.[illegible]
8	14	[illegible]	[illegible].042	3.[illegible]
9	6	C[illegible]	0.037	2.80[illegible]
10	22	[illegible]	[illegible].034	2.5[illegible]
11	15	AEW(SEA BASED)	[illegible].033	2.494
12	2[illegible]	[illegible]	[illegible].031	2.4[illegible]
13	10	STRATEGIC [illegible]	[illegible].029	1.[illegible]
14	21	AIR DEFENSE [illegible]	[illegible].027	1.4[illegible]
15	2[illegible]	SPACE BASED [illegible]	[illegible].025	1.[illegible]
16	29	ASAT(SPACE BASED)	[illegible].01[illegible]	0.[illegible]
17	18	MINE WARFARE	0.013	0.943
18	2	AMPHIBIOUS ASSAULT	0.011	0.8[illegible]
19	19	SPECIAL OPERATIONS	0.01[illegible]	0.75[illegible]
20	23	ASAT(LAND BASED)	0.00[illegible]	0.5[illegible]
21	9	SPACE-BASED WEAPONS [illegible]	0.00[illegible]	0.2[illegible]
22	2[illegible]	AIR INTERDICTION BASED	0.00[illegible]	0.1[illegible]
23	30	SPACE BASED WEAPONS [illegible]	[illegible].002	0.125
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.0[illegible]
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOD 3)

COBALT

AIR INTERDICTION	5.57
ARMY GROUND	3.69
CAS	1.[illegible]
TIE	[illegible]
STRATEGIC BOMBER	1.91
SLBM	0.00
ASW(SEA BASED)	1.[illegible]
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.52
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.43
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	[illegible]
	44.17

TIN

AIR INTERDICTION	1.[illegible]
ARMY GROUND	1.57
CAS	1.[illegible]
STRATEGIC BOMBER	1.91
ASW(LAND BASED)	3.29
ASW(SEA BASED)	1.[illegible]
ATTACK SUBS	5.47
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.[illegible]
SURFACE COMBATANTS	4.52
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.43
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.[illegible]
	41.32

NICKEL

AIR INTERDICTION	5.44
ARMY GROUND	4.02
CAS	1.54
STRATEGIC BOMBER	1.91
ASW(SEA BASED)	1.82
ATTACK SUBS	5.47
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.95
SURFACE COMBATANTS	4.52
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.43
INTERCEPTOR AIRCRAFT	0.00
	40.67

FLUOROBORIC ACID

AIR INTERDICTION	6.95
AMPHIBIOUS ASSAULT	0.91
ARMY GROUND	3.02
CAS	1.84
ICBM	0.00
STRATEGIC BOMBER	1.91
SLBM	0.00
ASW(LAND BASED)	3.29
ASW(SEA BASED)	1.78
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.52
AIR SUPERIORITY(LAND BASED)	2.55
AIR SUPERIORITY(SHIP BASED)	2.43
INTERCEPTOR AIRCRAFT	0.00
ARMY(LAND BASED)	0.00
	39.04

PYRETHRUM

ARMY GROUND	2.19
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.15
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.52
	16.87

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00	(41.32)
NICKEL	9.84	(40.67)
FLUOROBORIC ACID	9.45	(39.04)
COBALT	8.26	(34.13)
PYRETHRUM	4.08	(16.87)

COBALT		
A-10	CAS	45.2157
COBRA	CAS	43.4728
F-4	AIR INTERDICTION	100.9364
	CAS	6.[illegible]
F-16	AIR INTERDICTION	70.0947
	CAS	36.2322
ART. ACRFT	CAS	3.2410
RADIO RLAY	AIR INTERDICTION	3.1519
	CAS	2.4457
F-111	AIR INTERDICTION	101.1715
A-6	AIR INTERDICTION	37.8012
F-15	AIR INTERDICTION	56.0756
A-7	AIR INTERDICTION	50.4482
F-14	AIR INTERDICTION	42.0568
F-18	AIR INTERDICTION	70.0947
SH-3	ASW(SEA BASED)	6.4693
SH-2	ASW(SEA BASED)	16.1732
SH-60B	ASW(SEA BASED)	25.1583
S-3	ASW(SEA BASED)	30.9674
ATT. SUBS	ASW(SEA BASED)	25.6718
FRIGATES	ASW(SEA BASED)	15.4031
DSTROYERS	ASW(SEA BASED)	9.2419
M-48	ARMY GROUND	31.0396
M-60	ARMY GROUND	49.9850
M-1	ARMY GROUND	55.4279
M-551	ARMY GROUND	0.1849
M-901	ARMY GROUND	44.3423
M-2/M-3	ARMY GROUND	38.7995
M-113	ARMY GROUND	4.3111
MLRS	ARMY GROUND	16.6283
TOWED ART.	ARMY GROUND	22.1711
SELF-PROP.	ARMY GROUND	29.5615
PERSHING	ARMY GROUND	14.7808
GLCMS	ARMY GROUND	24.6346
INFANTRY	ARMY GROUND	6.1586
MORTERS	ARMY GROUND	30.1774
ROLES LNCH	ARMY GROUND	1.2939

NORMALIZED VALUES

F-111	10.0000
F-4	8.5169
F-16	8.4278
F-18	5.5576
A-10	5.1492
F-15	4.4444
M-1	4.3931
A-7	4.0000
M-60	3.9538
M-901	3.5145
COBRA	3.4461
F-14	3.3338
M-2/M-3	3.0752
A-6	3.0000
S-3	2.9300
M-48	2.4601
MORTERS	2.2918
SELF-PROP.	2.2430
ATT. SUBS	2.0347
SH-60B	1.9940
GLCMS	1.9575
TOWED ART.	1.7572
MLRS	1.3179
SH-2	1.2815
FRIGATES	1.2208
PERSHING	1.1715
DSTROYERS	0.7325
SH-3	0.5127
INFANTRY	0.4881
RADIO RLAY	0.4498
M-113	0.3417
ART. ACRFT	0.2565
ROLES LNCH	0.1026
M-[illegible]	0.0[illegible]

TIN	CAS	65	2127
A-10	CAS	52	9711
COBRA	CAS	1[illegible]	[illegible]
F-2	AIR INTERDICTION	6	5120
F-16	CAS	70	0947
	AIR INTERDICTION	32	[illegible]
ART. ACRFT	CAS	3	2110
RADIO RLAY	AIR INTERDICTION	9	1543
	CAS	2	4457
F-111	AIR INTERDICTION	12	1105
A-6	AIR INTERDICTION	42	5826
F-15	AIR INTERDICTION	52	0[illegible]
A-7	AIR INTERDICTION	50	4[illegible]
F-14	AIR INTERDICTION	47	3140
F-18	AIR INTERDICTION	78	8504
SH-3	ASW(SEA BASED)	5	5[illegible]
SH-2	ASW(SEA BASED)	13	[illegible]
SH-60B	ASW(SEA BASED)	21	5642
S-3	ASW(SEA BASED)	34	[illegible]
ATT. SUBS	ASW(SEA BASED)	15	4031
FRIGATES	ASW(SEA BASED)	15	4031
DSTROYERS	ASW(SEA BASED)	9	2418
M-48	ARMY GROUND	9	4488
M-60	ARMY GROUND	5	5[illegible]
M-1	ARMY GROUND	80	7932
M-551	ARMY GROUND	0	0416
M-901	ARMY GROUND	5	5[illegible]
M-2/M-3	ARMY GROUND	5	5428
M-113	ARMY GROUND	0	6155
MLRS	ARMY GROUND	8	3140
TOWED ART.	ARMY GROUND	3	6552
SELF-PROP.	ARMY GROUND	4	9269
PERSHING	ARMY GROUND	12	9382
GLCMS	ARMY GROUND	21	5558
INFANTRY	ARMY GROUND	42	2692
MORTERS	ARMY GROUND	4	3111
RDLES LNCH	ARMY GROUND	0	1848

NORMALIZED VALUES

F-111	10.0000
F-4	8.5169
F-16	8.4273
F-18	6.2500
A-10	5.1692
COBRA	4.5948
F-15	4.4444
A-7	4.0000
INFANTRY	3.9050
F-14	3.7500
A-6	3.3750
S-3	2.9300
M-1	2.4406
SH-60B	1.7091
GLCMS	1.7084
FRIGATES	1.2208
ATT. SUBS	1.2208
SH-2	1.0987
PERSHING	1.0251
DSTROYERS	0.7325
MLRS	0.6590
RADIO RLAY	0.4438
SH-3	0.4395
M-2/M-3	0.4393
M-901	0.4393
M-60	0.4393
SELF-PROP.	0.3905
MORTERS	0.3417
TOWED ART.	0.2929
M-48	0.2733
ART. ACRFT	0.2500
M-113	0.0488
RDLES LNCH	0.0146
M-551	0.0000

NICKEL			
A-10	CAS		65.2197
COBRA	CAS		43.4799
F-4	AIR	INTERDICTION	77.7113
	CAS		4.8915
F-16	AIR	INTERDICTION	70.0947
	CAS		33.2192
ART. ACRFT	CAS		1.1740
RADIO RLAY	AIR	INTERDICTION	3.1543
	CAS		2.4457
F-111	AIR	INTERDICTION	126.1703
A-6	AIR	INTERDICTION	37.8512
F-15	AIR	INTERDICTION	56.0758
A-7	AIR	INTERDICTION	50.4682
F-14	AIR	INTERDICTION	47.3140
F-18	AIR	INTERDICTION	78.8566
SH-3	ASW(SEA BASED)		7.8795
SH-2	ASW(SEA BASED)		19.4337
SH-60B	ASW(SEA BASED)		28.7524
S-3	ASW(SEA BASED)		36.9474
ATT. SUBS	ASW(SEA BASED)		46.2092
FRIGATES	ASW(SEA BASED)		27.7255
DSTROYERS	ASW(SEA BASED)		16.6353
M-48	ARMY	GROUND	34.4894
M-60	ARMY	GROUND	55.4278
M-1	ARMY	GROUND	61.5865
M-551	ARMY	GROUND	0.6159
M-901	ARMY	GROUND	38.7995
M-2/M-3	ARMY	GROUND	44.3423
M-113	ARMY	GROUND	4.3111
MLRS	ARMY	GROUND	16.6283
TOWED ART.	ARMY	GROUND	29.5615
SELF-PROP.	ARMY	GROUND	39.4158
PERSHING	ARMY	GROUND	14.7808
GLCMS	ARMY	GROUND	18.4739
INFANTRY	ARMY	GROUND	30.7932
MORTERS	ARMY	GROUND	12.9332
RCLES LNCH	ARMY	GROUND	0.1848

NORMALIZED VALUES

F-111	10.0000
F-16	8.4278
F-4	6.3877
F-18	6.2500
A-10	5.1692
M-1	4.8812
F-15	4.4444
M-60	4.3931
A-7	4.0000
F-14	3.7500
ATT. SUBS	3.6624
M-2/M-3	3.5145
COBRA	3.4461
SELF-PROP.	3.1240
M-901	3.0752
A-6	3.0000
S-3	2.9300
M-48	2.7335
INFANTRY	2.4406
TOWED ART.	2.3430
SH-60B	2.2789
FRIGATES	2.1975
SH-2	1.4650
GLCMS	1.4644
DSTROYERS	1.3185
MLRS	1.3179
PERSHING	1.1715
MORTERS	1.0251
SH-3	0.5860
RADIO RLAY	0.4478
M-113	0.3417
ART. ACRFT	0.1728
M-551	0.0488
RCLES LNCH	0.0147

FLUOROSPAR ACID		
A-10	CAS	81.5247
COBRA	CAS	43.4799
F-4	AIR INTERDICTION	13[illegible].1795
	CAS	8.1524
F-16	AIR INTERDICTION	87.6184
	CAS	45.2910
ART. AIRFT	CAS	3.1110
RADIO RLAY	AIR INTERDICTION	3.1543
	CAS	2.4457
F-111	AIR INTERDICTION	157.7191
A-6	AIR INTERDICTION	47.3140
F-15	AIR INTERDICTION	70.0947
A-7	AIR INTERDICTION	63.0853
F-14	AIR INTERDICTION	50.5711
F-18	AIR INTERDICTION	87.6184
SH-3	ASW(SEA BASED)	7.[illegible]
S-3	ASW(SEA BASED)	18.4337
SH-60B	ASW(SEA BASED)	35.9425
S-3	ASW(SEA BASED)	41.[illegible]
ATT SUBS	ASW(SEA BASED)	30.8041
FRIGATES	ASW(SEA BASED)	21.5643
DESTROYERS	ASW(SEA BASED)	12.9386
M-48	ARMY GROUND	10.3465
M-60	ARMY GROUND	16.9211
M-1	ARMY GROUND	19.4759
M-551	ARMY GROUND	0.1943
M-901	ARMY GROUND	44.3421
M-2/M-3	ARMY GROUND	44.3423
M-113	ARMY GROUND	4.9269
MLRS	ARMY GROUND	13.8570
TOWED ART.	ARMY GROUND	19.4759
SELF-PROP.	ARMY GROUND	24.6346
PERSHING	ARMY GROUND	12.9332
GLCMS	ARMY GROUND	21.5553
INFANTRY	ARMY GROUND	49.2492
MORTERS	ARMY GROUND	21.5533
ROLES LNCH	ARMY GROUND	0.1943

NORMALIZED VALUES

F-111	10.0000
F-4	8.5149
F-16	8.4278
F-18	5.5557
A-10	5.1692
F-15	4.4441
A-7	4.0000
F-14	3.3333
INFANTRY	3.1240
A-6	3.0000
S-3	2.9300
M-2/M-3	2.8114
M-901	2.8114
COBRA	2.7569
SH-60B	2.2789
ATT. SUBS	1.9531
SELF-PROP.	1.5620
FRIGATES	1.3673
MORTERS	1.3667
GLCMS	1.3667
SH-2	1.1720
TOWED ART.	1.1715
M-1	1.1715
M-60	1.0548
MLRS	0.8794
DESTROYERS	0.8204
PERSHING	0.8200
M-48	0.6560
SH-3	0.4688
RADIO RLAY	0.3551
M-113	0.3124
ART. AIRFT	0.2091
ROLES LNCH	0.0117
M-551	0.0117

PYRETHRUM

ATT. SUBS	ASW(SEA BASED)	15.4031
M-48	ARMY GROUND	24.1419
M-60	ARMY GROUND	39.7995
M-113	ARMY GROUND	4.3111
TOWED ART.	ARMY GROUND	25.8663
SELF-PROP.	ARMY GROUND	34.4864
INFANTRY	ARMY GROUND	61.5865
MORTERS	ARMY GROUND	30.1774

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP.	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-48	3.9200
ATT. SUBS	2.5010
M-113	0.7000

ALL COMMODITIES

A-10	CAS	2.7719
COBRA	CAS	1.8941
F-4	AIR INTERDICTION	4.0379
	CAS	0.2605
F-16	AIR INTERDICTION	2.9790
	CAS	1.5399
ART. ACRFT	CAS	0.1196
RADIO RLAY	AIR INTERDICTION	0.1262
	CAS	0.0978
F-111	AIR INTERDICTION	5.3622
A-6	AIR INTERDICTION	1.6560
F-15	AIR INTERDICTION	2.3892
A-7	AIR INTERDICTION	2.1449
F-14	AIR INTERDICTION	1.8926
F-18	AIR INTERDICTION	3.1543
SH-3	ASW(SEA BASED)	0.269[illegible]
SH-2	ASW(SEA BASED)	0.6700
SH-60B	ASW(SEA BASED)	1.1142
S-3	ASW(SEA BASED)	1.5711
ATT. SUBS	ASW(SEA BASED)	1.3949
FRIGATES	ASW(SEA BASED)	0.8010
DSTROYERS	ASW(SEA BASED)	0.4806
M-48	ARMY GROUND	1.0347
M-60	ARMY GROUND	1.6628
M-1	ARMY GROUND	1.6628
M-551	ARMY GROUND	0.0105
M-901	ARMY GROUND	1.3303
M-2/M-3	ARMY GROUND	1.3303
M-113	ARMY GROUND	0.1848
MLRS	ARMY GROUND	0.5543
TOWED ART.	ARMY GROUND	0.9977
SELF-PROP.	ARMY GROUND	1.3303
PERSHING	ARMY GROUND	0.5543
GLCMS	ARMY GROUND	0.8622
INFANTRY	ARMY GROUND	1.9703
MORTERS	ARMY GROUND	0.9915
ROLES LNCH	ARMY GROUND	0.0185

NORMALIZED VALUES

F-111	10.0000
F-16	8.4273
F-4	8.0159
F-18	5.8824
A-10	5.1692
F-15	4.4444
A-7	4.0000
INFANTRY	3.6753
F-14	3.5294
COBRA	3.5137
M-1	3.1010
M-60	3.1010
A-6	3.0882
S-3	2.9300
ATT. SUBS	2.4895
M-2/M-3	2.4808
M-901	2.4808
SELF-PROP.	2.4808
SH-60B	2.0778
M-48	1.9295
TOWED ART.	1.8606
MORTERS	1.8491
GLCMS	1.6079
FRIGATES	1.4927
SH-2	1.2495
PERSHING	1.0337
MLRS	1.0337
DSTROYERS	0.8964
SH-3	0.4978
RADIO RLAY	0.4177
M-113	0.3446
ART. ACRFT	[illegible]
ROLES LNCH	[illegible]
M-551	[illegible]

CRITICALITY OF SHORTFALL
ALL YEARS
(LOG 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FEA COMMODITY IMPORT.	CRITIC-ALITY	NON-FUEL MINERAL CRITICALITY
COBALT	85.4	45.8	-48.7	401.5	8.3	3325.1	7.7
TIN	42.0	190.6	353.8	0.0	10.0	0.0	0.0
NICKEL	200.0	32.2	-83.9	437.7	9.8	4307.6	10.9
FLUORSPAR ACID	1400.0	895.0	-36.1	355.9	5.4	3883.4	9.6
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1852.8	4.3

COMPOSITE IMPORTANCE
(LOG 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1350.	7.71	1.92	0.520	4.012
MOROCCO	450.	2.57	1.50	0.667	1.715
BOTSWANA	250.	1.43	0.71	1.404	2.005
SOUTH AFRICA	150.	0.86	1.19	0.842	0.721
ZAIRE	9000.	51.43	0.71	1.404	72.185
ZAMBIA	3500.	20.00	0.71	1.404	28.072
PHILIPPINES	50.	0.29	0.92	1.087	0.316
AUSTRALIA	400.	2.29	0.92	1.087	2.413
NEW CALEDONIA	250.	1.43	0.92	1.087	1.508
CANADA	1100.	6.29	2.89	0.346	2.175
U.S.	1000.	5.71	2.56	0.391	2.236
TOTAL:	17500.	100.00			

COMPOSITE IMPORTANCE
(LOG 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.92	1.087	0.161
U.S.	16100.	23.82	2.56	0.391	9.314
THAILAND	5900.	8.73	0.92	1.087	9.493
INDONESIA	5800.	8.58	0.92	1.087	9.332
UK	100.	0.15	1.96	0.510	0.075
BOLIVIA	10300.	15.24	0.98	1.020	15.543
BRAZIL	2400.	3.55	0.86	1.162	4.125
PRC	3000.	4.44	2.47	0.405	1.796
MALAYSIA	23900.	35.36	0.92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000.	0.33	1.92	0.520	0.171
SOUTH AFRICA	5000	1.64	1.19	0.841	1.[illegible]
PHILIPPINES	5000.	1.64	0.92	1.087	1.[illegible]
AUSTRALIA	25000	8.21	0.92	1.087	8.[illegible]
CANADA	150000	49.28	2.89	0.346	17.05[illegible]
U.S.	88000	28.91	2.56	0.391	11.[illegible]
GREECE	600	0.20	1.96	0.510	0.101
NETHERLANDS	200	0.07	1.96	0.510	0.0[illegible]
FRG	100	0.03	1.96	0.510	0.017
YUGOSLAVIA	500	0.16	1.96	0.510	0.08[illegible]
CUBA	5000	1.64	0.94	1.061	1.742
DOM. REPUB	15000	4.93	1.53	0.656	3.240
GUATAMALA	4000.	1.31	1.53	0.656	0.861
INDONESIA	5000	1.64	0.92	1.087	1.785
TOTAL	304400	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180.	22.36	1.19	0.841	18.80[illegible]
U.S.	70.	8.70	2.56	0.391	3.402
ITALY	65	8.07	1.96	0.510	4.120
SPAIN	100.	12.42	1.96	0.510	6.33[illegible]
EAST AFRICA	25.	3.11	0.71	1.404	4.3[illegible]
THAILAND	15.	1.86	0.92	1.087	2.025
MEXICO	350	43.48	2.56	0.391	17.011
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	1.19	0.841	0.85[illegible]
AUSTRALIA	1500.	0.76	0.92	1.087	0.825
UK	11000.	5.57	1.96	0.510	2.842
KENYA	80000.	40.51	0.71	1.404	56.85[illegible]
RWANDA	25000.	12.66	0.71	1.404	17.767
TANZANIA	78000.	39.49	0.71	1.404	55.433
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	%(1-CI) OF IMP	PS SHORTFALL CRITICALITY	TOTAL	N.PRELIM. TO 100
[illegible]ALT				
FINLAND	4.012	7.72	30.97	5.5[illegible]
MOROCCO	1.715	7.72	13.24	2.3[illegible]
BOTSWANNA	2.005	7.72	15.48	2.73
SOUTH AFRICA	0.721	7.72	5.56	1.0[illegible]
ZAIRE	72.185	7.72	557.20	100.0[illegible]
ZAMBIA	29.072	7.72	224.4[illegible]	3[illegible].8[illegible]
PHILIPPINES	0.310	7.72	2.40	0.43
AUSTRALIA	2.493	7.72	19.17	3.44
NEW CALEDONIA	1.552	7.72	11.98	2.15
CANADA	2.175	7.72	16.79	3.01
U S	2.236	7.72	17.26	3.10
[illegible]				
AUSTRALIA	0.141	0.00	0.00	0.00
U S	9.219	0.00	0.00	0.00
THAILAND	9.493	0.00	0.00	0.00
INDONESIA	9.922	0.00	0.00	0.0[illegible]
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.549	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
PRC	1.79[illegible]	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
[illegible]KEL				
FINLAND	0.171	10.00	1.71	0.31
SOUTH AFRICA	1.381	10.00	13.81	2.4[illegible]
PHILIPPINES	1.785	10.00	17.85	3.20
AUSTRALIA	8.924	10.00	89.24	16.04
CANADA	17.054	10.00	170.54	30.61
U S	11.311	10.00	113.11	20.3[illegible]
GREECE	0.101	10.00	1.01	0.18
NETHERLANDS	0.034	10.00	0.34	0.06
FRG	0.017	10.00	0.17	0.03
YUGOSLAVIA	0.084	10.00	0.84	0.15
USSR	1.742	10.00	17.42	3.13
DOM. REPUB.	3.230	10.00	32.30	5.80
GUATAMALA	0.861	10.00	8.61	1.55
INDONESIA	1.785	10.00	17.85	3.20
[illegible]UORSPAR ACID				
SOUTH AFRICA	18.803	8.55	160.78	28.86
U S	3.402	8.55	29.09	5.22
ITALY	4.120	8.55	35.23	6.32
SPAIN	6.338	8.55	54.20	9.73
EAST AFRICA	4.359	8.55	37.27	6.69
THAILAND	2.025	8.55	17.31	3.11
MEXICO	17.011	8.55	145.46	26.11
[illegible]YRETHRUM				
SOUTH AFRICA	0.852	4.30	3.66	0.66
AUSTRALIA	0.825	4.30	3.55	0.64
UK	2.842	4.30	12.22	2.19
KENYA	56.855	4.30	244.55	43.9[illegible]
RWANDA	17.767	4.30	76.42	13.72
TANZANIA	55.433	4.30	238.43	42.7[illegible]

SOURCE IMPORTANCE
RANKED BY COMMODITY
(100 %)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	43.89
3	TANZANIA	PYRETHRUM	41.77
4	ZAMBIA	COBALT	33.39
5	CANADA	NICKEL	30.41
6	SOUTH AFRICA	FLUORSPAR ACID	23.86
7	MEXICO	FLUORSPAR ACID	23.11
8	U S	NICKEL	20.99
9	AUSTRALIA	NICKEL	14.02
10	RWANDA	PYRETHRUM	13.72
11	SPAIN	FLUORSPAR ACID	9.73
12	EAST AFRICA	FLUORSPAR ACID	6.69
13	ITALY	FLUORSPAR ACID	6.32
14	DOM REPUB	NICKEL	5.80
15	FINLAND	COBALT	5.56
16	U S	FLUORSPAR ACID	5.11
17	AUSTRALIA	COBALT	3.44
18	INDONESIA	NICKEL	3.20
19	PHILIPPINES	NICKEL	3.20
20	USSR	NICKEL	3.13
21	THAILAND	FLUORSPAR ACID	3.11
22	U S	COBALT	3.10
23	CANADA	COBALT	3.01
24	BOTSWANA	COBALT	2.76
25	SOUTH AFRICA	NICKEL	2.49
26	MOROCCO	COBALT	2.31
27	UK	PYRETHRUM	2.19
28	NEW CALEDONIA	COBALT	2.15
29	GUATAMALA	NICKEL	1.55
30	SOUTH AFRICA	COBALT	1.03
31	SOUTH AFRICA	PYRETHRUM	0.66
32	AUSTRALIA	PYRETHRUM	0.64
33	PHILIPPINES	COBALT	0.43
34	FINLAND	NICKEL	0.31
35	GREECE	NICKEL	0.18
36	YUGOSLAVIA	NICKEL	0.15
37	NETHERLANDS	NICKEL	0.06
38	FRG	NICKEL	0.03
39	MALAYSIA	TIN	0.00
40	PRC	TIN	0.00
41	BRAZIL	TIN	0.00
42	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
44	INDONESIA	TIN	0.00
45	THAILAND	TIN	0.00
46	U S	TIN	0.00
47	AUSTRALIA	TIN	0.00

SCENARIO 42

WEIGHTS of REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

egion	1	2	3	4	5	6	7	8	9	10
ight	10.0	10.0	7.0	5.0	7.0	10.0	1.0	5.0	1.0	[illegible]
/COEF	0.1543	0.1543	0.1094	0.0781	0.1094	0.1563	0.0156	0.0781	0.0156	[illegible]

Level of Conflict 3 Media 2

egion	1	2	3	4	5	6	7	8	9	10
gio	11									
eight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	8.0	7.0	5.0
eight	9.0									
COEF	0.1190	0.1190	0.1071	0.0476	0.0833	0.0595	0.1190	0.0952	0.0833	[illegible]
COEF	0.1071									

Level of Conflict 3 Media 3

gion	1	2	3	4	5	6	7
ight	10.0	10.0	10.0	10.0	6.0	4.0	10.0
/COEF	0.1667	0.1667	0.1667	0.1667	0.1000	0.0667	0.1667

Level of Conflict 3 Media 4

gion	1	2	3	4
eight	10.0	4.0	2.0	1.0
/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
or the Importance of Controlling EACH region within its [illegible]

edia 1

egion	1	2	3	4	5	6	7	8	9	10
/COEF	0.0200	0.0200	0.0140	0.0100	0.0140	0.0200	0.0040	0.0100	0.0040	[illegible]

edia 2

egion	1	2	3	4	5	6	7	8	9	10
edia 11										
egion										
COEF	0.0152	0.0152	0.0137	0.0061	0.0107	0.0076	0.0152	0.0122	0.0107	[illegible]
/COEF	0.0137									

edia 3

egion	1	2	3	4	5	6	7
/COEF	0.0213	0.0213	0.0213	0.0213	0.0128	0.0085	0.0213

edia 4

gion	1	2	3	4
/COEF	0.0752	0.0301	0.0150	0.0075

portance of controlling ANY Region
thin its Media as compared to the Importance
f controlling ANY Region of any other Media

edia 1

gion	1	2	3	4	5	6	7	8	9	10
/COEF	0.0087	0.0087	0.0061	0.0043	0.0061	0.0087	0.0017	0.0043	0.0017	[illegible]

edia 2

gion	1	2	3	4	5	6	7	8	9	10
edia 11										
egion										
COEF	0.0033	0.0033	0.0030	0.0013	0.0023	0.0017	0.0033	0.0026	0.0023	0.0017
/COEF	0.0030									

edia 3

gion	1	2	3	4	5	6	7
COEF	0.0056	0.0056	0.0056	0.0056	0.0033	0.0022	0.0056

edia 4

egion	1	2	3	4
COEF	0.0045	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOG 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.133	10.000
2	1	AIR INTERDICTION	0.112	8.470
3	7	ATK/OPLIS	0.085	6.372
4	16	ATTACK SUB	0.072	5.411
5	19	SUPPLIES CONSTANTS	0.060	4.500
6	8	RAPID DEPLOY	0.056	4.240
7	12	THEATER NUCLEAR WEAPONS	0.054	4.081
8	14	ASW(LAND BASED)	0.043	3.240
9	22	AIR SUPERIORITY(LAND BASED)	0.037	2.771
10	6	CAS	0.034	2.537
11	15	ASW(SEA BASED)	0.031	2.321
12	23	AIR SUPERIORITY(SHIP BASED)	0.030	2.274
13	10	STRATEGIC BOMBER	[illegible]	1.954
14	21	AIR DEFENSE(SHIP BASED)	0.022	1.664
15	25	SPACE BASED WEAPON(AIR CNTRL)	0.019	1.414
16	13	SPECIAL OPERATIONS	0.014	1.031
17	29	ASAT(SPACE BASED)	0.013	0.981
18	18	MINE WARFARE	0.012	0.900
19	2	AMPHIBIOUS ASSAULT	0.010	0.747
20	33	ASAT(LAND BASED)	0.007	0.541
21	20	AIR DEFENSE(LAND BASED)	0.004	0.285
22	9	SPACE-BASED WEAPON(LAND CNTRL)	0.003	0.211
23	30	SPACE BASED WEAPON(SEA CNTRL)	0.002	0.154
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

AD-A150 263 SIMULATION OF CRITICAL MATERIALS RESOURCE STRATEGIES 2/2
VOLUME 4 APPENDIX D..(U) TITAN SYSTEMS INC LA JOLLA CA
D SOMERFELD 13 SEP 83 TITAN-DSI-105800-07-83-5F-VOL-4
UNCLASSIFIED EMW-C-0906 F/G 15/5 NL

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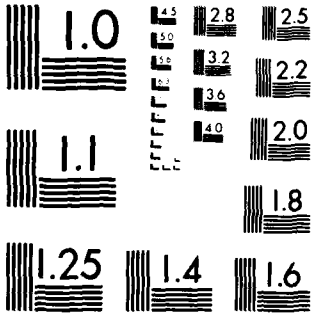

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.57
ARMY GROUND	3.92
CAS	1.45
ICBM	0.00
STRATEGIC BOMBER	1.92
SLBM	0.00
ASW(SEA BASED)	1.99
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	2.27
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.54
	34.44

TIN

AIR INTERDICTION	6.53
ARMY GROUND	1.65
CAS	1.58
STRATEGIC BOMBER	1.93
ASW(LAND BASED)	3.25
ASW(SEA BASED)	1.14
ATTACK SUBS	5.49
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.97
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	2.27
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.57

NICKEL

AIR INTERDICTION	5.73
ARMY GROUND	4.25
CAS	1.42
STRATEGIC BOMBER	1.85
ASW(SEA BASED)	1.79
ATTACK SUBS	5.49
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.97
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	2.27
INTERCEPTOR AIRCRAFT	0.00
	41.07

FLUORSPAR ACID

AIR INTERDICTION	7.31
AMPHIBIOUS ASSAULT	0.75
ARMY GROUND	[illegible]
CAS	1.[illegible]
ICBM	0.00
STRATEGIC BOMBER	1.85
SLBM	0.00
ASW(LAND BASED)	3.25
ASW(SEA BASED)	1.71
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	[illegible]
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	39.31

PYRETHRUM

ARMY GROUND	2.[illegible]
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.15
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
	16.98

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00	(41.57)
NICKEL	9.88	(41.07)
FLUORSPAR ACID	9.46	(39.31)
COBALT	8.30	(34.49)
PYRETHRUM	4.08	(16.98)

COBALT		
A-10	CAS	60.0798
COBRA	CAS	40.0532
F-4	AIR INTERDICTION	106.0531
	CAS	6.0080
F-16	AIR INTERDICTION	73.6480
	CAS	33.3776
ART. ACRFT	CAS	3.0040
RADIO RLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	132.5464
A-6	AIR INTERDICTION	39.7655
F-15	AIR INTERDICTION	58.9184
A-7	AIR INTERDICTION	52.0215
F-14	AIR INTERDICTION	44.1858
F-18	AIR INTERDICTION	73.6480
SH-3	ASW(SEA BASED)	6.3772
SH-2	ASW(SEA BASED)	15.9354
SH-60B	ASW(SEA BASED)	24.7864
S-3	ASW(SEA BASED)	36.4237
ATT SUBS	ASW(SEA BASED)	25.2942
FRIGATES	ASW(SEA BASED)	15.1765
DSTROYERS	ASW(SEA BASED)	9.1059
M-48	ARMY GROUND	32.7691
M-60	ARMY GROUND	52.6647
M-1	ARMY GROUND	58.5163
M-551	ARMY GROUND	0.1901
M-901	ARMY GROUND	43.8131
M-2/M-3	ARMY GROUND	40.9614
M-113	ARMY GROUND	4.5513
MLRS	ARMY GROUND	17.5549
TOWED ART.	ARMY GROUND	23.4065
SELF-PROP.	ARMY GROUND	31.2097
PERSHING	ARMY GROUND	15.6044
GLCMS	ARMY GROUND	26.0073
INFANTRY	ARMY GROUND	6.5018
MORTERS	ARMY GROUND	31.8589
ROLES LNCH	ARMY GROUND	1.3654

NORMALIZED VALUES

F-111	10.0000
F-4	8.4586
F-16	8.0734
F-18	5.5556
A-10	4.5321
F-15	4.4444
M-1	4.4141
A-7	4.0000
M-60	3.9727
M-901	3.5313
F-14	3.3333
M-2/M-3	3.0899
COBRA	3.0214
A-6	3.0000
S-3	2.7476
M-48	2.4719
MORTERS	2.4032
SELF-PROP.	2.3542
GLCMS	1.9618
ATT. SUBS	1.9080
SH-60B	1.8699
TOWED ART.	1.7656
MLRS	1.3242
SH-2	1.2021
PERSHING	1.1771
FRIGATES	1.1448
DSTROYERS	0.6869
INFANTRY	0.4905
SH-3	0.4808
RADIO RLAY	0.4200
M-113	0.3433
ART. ACRFT	0.2244
ROLES LNCH	0.1030
M-551	0.0187

TIN		
A-10	CAS	60.0798
COBRA	CAS	53.4062
F-4	AIR INTERDICTION	106.0531
	CAS	6.0080
F-16	AIR INTERDICTION	73.6480
	CAS	33.3776
AFD. ACRFT	CAS	3.0040
RADIO RLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	132.5464
A-6	AIR INTERDICTION	44.7411
F-15	AIR INTERDICTION	59.9184
A-7	AIR INTERDICTION	53.0265
F-14	AIR INTERDICTION	47.7124
F-18	AIR INTERDICTION	82.8540
SH-3	ASW(SEA BASED)	5.4434
SH-2	ASW(SEA BASED)	13.6599
SH-60B	ASW(SEA BASED)	21.2472
S-3	ASW(SEA BASED)	36.4237
ATT. SUBS	ASW(SEA BASED)	15.1765
FRIGATES	ASW(SEA BASED)	15.1765
DSTROYERS	ASW(SEA BASED)	9.1059
M-48	ARMY GROUND	3.6410
M-60	ARMY GROUND	5.8516
M-1	ARMY GROUND	32.5091
M-551	ARMY GROUND	0.0630
M-901	ARMY GROUND	5.8516
M-2/M-3	ARMY GROUND	5.8516
M-113	ARMY GROUND	0.6502
MLRS	ARMY GROUND	8.7775
TOWED ART.	ARMY GROUND	3.9011
SELF-PROP.	ARMY GROUND	5.2015
PERSHING	ARMY GROUND	13.6538
GLCMS	ARMY GROUND	22.7564
INFANTRY	ARMY GROUND	52.0145
MORTERS	ARMY GROUND	4.5513
ROLES LNCH	ARMY GROUND	0.1951

NORMALIZED VALUES	
F-111	10.0000
F-4	8.4532
F-16	8.0734
F-18	6.2500
A-10	4.5821
F-15	4.4444
COBRA	4.0285
A-7	4.0000
INFANTRY	3.9237
F-14	3.7500
A-6	3.3750
S-3	2.7476
M-1	2.4523
GLCMS	1.7146
SH-60B	1.6028
ATT. SUBS	1.1448
FRIGATES	1.1448
SH-2	1.0303
PERSHING	1.0300
DSTROYERS	0.6869
MLRS	0.6621
M-2/M-3	0.4414
M-901	0.4414
M-60	0.4414
RADIO RLAY	0.4200
SH-3	0.4121
SELF-PROP.	0.3924
MORTERS	0.3413
TOWED ART.	0.2943
M-48	0.2747
ART. ACRFT	0.2044
M-113	0.0490
ROLES LNCH	0.0147
M-551	0.0000

NICKEL

A-10	CAS	60.0798
COBRA	CAS	40.0532
F-4	AIR INTERDICTION	79.5346
	CAS	4.5060
F-16	AIR INTERDICTION	73.6480
	CAS	33.3776
ART. ACRFT	CAS	2.0017
RADIO RLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	132.5464
A-6	AIR INTERDICTION	39.7699
F-15	AIR INTERDICTION	59.9194
A-7	AIR INTERDICTION	53.0265
F-14	AIR INTERDICTION	49.7124
F-18	AIR INTERDICTION	62.8540
SH-3	ASW(SEA BASED)	7.2817
SH-2	ASW(SEA BASED)	19.2119
SH-60B	ASW(SEA BASED)	28.3296
S-3	ASW(SEA BASED)	36.4237
ATT. SUBS	ASW(SEA BASED)	45.5296
FRIGATES	ASW(SEA BASED)	27.3178
DSTROYERS	ASW(SEA BASED)	16.3907
M-48	ARMY GROUND	36.4102
M-60	ARMY GROUND	58.5143
M-1	ARMY GROUND	65.0182
M-551	ARMY GROUND	0.6501
M-901	ARMY GROUND	40.9614
M-2/M-3	ARMY GROUND	46.8131
M-113	ARMY GROUND	4.5513
MLRS	ARMY GROUND	17.5549
TOWED ART.	ARMY GROUND	31.2037
SELF-PROP.	ARMY GROUND	41.6116
PERSHING	ARMY GROUND	15.6044
GLCMS	ARMY GROUND	19.5054
INFANTRY	ARMY GROUND	32.5091
MORTERS	ARMY GROUND	13.6539
ROLES LNCH	ARMY GROUND	0.1951

NORMALIZED VALUES

F-111	10.0000
F-16	8.0734
F-4	6.3099
F-18	6.2500
M-1	4.9046
A-10	4.5321
F-15	4.4444
M-60	4.4141
A-7	4.0000
F-14	3.7500
M-2/M-3	3.5313
ATT. SUBS	3.4345
SELF-PROP.	3.1389
M-901	3.0899
COBRA	3.0214
A-6	3.0000
S-3	2.7476
M-48	2.7466
INFANTRY	2.4523
TOWED ART.	2.3541
SH-60B	2.1370
FRIGATES	2.0607
GLCMS	1.4714
SH-2	1.3724
MLRS	1.3242
DSTROYERS	1.2364
PERSHING	1.1771
MORTERS	1.0300
SH-3	0.5490
RADIO RLAY	0.4200
M-113	0.3433
ART. ACRFT	0.1511
M-551	0.0490
ROLES LNCH	0.0147

FLUORSPAR ACID		
A-10	CAS	75.0957
COBRA	CAS	40.[illegible]
F-4	AIR INTERDICTION	132.5664
	CAS	7.5100
F-16	AIR INTERDICTION	92.0600
	CAS	41.7221
ART. ACRFT	CAS	3.0040
RADIO RLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	165.7080
A-6	AIR INTERDICTION	49.7124
F-15	AIR INTERDICTION	73.6490
A-7	AIR INTERDICTION	64.2832
F-14	AIR INTERDICTION	55.2360
F-18	AIR INTERDICTION	92.0600
SH-3	ASW(SEA BASED)	7.29[illegible]
SH-2	ASW(SEA BASED)	19.2119
SH-60B	ASW(SEA BASED)	35.4119
S-3	ASW(SEA BASED)	45.5296
ATT. SUBS	ASW(SEA BASED)	30.3521
FRIGATES	ASW(SEA BASED)	21.2472
DSTROYERS	ASW(SEA BASED)	12.7493
M-48	ARMY GROUND	10.9231
M-60	ARMY GROUND	17.5549
M-1	ARMY GROUND	19.5054
M-551	ARMY GROUND	0.1951
M-901	ARMY GROUND	46.8131
M-2/M-3	ARMY GROUND	46.8131
M-113	ARMY GROUND	5.2015
MLRS	ARMY GROUND	14.6291
TOWED ART.	ARMY GROUND	19.5054
SELF-PROP.	ARMY GROUND	26.0073
PERSHING	ARMY GROUND	13.6538
GLCMS	ARMY GROUND	22.7564
INFANTRY	ARMY GROUND	52.0145
MORTERS	ARMY GROUND	22.7564
ROLES LNCH	ARMY GROUND	0.1951

NORMALIZED VALUES

F-111	10.0000
F-4	8.4592
F-16	8.0734
F-18	5.5504
A-10	4.5821
F-15	4.4444
A-7	4.0000
F-14	3.3333
INFANTRY	3.1389
A-6	3.0000
M-2/M-3	2.8250
M-901	2.8250
S-3	2.7476
COBRA	2.4171
SH-60B	2.1370
ATT. SUBS	1.8317
SELF-PROP.	1.5695
MORTERS	1.3733
GLCMS	1.3733
FRIGATES	1.2824
TOWED ART.	1.1771
M-1	1.1771
SH-2	1.0990
M-60	1.0594
MLRS	0.8828
PERSHING	0.8240
DSTROYERS	0.7693
M-48	0.6[illegible]
SH-3	0.4394
RADIO RLAY	0.3860
M-113	0.3139
ART. ACRFT	0.1817
M-551	0.0118
ROLES LNCH	0.0118

PYRETHRUM

ATT. SUPP	ASW(SEA BASED)	15.1765
M-48	ARMY GROUND	25.4371
M-60	ARMY GROUND	40.9614
M-113	ARMY GROUND	4.0513
TOWED ART.	ARMY GROUND	27.8076
SELF-PROP.	ARMY GROUND	36.4102
INFANTRY	ARMY GROUND	65.0192
MORTERS	ARMY GROUND	31.8589

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP.	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-48	3.9200
ATT. SUPP	2.3342
M-113	0.7000

ALL COMMODITIES

A-10	CAS	2.5534
COBRA	CAS	1.7334
F-4	AIR INTERDICTION	4.2421
	CAS	0.1403
F-16	AIR INTERDICTION	3.1300
	CAS	1.4196
ART. ACRFT	CAS	0.1101
RADIO RLAY	AIR INTERDICTION	0.1326
	CAS	0.0901
F-111	AIR INTERDICTION	5.6341
A-6	AIR INTERDICTION	1.7399
F-15	AIR INTERDICTION	2.[illegible]
A-7	AIR INTERDICTION	2.2536
F-14	AIR INTERDICTION	1.9[illegible]
F-18	AIR INTERDICTION	3.3142
SH-3	ASW(SEA BASED)	0.2641
SH-2	ASW(SEA BASED)	0.6602
SH-60B	ASW(SEA BASED)	1.0978
S-3	ASW(SEA BASED)	1.5480
ATT. SUBS	ASW(SEA BASED)	1.3158
FRIGATES	ASW(SEA BASED)	0.7892
DSTROYERS	ASW(SEA BASED)	0.4735
M-48	ARMY GROUND	1.0523
M-60	ARMY GROUND	1.7505
M-1	ARMY GROUND	1.7555
M-551	ARMY GROUND	0.0111
M-901	ARMY GROUND	1.4044
M-2/M-3	ARMY GROUND	1.4044
M-113	ARMY GROUND	0.1951
MLRS	ARMY GROUND	0.5852
TOWED ART.	ARMY GROUND	1.0533
SELF-PROP.	ARMY GROUND	1.4044
PERSHING	ARMY GROUND	0.5852
GLCMS	ARMY GROUND	0.9103
INFANTRY	ARMY GROUND	2.0806
MORTERS	ARMY GROUND	1.0468
RCLES LNCH	ARMY GROUND	0.0195

NORMALIZED VALUES

F-111	10.0000
F-16	8.0734
F-4	7.9560
F-18	5.8824
A-10	4.5321
F-15	4.4444
A-7	4.0000
INFANTRY	3.6929
F-14	3.5294
M-1	3.1158
M-60	3.1158
A-6	3.0800
COBRA	3.0806
S-3	2.7474
M-2/M-3	2.4927
M-901	2.4927
SELF-PROP.	2.4927
ATT. SUBS	2.3345
SH-60B	1.9484
M-48	1.9387
TOWED ART.	1.8695
MORTERS	1.8590
GLCMS	1.6156
FRIGATES	1.4007
SH-2	1.1718
PERSHING	1.0384
MLRS	1.0386
DSTROYERS	0.8404
SH-3	0.4687
RADIO RLAY	0.3952
M-113	0.3442
ART. ACRFT	0.1[illegible]
RCLES LNCH	0.0346
M-551	0.01[illegible]

CRITICALITY OF SHORTFALL
ALL FEDS
(LOG 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FEA COMMODITY IMPORT	CRITICALITY	NORMALIZED FEDERAL CRITICALITY
COBALT	85.4	42.8	-42.7	402.5	8.3	3339.2	7.7
TIN	42.0	159.6	379.8	0.0*	10.0	0.0	0.0
NICKEL	200.0	32.2	-83.9	437.7	9.9	4324.8	10.0
FLUORSPAR ACID	1400.0	895.0	-36.1	337.9	9.5	3686.5	8.5
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1853.2	4.[illegible]

COMPOSITE IMPORTANCE
(LOG 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1350.	7.71	1.72	0.580	4.477
MOROCCO	450.	2.57	2.05	0.487	1.251
BOTSWANA	250.	1.43	1.76	0.569	0.813
SOUTH AFRICA	150	0.86	2.31	0.432	0.371
ZAIRE	12500.	71.43	1.76	0.569	40.670
PHILIPPINES	50.	0.29	0.82	1.216	0.347
AUSTRALIA	400	2.29	0.82	1.216	2.779
NEW CALEDONIA	250.	1.43	0.92	1.216	1.737
CANADA	1100.	6.29	2.61	0.383	2.409
[illegible]	1000.	5.71	2.31	0.432	2.471
TOTAL:	17500.	100.00			

COMPOSITE IMPORTANCE
(LOG 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.82	1.216	0.180
U.S.	16100.	23.82	2.31	0.432	10.299
THAILAND	5900.	8.73	0.82	1.216	10.611
INDONESIA	5800.	8.58	0.82	1.216	10.431
[illegible]	100	0.15	1.76	0.569	0.084
BOLIVIA	10300.	15.24	0.90	1.117	17.014
BRAZIL	2400.	3.55	0.90	1.117	3.964
PRC	3000	4.44	2.33	0.429	1.905
MALAYSIA	23900.	35.36	0.82	1.216	42.983
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000.	0.33	1.72	0.580	0.191
SOUTH AFRICA	5000	1.64	2.31	0.432	[illegible]
PHILIPPINES	5000	1.64	0.82	1.216	1.997
AUSTRALIA	25000	8.21	0.82	1.216	9.992
CANADA	150000.	49.28	2.61	0.383	18.877
U.S.	88000.	28.91	2.31	0.432	[illegible]
[illegible]	600.	0.20	1.76	0.569	0.112
NETHERLANDS	200	0.07	1.76	0.569	[illegible]
IRAQ	100.	0.03	1.76	0.569	0.019
YUGOSLAVIA	500.	0.16	1.76	0.569	[illegible]
USSR	5000	1.64	0.88	1.160	1.902
DOM. REPUB.	15000	4.93	1.38	0.727	3.582
GUATEMALA	4000.	1.31	1.38	0.727	0.955
INDONESIA	5000.	1.64	0.82	1.216	1.997
TOTAL	304400	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180	22.36	2.31	0.432	9.661
U.S.	70.	8.70	2.31	0.432	3.756
ITALY	65.	8.07	1.76	0.569	4.597
SPAIN	100.	12.42	1.76	0.569	7.073
EAST AFRICA	25.	3.11	1.76	0.569	1.768
THAILAND	15.	1.86	0.82	1.216	2.265
MEXICO	350.	43.48	2.31	0.432	18.801
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	2.31	0.432	0.438
AUSTRALIA	1500.	0.76	0.82	1.216	0.923
U.S.	11000.	5.57	1.76	0.569	3.171
KENYA	80000.	40.51	1.76	0.569	23.063
RWANDA	25000.	12.66	1.76	0.569	7.207
TANZANIA	78000.	39.49	1.76	0.569	22.487
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOG S)

SOURCE	%(1/CI) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	[illegible] TO 100
COBALT				
FINLAND	4.477	7.72	34.57	11.01
MOROCCO	1.252	7.72	9.66	3.07
BOTSWANNA	0.813	7.72	6.28	2.00
SOUTH AFRICA	0.371	7.72	2.86	0.91
ZAIRE	40.670	7.72	314.02	100.00
PHILIPPINES	0.347	7.72	2.68	0.85
AUSTRALIA	2.779	7.72	21.46	6.83
NEW CALEDONIA	1.737	7.72	13.41	4.27
CANADA	2.408	7.72	18.59	5.92
U S	2.471	7.72	19.08	6.08
TIN				
AUSTRALIA	0.150	0.00	0.00	0.00
U S	10.299	0.00	0.00	0.00
THAILAND	10.611	0.00	0.00	0.00
INDONESIA	10.431	0.00	0.00	0.00
UK	0.084	0.00	0.00	0.00
BOLIVIA	17.014	0.00	0.00	0.00
BRAZIL	3.964	0.00	0.00	0.00
PRC	1.905	0.00	0.00	0.00
MALAYSIA	42.951	0.00	0.00	0.00
NICKEL				
FINLAND	0.191	10.00	1.91	0.61
SOUTH AFRICA	0.710	10.00	7.10	2.2[illegible]
PHILIPPINES	1.997	10.00	19.97	6.36
AUSTRALIA	9.985	10.00	99.85	31.[illegible]
CANADA	18.877	10.00	188.77	60.11
U S	12.501	10.00	125.01	39.81
GREECE	0.112	10.00	1.12	0.36
NETHERLANDS	0.037	10.00	0.37	0.12
FRG	0.019	10.00	0.19	0.06
YUGOSLAVIA	0.094	10.00	0.94	0.30
USSR	1.905	10.00	19.05	6.07
DOM. REPUB.	3.582	10.00	35.82	11.41
GUATAMALA	0.955	10.00	9.55	3.04
INDONESIA	1.997	10.00	19.97	6.36
FLUORSPAR ACID				
SOUTH AFRICA	9.669	8.52	82.42	26.25
U S	3.760	8.52	32.05	10.21
ITALY	4.597	8.52	39.19	12.48
SPAIN	7.073	8.52	60.29	19.20
EAST AFRICA	1.768	8.52	15.07	4.80
THAILAND	2.265	8.52	19.31	6.15
MEXICO	18.801	8.52	160.27	51.04
PYRETHRUM				
SOUTH AFRICA	0.438	4.29	1.88	0.60
AUSTRALIA	0.923	4.29	3.96	1.26
UK	3.171	4.29	13.59	4.33
KENYA	23.063	4.29	98.83	31.47
RWANDA	7.207	4.29	30.88	9.84
TANZANIA	22.487	4.29	96.36	30.69

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOG 3)

	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	CANADA	NICKEL	60.11
3	MEXICO	FLUORSPAR ACID	51.04
4	U S	NICKEL	39.81
5	AUSTRALIA	NICKEL	31.80
6	KENYA	PYRETHRUM	31.47
7	TANZANIA	PYRETHRUM	30.69
8	SOUTH AFRICA	FLUORSPAR ACID	24.20
9	SPAIN	FLUORSPAR ACID	17.2[illegible]
10	ITALY	FLUORSPAR ACID	12.49
[illegible]	DOM REPUB	NICKEL	11.41
12	FINLAND	COBALT	11.01
13	U S	FLUORSPAR ACID	1[illegible].2[illegible]
14	RWANDA	PYRETHRUM	9.84
15	AUSTRALIA	COBALT	6.83
16	INDONESIA	NICKEL	6.[illegible]
17	PHILIPPINES	NICKEL	6.36
18	THAILAND	FLUORSPAR ACID	6.10
19	U S	COBALT	6.08
20	USSR	NICKEL	6.07
[illegible]	CANADA	COBALT	5.[illegible]
22	EAST AFRICA	FLUORSPAR ACID	4.90
23	UK	PYRETHRUM	4.32
24	NEW CALEDONIA	COBALT	4.27
25	MOROCCO	COBALT	3.08
26	GUATAMALA	NICKEL	3.04
27	SOUTH AFRICA	NICKEL	2.24
28	BOTSWANNA	COBAL	2.00
29	AUSTRALIA	PYRETHRUM	1.26
30	SOUTH AFRICA	COBALT	0.9[illegible]
[illegible]	PHILIPPINES	COBALT	0.85
32	FINLAND	NICKEL	0.61
33	SOUTH AFRICA	PYRETHRUM	0.60
34	GREECE	NICKEL	0.36
35	YUGOSLAVIA	NICKEL	0.30
36	NETHERLANDS	NICKEL	0.12
37	FRG	NICKEL	0.06
38	MALAYSIA	TIN	0.00
39	PRC	TIN	0.00
40	BRAZIL	TIN	0.00
[illegible]	BOLIVIA	TIN	0.00
42	UK	TIN	0.00
43	INDONESIA	TIN	0.00
44	THAILAND	TIN	0.00
45	U S	TIN	0.00
46	AUSTRALIA	TIN	0.00

SCENARIO 43

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	10.0	2.0	5.0	2.0	6.0
I/COEF	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0313	0.0938

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	8.0	7.0	2.0
Weight	9.0									
I/COEF	0.1190	0.1190	0.1071	0.0476	0.0833	0.0595	0.1190	0.0952	0.0833	[illegible]
I/COEF	0.1071									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	10.0	6.0	4.0	10.0
I/COEF	0.1667	0.1667	0.1667	0.1667	0.1000	0.0667	0.1667

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS

on the Importance of Controlling EACH Region within its [illegible]

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0200	0.0200	0.0140	0.0100	0.0140	0.0200	0.0040	0.0100	0.0040	[illegible]

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0152	0.0152	0.0137	0.0061	0.0107	0.0076	0.0152	0.0122	0.0107	0.0076
I/COEF	0.0137									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0213	0.0213	0.0213	0.0213	0.0128	0.0085	0.0213

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0150	0.0075

Importance of controlling ANY Region

within its Media as compared to the Importance

of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0087	0.0087	0.0061	0.0043	0.0061	0.0087	0.0017	0.0043	0.0017	0.0052

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0033	0.0033	0.0030	0.0013	0.0023	0.0017	0.0033	0.0026	0.0023	0.0017
I/COEF	0.0030									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0056	0.0056	0.0056	0.0056	0.0033	0.0022	0.0056

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOC 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.133	10.000
2	1	AIR INTERDICTION	0.112	8.47[illegible]
3	3	AFL; OFFENSE	0.09[illegible]	6.37[illegible]
4	16	ATTACK SUBS	0.073	5.49[illegible]
5	19	SURFACE COMBATANTS	0.060	4.50[illegible]
6	8	RAPID DEPLOY	0.056	4.24[illegible]
7	12	THEATER NUCLEAR WEAPON	0.054	4.051
8	14	ASW(LAND BASED)	0.043	3.24[illegible]
9	22	AIR SUPERIORITY(LAND BASED)	0.037	2.778
10	6	CAS	0.034	2.5[illegible]
11	15	ASW(SEA BASED)	0.032	2.428
12	23	AIR SUPERIORITY(SHIP BASED)	0.03[illegible]	2.27[illegible]
13	10	STRATEGIC BOMBER	0.02[illegible]	1.9[illegible]
14	21	AIR DEFENSE(SHIP BASED)	0.022	1.664
15	25	SPACE BASED WEAPON(AIR CNTRL)	0.019	1.454
16	13	SPECIAL OPERATIONS	0.014	1.041
17	29	ASAT(SPACE BASED)	0.013	0.982
18	18	MINE WARFARE	0.013	0.970
19	2	AMPHIBIOUS ASSAULT	0.010	0.74[illegible]
20	26	ASAT(LAND BASED)	0.007	0.54[illegible]
21	20	AIR DEFENSE(LAND BASED)	0.004	0.29[illegible]
22	9	SPACE-BASED WEAPON(LND CNTRL)	0.003	0.21[illegible]
23	30	SPACE BASED WEAPON(SEA CNTRL)	0.001	0.10[illegible]
24	27	ABM(SPACE BASED)	0.0[illegible]	0.0[illegible]
25	28	ABM(LAND BASED)	0.000	0.00[illegible]
26	24	INTERCEPTOR AIRCRAFT	0.000	0.0[illegible]
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.00[illegible]	0.00[illegible]
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.60
ARMY GROUND	3.90
CAS	1.47
ICBM	0.9[illegible]
STRATEGIC BOMBER	1.8[illegible]
SLBM	0.00
ASW(SEA BASED)	1.[illegible]
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	2.[illegible]
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.5[illegible]
	44.49

TIN

AIR INTERDICTION	4.00
ARMY GROUND	1.65
CAS	1.[illegible]
STRATEGIC BOMBER	1.85
ASW(LAND BASED)	3.20
ASW(SEA BASED)	1.1[illegible]
ATTACK SUBS	5.4[illegible]
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.97
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	2.27
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.57

NICKEL

AIR INTERDICTION	5.73
ARMY GROUND	4.25
CAS	1.42
STRATEGIC BOMBER	1.85
ASW(SEA BASED)	1.79
ATTACK SUBS	5.49
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.97
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	2.27
INTERCEPTOR AIRCRAFT	0.00
	41.07

FLUORSPAR ACID

AIR INTERDICTION	7.61
AMPHIBIOUS ASSAULT	0.75
ARMY GROUND	3.14
CAS	1.70
ICBM	0.00
STRATEGIC BOMBER	1.85
SLBM	0.02
ASW(LAND BASED)	3.25
ASW(SEA BASED)	1.[illegible]1
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
AIR SUPERIORITY(LAND BASED)	2.78
AIR SUPERIORITY(SHIP BASED)	3.27
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	39.31

PYRETHRUM

ARMY GROUND	2.32
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.15
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.51
	16.98

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00	(41.57)
[illegible]EL	9.86	(41.07)
FLUORSPAR ACID	9.46	(39.31)
COBALT	8.30	(34.45)
PYRETHRUM	4.08	(16.98)

COBALT

A-10	CAS	60.0798
COBRA	CAS	40.0582
F-4	AIR INTERDICTION	10[illegible].0531
	CAS	6.0[illegible]
F-16	AIR INTERDICTION	73.6480
	CAS	33.3776
ART. ACRFT	CAS	3.0040
RADIO RLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	132.5664
A-6	AIR INTERDICTION	39.7699
F-15	AIR INTERDICTION	58.9184
A-7	AIR INTERDICTION	53.0245
F-14	AIR INTERDICTION	44.18[illegible]
F-18	AIR INTERDICTION	73.6480
SH-3	ASW(SEA BASED)	6.3742
SH-2	ASW(SEA BASED)	15.9354
SH-60B	ASW(SEA BASED)	24.7884
S-3	ASW(SEA BASED)	36.4237
ATT. SUBS	ASW(SEA BASED)	25.2942
FRIGATES	ASW(SEA BASED)	15.1765
DSTROYERS	ASW(SEA BASED)	9.1059
M-48	ARMY GROUND	32.7691
M-60	ARMY GROUND	52.664[illegible]
M-1	ARMY GROUND	58.5163
M-551	ARMY GROUND	0.1951
M-901	ARMY GROUND	46.8131
M-2/M-3	ARMY GROUND	40.9614
M-113	ARMY GROUND	4.5513
MLRS	ARMY GROUND	17.5549
TOWED ART.	ARMY GROUND	23.4065
SELF-PROP.	ARMY GROUND	31.2087
PERSHING	ARMY GROUND	15.6044
GLCMS	ARMY GROUND	26.0073
INFANTRY	ARMY GROUND	6.5018
MORTERS	ARMY GROUND	31.8589
RCLES LNCH	ARMY GROUND	1.3654

NORMALIZED VALUES

F-111	10.0000
F-4	8.4532
F-16	8.0734
F-18	5.5556
A-10	4.5821
F-15	4.4444
M-1	4.4141
A-7	4.0000
M-60	3.9727
M-901	3.5313
F-14	3.3333
M-2/M-3	3.0899
COBRA	3.0214
A-6	3.0000
S-3	2.7476
M-48	2.4719
MORTERS	2.4032
SELF-PROP.	2.3542
GLCMS	1.9618
ATT. SUBS	1.9080
SH-60B	1.8699
TOWED ART.	1.7656
MLRS	1.3242
SH-2	1.2021
PERSHING	1.1771
FRIGATES	1.1448
DSTROYERS	0.6869
INFANTRY	0.4905
SH-3	0.4808
RADIO RLAY	0.4200
M-113	0.3430
ART. ACRFT	0.2224
RCLES LNCH	0.1030
M-551	0.0147

TIN		
A-10	CAS	60.0798
COBRA	CAS	53.4042
F-4	AIR INTERDICTION	106.4531
	CAS	6.0090
F-16	AIR INTERDICTION	73.6489
	CAS	33.8776
ART. ACFT	CAS	3.0140
RADIO RLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	131.5664
A-6	AIR INTERDICTION	44.7411
F-15	AIR INTERDICTION	58.9184
A-7	AIR INTERDICTION	53.0265
F-14	AIR INTERDICTION	47.7134
F-18	AIR INTERDICTION	82.8540
SH-3	ASW(SEA BASED)	5.4636
SH-2	ASW(SEA BASED)	13.6569
SH-60B	ASW(SEA BASED)	21.2472
S-3	ASW(SEA BASED)	34.4137
ATT. SUBS	ASW(SEA BASED)	15.1765
FRIGATES	ASW(SEA BASED)	15.1765
DESTROYERS	ASW(SEA BASED)	9.1059
M-48	ARMY GROUND	3.6410
M-60	ARMY GROUND	5.8514
M-1	ARMY GROUND	32.5071
M-551	ARMY GROUND	0.0650
M-901	ARMY GROUND	5.8512
M-2/M-3	ARMY GROUND	5.8516
M-113	ARMY GROUND	0.6502
MLRS	ARMY GROUND	8.7705
TOWED ART	ARMY GROUND	3.9011
SELF-PROP.	ARMY GROUND	5.2015
PERSHING	ARMY GROUND	13.6538
GLCMS	ARMY GROUND	22.7564
INFANTRY	ARMY GROUND	52.0145
MORTERS	ARMY GROUND	4.5513
ROLES LNCH	ARMY GROUND	0.1951

NORMALIZED VALUES

F-111	10.0000
F-4	8.4532
F-16	8.0734
F-18	6.7500
A-10	4.6321
F-15	4.4444
COBRA	4.0285
A-7	4.0000
INFANTRY	3.9237
F-14	3.7500
A-6	3.3750
S-3	2.7474
M-1	2.4523
GLCMS	1.7174
SH-60B	1.6018
ATT. SUBS	1.1448
FRIGATES	1.1448
SH-2	1.0303
PERSHING	1.0300
DESTROYERS	0.6869
MLRS	0.6621
M-2/M-3	0.4414
M-901	0.4414
M-60	0.4414
RADIO RLAY	0.4200
SH-3	0.4121
SELF-PROP.	0.3924
MORTERS	0.3433
TOWED ART.	0.2943
M-48	0.2747
ART. ACFT	0.2274
M-113	0.0490
ROLES LNCH	0.0147
[illegible]	[illegible]

NICKEL

A-10	CAS	60.0798
COBRA	CAS	40.0531
F-4	AIR INTERDICTION	79.5313
	CAS	4.5060
F-16	AIR INTERDICTION	73.6480
	CAS	33.3776
ART. ACRFT	CAS	1.0027
RADIO RLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	131.5644
A-6	AIR INTERDICTION	39.7699
F-15	AIR INTERDICTION	58.9144
A-7	AIR INTERDICTION	53.0265
F-14	AIR INTERDICTION	49.7124
F-18	AIR INTERDICTION	81.8540
SH-3	ASW(SEA BASED)	7.2817
SH-2	ASW(SEA BASED)	19.2119
SH-60B	ASW(SEA BASED)	29.3296
S-3	ASW(SEA BASED)	36.4237
ATT. SUBS	ASW(SEA BASED)	45.5944
FRIGATES	ASW(SEA BASED)	27.3178
DSTROYERS	ASW(SEA BASED)	16.3907
M-48	ARMY GROUND	34.4101
M-60	ARMY GROUND	58.5163
M-1	ARMY GROUND	65.0182
M-551	ARMY GROUND	0.6502
M-901	ARMY GROUND	40.9614
M-2/M-3	ARMY GROUND	46.8131
M-113	ARMY GROUND	4.5513
MLRS	ARMY GROUND	17.3549
TOWED ART.	ARMY GROUND	31.2087
SELF-PROP.	ARMY GROUND	41.6116
PERSHING	ARMY GROUND	15.6044
GLCMS	ARMY GROUND	19.5004
INFANTRY	ARMY GROUND	32.5091
MORTERS	ARMY GROUND	13.6538
HOLES LNCH	ARMY GROUND	0.1951

NORMALIZED VALUES

F-111	10.0000
F-16	8.0724
F-4	6.8879
F-18	6.2500
M-1	4.9046
A-10	4.5811
F-15	4.4444
M-60	4.4141
A-7	4.0000
F-14	3.7500
M-2/M-3	3.5313
ATT. SUBS	3.4345
SELF-PROP.	3.1389
M-901	3.0899
COBRA	3.0214
A-6	3.0000
S-3	2.7474
M-48	2.7446
INFANTRY	2.4523
TOWED ART.	2.3542
SH-60B	2.1870
FRIGATES	2.0607
GLCMS	1.4714
SH-2	1.3738
MLRS	1.3242
DSTROYERS	1.2364
PERSHING	1.1771
MORTERS	1.0300
SH-3	0.5195
RADIO RLAY	0.4200
M-113	0.3423
ART. ACRFT	0.1511
M-551	0.0120
[illegible]	[illegible]

FLUORSPAR ACID			
A-10	CAS		75.0997
COBRA	CAS		40.0534
F-4	AIR	INTERDICTION	132.5664
	CAS		7.5100
F-16	AIR	INTERDICTION	92.0600
	CAS		41.7221
APT ACRFT	CAS		3.0040
RADIO RLAY	AIR	INTERDICTION	3.8142
	CAS		2.2530
F-111	AIR	INTERDICTION	165.7060
A-6	AIR	INTERDICTION	49.7124
F-15	AIR	INTERDICTION	73.6460
A-7	AIR	INTERDICTION	66.2632
F-14	AIR	INTERDICTION	55.2340
F-18	AIR	INTERDICTION	92.0600
SH-3	ASW(SEA BASED)		7.1847
SH-2	ASW(SEA BASED)		15.2119
SH-60B	ASW(SEA BASED)		35.4119
S-3	ASW(SEA BASED)		45.5276
ATT. SUBS	ASW(SEA BASED)		30.3531
FRIGATES	ASW(SEA BASED)		21.2472
DESTROYERS	ASW(SEA BASED)		12.7493
M-48	ARMY	GROUND	10.9231
M-60	ARMY	GROUND	17.5549
M-1	ARMY	GROUND	19.5054
M-551	ARMY	GROUND	0.1951
M-901	ARMY	GROUND	45.8131
M-2/M-3	ARMY	GROUND	46.8131
M-113	ARMY	GROUND	5.2015
MLRS	ARMY	GROUND	14.6241
TOWED ART.	ARMY	GROUND	19.5054
SELF-PROP.	ARMY	GROUND	26.0073
PERSHING	ARMY	GROUND	13.6538
GLCMS	ARMY	GROUND	22.7564
INFANTRY	ARMY	GROUND	52.0145
MORTERS	ARMY	GROUND	22.7544
ROLES LNCH	ARMY	GROUND	0.1951

NORMALIZED VALUES	
F-111	10.0000
F-4	8.4532
F-16	8.0734
F-18	5.5556
A-10	4.5321
F-15	4.4444
A-7	4.0000
F-14	3.3333
INFANTRY	3.1389
A-6	3.0000
M-2/M-3	2.8250
M-901	2.8250
S-3	2.7476
COBRA	2.4171
SH-60B	2.1370
ATT. SUBS	1.8817
SELF-PROP.	1.5695
MORTERS	1.3700
GLCMS	1.3700
FRIGATES	1.2817
TOWED ART.	1.1771
M-1	1.1771
SH-2	1.0000
M-60	1.0504
MLRS	0.8828
PERSHING	0.8240
DESTROYERS	0.7493
M-48	0.6591
SH-3	0.4704
RADIO RLAY	0.3000
M-113	0.3139
ART ACRFT	0.1118
M-551	0.0118
ROLES LNCH	0.0118

PYRETHRUM

ATT. SUBS	ASW(SEA BASED)	15.1765
M-48	ARMY GROUND	25.4871
M-60	ARMY GROUND	40.9614
M-113	ARMY GROUND	4.5512
TOWED ART.	ARMY GROUND	27.3076
SELF-PROP.	ARMY GROUND	34.4102
INFANTRY	ARMY GROUND	65.0182
MORTERS	ARMY GROUND	31.85[illegible]

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP.	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-48	3.9100
ATT. SUBS	2.3300
M-113	0.7000

ALL COMMODITIES

A-10	CAS	2.5594
COBRA	CAS	1.7856
F-4	AIR INTERDICTION	4.2421
	CAS	0.2424
F-16	AIR INTERDICTION	3.1300
	CAS	1.4141
ART. ACRFT	CAS	0.1171
RADIO RLAY	AIR INTERDICTION	0.1848
	CAS	0.0901
F-111	AIR INTERDICTION	5.6341
A-6	AIR INTERDICTION	1.7349
F-15	AIR INTERDICTION	2.5040
A-7	AIR INTERDICTION	2.2536
F-14	AIR INTERDICTION	1.9865
F-18	AIR INTERDICTION	3.3142
SH-3	ASW(SEA BASED)	0.2641
SH-2	ASW(SEA BASED)	0.6602
SH-60B	ASW(SEA BASED)	1.0978
S-3	ASW(SEA BASED)	1.5481
ATT. SUBS	ASW(SEA BASED)	1.3106
FRIGATES	ASW(SEA BASED)	0.7852
DSTROYERS	ASW(SEA BASED)	0.4790
M-48	ARMY GROUND	1.0923
M-60	ARMY GROUND	1.7515
M-1	ARMY GROUND	1.7555
M-551	ARMY GROUND	0.0111
M-901	ARMY GROUND	1.4044
M-2, M-3	ARMY GROUND	1.4044
M-113	ARMY GROUND	0.1951
MLRS	ARMY GROUND	0.5612
TOWED ART.	ARMY GROUND	1.0533
SELF-PROP.	ARMY GROUND	1.4044
PERSHING	ARMY GROUND	0.5952
GLCMS	ARMY GROUND	0.9103
INFANTRY	ARMY GROUND	2.0806
MORTERS	ARMY GROUND	1.0448
RILES LNCH	ARMY GROUND	0.0195

NORMALIZED VALUES

F-111	10.0000
F-16	8.0734
F-4	7.9560
F-18	5.8824
A-10	4.5321
F-15	4.4444
A-7	4.0000
INFANTRY	3.6929
F-14	3.5294
M-1	3.1158
M-60	3.1155
A-6	3.0882
COBRA	3.0804
S-3	2.7476
M-2/M-3	2.4927
M-901	2.4927
SELF-PROP.	2.4927
ATT. SUBS	2.3345
SH-60B	1.9484
M-48	1.9387
TOWED ART.	1.8695
MORTERS	1.8550
GLCMS	1.6154
FRIGATES	1.4007
SH-2	1.1718
PERSHING	1.0384
MLRS	1.0384
DSTROYERS	0.8404
SH-3	0.4687
RADIO RLAY	0.3[illegible]
M-113	0.3471
ART. ACRFT	0.1[illegible]
RILES LNCH	0.0744
M-551	0.0197

CRITICALITY OF SHORTFALL
ALL PERS
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK-PILE (UNITS)	SHORT-FALL (%)	TRANS-LATED	PER COMMODITY IMPORT	CRITIC-ALITY	NORMALIZED PER-PER ALL CRITICALITY
COBALT	88.4	143.8	-41.0	412.5	9.3	3838.2	[illegible]
TIN	43.0	190.6	353.3	[illegible]	10.0	0.0	[illegible]
NICKEL	200.0	32.1	-83.9	437.7	9.9	4324.8	[illegible]
FLUORSPAR ACID	1400.0	895.0	-36.1	389.9	9.5	3686.5	8.5
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1853.2	4.3

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
FINLAND	1350.	7.71	1.72	0.581	4.477
MOROCCO	450.	2.57	2.05	0.487	1.233
BOTSWANNA	250.	1.43	1.76	0.569	0.813
SOUTH AFRICA	150.	0.86	2.31	0.432	0.371
ZAIRE	9000.	51.43	1.76	0.569	29.232
ZAMBIA	3500.	20.00	1.76	0.569	11.368
PHILIPPINES	51.	0.29	0.82	1.216	0.3[illegible]
AUSTRALIA	400.	2.29	0.82	1.216	2.[illegible]
NEW CALEDONIA	250.	1.43	0.82	1.216	1.[illegible]
CANADA	1100.	6.29	2.61	0.383	2.[illegible]
U.S.	1000.	5.71	2.31	0.432	2.471
TOTAL:	17500.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.82	1.216	0.180
U.S.	16100.	23.82	2.31	0.432	10.29[illegible]
THAILAND	5900.	8.73	0.82	1.216	10.611
INDONESIA	5800.	8.58	0.82	1.216	10.431
[illegible]	100.	0.15	1.76	0.569	0.084
BOLIVIA	10300.	15.24	0.90	1.117	17.014
BRAZIL	2400.	3.55	0.90	1.117	3.964
PRC	3000.	4.44	2.33	0.429	1.905
MALAYSIA	23900.	35.36	0.82	1.216	42.98[illegible]
TOTAL	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000.	0.33	1.76	0.580	0.191
SOUTH AFRICA	5000.	1.64	2.31	0.432	0.71[illegible]
PHILIPPINES	5000	1.64	0.82	1.216	1.[illegible]
AUSTRALIA	25000	8.21	0.82	1.216	[illegible]
CANADA	150000.	49.26	2.61	0.383	18.877
U.S.	88000	28.91	2.31	0.432	12.5[illegible]
GREECE	600	0.20	1.76	0.569	0.112
NETHERLANDS	200	0.07	1.76	0.569	0.0[illegible]
FRG	100	0.03	1.76	0.569	0.[illegible]
YUGOSLAVIA	500.	0.16	1.76	0.569	0.094
USSR	5000.	1.64	0.86	1.160	1.[illegible]
DOM. REPUB.	15000	4.93	1.38	0.727	3.5[illegible]
GUATAMALA	4000.	1.31	1.38	0.727	0.[illegible]
INDONESIA	5000	1.64	0.82	1.216	1.[illegible]
TOTAL:	304400	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	190.	22.38	2.31	0.432	9.6[illegible]
U.S.	70.	8.70	2.31	0.432	3.76[illegible]
ITALY	65	8.07	1.76	0.569	4.5[illegible]
SPAIN	100.	12.43	1.76	0.569	7.07[illegible]
EAST AFRICA	25.	3.11	1.76	0.569	1.768
THAILAND	15	1.86	0.82	1.216	2.265
MEXICO	350.	43.43	2.31	0.432	18.9[illegible]1
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	2.31	0.432	0.43[illegible]
AUSTRALIA	1500.	0.76	0.82	1.216	0.92[illegible]
U.S.	11000.	5.57	1.76	0.569	3.171
KENYA	80000.	40.51	1.76	0.569	23.04[illegible]
RWANDA	25000.	12.66	1.76	0.569	7.207
TANZANIA	78000.	39.49	1.76	0.569	22.4[illegible]7
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	%(1/CI) OVERALL	PER/PROTFALL VULNERABILITY	TOTAL	NORMALIZED (NO 1)
COBALT				
FINLAND	4.477	7.72	34.57	15.2[illegible]
MOROCCO	1.2[illegible]	7.72	9.66	4.2[illegible]
BOTSWANNA	0.810	7.72	6.28	2.76
SOUTH AFRICA	0.371	7.72	2.86	1.27
ZAIRE	29.[illegible]	7.72	228.09	100.00
ZAMBIA	11.3[illegible]	7.72	87.92	38.6[illegible]
PHILIPPINES	0.347	7.72	2.69	1.19
AUSTRALIA	2.779	7.72	21.46	9.4[illegible]
NEW CALEDONIA	1.737	7.72	13.41	5.9[illegible]
CANADA	2.408	7.72	18.5[illegible]	8.22
U S	2.471	7.72	[illegible]	8.44
TIN				
AUSTRALIA	0.1[illegible]	0.00	0.00	[illegible]
U S	10.29[illegible]	0.00	0.00	0.00
THAILAND	10.611	0.00	0.00	0.00
INDONESIA	10.401	0.00	0.00	0.00
UK	0.064	0.00	0.00	0.00
BOLIVIA	17.014	0.00	0.00	0.00
BRAZIL	3.964	0.00	0.00	0.00
PRC	1.9[illegible]	0.00	0.00	0.00
MALAYSIA	41.981	0.00	0.00	0.00
NICKEL				
FINLAND	0.191	10.00	1.91	0.84
SOUTH AFRICA	0.71[illegible]	10.00	7.10	3.14
PHILIPPINES	1.997	10.00	19.97	8.83
AUSTRALIA	9.9[illegible]	10.00	9[illegible].85	[illegible]
CANADA	18.877	10.00	188.77	83.49
U S	12.501	10.00	125.01	55.29
GREECE	0.112	10.00	1.12	0.50
NETHERLANDS	0.037	10.00	0.37	0.17
PRC	0.019	10.00	0.19	0.08
YUGOSLAVIA	0.094	10.00	0.94	0.41
USSR	1.905	10.00	19.05	8.42
DOM REPUB	3.582	10.00	35.82	15.84
GUATEMALA	0.955	10.00	9.55	4.23
INDONESIA	1.997	10.00	19.97	8.83
FLUORSPAR ACID				
SOUTH AFRICA	9.669	8.52	82.42	36.46
U S	3.760	8.52	32.05	14.18
ITALY	4.587	8.52	39.19	17.33
SPAIN	7.073	8.52	60.29	26.67
EAST AFRICA	1.768	8.52	15.07	6.67
THAILAND	2.265	8.52	19.31	8.54
MEXICO	18.801	8.52	160.27	70.89
[illegible]ETHRUM				
SOUTH AFRICA	0.438	4.29	1.88	0.83
AUSTRALIA	0.922	4.29	3.96	1.75
UK	3.171	4.29	13.59	6.01
KENYA	23.063	4.29	98.83	4[illegible].71
RWANDA	7.207	4.29	30.88	13.66
TANZANIA	22.487	4.29	96.36	42.62

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	CANADA	NICKEL	83.49
3	MEXICO	FLUORSPAR ACID	70.8[illegible]
4	U S	NICKEL	55.29
5	AUSTRALIA	NICKEL	44.14
6	KENYA	PYRETHRUM	43.71
7	TANZANIA	PYRETHRUM	43.6[illegible]
8	ZAMBIA	COBALT	[illegible]
9	SOUTH AFRICA	FLUORSPAR ACID	36.46
10	SPAIN	FLUORSPAR ACID	26.67
[illegible]	ITALY	FLUORSPAR ACID	17.39
12	DOM REPUB	NICKEL	15.84
13	FINLAND	COBALT	15.29
14	U S	FLUORSPAR ACID	14.18
15	RWANDA	PYRETHRUM	12.66
16	AUSTRALIA	COBALT	9.4[illegible]
17	INDONESIA	NICKEL	8.93
[illegible]	PHILIPPINES	NICKEL	[illegible]
19	THAILAND	FLUORSPAR ACID	8.54
[illegible]	U S	COBALT	8.44
[illegible]	USSR	NICKEL	8.42
22	CANADA	COBALT	8.22
23	EAST AFRICA	FLUORSPAR ACID	6.67
[illegible]	UK	PYRETHRUM	6.01
[illegible]	NEW CALEDONIA	COBALT	5.93
26	MOROCCO	COBALT	4.27
27	GUATAMALA	NICKEL	4.23
[illegible]	SOUTH AFRICA	NICKEL	3.14
29	BOTSWANNA	COBALT	2.78
30	AUSTRALIA	PYRETHRUM	1.75
[illegible]	SOUTH AFRICA	COBALT	1.27
32	PHILIPPINES	COBALT	1.19
33	FINLAND	NICKEL	0.84
[illegible]	SOUTH AFRICA	PYRETHRUM	0.83
[illegible]	GREECE	NICKEL	0.50
36	YUGOSLAVIA	NICKEL	0.41
37	NETHERLANDS	NICKEL	0.17
[illegible]	FRG	NICKEL	0.0[illegible]
39	MALAYSIA	TIN	0.00
40	PRC	TIN	0.00
[illegible]	BRAZIL	TIN	0.00
42	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
[illegible]	INDONESIA	TIN	0.00
[illegible]	THAILAND	TIN	0.00
46	U S	TIN	0.00
47	AUSTRALIA	TIN	0.00

SCENARIO 44

WEIGHTS on REGIONS by LEVEL of CONFLICT and MEDIA

Level of Conflict 1 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	2.0	1.0	5.0	1.0	[illegible]
I/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	0.1[illegible]

Level of Conflict 1 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
Weight	9.0									
I/COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0933	0.0[illegible]
I/COEF	0.1200									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
I/COEF	0.1786	0.1786	0.1786	0.1429	0.1071	0.0714	0.1429

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS

for the importance of Controlling EACH region within its [illegible]

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0228	0.0228	0.0171	0.0114	0.0161	0.0041	0.0048	0.0114	0.0041	0.0[illegible]

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0171	0.0171	0.0154	0.0068	0.0119	0.0085	0.0017	0.0136	0.0119	0.0085
I/COEF	0.0154									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0218	0.0228	0.0211	0.0182	0.0137	0.0071	0.0182

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0150	0.00[illegible]

Importance of controlling ANY Region
within its Media as compared to the Importance
of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0040

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
I/COEF	0.0033									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOG 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.141	10.000
2	1	AIR INTERDICTION	0.117	8.2[illegible]
3	3	ATK GROUND	0.104	7.361
4	16	ATTACK SUBS	0.072	5.100
5	19	SURFACE COMBATANTS	0.060	4.247
6	12	THEATER NUCLEAR WEAPON	0.054	3.811
7	8	RAPID DEPLOY	0.052	3.71[illegible]
8	6	CAS	0.044	3.1[illegible]
9	14	AFW(LAND BASED)	0.043	3.0[illegible]
10	22	AIR SUPERIORITY (LAND BASED)	0.041	2.9[illegible]
11	15	AFW(SEA BASED)	0.033	2.315
12	2[illegible]	AIR SUPERIORITY (SEA BASED)	0.032	2.27[illegible]
13	21	AIR DEFENSE (SEA BASED)	0.031	2.185
14	10	STRATEGIC BOMBER	0.025	1.797
15	25	SPACE BASED WEAPONS (AIR CONTROL)	0.020	1.41[illegible]
16	29	ASAT(SPACE BASED)	0.012	0.924
17	18	MINE WARFARE	0.013	0.891
18	2	AMPHIBIOUS ASSAULT	0.011	0.750
19	13	SPECIAL OPERATIONS	0.010	0.715
20	28	ASAT(LAND BASED)	0.007	0.510
21	23	AIR DEFENSE(LAND BASED)	0.004	0.271
22	7	SPACE-BASED WEAPONS(LAND CONTROL)	0.003	0.211
23	26	SPACE BASED WEAPONS(SEA CONTROL)	0.002	0.118
24	27	ABM(SPACE BASED)	0.000	0.0[illegible]
25	24	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.0[illegible]
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
LOC 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.51
CAS	1.[illegible]
ICBM	0.00
STRATEGIC BOMBER	1.7[illegible]
SLBM	0.0[illegible]
ASW(SEA BASED)	1.[illegible]
CARRIER BATTLE GROUP	1[illegible].00
SURFACE COMBATANTS	4.2[illegible]
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	1.2[illegible]
INTERCEPTOR AIRCRAFT	0.0[illegible]
ABM(LAND BASED)	0.[illegible]
	2[illegible].9[illegible]

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.91
CAS	1.91
STRATEGIC BOMBER	1.79
ASW LAND BASED)	1.[illegible]
ASW SEA BASED)	1.11
ATTACK SUBS	5.1[illegible]
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.[illegible]
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.25
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.18

NICKEL

AIR INTERDICTION	5.60
ARMY GROUND	4.92
CAS	1.72
STRATEGIC BOMBER	1.79
ASW(SEA BASED)	1.71
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
	41.21

FLUORSPAR ACID

AIR INTERDICTION	7.13
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	[illegible]
CAS	[illegible]
ICBM	0.00
STRATEGIC BOMBER	1.73
SLBM	[illegible]
ASW(LAND BASED)	3.09
ASW(SEA BASED)	[illegible]
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.21
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SEA BASED)	[illegible]
INTERCEPTOR AIRCRAFT	[illegible]
ABM(LAND BASED)	0.00
	31.57

PYRETHRUM

ARMY GROUND	[illegible]
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.14
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
	17.08

COMMODITY NORMALIZED IMPORTANCE

NICKEL	10.00	(41.21)
TIN	9.99	(41.19)
FLUORSPAR ACID	9.69	(39.57)
COBALT	8.49	(34.99)
PYRETHRUM	4.14	(17.08)

COBALT			
A-10	CAS	[illegible]	[illegible]
COBRA	CAS	46	[illegible]
F-4	AIR INTERDICTION	103	5050
	CAS	[illegible]	[illegible]
F-16	AIR INTERDICTION	[illegible]	[illegible]
	CAS	40	4075
ART. ACRFT	CAS	3	6367
RADIO RLAY	AIR INTERDICTION	3	[illegible]
	CAS	3	7275
F-111	AIR INTERDICTION	109	[illegible]
A-6	AIR INTERDICTION	33	8144
F-15	AIR INTERDICTION	57	[illegible]
A-7	AIR INTERDICTION	51	7525
F-14	AIR INTERDICTION	43	[illegible]
F-18	AIR INTERDICTION	71	8725
SH-3	ASW(SEA BASED)	6	0775
SH-2	ASW(SEA BASED)	15	1937
SH-60B	ASW(SEA BASED)	13	[illegible]
S-3	ASW(SEA BASED)	34	7184
ATT. SUBS	ASW(SEA BASED)	24	1169
FRIGATES	ASW(SEA BASED)	14	4701
DESTROYERS	ASW(SEA BASED)	8	6611
M-48	ARMY GROUND	37	[illegible]
M-60	ARMY GROUND	61	[illegible]
M-1	ARMY GROUND	[illegible]	[illegible]
M-551	ARMY GROUND	0	[illegible]
M-901	ARMY GROUND	54	[illegible]
M-27M-3	ARMY GROUND	47	[illegible]
M-113	ARMY GROUND	5	[illegible]
MLRS	ARMY GROUND	20	3394
TOWED ART	ARMY GROUND	[illegible]	1192
SELF-PROP	ARMY GROUND	36	1589
PERSHING	ARMY GROUND	19	0795
GLCMS	ARMY GROUND	30	[illegible]
INFANTRY	ARMY GROUND	7	5331
MORTERS	ARMY GROUND	36	9122
ROLES LNCH	ARMY GROUND	1	5820

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.4716
F-18	5.5556
M-1	5.2402
M-40	4.7162
F-15	4.4444
M-901	4.1921
A-7	4.0000
COBRA	3.7473
M-27M-3	3.6481
F-14	3.3333
A-6	3.0000
M-48	2.9345
MORTERS	2.8530
SELF-PROP	2.7948
S-3	2.4842
GLCMS	2.3200
TOWED ART.	2.0961
ATT. SUBS	1.8640
SH-60B	1.8267
MLRS	1.5721
PERSHING	1.3974
SH-2	1.1743
FRIGATES	1.1188
DESTROYERS	0.6710
INFANTRY	[illegible]
SH-3	0.4797
RADIO RLAY	0.4[illegible]
M-113	0.4074
ART. ACRFT	0.[illegible]
ROLES LNCH	0.1[illegible]
[illegible]	0.0[illegible]

TIN			
A-10	CAS		72.7331
COBRA	CAS		64.6511
F-4	AIR INTERDICTION		113.5151
	CAS		7.1734
F-16	AIR INTERDICTION		71.9785
	CAS		41.4075
ART. ACFT	CAS		3.6367
RADIO RLAY	AIR INTERDICTION		3.2345
	CAS		2.7275
F-111	AIR INTERDICTION		11[illegible].3813
A-6	AIR INTERDICTION		43.6462
F-15	AIR INTERDICTION		57.5026
A-7	AIR INTERDICTION		51.7525
F-14	AIR INTERDICTION		4[illegible].5110
F-18	AIR INTERDICTION		80.6633
SH-3	ASW(SEA BASED)		5.1093
SH-2	ASW(SEA BASED)		13.0231
SH-60B	ASW(SEA BASED)		20.2511
S-3	ASW(SEA BASED)		34.7284
ATT. SUBS	ASW(SEA BASED)		14.4701
FRIGATES	ASW(SEA BASED)		14.4701
DSTROYERS	ASW(SEA BASED)		8.6821
M-48	ARMY GROUND		4.2195
M-60	ARMY GROUND		6.7793
M-1	ARMY GROUND		37.6655
M-551	ARMY GROUND		0.0703
M-901	ARMY GROUND		6.7798
M-2/M-3	ARMY GROUND		6.7798
M-113	ARMY GROUND		0.7593
MLRS	ARMY GROUND		10.1697
TOWED ART.	ARMY GROUND		4.5199
SELF-PROP	ARMY GROUND		6.0265
PERSHING	ARMY GROUND		15.3195
GLCMS	ARMY GROUND		26.3659
INFANTRY	ARMY GROUND		60.2649
MORTERS	ARMY GROUND		5.2732
ROLES LNCH	ARMY GROUND		0.2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
F-18	6.2500
A-10	5.6216
COBRA	4.9970
INFANTRY	4.6579
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
M-1	2.9112
S-3	2.6842
GLCMS	2.0378
SH-60B	1.5658
PERSHING	1.2227
FRIGATES	1.1184
ATT. SUBS	1.1184
SH-2	1.0066
MLRS	0.7860
DSTROYERS	0.6710
M-2/M-3	0.5240
M-901	0.5240
M-60	0.5240
SELF-PROP.	0.4658
RADIO RLAY	0.4608
MORTERS	0.4076
SH-3	0.3493
TOWED ART	0.3493
M-48	0.3261
ART. ACFT	0.2911
M-113	0.0582
ROLES LNCH	[illegible]
M-551	[illegible]

MODEL			
A-10	CAS	72	7336
COBRA	CAS	41	4800
F-4	AIR INTERDICTION	77	6188
F-16	CAS	5	4550
	AIR INTERDICTION	1	6185
	CAS	4	4100
ATT. AGRFT	CAS	2	4245
RADIO RLAY	AIR INTERDICTION	3	1325
	CAS	1	1175
F-111	AIR INTERDICTION	123	8312
A-6	AIR INTERDICTION	88	8144
F-15	AIR INTERDICTION	57	5072
A-7	AIR INTERDICTION	51	7325
F-14	AIR INTERDICTION	42	5180
F-18	AIR INTERDICTION	80	8833
SH-3	ASW(SEA BASED)	6	9474
S-3	ASW(SEA BASED)	17	3841
SH-60B	ASW(SEA BASED)	27	0102
S-3	ASW(SEA BASED)	34	7124
ATT. SUBS	ASW(SEA BASED)	43	4104
FRIGATES	ASW(SEA BASED)	32	0456
DESTROYERS	ASW(SEA BASED)	15	8273
M-48	ARMY GROUND	42	1854
M-60	ARMY GROUND	67	7580
M-1	ARMY GROUND	75	3311
M-551	ARMY GROUND	0	7582
M-901	ARMY GROUND	47	4586
M-2/M-3	ARMY GROUND	54	2327
M-113	ARMY GROUND	5	2733
MLRS	ARMY GROUND	20	0394
TOWED ART.	ARMY GROUND	36	1580
SELF-PROP.	ARMY GROUND	43	2113
PERSHING	ARMY GROUND	19	0725
GLCM	ARMY GROUND	22	5223
INFANTRY	ARMY GROUND	37	6655
MORTARS	ARMY GROUND	15	8135
POLES LNCH	ARMY GROUND	0	2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	6.4216
F-18	6.2500
M-1	5.8224
A-10	5.6216
M-60	5.2402
F-15	4.4444
M-2/M-3	4.1921
A-7	4.0000
F-14	3.7500
COBRA	3.7478
SELF-PROP.	3.7263
M-901	3.6681
ATT. SUBS	3.3552
M-48	3.2605
A-6	3.0000
INFANTRY	2.9112
TOWED ART.	2.7948
S-3	2.6842
SH-60B	2.0877
FRIGATES	2.0131
GLCM3	1.7467
MLRS	1.5721
PERSHING	1.3974
SH-2	1.3421
MORTERS	1.2227
DSTROYERS	1.2077
SH-3	0.5377
RADIO RLAY	0.4603
M-113	0.4074
ATT. AGRFT	0.1977
M-551	0.0000

FLOOFSEAR	CAS	[illegible]	[illegible]
F-10	CAS	[illegible]	[illegible]
[illegible]	CAS	[illegible]	[illegible]
F-4	AIR INTERDICTION	12	88.1[illegible]
CEE	[illegible]	[illegible]	[illegible]
F-16	AIR INTERDICTION	9[illegible]	[illegible]
CAS		50	50.54
ART. ACRFT	CAS	[illegible]	[illegible]
RADIO RLAY	AIR INTERDICTION	[illegible]	13.45
CAS		[illegible]	[illegible]
F-111	AIR INTERDICTION	1[illegible]	[illegible]
A-6	AIR INTERDICTION	43	51.80
F-15	AIR INTERDICTION	71	37.25
A-7	AIR INTERDICTION	64	[illegible]
F-14	AIR INTERDICTION	59	[illegible]
F-13	AIR INTERDICTION	[illegible]	[illegible]
SH-3	ASW(SEA BASED)	6	[illegible]
SH-2	ASW(SEA BASED)	17	[illegible]
SH-60B	ASW(SEA BASED)	63	76.32
S-3	ASW(SEA BASED)	43	41.04
ATT. SUBS	ASW(SEA BASED)	28	[illegible]
FRIGATES	ASW(SEA BASED)	20	25.82
DESTROYERS	ASW(SEA BASED)	17	[illegible]
M-48	ARMY GROUND	12	65.56
M-60	ARMY GROUND	20	[illegible]
M-1	ARMY GROUND	22	[illegible]
M-551	ARMY GROUND	0	22.60
M-901	ARMY GROUND	54	[illegible]
M-2/M-3	ARMY GROUND	54	[illegible]
M-113	ARMY GROUND	6	0.265
MLRS	ARMY GROUND	16	[illegible]
TOWED ART	ARMY GROUND	22	[illegible]
SELF-PROP	ARMY GROUND	30	[illegible]
PERSHING	ARMY GROUND	15	8.195
GLCMS	ARMY GROUND	29	[illegible]
INFANTRY	ARMY GROUND	63	2.649
MORTERS	ARMY GROUND	26	[illegible]
ROLES LNCH	ARMY GROUND	0	0.240

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5556
F-15	4.4444
A-7	4.0000
INFANTRY	3.7763
M-2/M-3	3.3537
M-901	3.3537
F-14	3.3333
A-6	3.0000
COBRA	2.9782
S-3	2.6842
SH-60B	2.0877
SELF-PROP	1.8632
ATT. SUBS	1.7895
MORTERS	1.6303
GLCMS	1.6303
TOWED ART	1.3974
M-1	1.3974
M-60	1.2576
FRIGATES	1.2526
SH-2	1.0737
MLRS	1.0480
PERSHING	0.9782
M-48	0.7825
DESTROYERS	0.7516
SH-3	0.4705
M-113	0.3766
RADIO RLAY	0.3456
ART. ACRFT	0.[illegible]
ROLES LNCH	0.0140
M-551	0.0140

PYRETHRUM

ATT SUBS	ASW(SEA BASED)	12.4701
M-48	ARMY GROUND	20.5276
M-60	ARMY GROUND	47.4536
M-113	ARMY GROUND	5.2712
TOWED ART	ARMY GROUND	31.6390
SELF-PROP.	ARMY GROUND	42.1854
INFANTRY	ARMY GROUND	75.3211
MORTERS	ARMY GROUND	96.9122

NORMALIZED VALUES

INFANTRY	10.0000
M-60	1.3000
SELF-PROP	5.6000
MORTERS	4.9000
TOWED ART	4.2000
M-48	3.5100
ATT SUBS	1.9209
M-113	0.7000

ALL COMMODITIES

A-10	CAS	3.0912
[illegible]	CAS	2.1[illegible]
F-4	AIR INTERDICTION	4.1402
	CAS	0.2909
F-16	AIR INTERDICTION	3.0543
	CAS	1.7173
ART. AIRFT	CAS	0.1333
RADIO RLAY	AIR INTERDICTION	0.1284
	CAS	0.1071
F-111	AIR INTERDICTION	5.4917
A-6	AIR INTERDICTION	1.6781
F-15	AIR INTERDICTION	2.4439
A-7	AIR INTERDICTION	2.1[illegible]5
F-14	AIR INTERDICTION	1.9407
F-18	AIR INTERDICTION	3.2348
S-3	ASW(SEA BASED)	0.2513
SH-2	ASW(SEA BASED)	0.6295
SH-60B	ASW(SEA BASED)	1.0427
S-3	ASW(SEA BASED)	1.4740
ATT. SUBS	ASW(SEA BASED)	1.2541
FRIGATES	ASW(SEA BASED)	0.7524
DSTROYERS	ASW(SEA BASED)	0.4515
M-48	ARMY GROUND	1.2656
M-60	ARMY GROUND	2.0239
M-1	ARMY GROUND	2.0239
M-[illegible]	ARMY GROUND	0.01[illegible]
M-901	ARMY GROUND	1.6272
M-2/M-3	ARMY GROUND	1.6272
M-113	ARMY GROUND	0.2260
MLRS	ARMY GROUND	0.6780
TOWED ART.	ARMY GROUND	1.2204
SELF-PROP	ARMY GROUND	1.6272
PERSHING	ARMY GROUND	0.6780
GLCMS	ARMY GROUND	1.0546
INFANTRY	ARMY GROUND	2.4106
MORTERS	ARMY GROUND	1.2126
ROLES LNCH	ARMY GROUND	0.0226

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.0585
F-18	5.8874
A-10	5.6214
F-15	4.4444
INFANTRY	4.3889
A-7	4.0000
COBRA	3.9213
M-1	3.6889
M-60	3.6889
F-14	3.5294
A-6	3.0882
SELF-PROP.	2.9902
M-2/M-3	2.9592
M-901	2.9592
S-3	2.6842
M-48	2.6016
ATT. SUBS	2.2807
TOWED ART.	2.2194
MORTERS	2.2057
GLCMS	1.9150
SH-60B	1.9035
FRIGATES	1.3654
PERSHING	1.2330
MLRS	1.2330
SH-2	1.1447
DSTROYERS	0.8210
SH-3	0.4579
RADIO RLAY	0.4387
M-113	0.4110
ART. AIRFT	0.2425
ROLES LNCH	0.0411
M-901	0.0218

CRITICALITY OF SHORTFALL
FOR FEDS
(LOG 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FED CRIDITY IMPORT.	CRITIC-ALITY	NORMALIZED FED SHORTFALL CRITICALITY
COBALT	95.4	41.8	-43.7	402.5	8.5	3418.1	[illegible]
TIN	42.0	190.6	353.9	0.0	10.0	0.0	[illegible]
NICKEL	200.0	32.2	-83.9	437.7	10.0	4377.1	[illegible]
FLUORSPAR ACID	1400.0	895.0	-34.1	399.9	9.6	3744.3	[illegible]
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1880.7	[illegible]

COMPOSITE IMPORTANCE
(LOG 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
[illegible]	1350	6.42	0.71	1.404	[illegible]
FINLAND	450.	2.14	1.50	0.667	[illegible]
MOROCCO	250	1.19	0.71	1.404	[illegible]
BOTSWANNA	[illegible]	0.71	1.19	0.841	[illegible]
SOUTH AFRICA	12500	59.52	0.71	1.404	[illegible]
ZAIRE	[illegible]	16.67	0.71	1.404	[illegible]
ZAMBIA	50	0.24	0.92	1.087	[illegible]
PHILIPPINES	400	1.90	0.92	1.087	[illegible]
AUSTRALIA	250	1.19	0.92	1.087	[illegible]
NEW CALEDONIA	1100	5.24	2.89	0.346	[illegible]
CANADA	1000	4.76	2.51	0.391	[illegible]
U.S.					
TOTAL:	21000	100.00			

COMPOSITE IMPORTANCE
(LOG 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.92	1.087	0.141
U.S.	16100	23.82	2.56	0.391	9.313
THAILAND	5900.	8.73	0.92	1.087	9.493
INDONESIA	5800.	8.58	0.92	1.087	9.322
U.	100	0.15	1.96	0.510	0.075
BOLIVIA	10300.	15.24	0.98	1.020	15.543
BRAZIL	2400.	3.55	0.86	1.162	4.125
P.C	3000.	4.44	2.47	0.405	1.796
MALAYSIA	23900.	35.36	0.92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	100.	0.33	0.71	1.404	0.[illegible]
SOUTH AFRICA	5000.	1.64	1.19	0.841	1.[illegible]
PHILIPPINES	5000	1.64	0.92	1.087	1.[illegible]
AUSTRALIA	25000.	8.21	0.92	1.087	8.[illegible]
CANADA	150000	49.26	2.87	0.348	17.[illegible]
U.S.	88000	28.91	2.56	0.391	11.311
GREECE	600	0.20	1.96	0.510	0.1[illegible]
NETHERLANDS	200	0.07	1.96	0.510	0.0[illegible]
FRG	100	0.03	1.96	0.510	[illegible]
YUGOSLAVIA	500.	0.16	1.96	0.510	[illegible]
USSR	5000	1.64	0.94	1.061	[illegible]
DOM. REPUB.	15000.	4.93	1.53	0.656	3.2[illegible]
GUATAMALA	4000.	1.31	1.53	0.656	0.8[illegible]
INDONESIA	5000	1.64	0.92	1.087	1.7[illegible]
TOTAL:	304400	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180	22.36	1.19	0.841	18.80[illegible]
U.S.	70	8.70	2.56	0.391	3.401
ITALY	65	8.07	1.96	0.510	4.1[illegible]
SPAIN	100	12.42	1.96	0.510	6.3[illegible]
EAST AFRICA	25.	3.11	0.71	1.404	4.3[illegible]
THAILAND	15.	1.86	0.92	1.087	2.025
MEXICO	350	43.48	2.56	0.391	17.011
TOTAL:	805	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	1.19	0.841	0.8[illegible]
AUSTRALIA	1500	0.76	0.92	1.087	0.825
U.	11000.	5.57	1.96	0.510	2.842
KENYA	80000	40.51	0.71	1.404	56.855
RWANDA	25000.	12.66	0.71	1.404	17.767
TANZANIA	78000	39.49	0.71	1.404	55.431
TOTAL:	197500	100.00			

SOURCE IMPORTANCE
(LOG 3)

SOURCE	% WORLD COMP IMP	RE SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	9.122	7.81	70.48	10.81
MOROCCO	1.427	7.81	11.16	1.71
BOTSWANNA	1.671	7.81	13.05	2.00
SOUTH AFRICA	0.101	7.81	4.69	0.71
ZAIRE	83.548	7.81	652.43	100.00
ZAMBIA	23.393	7.81	182.68	28.0
PHILIPPINES	0.259	7.81	2.02	0.31
AUSTRALIA	2.070	7.81	16.16	2.48
NEW CALEDONIA	1.293	7.81	10.10	1.55
CANADA	1.919	7.81	14.16	2.17
[illegible]	1.861	7.81	14.55	2.23
[illegible]				
AUSTRALIA	0.161	0.00	0.00	0.00
U.S.	9.319	0.00	0.00	0.00
THAILAND	9.483	0.00	0.00	0.00
INDONESIA	9.372	0.00	0.00	0.00
[illegible]	0.075	0.00	0.00	0.00
BOLIVIA	15.548	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
[illegible]	1.756	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
NICKEL				
FINLAND	0.461	10.00	4.11	0.71
SOUTH AFRICA	1.381	10.00	13.81	2.12
PHILIPPINES	1.785	10.00	17.85	2.74
AUSTRALIA	8.924	10.00	89.24	13.68
CANADA	17.054	10.00	170.54	26.14
U.S.	11.311	10.00	113.11	17.34
GREECE	0.101	10.00	1.01	0.15
NETHERLANDS	0.034	10.00	0.34	0.05
FRG	0.017	10.00	0.17	0.03
YUGOSLAVIA	0.084	10.00	0.84	0.13
USSR	1.742	10.00	17.42	2.67
DOM. REPUB.	3.230	10.00	32.30	4.95
GUATAMALA	0.861	10.00	8.61	1.32
INDONESIA	1.785	10.00	17.85	2.74
FLUORSPAR ACID				
SOUTH AFRICA	19.803	8.55	140.85	24.65
U.S.	3.402	8.55	29.10	4.46
ITALY	4.120	8.55	35.24	5.40
SPAIN	6.338	8.55	54.22	8.31
EAST AFRICA	4.359	8.55	37.29	5.72
THAILAND	2.025	8.55	17.32	2.65
MEXICO	17.011	8.55	145.52	22.30
PYRETHRUM				
SOUTH AFRICA	0.852	4.30	3.66	0.56
AUSTRALIA	0.825	4.30	3.55	0.54
UK	2.841	4.30	12.21	1.87
KENYA	56.855	4.30	244.29	37.44
RWANDA	17.767	4.30	76.34	11.70
TANZANIA	55.433	4.30	238.18	36.51

SOURCE DIVERSITY
RANKED BY SOURCE
(LOC 3)

	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	37.44
3	TANZANIA	PYRETHRUM	36.51
4	ZAMBIA	COBALT	28.00
5	CANADA	NICKEL	24.14
6	SOUTH AFRICA	FLUORSPAR ACID	24.65
7	MEXICO	FLUORSPAR ACID	22.[illegible]
8	U S	NICKEL	17.94
9	AUSTRALIA	NICKEL	13.49
10	RWANDA	PYRETHRUM	11.70
11	FINLAND	COBALT	10.80
12	SPAIN	FLUORSPAR ACID	8.[illegible]
13	EAST AFRICA	FLUORSPAR ACID	5.72
14	ITALY	FLUORSPAR ACID	5.4[illegible]
15	DOM. REPUB.	NICKEL	4.95
16	U S	FLUORSPAR ACID	4.4[illegible]
17	INDONESIA	NICKEL	2.74
18	PHILIPPINES	NICKEL	2.74
19	USSR	NICKEL	2.[illegible]
20	THAILAND	FLUORSPAR ACID	2.[illegible]
21	AUSTRALIA	COBALT	2.4[illegible]
22	U S	COBALT	2.[illegible]
23	CANADA	COBALT	2.17
24	SOUTH AFRICA	NICKEL	2.12
25	BOTSWANNA	COBALT	2.00
26	UK	PYRETHRUM	1.[illegible]
27	MOROCCO	COBALT	1.71
28	NEW CALEDONIA	COBALT	1.[illegible]
29	GUATAMALA	NICKEL	1.32
30	SOUTH AFRICA	COBALT	0.72
31	FINLAND	NICKEL	0.71
32	SOUTH AFRICA	PYRETHRUM	0.54
33	AUSTRALIA	PYRETHRUM	0.54
34	PHILIPPINES	COBALT	0.31
35	GREECE	NICKEL	0.15
36	YUGOSLAVIA	NICKEL	0.13
37	NETHERLANDS	NICKEL	0.05
38	FRG	NICKEL	0.03
39	MALAYSIA	TIN	0.00
40	PRC	TIN	0.00
41	BRAZIL	TIN	0.00
42	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
44	INDONESIA	TIN	0.00
45	THAILAND	TIN	0.00
46	U S	TIN	0.00
47	AUSTRALIA	TIN	0.00

SCENARIO 45

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	10.0	2.0	5.0	2.0	[illegible]
I/COEF	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0313	[illegible]

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	8.0	7.0	5.0
Weight	9.0									
I/COEF	0.1190	0.1190	0.1071	0.0476	0.0833	0.0595	0.1190	0.0952	0.0833	0.0595
I/COEF	0.1071									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	10.0	6.0	4.0	10.0
I/COEF	0.1667	0.1667	0.1667	0.1667	0.1000	0.0667	0.1667

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
or the Importance of Controlling EACH region within its own Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0200	0.0200	0.0140	0.0100	0.0140	0.0200	0.0040	0.0100	0.0040	[illegible]

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0152	0.0151	0.0137	0.0061	0.0107	0.0076	0.0151	0.0122	0.0107	[illegible]
I/COEF	0.0137									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0213	0.0213	0.0213	0.0213	0.0128	0.0085	0.0213

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0150	0.0075

Importance of controlling ANY Region
within its Media as compared to the Importance
of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0087	0.0087	0.0061	0.0043	0.0061	0.0087	0.0017	0.0043	0.0017	0.0051

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0033	0.0033	0.0030	0.0013	0.0023	0.0017	0.0033	0.0026	0.0023	0.0017
I/COEF	0.0030									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0056	0.0056	0.0056	0.0056	0.0033	0.0022	0.0056

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOC 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.139	10.000
2	1	AIR INTERDICTION	0.110	7.8[illegible]
3	3	ARMY GROUND	0.095	6.845
4	16	ATTACK SUBS	0.073	5.2[illegible]
5	19	SURFACE COMBATANTS	0.060	4.292
6	8	RAPID DEPLOY	0.058	4.141
7	12	THEATER NUCLEAR WEAPON	0.054	3.8[illegible]
8	14	ASW(LAND BASED)	0.043	3.09[illegible]
9	6	CAS	0.040	2.902
10	22	AIR SUPERIORITY(LAND BASED)	0.03[illegible]	2.7[illegible]
11	15	ASW(SEA BASED)	0.032	2.312
12	23	AIR SUPERIORITY(SHIP BASED)	0.030	2.1[illegible]
13	21	AIR DEFENSE(SHIP BASED)	0.027	1.954
14	10	STRATEGIC BOMBER	0.025	1.765
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.019	1.364
16	13	SPECIAL OPERATIONS	0.015	1.050
17	29	ASAT(SPACE BASED)	0.013	0.935
18	18	MINE WARFARE	0.013	0.924
19	2	AMPHIBIOUS ASSAULT	0.010	0.713
20	28	ASAT(LAND BASED)	0.007	0.516
21	20	AIR DEFENSE(LAND BASED)	0.004	0.264
22	9	SPCE-BASED WEAPON(LNI CNTRL)	0.003	0.202
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.002	0.118
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.44
ARMY GROUND	4.19
CAS	1.[illegible]
ICBM	0.00
STRATEGIC BOMBER	1.78
SLBM	0.00
ASW(SEA BASED)	1.[illegible]
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.16
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.53
	33.[illegible]

TIN

AIR INTERDICTION	5.62
ARMY GROUND	1.78
CAS	1.77
STRATEGIC BOMBER	1.76
ASW(LAND BASED)	3.09
ASW(SEA BASED)	1.11
ATTACK SUBS	5.23
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.92
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.16
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	40.47

NICKEL

AIR INTERDICTION	5.33
ARMY GROUND	4.56
CAS	1.60
STRATEGIC BOMBER	1.76
ASW(SEA BASED)	1.71
ATTACK SUBS	5.23
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.92
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.16
INTERCEPTOR AIRCRAFT	0.00
	40.30

FLUORSPAR ACID

AIR INTERDICTION	4.74
AMPHIBIOUS ASSAULT	0.71
ARMY GROUND	3.42
CAS	1.90
ICBM	0.00
STRATEGIC BOMBER	1.76
SLBM	0.00
ASW(LAND BASED)	3.09
ASW(SEA BASED)	1.[illegible]
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.16
INTERCEPTOR AIRCRAFT	0.00
ASM(LAND BASED)	0.00
	38.50

PYRETHRUM

ARMY GROUND	2.49
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.14
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.29
	16.92

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00	(40.47)
NICKEL	9.96	(40.30)
FLUORSPAR ACID	9.51	(38.50)
COBALT	8.40	(33.99)
PYRETHRUM	4.18	(16.92)

COBALT			
A-10	CAS	67	4.28
COBRA	CAS	44	9352
F-4	AIR INTERDICTION	98	5102
	CAS	[illegible]	[illegible]
F-16	AIR INTERDICTION	69	4168
	CAS	37	4460
AFT ACRFT	CAS	3	3701
RADIO RLAY	AIR INTERDICTION	3	0799
	CAS	1	5176
F-111	AIR INTERDICTION	123	1503
A-6	AIR INTERDICTION	36	9451
F-15	AIR INTERDICTION	54	7395
A-7	AIR INTERDICTION	47	2601
F-14	AIR INTERDICTION	41	0501
F-18	AIR INTERDICTION	69	4169
SH-3	ASW(SEA BASED)	6	0683
SH-2	ASW(SEA BASED)	15	1768
SH-60B	ASW(SEA BASED)	13	5940
S-3	ASW(SEA BASED)	34	6761
ATT. SUBS	ASW(SEA BASED)	14	09[illegible]
FRIGATES	ASW(SEA BASED)	14	4454
DSTROYERS	ASW(SEA BASED)	8	6690
M-48	ARMY GROUND	35	2006
M-60	ARMY GROUND	56	5724
M-1	ARMY GROUND	62	8562
M-551	ARMY GROUND	0	2097
M-901	ARMY GROUND	50	2934
M-2/M-3	ARMY GROUND	44	0073
M-113	ARMY GROUND	4	8890
MLRS	ARMY GROUND	18	8575
TOWED ART.	ARMY GROUND	25	1433
SELF-PROP.	ARMY GROUND	33	5244
PERSHING	ARMY GROUND	16	7622
GLCMS	ARMY GROUND	27	9370
INFANTRY	ARMY GROUND	6	9842
MORTERS	ARMY GROUND	34	2243
ROLES LNCH	ARMY GROUND	1	4667

NORMALIZED VALUES

F-111	10.0000
F-16	8.5962
F-4	8.5473
F-18	5.5576
A-10	5.4732
M-1	5.1042
M-60	4.5938
F-15	4.4414
M-901	4.0834
A-7	4.0000
COBRA	3.6488
M-2/M-3	3.5729
F-14	3.3333
A-6	3.0000
M-48	2.8583
S-3	2.8108
MORTERS	2.7799
SELF-PROP.	2.7222
GLCMS	2.2485
TOWED ART.	2.0417
ATT. SUBS	1.9554
SH-60B	1.9148
MLRS	1.5318
PERSHING	1.3611
SH-2	1.2319
FRIGATES	1.1732
DSTROYERS	0.7039
INFANTRY	0.5671
SH-3	0.4938
RADIO RLAY	0.4556
M-113	0.3970
ART. ACRFT	0.[illegible]
ROLES LNCH	0.1171
M-551	0.0[illegible]

TIN			
A-10	CAS		67 4035
COBRA	CAS		57 9136
F-4	AIR INTERDICTION		99 5031
	CAS		6 7403
F-16	AIR INTERDICTION		68 4168
	CAS		32 4440
APT. ACRFT	CAS		3 3701
RADIO RLAY	AIR INTERDICTION		3 0798
	CAS		2 5276
F-111	AIR INTERDICTION		103 1503
A-6	AIR INTERDICTION		41 5432
F-15	AIR INTERDICTION		54 7325
A-7	AIR INTERDICTION		49 2601
F-14	AIR INTERDICTION		43 1914
F-18	AIR INTERDICTION		76 9689
SH-3	ASW(SEA BASED)		5 2014
SH-2	ASW(SEA BASED)		13 0031
SH-60B	ASW(SEA BASED)		20 2277
S-3	ASW(SEA BASED)		34 6761
ATT. SUBS	ASW(SEA BASED)		14 4454
FRIGATES	ASW(SEA BASED)		14 4454
DSTROYERS	ASW(SEA BASED)		8 6690
M-48	ARMY GROUND		3 9112
M-60	ARMY GROUND		6 2858
M-1	ARMY GROUND		34 9112
M-551	ARMY GROUND		0 0698
M-901	ARMY GROUND		6 2858
M-2/M-3	ARMY GROUND		6 2858
M-113	ARMY GROUND		0 6984
MLRS	ARMY GROUND		9 4237
TOWED ART.	ARMY GROUND		4 1905
SELF-PROP	ARMY GROUND		5 5874
PERSHING	ARMY GROUND		14 6669
GLCMS	ARMY GROUND		24 4449
INFANTRY	ARMY GROUND		55 8740
MORTERS	ARMY GROUND		4 8390
ROLES LNCH	ARMY GROUND		0 2095

NORMALIZED VALUES

F-111	10.0000
F-16	8.5962
F-4	8.5473
F-18	6.2500
A-10	5.4722
COBRA	4.8601
INFANTRY	4.5371
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
M-1	2.8257
S-3	2.8158
GLCMS	1.9890
SH-60B	1.4425
PERSHING	1.1910
FRIGATES	1.1782
ATT. SUBS	1.1782
SH-2	1.0556
MLRS	0.7646
DSTROYERS	0.7089
M-2/M-3	0.5104
M-901	0.5104
M-60	0.5104
RADIO RLAY	0.4552
SELF-PROP.	0.4587
SH-3	0.4274
MORTERS	0.3970
TOWED ART.	0.3403
M-48	0.3176
APT. ACRFT	0.2787
M-113	0.0542
ROLES LNCH	0.0170
[illegible]	0.0017

NICKEL

A-10	CAS	67	4018
COBRA	CAS	44	9311
F-4	AIR INTERDICTION	[illegible]	[illegible]
	CAS	5	051[illegible]
F-16	AIR INTERDICTION	68	4163
	CAS	37	444[illegible]
ART. ACRFT	CAS	1	2411
RADIO RLAY	AIR INTERDICTION	3	0781
	CAS	2	5276
F-111	AIR INTERDICTION	123	1503
A-6	AIR INTERDICTION	36	9451
F-15	AIR INTERDICTION	54	7335
A-7	AIR INTERDICTION	49	2601
F-14	AIR INTERDICTION	46	1814
F-18	AIR INTERDICTION	76	9685
SH-3	ASW(SEA BASED)	6	[illegible]
SH-2	ASW(SEA BASED)	17	3391
SH-60B	ASW(SEA BASED)	26	970[illegible]
S-3	ASW(SEA BASED)	34	4741
ATT. SUBS	ASW(SEA BASED)	43	3471
FRIGATES	ASW(SEA BASED)	14	0071
DSTROYERS	ASW(SEA BASED)	15	6043
M-48	ARMY GROUND	39	1119
M-60	ARMY GROUND	61	85[illegible]
M-1	ARMY GROUND	69	8425
M-551	ARMY GROUND	0	6884
M-901	ARMY GROUND	44	0009
M-2/M-3	ARMY GROUND	50	2866
M-113	ARMY GROUND	4	8590
MLRS	ARMY GROUND	18	8570
TOWED ART.	ARMY GROUND	33	5144
SELF-PROP.	ARMY GROUND	44	6992
PERSHING	ARMY GROUND	16	7621
GLCMS	ARMY GROUND	20	9527
INFANTRY	ARMY GROUND	34	9212
MORTERS	ARMY GROUND	14	6669
ROLES LNCH	ARMY GROUND	0	2095

NORMALIZED VALUES	
F-111	10.0000
F-16	8.0962
F-4	6.4105
F-18	6.2500
M-1	5.6713
A-10	5.4732
M-60	5.1042
F-15	4.4444
M-2/M-3	4.0834
A-7	4.0000
F-14	3.7500
COBRA	3.6428
SELF-PROP.	3.6296
M-901	3.5729
ATT. SUBS	3.5197
M-48	3.1759
A-6	3.0000
INFANTRY	2.8357
S-3	2.8158
TOWED ART.	2.7272
SH-60B	2.1900
FRIGATES	2.1118
GLCMS	1.7014
MLRS	1.5818
SH-2	1.4079
PERSHING	1.3611
DSTROYERS	1.2671
MORTERS	1.1910
SH-3	0.5635
RADIO RLAY	0.4[illegible]
M-113	0.3970
ART. ACRFT	0.1[illegible]
M-551	0.0[illegible]
ROLES LNCH	0.0170

	ACID		
A-10	CAS		84 [illegible]
COBRA	CAS		44 [illegible]
F-4	AIR INTERDICTION		123 1503
	CAS		8 4274
F-16	AIR INTERDICTION		30 [illegible]
	CAS		41 [illegible]
ART ACRFT	CAS		3 3701
RADIO RLAY	AIR INTERDICTION		3 0713
	CAS		2 5276
F-111	AIR INTERDICTION		153 [illegible]
A-6	AIR INTERDICTION		46 1914
F-15	AIR INTERDICTION		68 4168
A-7	AIR INTERDICTION		61 5751
F-14	AIR INTERDICTION		51 3126
F-18	AIR INTERDICTION		85 5210
SH-3	ASW(SEA BASED)		6 [illegible]
SH-2	ASW(SEA BASED)		17 3381
SH-60B	ASW(SEA BASED)		32 7129
S-3	ASW(SEA BASED)		43 3452
ATT. SUBS	ASW(SEA BASED)		28 [illegible]
FRIGATES	ASW(SEA BASED)		20 2277
DSTROYERS	ASW(SEA BASED)		12 1367
M-48	ARMY GROUND		11 7335
M-60	ARMY GROUND		18 8575
M-1	ARMY GROUND		20 9527
M-551	ARMY GROUND		0 2095
M-901	ARMY GROUND		50 2866
M-2/M-3	ARMY GROUND		50 2866
M-113	ARMY GROUND		5 5874
MLRS	ARMY GROUND		15 7146
TOWED ART	ARMY GROUND		20 9527
SELF-PROP.	ARMY GROUND		27 9370
PERSHING	ARMY GROUND		14 6669
GLCMS	ARMY GROUND		24 4449
INFANTRY	ARMY GROUND		55 8740
MORTERS	ARMY GROUND		24 4449
ROLES LNCH	ARMY GROUND		0 2095

NORMALIZED VALUES

F-111	10 0000
F-16	8 5962
F-4	8 5473
F-18	5 5514
A-10	5 4732
F-15	4 4444
A-7	4 0000
INFANTRY	3 6296
F-14	3 3333
M-2/M-3	3 2667
M-901	3 2667
A-6	3 0000
COBRA	2 9191
S-3	2 8158
SH-60B	2 1900
ATT. SUBS	1 8772
SELF-PROP.	1 8148
MORTERS	1 7880
GLCMS	1 5880
TOWED ART.	1 3611
M-1	1 3611
FRIGATES	1 3140
M-60	1 2250
SH-2	1 1248
MLRS	1 0208
PERSHING	0 9528
DSTROYERS	0 7884
M-48	0 7620
SH-3	0 4505
RADIO RLAY	0 3642
M-113	0 2480
ART. ACRFT	0 [illegible]
ROLES LNCH	0 [illegible]
M-551	0 [illegible]

PYRETHRUM

ATT SUBS	ASW(SEA BASED)	[illegible]
M-48	ARMY GROUND	[illegible]
M-60	ARMY GROUND	44 [illegible]
M-113	ARMY GROUND	4 [illegible]
TOWED ART	ARMY GROUND	[illegible]
SELF-PROP.	ARMY GROUND	[illegible]
INFANTRY	ARMY GROUND	[illegible]
MORTERS	ARMY GROUND	54 [illegible]

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-48	3.9200
ATT SUBS	2.0657
M-113	0.7000

ALL COMPATIBLE			
A-10	CAS		8.8426
COBRA	CAS		1.9672
F-4	CAS		0.9428
F-16	AIR INTERDICTION		0.1632
	CAS		2.9077
	CAS		1.5415
AFT ACRFT	CAS		0.1236
RADIO RLAY	AIR INTERDICTION		0.1232
	CAS		0.1011
F-111	AIR INTERDICTION		5.2329
A-6	AIR INTERDICTION		1.6168
F-15	AIR INTERDICTION		2.8372
A-7	AIR INTERDICTION		2.0330
F-14	AIR INTERDICTION		1.8473
F-18	AIR INTERDICTION		3.0789
SH-3	ASW(SEA BASED)		0.2512
SH-2	ASW(SEA BASED)		0.6125
SH-60B	ASW(SEA BASED)		1.0453
S-3	ASW(SEA BASED)		1.4711
ATT SUBS	ASW(SEA BASED)		1.2571
FRIGATES	ASW(SEA BASED)		0.7513
DESTROYERS	ASW(SEA BASED)		0.4525
M-48	ARMY GROUND		1.1734
M-60	ARMY GROUND		1.8571
M-1	ARMY GROUND		1.8807
M-551	ARMY GROUND		0.0445
M-901	ARMY GROUND		1.5088
M-2/M-3	ARMY GROUND		0.7125
M-113	ARMY GROUND		0.6236
MLRS	ARMY GROUND		1.1114
TOWED ART.	ARMY GROUND		1.5088
SELF-PROP.	ARMY GROUND		0.6236
PERSHING	ARMY GROUND		0.2778
GLCMS	ARMY GROUND		2.2350
INFANTRY	ARMY GROUND		1.1245
MORTERS	ARMY GROUND		0.0210
FULSE LNCH	ARMY GROUND		

NORMALIZED VALUES

F-111	10.0000
F-16	8.5962
F-4	8.0445
F-18	5.8874
A-10	5.4732
F-15	4.4444
INFANTRY	4.2702
A-7	4.0000
COBRA	3.7204
M-1	3.6030
M-60	3.6030
F-14	3.5294
A-6	3.0882
M-2/M-3	2.8824
M-901	2.8824
SELF-PROP.	2.8824
S-3	2.8158
ATT. SUBS	2.3925
M-48	2.2418
TOWED ART.	2.1618
MORTERS	2.1484
SH-60B	1.9948
GLCMS	1.8682
FRIGATES	1.4355
PERSHING	1.2010
MLRS	1.2010
SH-2	1.2008
DESTROYERS	0.8413
SH-3	0.4803
RADIO RLAY	0.42[illegible]
M-113	0.4003
ART ACRFT	0.2341
FULES LNCH	0.1400
M-551	0.0[illegible]

CRITICALITY OF SHORTFALL
ALL FEDS
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANSLATED	FEDS CRITICITY IMPORT	CRITICALITY	[illegible]
COBALT	[illegible]	4[illegible] 6	-4[illegible] 7	4[illegible] 5	[illegible] 4	3372 9	[illegible]
TIN	4[illegible] 0	190 6	353 8	0 0	10 0	0 0	[illegible]
NICKEL	200 0	32 2	-83 9	477 7	10 0	4358 1	1[illegible] 0
BORAX	1400 0	995 0	-3[illegible] 1	399 9	9 5	3709 3	[illegible] 5
PYRETHRUM	500 0	0 0	-100 0	453 8	4 2	1897 6	4 2

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
BELGIUM	1350	6 43	1 76	0 569	[illegible]
FINLAND	450.	2 14	2.05	0 487	1 [illegible]
MOROCCO	250.	1 19	1 76	0 569	0 678
BOTSWANNA	150	0 71	2 31	0 432	0 [illegible]
SOUTH AFRICA	12500	59 52	1 76	0 569	33 [illegible]
ZAIRE	3500	16 67	1 76	0 569	[illegible]
ZAMBIA	50	0 24	0 82	1 216	[illegible]
PHILIPPINES	400	1 90	0 82	1 216	2 [illegible]
AUSTRALIA	250	1 19	0 82	1 216	1 [illegible]
NEW CALEDONIA	1100	5 24	2 61	0 383	[illegible]
CANADA	[illegible]	4 76	2 31	0 432	[illegible]
USS	---	---			
TOTAL	21000	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100	0. 15	0 82	1. 216	[illegible]
USS	16100	23. 82	2. 31	0. 432	10. [illegible]
THAILAND	5900.	8. 73	0 82	1. 216	10. 611
INDONESIA	5800.	8. 58	0. 82	1. 216	10. 431
[illegible]	100.	0. 15	1. 76	0. 569	0. 084
BOLIVIA	10300.	15. 24	0. 90	1. 117	17. 014
BRAZIL	2400.	3. 55	0. 90	1. 117	3. 964
[illegible]	3000.	4. 44	2. 33	0. 429	1. 9[illegible]
MALAYSIA	23900.	35. 36	0. 82	1. 216	42. [illegible]
TOTAL:	67600.	100. 00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%
FINLAND	1000	0.33	1.76	0.569	[illegible]
SOUTH AFRICA	5000.	1.64	2.31	0.432	[illegible]
PHILIPPINES	5000.	1.64	0.82	1.216	[illegible]
AUSTRALIA	25000.	8.21	0.82	1.216	[illegible]
CANADA	150000.	49.28	2.61	0.383	[illegible]
U.S.	88000.	28.91	2.31	0.432	[illegible]
GREECE	600.	0.20	1.76	0.569	[illegible]
NETHERLANDS	200.	0.07	1.76	0.569	[illegible]
F.G.	100.	0.03	1.76	0.569	[illegible]
YUGOSLAVIA	500.	0.16	1.76	0.569	[illegible]
USSR	5000.	1.64	0.86	1.160	[illegible]
IRAN REPUB	15000	4.93	1.38	0.727	[illegible]
GUATAMALA	4000.	1.31	1.38	0.727	[illegible]
INDONESIA	5000.	1.64	0.82	1.216	[illegible]
TOTAL:	304400	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180	22.36	2.31	0.432	[illegible]
U.S.	70.	8.70	2.31	0.432	3.760
ITALY	65.	8.07	1.76	0.569	4.597
SPAIN	100.	12.42	1.76	0.569	7.073
EAST AFRICA	25.	3.11	1.76	0.569	1.768
THAILAND	15.	1.86	0.82	1.216	2.265
MEXICO	350	43.48	2.31	0.432	18.801
TOTAL:	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	2.31	0.432	0.435
AUSTRALIA	1500.	0.76	0.82	1.216	0.923
U.S.	11000.	5.57	1.76	0.569	3.171
KENYA	80000.	40.51	1.76	0.569	23.063
RWANDA	25000.	12.66	1.76	0.569	7.207
TANZANIA	78000.	39.49	1.76	0.569	22.487
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	%(1/CI) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	3.640	7.76	28.27	10.81
MOROCCO	1.042	7.76	8.09	3.0[illegible]
BOTSWANNA	0.679	7.76	5.26	2.00
SOUTH AFRICA	0.3[illegible]	7.76	2.40	0.91
ZAIRE	33.892	7.76	262.85	100.00
ZAMBIA	9.49[illegible]	7.76	73.61	28.00
PHILIPPINES	0.289	7.76	2.24	0.85
AUSTRALIA	2.316	7.76	17.96	6.81
NEW CALEDONIA	1.447	7.76	11.22	4.27
CANADA	2.007	7.76	15.58	5.[illegible]
U S	2.05[illegible]	7.76	15.[illegible]	6.0[illegible]
TIN				
AUSTRALIA	0.193	0.00	0.00	0.0[illegible]
U S	10.297	0.00	0.00	0.0[illegible]
THAILAND	10.611	0.00	0.00	0.00
INDONESIA	10.431	0.00	0.00	0.0[illegible]
UK	0.094	0.00	0.00	0.00
BOLIVIA	17.014	0.00	0.00	0.0[illegible]
BRAZIL	3.944	0.00	0.00	0.00
PRC	1.[illegible]15	0.00	0.0[illegible]	0.[illegible]
MALAYSIA	42.983	0.00	0.00	0.00
NICKEL				
FINLAND	0.197	10.00	1.97	0.71
SOUTH AFRICA	0.710	10.00	7.10	2.7[illegible]
PHILIPPINES	1.997	10.00	19.97	7.60
AUSTRALIA	9.935	10.00	99.35	37.[illegible]
CANADA	18.877	10.00	188.77	71.82
U S	12.501	10.00	125.01	47.5[illegible]
GREECE	0.112	10.00	1.12	0.43
NETHERLANDS	0.037	10.00	0.37	0.14
PRC	0.019	10.00	0.19	0.07
YUGOSLAVIA	0.094	10.00	0.94	0.36
USSR	1.905	10.00	19.05	7.25
DOM. REPUB	3.582	10.00	35.82	13.63
GUATAMALA	0.955	10.00	9.55	3.63
INDONESIA	1.997	10.00	19.97	7.60
FLUORSPAR ACID				
SOUTH AFRICA	9.669	8.51	82.28	31.30
U S	3.760	8.51	32.00	12.17
ITALY	4.597	8.51	39.12	14.88
SPAIN	7.073	8.51	60.19	22.90
EAST AFRICA	1.768	8.51	15.05	5.72
THAILAND	2.265	8.51	19.28	7.33
MEXICO	18.801	8.51	159.98	60.87
PYRETHRUM				
SOUTH AFRICA	0.439	4.35	1.91	0.73
AUSTRALIA	0.923	4.35	4.02	1.53
UK	3.171	4.35	13.81	5.25
KENYA	23.063	4.35	100.42	38.21
RWANDA	7.207	4.35	31.39	11.94
TANZANIA	22.437	4.35	97.91	37.25

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	CANADA	NICKEL	71.92
3	MEXICO	FLUORSPAR ACID	60.87
4	U S	NICKEL	47.58
5	KENYA	PYRETHRUM	38.21
6	AUSTRALIA	NICKEL	37.94
7	TANZANIA	PYRETHRUM	37.25
8	SOUTH AFRICA	FLUORSPAR ACID	31.33
9	ZAMBIA	COBALT	23.00
10	SPAIN	FLUORSPAR ACID	22.90
11	ITALY	FLUORSPAR ACID	14.85
12	DOM REPUB	NICKEL	13.6
13	U S	FLUORSPAR ACID	12.17
14	RWANDA	PYRETHRUM	11.94
15	FINLAND	COBALT	10.90
16	INDONESIA	NICKEL	7.90
17	PHILIPPINES	NICKEL	7.60
18	THAILAND	FLUORSPAR ACID	7.33
19	USSR	NICKEL	7.25
20	AUSTRALIA	COBALT	6.83
21	U S	COBALT	6.05
22	CANADA	COBALT	5.11
23	EAST AFRICA	FLUORSPAR ACID	5.72
24	UK	PYRETHRUM	5.15
25	NEW CALEDONIA	COBALT	4.27
26	GUATAMALA	NICKEL	3.43
27	MOROCCO	COBALT	3.06
28	SOUTH AFRICA	NICKEL	2.70
29	BOTSWANNA	COBALT	2.00
30	AUSTRALIA	PYRETHRUM	1.93
31	SOUTH AFRICA	COBALT	0.91
32	PHILIPPINES	COBALT	0.85
33	SOUTH AFRICA	PYRETHRUM	0.73
34	FINLAND	NICKEL	0.71
35	GREECE	NICKEL	0.43
36	YUGOSLAVIA	NICKEL	0.36
37	NETHERLANDS	NICKEL	0.14
38	FRG	NICKEL	0.07
39	MALAYSIA	TIN	0.00
40	PRC	TIN	0.00
41	BRAZIL	TIN	0.00
42	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
44	INDONESIA	TIN	0.00
45	THAILAND	TIN	0.00
46	U S	TIN	0.00
47	AUSTRALIA	TIN	0.00

SCENARIO 46

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	2.0	2.0	5.0	2.0	6.0
I/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	0.1071

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
Weight	9.0									
I/COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0933	[illegible]
I/COEF	0.1200									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
I/COEF	0.1786	0.1786	0.1786	0.1429	0.1071	[illegible]	0.1429

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
on the Importance of Controlling EACH region within its own Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0223	0.0223	0.0160	0.0114	0.0160	0.0046	0.0041	0.0114	0.0041	0.0137

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0171	0.0171	0.0154	0.0068	0.0119	0.0085	0.0017	0.0136	0.0119	0.0085
I/COEF	0.0154									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0228	0.0228	0.0228	0.0183	0.0137	0.0091	0.0183

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0150	0.0075

Importance of controlling ANY Region
within its Media as compared to the Importance
of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0060

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
I/COEF	0.0033									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOC 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.141	10.000
2	1	AIR INTERDICTION	0.117	8.266
3	3	[illegible] GROUND	0.104	7.381
4	16	ATTACK SUBS	0.072	5.131
5	19	SURFACE COMBATANTS	0.060	4.245
6	12	THEATER NUCLEAR WEAPONS	0.054	3.812
7	8	RAPID DEPLOY	0.052	3.703
8	6	CAS	0.044	3.1[illegible]
9	14	ASW(LAND BASED)	0.042	3.0[illegible]
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.910
11	15	ASW(SEA BASED)	0.033	2.315
12	23	AIR SUPERIORITY(SHIP BASED)	0.032	2.279
13	21	AIR DEFENSE(SHIP BASED)	0.02[illegible]	1.1[illegible]
14	10	STRATEGIC BOMBER	0.025	1.79[illegible]
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.020	1.414
16	28	ASAT(SPACE BASED)	0.013	0.924
17	18	MINE WARFARE	0.013	0.891
18	2	AMPHIBIOUS ASSAULT	0.011	0.757
19	13	SPECIAL OPERATIONS	0.010	0.725
20	29	ASAT(LAND BASED)	0.007	0.510
21	20	AIR DEFENSE(LAND BASED)	0.004	0.278
22	9	SPCE-BASED WEAPON(LND CNTRL)	0.003	0.212
23	30	SPCE BASED WEAPON SEA CNTRL)	0.002	0.118
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOI 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.50
CAS	1.71
ICBM	0.00
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(SEA BASED)	1.29
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.51
	34.93

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.91
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	2.06
ASW(SEA BASED)	1.11
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.99
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.18

NICKEL

AIR INTERDICTION	5.60
ARMY GROUND	4.92
CAS	1.72
STRATEGIC BOMBER	1.79
ASW(SEA BASED)	1.71
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
	41.21

FLUORSPAR ACID

AIR INTERDICTION	7.13
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	3.68
CAS	2.05
ICBM	0.[illegible]
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(LAND BASED)	2.03
ASW(SEA BASED)	1.63
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	35.57

PYRETHRUM

ARMY GROUND	2.68
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.14
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
	17.08

COMMODITY NORMALIZED IMPORTANCE

NICKEL	10.00	(41.21)
TIN	9.99	(41.18)
FLUORSPAR ACID	9.60	(39.57)
COBALT	8.49	(34.99)
PYRETHRUM	4.14	(17.08)

COBALT		
A-10	CAS	71.7333
COBRA	CAS	49.4[illegible]
F-4	AIR INTERDICTION	100.5050
	CAS	7.2714
F-16	AIR INTERDICTION	71.8735
	CAS	41.4[illegible]
ART. ACRFT	CAS	9.6367
RADIO RLAY	AIR INTERDICTION	9.2345
	CAS	1.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	33.8144
F-15	AIR INTERDICTION	57.5013
A-7	AIR INTERDICTION	51.7535
F-14	AIR INTERDICTION	43.1271
F-18	AIR INTERDICTION	71.8735
SH-3	ASW(SEA BASED)	6.0775
SH-2	ASW(SEA BASED)	15.1937
SH-60B	ASW(SEA BASED)	23.6346
S-3	ASW(SEA BASED)	34.7284
ATT. SUBS	ASW(SEA BASED)	24.1169
FRIGATES	ASW(SEA BASED)	14.4701
DETROYERS	ASW(SEA BASED)	8.6921
M-48	ARMY GROUND	37.9669
M-60	ARMY GROUND	61.0132
M-1	ARMY GROUND	67.7980
M-551	ARMY GROUND	0.2260
M-901	ARMY GROUND	54.2334
M-2/M-3	ARMY GROUND	47.4536
M-113	ARMY GROUND	5.2732
MLRS	ARMY GROUND	20.3394
TOWED ART.	ARMY GROUND	27.1192
SELF-PROP.	ARMY GROUND	36.1599
PERSHING	ARMY GROUND	18.0795
GLCMS	ARMY GROUND	30.1324
INFANTRY	ARMY GROUND	7.5331
MORTERS	ARMY GROUND	36.9122
ROLES LNCH	ARMY GROUND	1.5820

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5556
M-1	5.2407
M-60	4.7162
F-15	4.4444
M-901	4.1921
A-7	4.0000
COBRA	3.7478
M-2/M-3	3.6481
F-14	3.3333
A-6	3.0000
M-48	2.9345
MORTERS	2.8530
SELF-PROP.	2.7948
S-3	2.6842
GLCMS	2.3290
TOWED ART.	2.0961
ATT. SUBS	1.8640
SH-60B	1.8267
MLRS	1.5721
PERSHING	1.3974
SH-2	1.1743
FRIGATES	1.1184
DETROYERS	0.6710
INFANTRY	0.5822
SH-3	0.4697
RADIO RLAY	0.4608
M-113	0.4076
ART. ACRFT	0.2811
ROLES LNCH	0.1223
M-551	0.0175

TIN		
A-10	CAS	72.7336
COBRA	CAS	64.6521
F-4	AIR INTERDICTION	103.5050
	CAS	7.2734
F-16	AIR INTERDICTION	71.8785
	CAS	40.4079
ART ACRFT	CAS	3.6317
RADIO RLAY	AIR INTERDICTION	[illegible]
	CAS	2.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	43.6[illegible]
F-15	AIR INTERDICTION	5[illegible].5[illegible]
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	43.5180
F-18	AIR INTERDICTION	[illegible]
SH-3	ASW(SEA BASED)	5.2093
SH-2	ASW(SEA BASED)	13.0271
SH-60B	ASW(SEA BASED)	[illegible]
S-3	ASW(SEA BASED)	[illegible].7254
ATT SUBS	ASW(SEA BASED)	14.4711
FRIGATES	ASW(SEA BASED)	14.4701
DSTROYERS	ASW(SEA BASED)	6.6821
M-48	ARMY GROUND	4.2185
M-60	ARMY GROUND	6.7749
M-1	ARMY GROUND	[illegible].6455
M-551	ARMY GROUND	0.0753
M-901	ARMY GROUND	6.7798
M-2/M-3	ARMY GROUND	6.7[illegible]
M-113	ARMY GROUND	0.7533
MLRS	ARMY GROUND	10.16[illegible]
TOWED ART	ARMY GROUND	4.5199
SELF-PROP	ARMY GROUND	6.0125
PERSHING	ARMY GROUND	15.8195
GLCMS	ARMY GROUND	26.3[illegible]
INFANTRY	ARMY GROUND	60.2649
MORTERS	ARMY GROUND	5.2732
POLES LNCH	ARMY GROUND	0.2230

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
F-18	6.2500
A-10	5.6216
COBRA	4.9970
INFANTRY	4.6579
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
M-1	2.9112
S-3	2.4842
GLCMS	2.0378
SH-60B	1.5658
PERSHING	1.2227
FRIGATES	1.1184
ATT. SUBS	1.1184
SH-2	1.0046
MLRS	0.7840
DSTROYERS	0.6710
M-2/M-3	0.5240
M-901	0.5240
M-60	0.5[illegible]
SELF-PROP.	0.4458
RADIO RLAY	0.4608
MORTERS	0.4076
SH-3	0.4076
TOWED ART	0.3493
M-48	0.3141
ART ACRFT	0.2911
M-113	0.[illegible]
POLES LNCH	0.0175
M-551	0.0[illegible]

MODEL			
A-10	CAS		72.1382
COBRA	CAS		48.4311
F-4	AIR INTERDICTION		77.6233
	CAS		5.4500
F-16	AIR INTERDICTION		71.6782
	CAS		40.4075
ATT. SUBS	CAS		12.4258
RADIO RLAY	AIR INTERDICTION		3.1157
	CAS		2.7175
F-111	AIR INTERDICTION		100.3815
A-6	AIR INTERDICTION		33.3144
F-15	AIR INTERDICTION		57.5128
A-7	AIR INTERDICTION		51.7214
F-14	AIR INTERDICTION		48.5180
F-18	AIR INTERDICTION		8.8333
SH-3	ASW(SEA BASED)		6.4593
SH-2	ASW(SEA BASED)		17.3643
SH-60B	ASW(SEA BASED)		3.0170
S-3	ASW(SEA BASED)		34.7284
ATT. SUBS	ASW(SEA BASED)		43.4104
FRIGATES	ASW(SEA BASED)		36.0463
DESTROYERS	ASW(SEA BASED)		15.6273
M-48	ARMY GROUND		42.1854
M-60	ARMY GROUND		67.7980
M-1	ARMY GROUND		75.8311
M-551	ARMY GROUND		0.7513
M-109	ARMY GROUND		47.4536
M-2/M-3	ARMY GROUND		54.2384
M-113	ARMY GROUND		5.7333
MLRS	ARMY GROUND		0.3333
TOWED ART	ARMY GROUND		66.1589
SELF-PROP	ARMY GROUND		48.2119
PERSHING	ARMY GROUND		18.0795
GLCMS	ARMY GROUND		11.5333
INFANTRY	ARMY GROUND		57.6655
MORTERS	ARMY GROUND		15.8195
POLES LNCH	ARMY GROUND		0.2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	6.4216
F-18	6.2500
M-1	5.8224
A-10	5.6216
M-60	5.2402
F-15	4.4444
M-2/M-3	4.1921
A-7	4.0000
F-14	3.7500
COBRA	3.7478
SELF-PROP.	3.7263
M-901	3.6681
ATT. SUBS	3.3552
M-48	3.2605
A-6	3.0000
INFANTRY	2.9112
TOWED ART.	2.7948
S-3	2.6842
SH-60B	2.0877
FRIGATES	2.0131
GLCMS	1.7467
MLRS	1.5721
PERSHING	1.3974
SH-2	1.3421
MORTERS	1.2227
DSTROYERS	1.2079
SH-3	0.5368
RADIO RLAY	0.4603
M-113	0.4076
ATT. ACRFT	0.1874
[illegible]	0.0582
POLES LNCH	0.0125

FLOAT-FIXED ALLIED	CAS	INTERDICTION	90	2170	0	2260
A-10	CAS	INTERDICTION	45	4831	0	2260
COBRA	CAS	INTERDICTION	15	6312	0	2260
F-4	CAS	INTERDICTION	0	0217	0	2260
	CAS	INTERDICTION	30	6211	0	2260
F-16	CAS	INTERDICTION	50	5094	0	2260
	CAS	INTERDICTION	0	6647	0	2260
ART. ACRFT	CAS	INTERDICTION	0	1115	0	2260
RADIO PLAY	CAS	INTERDICTION	0	1115	0	2260
F-111	CAS	INTERDICTION	161	7188	0	2260
A-6	CAS	INTERDICTION	45	5180	0	2260
F-15	CAS	INTERDICTION	71	8780	0	2260
A-7	CAS	INTERDICTION	44	6006	0	2260
F-14	CAS	INTERDICTION	55	5000	0	2260
F-18	CAS	INTERDICTION	30	8481	0	2260
SH-3	CAS	INTERDICTION	0	9257	0	2260
SH-2	CAS	INTERDICTION	17	8642	0	2260
S-3	CAS	INTERDICTION	55	7531	0	2260
SH-60B	CAS	INTERDICTION	45	4174	0	2260
ATT. SUBS	CAS	INTERDICTION	23	8403	0	2260
FRIGATES	CAS	INTERDICTION	120	2512	0	2260
DESTROYERS	ASW(SEA BASED)	ARMY GROUND	110	1540	0	2260
M-48	ARMY GROUND		110	6556	0	2260
M-60	ARMY GROUND		110	8314	0	2260
M-1	ARMY GROUND		110	5313	0	2260
M-551	ARMY GROUND		0	1110	0	2260
M-901	ARMY GROUND		54	0384	0	2260
M-2/M-3	ARMY GROUND		54	1334	0	2260
M-113	ARMY GROUND		0	0145	0	2260
MLRS	ARMY GROUND		10	0495	0	2260
TOWED ART.	ARMY GROUND		10	5313	0	2260
SELF-PROP	ARMY GROUND		0	1313	0	2260
PERSHING	ARMY GROUND		15	8195	0	2260
GLCMS	ARMY GROUND		20	3450	0	2260
INFANTRY	ARMY GROUND		60	1449	0	2260
MORTERS	ARMY GROUND		20	3602	0	2260
ROLES LNCH	ARMY GROUND		0	2260	0	2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5556
F-15	4.4444
A-7	4.0000
INFANTRY	3.7263
M-2/M-3	3.3537
M-901	3.3537
F-14	3.3333
A-6	3.0000
COBRA	2.9982
S-3	2.6842
SH-60B	2.0877
SELF-PROP.	1.8437
ATT. SUBS	1.7895
MORTERS	1.6303
GLCMS	1.6303
TOWED ART.	1.3974
M-1	1.3974
M-60	1.2576
FRIGATES	1.2526
SH-2	1.0737
MLRS	1.0480
PERSHING	0.9782
M-48	0.7825
DSTROYERS	0.7516
SH-3	0.4237
M-113	0.3276
RADIO PLAY	0.3237
ART. ACRFT	0.2237
ROLES LNCH	0.0140
M-551	0.0140

FIREFIGHT

ATT SUBS	AIR(SEA BASED)	14 4701
M-48	ARMY GROUND	20 5226
M-60	ARMY GROUND	27 4583
M-113	ARMY GROUND	5 2711
TOWED ART.	ARMY GROUND	31 6370
SELF-PROP	ARMY GROUND	42 1854
INFANTRY	ARMY GROUND	75 3321
MORTERS	ARMY GROUND	36 9122

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP	5.6000
MORTERS	4.9000
TOWED ART	4.2000
M-48	3.5200
ATT SUBS	1.9200
M-113	0.7000

ALL COMMODITIES			
A-10	CAS	3.0212	
COBRA	CAS	1.1112	
F-4	AIR INTERDICTION, CAS	4.1411	
F-16	AIR INTERDICTION, CAS	0.0558	
ART. ACCPT	CAS	1.7133	
RADIO RLAY	AIR INTERDICTION CAS	0.1333	
F-111	AIR INTERDICTION	0.1294	
A-6	AIR INTERDICTION	0.1091	
F-15	AIR INTERDICTION	5.4037	
A-7	AIR INTERDICTION	1.6861	
F-14	AIR INTERDICTION	1.4429	
F-18	AIR INTERDICTION	2.1995	
SH-3	ASW(SEA BASED)	1.8407	
SH-2	ASW(SEA BASED)	0.2345	
SH-60B	ASW(SEA BASED)	0.7511	
S-3	ASW(SEA BASED)	0.6225	
ATT. SUBS	ASW(SEA BASED)	1.0467	
FRIGATES	ASW(SEA BASED)	1.4750	
DESTROYERS	ASW(SEA BASED)	1.2541	
M-48	ARMY GROUND	0.7524	
M-60	ARMY GROUND	0.4515	
M-1	ARMY GROUND	1.2956	
M-551	ARMY GROUND	2.0333	
M-901	ARMY GROUND	2.0333	
M-2/M-3	ARMY GROUND	0.0113	
M-113	ARMY GROUND	1.6272	
MLRS	ARMY GROUND	1.6272	
TOWED ART.	ARMY GROUND	0.2260	
SELF-PROP.	ARMY GROUND	0.6780	
PERSHING	ARMY GROUND	1.2204	
GLCMS	ARMY GROUND	1.6272	
INFANTRY	ARMY GROUND	0.6780	
MORTERS	ARMY GROUND	2.4106	
ROLES LNCH	ARMY GROUND	1.0546	
		1.2128	
		0.0226	

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.0585
F-18	5.8824
A-10	5.6216
F-15	4.4444
INFANTRY	4.3839
A-7	4.0000
COBRA	3.8213
M-1	3.6989
M-60	3.6989
F-14	3.5294
A-6	3.0882
SELF-PROP.	2.9592
M-2/M-3	2.9592
M-901	2.9592
S-3	2.6842
M-48	2.3016
ATT. SUBS	2.2807
TOWED ART.	2.2194
MORTERS	2.2057
GLCMS	1.9180
SH-60B	1.9035
FRIGATES	1.3684
PERSHING	1.2330
MLRS	1.2330
SH-2	1.1447
DESTROYERS	0.8210
SH-3	0.4579
RADIO RLAY	0.4037
M-113	0.4110
ART. ACCPT	0.2426
ROLES LNCH	0.0411
M-551	0.0223

CRITICALITY OF SHORTFALL
ALL FE S
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FE CAPACITY IMPORT.	CRITIC-ALITY	NORMALIZED FE SHORTFALL CRITICALITY
COBALT	85.4	41.9	-41.7	411.5	9.5	3418.1	[illegible]
TIN	41.0	190.6	353.8	0.0	10.0	0.0	[illegible]
NICKEL	200.0	32.2	-83.9	437.7	10.0	4377.1	11.6
BORSPAR ACID	1400.0	875.0	-36.1	393.9	9.6	3744.3	8.6
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1830.7	4.[illegible]

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
MOROCCO	450.	2.29	1.50	0.667	1.528
BOTSWANA	250.	1.27	0.71	1.404	1.766
SOUTH AFRICA	150.	0.76	1.19	0.841	0.642
ZAIRE	12500.	63.41	0.71	1.404	88.[illegible]
ZAMBIA	3500.	17.81	0.71	1.404	24.[illegible]
PHILIPPINES	50.	0.25	0.92	1.087	0.276
AUSTRALIA	400.	2.04	0.92	1.087	2.211
NEW CALEDONIA	250.	1.27	0.92	1.087	1.[illegible]
CANADA	1100.	5.60	2.89	0.346	1.937
U.S.	1000.	5.09	2.56	0.391	1.991
TOTAL	19650.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.92	1.087	0.161
U.S.	16100.	23.82	2.56	0.391	9.319
THAILAND	5900.	8.73	0.92	1.087	9.493
INDONESIA	5800.	8.58	0.92	1.087	9.322
UK	100.	0.15	1.96	0.510	0.075
BOLIVIA	10300.	15.24	0.98	1.020	15.549
BRAZIL	2400.	3.55	0.86	1.162	4.125
PRC	3000.	4.44	2.47	0.405	1.79[illegible]
MALAYSIA	23900.	35.36	0.92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
SOUTH AFRICA	5000.	1.65	1.19	0.841	1.3[illegible]
PHILIPPINES	5000	1.65	0.92	1.087	1.79[illegible]
AUSTRALIA	25000.	8.24	0.92	1.087	8.9[illegible]
CANADA	150000	49.44	2.99	0.346	17.1[illegible]
U.S.	85000	27.00	2.56	0.391	11.3[illegible]
GREECE	600.	0.20	1.96	0.510	0.101
NETHERLANDS	200.	0.07	1.96	0.510	0.034
FRG	100.	0.03	1.96	0.510	0.017
YUGOSLAVIA	500.	0.16	1.96	0.510	0.08[illegible]
USSR	5000	1.65	0.94	1.061	1.74[illegible]
DOM. REPUB.	15000.	4.94	1.53	0.656	3.241
GUATEMALA	4000	1.32	1.53	0.656	0.864
INDONESIA	5000.	1.65	0.92	1.087	1.791
TOTAL:	303400.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180.	22.36	1.19	0.841	19.803
U.S.	70.	8.70	2.56	0.391	3.402
ITALY	65.	8.07	1.96	0.510	4.120
SPAIN	100	12.42	1.96	0.510	6.33[illegible]
EAST AFRICA	25.	3.11	0.71	1.404	4.35[illegible]
THAILAND	15.	1.86	0.92	1.087	2.025
MEXICO	350.	43.48	2.56	0.391	17.011
TOTAL	805.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	2000.	1.01	1.19	0.841	0.852
AUSTRALIA	1500.	0.76	0.92	1.087	0.825
UK	11000.	5.57	1.96	0.510	2.842
KENYA	80000.	40.51	0.71	1.404	56.8[illegible]
RWANDA	25000.	12.66	0.71	1.404	17.767
TANZANIA	78000.	39.49	0.71	1.404	55.43[illegible]
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	WEIGHT COMP IMP	FEASHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
MOROCCO	1.526	7.81	11.93	1.71
BOTSWANNA	1.786	7.81	13.95	2.00
SOUTH AFRICA	0.642	7.81	5.01	0.72
ZAIRE	87.293	7.81	697.25	100.00
ZAMBIA	25.001	7.81	195.23	28.00
PHILIPPINES	0.276	7.81	2.16	0.31
AUSTRALIA	2.212	7.81	17.27	2.48
NEW CALEDONIA	1.382	7.81	10.79	1.55
CANADA	1.937	7.81	15.13	2.17
U S	1.991	7.81	15.55	2.23
TIN				
AUSTRALIA	0.161	0.00	0.00	0.00
U S	9.319	0.00	0.00	0.00
THAILAND	9.483	0.00	0.00	0.00
INDONESIA	9.322	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.548	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
PRC	1.796	0.00	0.00	0.00
MALAYSIA	33.414	0.00	0.00	0.00
NICKEL				
SOUTH AFRICA	1.336	10.00	13.36	1.99
PHILIPPINES	1.791	10.00	17.91	2.50
AUSTRALIA	8.953	10.00	89.53	12.84
CANADA	17.110	10.00	171.10	24.54
U S	11.348	10.00	113.48	16.28
GREECE	0.101	10.00	1.01	0.14
NETHERLANDS	0.034	10.00	0.34	0.05
FRG	0.017	10.00	0.17	0.02
YUGOSLAVIA	0.084	10.00	0.84	0.12
USSR	1.748	10.00	17.48	2.51
DOM REPUB	3.241	10.00	32.41	4.65
GUATAMALA	0.864	10.00	8.64	1.24
INDONESIA	1.791	10.00	17.91	2.57
FLUORSPAR ACID				
SOUTH AFRICA	18.808	8.55	160.85	29.07
U S	3.402	8.55	29.10	4.17
ITALY	4.120	8.55	35.24	5.05
SPAIN	6.338	8.55	54.22	7.78
EAST AFRICA	4.359	8.55	37.29	5.35
THAILAND	2.025	8.55	17.32	2.48
MEXICO	17.011	8.55	145.52	20.87
PLATINUM				
SOUTH AFRICA	0.852	4.30	3.66	0.52
AUSTRALIA	0.825	4.30	3.55	0.51
UK	2.842	4.30	12.21	1.75
KENYA	56.855	4.30	244.29	35.04
RWANDA	17.767	4.30	76.34	10.95
TANZANIA	55.433	4.30	238.18	34.16

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

	SOURCE	COMMODITY	VALUE
[illegible]	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	35.04
3	TANZANIA	PYRETHRUM	34.16
[illegible]	ZAMBIA	COBALT	28.00
[illegible]	CANADA	NICKEL	24.54
6	SOUTH AFRICA	FLUORSPAR ACID	23.07
[illegible]	MEXICO	FLUORSPAR ACID	20.87
[illegible]	U S	NICKEL	16.28
9	AUSTRALIA	NICKEL	12.84
10	RWANDA	PYRETHRUM	10.95
1[illegible]	SPAIN	FLUORSPAR ACID	7.75
12	EAST AFRICA	FLUORSPAR ACID	5.20
13	ITALY	FLUORSPAR ACID	5.05
1[illegible]	DOM REPUB	NICKEL	4.[illegible]
1[illegible]	U S	FLUORSPAR ACID	4.17
16	INDONESIA	NICKEL	2.57
17	PHILIPPINES	NICKEL	2.57
1[illegible]	USSR	NICKEL	2.51
19	THAILAND	FLUORSPAR ACID	2.48
20	AUSTRALIA	COBALT	2.46
2[illegible]	U S	COBALT	2.23
22	CANADA	COBALT	2.17
23	BOTSWANNA	COBALT	2.00
2[illegible]	SOUTH AFRICA	NICKEL	1.[illegible]
2[illegible]	UK	PYRETHRUM	1.75
26	MOROCCO	COBALT	1.71
27	NEW CALEDONIA	COBALT	1.55
2[illegible]	GUATAMALA	NICKEL	1.24
29	SOUTH AFRICA	COBALT	0.72
30	SOUTH AFRICA	PYRETHRUM	0.52
3[illegible]	AUSTRALIA	PYRETHRUM	0.51
32	PHILIPPINES	COBALT	0.31
33	GREECE	NICKEL	0.14
3[illegible]	YUGOSLAVIA	NICKEL	0.12
3[illegible]	NETHERLANDS	NICKEL	0.05
36	FRG	NICKEL	0.02
37	MALAYSIA	TIN	0.00
3[illegible]	PRC	TIN	0.00
39	BRAZIL	TIN	0.00
40	BOLIVIA	TIN	0.00
4[illegible]	UK	TIN	0.00
4[illegible]	INDONESIA	TIN	0.00
43	THAILAND	TIN	0.00
4[illegible]	U S	TIN	0.00
4[illegible]	AUSTRALIA	TIN	0.00
46	THAILAND	TIN	0.00
[illegible]	U S	TIN	0.00

SCENARIO 47

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict 3 Media 1

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	7.0	5.0	7.0	2.0	2.0	5.0	2.0	
I/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0357	0.0357	0.0893	0.0357	0.1071

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Region	11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
Weight	9.0									
I/COEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0933	0.1067
I/COEF	0.1200									

Level of Conflict 3 Media 3

Region	1	2	3	4	5	6	7
Weight	10.0	10.0	10.0	8.0	6.0	4.0	8.0
I/COEF	0.1786	0.1786	0.1786	0.1429	0.1071	0.0714	0.1429

Level of Conflict 3 Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/COEF	0.5882	0.2353	0.1176	0.0588

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS
or the Importance of Controlling EACH region within its own Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0228	0.0228	0.0160	0.0114	0.0160	0.0046	0.0046	0.0114	0.0046	0.0137

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0171	0.0171	0.0154	0.0068	0.0119	0.0085	0.0017	0.0136	0.0119	0.0085
I/COEF	0.0154									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0228	0.0228	0.0228	0.0183	0.0137	0.0091	0.0183

Media 4

Region	1	2	3	4
I/COEF	0.0752	0.0301	0.0150	0.0075

Importance of controlling ANY Region
within its Media as compared to the Importance
of controlling ANY Region of any other Media

Media 1

Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0060

Media 2

Region	1	2	3	4	5	6	7	8	9	10
Media 11										
Region										
I/COEF	0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019
I/COEF	0.0033									

Media 3

Region	1	2	3	4	5	6	7
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

Media 4

Region	1	2	3	4
I/COEF	0.0065	0.0026	0.0013	0.0007

FORCE ELEMENT IMPORTANCE
(LOC 3)

RANKING	ELEMENT NUMBER	FORCE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.141	10.000
2	1	AIR INTERDICTION	0.117	8.26[illegible]
3	3	ARMY GROUND	0.104	7.39[illegible]
4	16	ATTACK SUBS	0.072	5.13[illegible]
5	19	SURFACE COMBATANTS	0.060	4.24[illegible]
6	12	THEATER NUCLEAR WEAPON	0.054	3.81[illegible]
7	8	RAPID DEPLOY	0.052	3.70[illegible]
8	6	CAS	0.044	3.1[illegible]
9	14	ASW(LAND BASED)	0.043	3.08[illegible]
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.91[illegible]
11	15	ASW(SEA BASED)	0.033	2.315
12	23	AIR SUPERIORITY(SHIP BASED)	0.031	2.27[illegible]
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.06[illegible]
14	10	STRATEGIC BOMBER	0.025	1.794
15	25	SPCE BASED WEAPON(AIR CNTRL)	0.020	1.416
16	29	ASAT(SPACE BASED)	0.013	0.924
17	18	MINE WARFARE	0.013	0.891
18	2	AMPHIBIOUS ASSAULT	0.011	0.757
19	13	SPECIAL OPERATIONS	0.010	0.725
20	28	ASAT(LAND BASED)	0.007	0.510
21	20	AIR DEFENSE(LAND BASED)	0.004	0.273
22	9	SPCE-BASED WEAPON(LND CNTRL)	0.003	0.211
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.001	0.119
24	27	ABM(SPACE BASED)	0.000	0.000
25	26	ABM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CBW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.52
CAS	1.7[illegible]
ICBM	0.00
STRATEGIC BOMBER	1.7[illegible]
SLBM	0.00
ASW(SEA BASED)	1.27
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABAT(LAND BASED)	0.51
	34.[illegible]

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.[illegible]1
STRATEGIC BOMBER	1.7[illegible]
ASW(LAND BASED)	3.09
ASW(SEA BASED)	1.11
ATTACK SUBS	5.1[illegible]
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	41.18

NICKEL

AIR INTERDICTION	5.60
ARMY GROUND	4.92
CAS	1.72
STRATEGIC BOMBER	1.79
ASW(SEA BASED)	1.71
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.89
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
	41.21

FLUORSPAR ACID

AIR INTERDICTION	7.13
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	3.67
CAS	2.05
ICBM	0.00
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(LAND BASED)	3.08
ASW(SEA BASED)	1.63
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.29
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	39.57

PYRETHRUM

ARMY GROUND	2.66
CIVIL DEFENSE	0.00
ASW(SEA BASED)	0.14
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25
	17.05

COMMODITY NORMALIZED IMPORTANCE

NICKEL	10.00	(41.21)
TIN	9.99	(41.15)
FLUORSPAR ACID	9.60	(39.57)
COBALT	8.49	(34.99)
PYRETHRUM	4.14	(17.08)

COBRA	CAS	72	7588
A-10	CAS	43	4811
COBRA	CAS	103	5370
F-4	AIR INTERDICTION	4	1714
	CAS	71	6785
F-16	AIR INTERDICTION	41	4075
	CAS	3	6867
ART ACRFT	CAS	3	2345
RADIO RLAY	AIR INTERDICTION	2	7275
	CAS	129	3818
F-111	AIR INTERDICTION	33	8144
A-6	AIR INTERDICTION	57	5025
F-15	AIR INTERDICTION	51	7525
A-7	AIR INTERDICTION	43	1231
F-14	AIR INTERDICTION	71	8725
F-18	AIR INTERDICTION	4	0775
SH-3	ASW(SEA BASED)	15	1957
SH-2	ASW(SEA BASED)	23	6348
SH-60B	ASW(SEA BASED)	36	7224
S-3	ASW(SEA BASED)	24	1149
ATT SUBS	ASW(SEA BASED)	14	4701
FRIGATES	ASW(SEA BASED)	8	4341
DSTROYERS	ASW(SEA BASED)	27	9449
M-48	ARMY GROUND	41	9111
M-60	ARMY GROUND	47	7989
M-1	ARMY GROUND	0	1441
M-551	ARMY GROUND	54	1114
M-901	ARMY GROUND	47	4586
M-2/M-3	ARMY GROUND	5	2744
M-113	ARMY GROUND	20	3384
MLRS	ARMY GROUND	27	1192
TOWED ART.	ARMY GROUND	24	1589
SELF-PROP.	ARMY GROUND	18	0795
PERSHING	ARMY GROUND	30	1124
GLCMS	ARMY GROUND	7	5331
INFANTRY	ARMY GROUND	34	9122
MORTERS	ARMY GROUND	1	5370
POLES LNCH	ARMY GROUND		

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
A-10	5.6216
F-18	5.5556
M-1	5.2402
M-60	4.7162
F-15	4.4444
M-901	4.1921
A-7	4.0000
COBRA	3.7478
M-2/M-3	3.6681
F-14	3.3333
A-6	3.0000
M-48	2.9345
MORTERS	2.8530
SELF-PROP.	2.7948
S-3	2.6842
GLCMS	2.3290
TOWED ART.	2.0961
ATT. SUBS	1.8640
SH-60B	1.8267
MLRS	1.5721
PERSHING	1.3974
SH-2	1.1743
FRIGATES	1.1194
DSTROYERS	0.6710
INFANTRY	0.[illegible]
SH-3	0.4697
RADIO RLAY	0.4608
M-113	0.4076
ART. ACRFT	0.[illegible]11
POLES LNCH	0.1[illegible]
M-551	0.01[illegible]

TOW	CAS		72	7386
A-10	CAS		64	6511
COBRA	CAS		103	5051
F-4	AIR INTERDICTION		1	1154
	CAS		71	8785
F-16	AIR INTERDICTION		40	4075
	CAS		3	6857
ART. ACRFT	CAS		3	3845
FIRE RLAY	AIR INTERDICTION		2	7275
	CAS		120	3813
F-111	AIR INTERDICTION		43	6642
A-6	AIR INTERDICTION		57	5028
F-15	AIR INTERDICTION		51	7525
A-7	AIR INTERDICTION		43	5180
F-14	AIR INTERDICTION		80	8683
F-18	AIR INTERDICTION		5	2095
SH-3	AEW(SEA BASED)		13	0231
ST-2	AEW(SEA BASED)		2	
S1-600	AEW(SEA BASED)		84	7284
S-3	AEW(SEA BASED)		14	4701
ATT. SUBS	AEW(SEA BASED)		14	4701
FRIGATES	AEW(SEA BASED)		8	6821
DESTROYERS	AEW(SEA BASED)		4	2185
M-48	ARMY GROUND		6	7788
M-60	ARMY GROUND		37	6655
M-1	ARMY GROUND		0	0003
M-551	ARMY GROUND		6	7798
M-901	ARMY GROUND		6	7798
M-2/M-3	ARMY GROUND		0	7513
M-113	ARMY GROUND		10	1692
MLRS	ARMY GROUND		4	5199
TOWED ART	ARMY GROUND		6	0265
SELF-PROP	ARMY GROUND		15	3195
PERSHING	ARMY GROUND		26	3609
GLCMS	ARMY GROUND		60	2649
INFANTRY	ARMY GROUND		5	2780
MORTERS	ARMY GROUND		0	2260
ROLES LNCH	ARMY GROUND			

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.5622
F-18	6.2500
A-10	5.6216
COBRA	4.9970
INFANTRY	4.6579
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
M-1	2.9112
S-3	2.6842
GLCMS	2.0378
SH-60B	1.5658
PERSHING	1.2227
FRIGATES	1.1184
ATT. SUBS	1.1184
SH-2	1.0066
MLRS	0.7840
DSTROYERS	0.6710
M-2/M-3	0.5240
M-901	0.5240
M-60	0.5240
SELF-PROP	0.4658
RADIO RLAY	0.4608
MORTERS	0.4076
SH-3	0.4076
TOWED ART.	0.3493
M-48	0.3261
ART. ACRFT	0.2911
M-113	0.05[illegible]
ROLES LNCH	0.0175
M-551	0.005[illegible]

NICKEL		
A-10	CAS	72.7334
COBRA	CAS	48.4391
F-4	AIR INTERDICTION	77.8289
	CAS	5.4550
F-16	AIR INTERDICTION	71.8785
	CAS	40.4070
ART. ACRFT	CAS	2.4245
RADIO RLAY	AIR INTERDICTION	3.2343
	CAS	2.7275
F-111	AIR INTERDICTION	129.3913
A-6	AIR INTERDICTION	38.8144
F-15	AIR INTERDICTION	57.5028
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	49.5190
F-18	AIR INTERDICTION	80.8633
SH-3	ASW(SEA BASED)	6.[illegible]
SH-2	ASW(SEA BASED)	17.3641
SH-60B	ASW(SEA BASED)	27.0109
S-3	ASW(SEA BASED)	34.7294
ATT. SUBS	ASW(SEA BASED)	43.4104
FRIGATES	ASW(SEA BASED)	26.0463
DESTROYERS	ASW(SEA BASED)	15.6278
M-48	ARMY GROUND	42.1854
M-60	ARMY GROUND	67.7980
M-1	ARMY GROUND	75.3311
M-551	ARMY GROUND	0.7575
M-901	ARMY GROUND	47.4516
M-2/M-3	ARMY GROUND	54.2384
M-113	ARMY GROUND	5.2731
MLRS	ARMY GROUND	20.3394
TOWED ART.	ARMY GROUND	36.1589
SELF-PROP	ARMY GROUND	48.2119
PERSHING	ARMY GROUND	18.0795
GLCMS	ARMY GROUND	22.5993
INFANTRY	ARMY GROUND	37.6655
MORTERS	ARMY GROUND	15.6195
ROLES LNCH	ARMY GROUND	0.2260

NORMALIZED VALUES	
F-111	10.0000
F-16	8.6787
F-4	6.4216
F-18	6.2500
M-1	5.8224
A-10	5.6216
M-60	5.2402
F-15	4.4444
M-2/M-3	4.1921
A-7	4.0000
F-14	3.7500
COBRA	3.7478
SELF-PROP.	3.7263
M-901	3.6481
ATT. SUBS	3.3552
M-48	3.2605
A-6	3.0000
INFANTRY	2.9112
TOWED ART.	2.7948
S-3	2.6842
SH-60B	2.0877
FRIGATES	2.0131
GLCMS	1.7467
MLRS	1.5721
PERSHING	1.3974
SH-2	1.3421
MORTERS	1.2227
DESTROYERS	1.2079
SH-3	0.5368
RADIO RLAY	0.4404
M-113	0.4074
ART. ACRFT	0.1874
M-551	0.0586
ROLES LNCH	0.0175

FLUORESPAR	ACID		90	5170	
A-10	CAS		48	4811	
COBRA	CAS		12	3118	
F-4	CAS	INTERDICTION	9	0913	
F-16	AIR	INTERDICTION	89	8481	
ART. ALERT	CAS		50	5014	
RADIO RLAY	AIR	INTERDICTION	3	6257	
F-111	CAS		3	2257	
A-6	AIR	INTERDICTION	2	7275	
F-15	AIR	INTERDICTION	161	1136	
A-7	AIR	INTERDICTION	48	5180	
F-14	AIR	INTERDICTION	71	8735	
F-18	AIR	INTERDICTION	64	6906	
SH-3	ASW(SEA BASED)		53	5089	
SH-2	ASW(SEA BASED)		89	8431	
SH-60B	ASW(SEA BASED)		6	9457	
S-3	ASW(SEA BASED)		13	8541	
DESTROYERS	ASW(SEA BASED)		83	7437	
M-48	ASW(SEA BASED)		43	7114	
M-60	ARMY GROUND		28	9403	
M-1	ARMY GROUND		20	2532	
M-551	ARMY GROUND		12	1549	
M-901	ARMY GROUND		12	6554	
M-2/M-3	ARMY GROUND		20	3372	
M-113	ARMY GROUND		22	5983	
MLRS	ARMY GROUND		0	2243	
TOWED ART.	ARMY GROUND		54	2384	
SELF-PROP.	ARMY GROUND		54	2354	
FERSHING	ARMY GROUND		6	0285	
GLCMS	ARMY GROUND		16	9495	
INFANTRY	ARMY GROUND		21	5243	
MORTERS	ARMY GROUND		20	1324	
ROLES LNCH	ARMY GROUND		15	8185	
			26	3659	
			60	2649	
			26	3652	
			0	2260	

NORMALIZED VALUES

F-111	10.0000
F-16	8.4787
F-4	8.5422
A-10	5.6216
F-18	5.5556
F-15	4.4444
A-7	4.0000
INFANTRY	3.7243
M-2/M-3	3.3537
M-901	3.3537
F-14	3.3333
A-6	3.0000
COBRA	2.9982
S-3	2.6842
SH-60B	2.0877
SELF-PROP.	1.8632
ATT. SUBS	1.7895
MORTERS	1.6313
GLCMS	1.6203
TOWED ART.	1.3974
M-1	1.3974
M-60	1.2576
FRIGATES	1.2526
SH-2	1.0737
MLRS	1.0480
PERSHING	0.9782
M-48	0.7825
DSTROYERS	0.7517
SH-3	0.4295
M-113	0.37[illegible]
RADIO RLAY	0.3[illegible]
ART. ALERT	0.[illegible]
ROLES LNCH	0.0140
M-551	0.0[illegible]

RYFETHRUM		
ATT SUBS	AIR/SEA BASED	14.4701
M-48	ARMY GROUND	[illegible]
M-60	ARMY GROUND	47.4566
M-113	ARMY GROUND	5.2782
TOWED ART	ARMY GROUND	21.6213
SELF-PROP	ARMY GROUND	41.1854
INFANTRY	ARMY GROUND	75.3311
MORTERS	ARMY GROUND	38.9122

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP	5.6[illegible]
MORTERS	4.9[illegible]
TOWED ART	4.2[illegible]
M-48	3.9200
ATT SUBS	1.9[illegible]
M-113	0.7000

ALL COMMODITIES

A-10	CAS	3.0912
COBRA	CAS	2.1012
F-4	AIR INTERDICTION	4.1402
	CAS	[illegible]
F-16	AIR INTERDICTION	3.0548
	CAS	1.7173
ART ACRFT	CAS	[illegible]
RADIO RLAY	AIR INTERDICTION	[illegible]
	CAS	0.1091
F-111	AIR INTERDICTION	5.4987
A-6	AIR INTERDICTION	1.6751
F-15	AIR INTERDICTION	2.4429
A-7	AIR INTERDICTION	[illegible]
F-14	AIR INTERDICTION	1.9407
F-18	AIR INTERDICTION	3.2345
SH-3	ASW(SEA BASED)	0.2516
SH-2	ASW(SEA BASED)	0.6295
SH-60B	ASW(SEA BASED)	1.0447
S-3	ASW(SEA BASED)	1.4760
ATT SUBS	ASW(SEA BASED)	1.2541
FRIGATES	ASW(SEA BASED)	0.7524
DESTROYERS	ASW(SEA BASED)	0.4515
M-48	ARMY GROUND	1.2656
M-60	ARMY GROUND	2.0327
M-1	ARMY GROUND	2.0329
M-551	ARMY GROUND	0.0128
M-901	ARMY GROUND	1.6072
M-2 M-3	ARMY GROUND	[illegible]
M-113	ARMY GROUND	0.2260
MLRS	ARMY GROUND	[illegible]
TOWED ART	ARMY GROUND	1.1204
SELF-PROP	ARMY GROUND	1.6072
PERSHING	ARMY GROUND	0.6790
GLCMS	ARMY GROUND	1.0544
INFANTRY	ARMY GROUND	2.4106
MORTERS	ARMY GROUND	1.2106
ROLES LNCH	ARMY GROUND	0.0226

NORMALIZED VALUES

F-111	10.0000
F-16	8.6787
F-4	8.0585
F-18	5.8874
A-10	5.6216
F-15	4.4448
INFANTRY	4.3839
A-7	4.0000
COBRA	3.8213
M-1	3.6989
M-60	3.6989
F-14	3.5274
A-6	3.0882
SELF-PROP.	2.9597
M-2/M-3	2.9593
M-901	2.9592
S-3	2.6842
M-48	2.3014
ATT. SUBS	2.2807
TOWED ART.	2.1124
MORTERS	2.0557
GLCMS	1.9180
SH-60B	1.9035
FRIGATES	1.4484
PERSHING	1.2030
MLRS	1.2330
SH-2	1.1447
DESTROYERS	0.9210
SH-3	0.4572
[illegible]	[illegible]

CRITICALITY OF SHORTFALL
ALL FEMS
LOC 3)

COMMODITY	GOAL (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRANS-LATED	FEMS COMMODITY IMPORT	CRITIC-ALITY	NORMALIZED FEMS SHORTFALL CRITICALITY
COBALT	3[illegible] 4	4[illegible] 5	-4[illegible] 7	4[illegible] 5	8 5	3418 1	[illegible]
TIN	4[illegible] 0	1[illegible] 6	[illegible] 5	0.0	10.0	0 0	[illegible]
NICKEL	20[illegible] 0	3[illegible] 2	-8[illegible] 9	4[illegible] 7	10.0	4377.1	1[illegible] 0
FLUORSPAR ACID	14[illegible] 0	8[illegible] 0	-3[illegible] 1	3[illegible] 9	5 6	3741 3	5 [illegible]
PYRETHRUM	5[illegible] 0	0 0	-1[illegible] 0	4[illegible] 8	4 1	1880 7	[illegible]

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1350.	6.47	1.92	0.52[illegible]	[illegible]
MOROCCO	450	2 16	1 50	0.6[illegible]	1 4[illegible]
BOTSWANNA	250.	1 20	0 71	1.4[illegible]	1.6[illegible]
ZAIRE	12500.	59.95	0 71	1 4[illegible]4	84 [illegible]
ZAMBIA	3500.	16 79	0 71	1 404	23 5[illegible]
PHILIPPINES	5[illegible]	0 24	0 92	1 087	0 [illegible]
AUSTRALIA	4[illegible]0.	1 92	0.92	1 087	2 [illegible]
NEW CALEDONIA	250	1 20	0 92	1 087	1 3[illegible]
CANADA	1100.	5 28	2.89	0.346	1 8[illegible]
U S	1000.	4 80	2.56	0 391	1 8[illegible]
TOTAL:	20850.	100 00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	100.	0.15	0.92	1.087	0.161
U S	16100	23.82	2 56	0.391	9.319
THAILAND	5900	8.73	0.92	1.087	9.493
INDONESIA	5800.	8 58	0.92	1.087	9.332
UK	100	0.15	1.96	0.510	0.075
BOLIVIA	10300.	15.24	0.98	1.020	15.543
BRAZIL	2400.	3.55	0.86	1.162	4 125
PRC	3000.	4.44	2.47	0.405	1 7[illegible]
MALAYSIA	23900.	35.36	0 92	1.087	38.414
TOTAL:	67600.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
FINLAND	1000.	0.33	1.92	0.520	0.174
PHILIPPINES	5000.	1.67	0.92	1.087	1.817
AUSTRALIA	25000.	8.35	0.92	1.087	9.073
CANADA	150000.	50.10	2.87	0.346	17.34
US	88000.	29.39	2.56	0.391	11.5[illegible]
GREECE	600	0.20	1.96	0.510	0.1[illegible]
NETHERLANDS	200.	0.07	1.96	0.510	0.034
RSA	100.	0.03	1.96	0.510	0.017
YUGOSLAVIA	500.	0.17	1.96	0.510	0.085
USSR	5000.	1.67	0.94	1.061	1.771
DOM. REPUB	15000.	5.01	1.53	0.656	3.284
GUATAMALA	4000.	1.34	1.53	0.656	0.876
INDONESIA	5000.	1.67	0.92	1.087	1.815
TOTAL:	299400.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
US	7.	11.20	2.56	0.391	4.382
ITALY	65	10.40	1.96	0.510	5.304
SPAIN	100.	16.00	1.96	0.510	8.144
WEST AFRICA	25	4.00	0.71	1.404	5.614
THAILAND	15.	2.40	0.92	1.087	2.608
MEXICO	350.	56.00	2.56	0.391	21.911
TOTAL:	623.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
AUSTRALIA	1500.	0.77	0.92	1.087	0.834
UK	11000.	5.63	1.96	0.510	2.871
KENYA	80000.	40.92	0.71	1.404	57.436
RWANDA	25000.	12.79	0.71	1.404	17.949
TANZANIA	78000.	39.90	0.71	1.404	56.000
TOTAL:	195500	100.00			

SOURCE IMPORTANCE
(LOG 3)

SOURCE	%(1/CI) CUMP IMP	PE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	3.367	7.81	26.30	4.00
MOROCCO	1.440	7.81	11.24	1.71
BOTSWANNA	1.693	7.81	13.14	2.00
ZAIRE	84.149	7.81	657.12	100.00
ZAMBIA	23.542	7.81	183.99	28.00
PHILIPPINES	0.261	7.81	2.03	0.31
AUSTRALIA	2.084	7.81	16.28	2.48
NEW CALEDONIA	1.303	7.81	10.17	1.55
CANADA	1.816	7.81	14.24	2.17
U S	1.877	7.81	14.65	2.23
TIN				
AUSTRALIA	0.141	0.00	0.00	0.00
U S	9.319	0.00	0.00	0.00
THAILAND	9.483	0.00	0.00	0.00
INDONESIA	9.322	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.548	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
PRC	1.796	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
NICKEL				
FINLAND	0.174	10.00	1.74	0.26
PHILIPPINES	1.815	10.00	18.15	2.76
AUSTRALIA	9.073	10.00	90.73	13.81
CANADA	17.388	10.00	173.88	26.34
U S	11.500	10.00	115.00	17.50
GREECE	0.102	10.00	1.02	0.16
NETHERLANDS	0.034	10.00	0.34	0.05
FRG	0.017	10.00	0.17	
YUGOSLAVIA	0.085	10.00	0.85	0.13
USSR	1.771	10.00	17.71	2.70
DOM. REPUB.	3.284	10.00	32.84	5.00
GUATAMALA	0.876	10.00	8.76	1.33
INDONESIA	1.815	10.00	18.15	2.76
FLUORSPAR ACID				
U S	4.382	8.55	37.49	5.70
ITALY	5.306	8.55	45.39	6.91
SPAIN	8.164	8.55	69.83	10.63
EAST AFRICA	5.614	8.55	48.03	7.31
THAILAND	2.608	8.55	22.31	3.39
MEXICO	21.911	8.55	187.43	28.52
PYRETHRUM				
AUSTRALIA	0.834	4.30	3.58	0.55
UK	2.871	4.30	12.34	1.88
KENYA	57.436	4.30	246.78	37.56
RWANDA	17.949	4.30	77.12	11.74
TANZANIA	56.000	4.30	240.62	36.62

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	37.56
3	TANZANIA	PYRETHRUM	36.62
4	MEXICO	FLUORSPAR ACID	29.52
5	ZAMBIA	COBALT	28.00
6	CANADA	NICKEL	26.39
7	U S	NICKEL	17.50
8	AUSTRALIA	NICKEL	13.91
9	RWANDA	PYRETHRUM	11.74
10	SPAIN	FLUORSPAR ACID	10.63
11	EAST AFRICA	FLUORSPAR ACID	7.31
12	ITALY	FLUORSPAR ACID	6.91
13	U S	FLUORSPAR ACID	5.70
14	DOM. REPUB	NICKEL	5.00
15	FINLAND	COBALT	4.01
16	THAILAND	FLUORSPAR ACID	3.39
17	INDONESIA	NICKEL	2.76
18	PHILIPPINES	NICKEL	2.76
19	USSR	NICKEL	2.70
20	AUSTRALIA	COBALT	2.49
21	U S	COBALT	2.23
22	CANADA	COBALT	2.17
23	BOTSWANNA	COBALT	2.00
24	UK	PYRETHRUM	1.88
25	MOROCCO	COBALT	1.71
26	NEW CALEDONIA	COBALT	1.55
27	GUATAMALA	NICKEL	1.33
28	AUSTRALIA	PYRETHRUM	0.55
29	PHILIPPINES	COBALT	0.31
30	FINLAND	NICKEL	0.26
31	GREECE	NICKEL	0.16
32	YUGOSLAVIA	NICKEL	0.13
33	NETHERLANDS	NICKEL	0.05
34	FRG	NICKEL	0.03
35	MALAYSIA	TIN	0.00
36	PRC	TIN	0.00
37	BRAZIL	TIN	0.00
38	BOLIVIA	TIN	0.00
39	UK	TIN	0.00
40	INDONESIA	TIN	0.00
41	THAILAND	TIN	0.00
42	U S	TIN	0.00
43	AUSTRALIA	TIN	0.00

END

FILMED

3-85

DTIC