

AD-A150 259

SIMULATION OF CRITICAL MATERIALS RESOURCE STRATEGIES
VOLUME 1 APPENDIX D. (U) TITAN SYSTEMS INC LA JOLLA CA
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EMW-C-0906 F/G 15/5

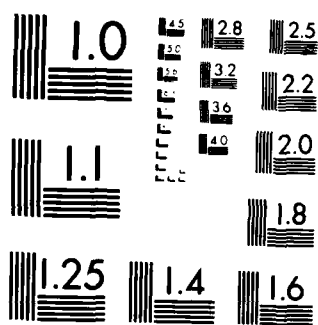
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DECISION SCIENCE
a division of TITAN SYSTEMS, INC.

TITAN-DSI-105800-07-83-5F

(11)

SIMULATION OF CRITICAL MATERIALS RESOURCE STRATEGIES

AD-A150 259

APPENDIX D - DATA BASE
VOLUME 1
THROUGH SCENARIO 11

FINAL REPORT

CONTRACT EMW-C-0906

ARTICLE III A

Submitted to:

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FEMA

Program Manager

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Washington, D.C. 20472

September 13, 1983

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La Jolla, California 92037

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Critical Material; Strategic Resources		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) 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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LIST OF COUNTRIES BY NUMBER

- 1 FINLAND
- 2 MOROCCO
- 3 BOTSWANNA
- 4 SOUTH AFRICA
- 5 ZAIRE
- 6 ZAMBIA
- 7 PHILIPPINES
- 8 AUSTRALIA
- 9 NEW CALEDONIA
- 10 CANADA
- 11 U S
- 12 ITALY
- 13 SPAIN
- 14 EAST AFRICA
- 15 THAILAND
- 16 MEXICO
- 17 GREECE
- 18 NETHERLANDS
- 19 FRG
- 20 YUGOSLAVIA
- 21 USSR
- 22 DOM. REPUB.
- 23 GUATAMALA
- 24 INDONESIA
- 25 UK
- 26 KENYA
- 27 RWANDA
- 28 TANZANIA
- 29 BOLIVIA
- 30 BRAZIL
- 31 PRG
- 32 MALAYSIA

LIST OF COMMODITIES BY NUMBER

- 1 COBALT
- 2 TIN
- 3 NICKEL
- 4 FLUOREPAR ACID
- 5 PYRETHRUM

Accession For	
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DTIC TAB	☐
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REGIONS BY MEDIA

MEDIA 1 LAND

- 1 NORTH AMERICA
- 2 EUROPE
- 3 REPUBLIC OF KOREA/JAPAN
- 4 S. E. ASIA/AUST/NEW ZEALAND
- 5 MIDDLE EAST
- 6 THIRD WORLD
- 7 SOVIET UNION
- 8 WARSAW PACT
- 9 SOUTH AMERICA
- 10 CENTRAL AMERICA

MEDIA 2 AIR

- 1 N. AMERICA/W. ATLAN/CARIB.
- 2 EUROPE/MEDITERRANEAN
- 3 NORTH ATLANTIC
- 4 SOVIET UNION
- 5 N. E. ASIA/(KOREA/JAPAN)
- 6 S. E. ASIA/AUST/NEW ZEALAND
- 7 THIRD WORLD
- 8 WARSAW PACT
- 9 MIDDLE EAST
- 10 SOUTH AMERICA
- 11 CENTRAL AMERICA

MEDIA 3 SEA

- 1 WEST ATLANTIC/CARIBBEAN
- 2 N. E. PACIFIC(HAWAII/ALASKA)
- 3 N. ATLANTIC/MEDITERRANEAN
- 4 PERSIAN GULF/INDIAN OCEAN
- 5 N. W. PACIFIC(KOREA/JAPAN)
- 6 S. E. ASIA/AUST/NEW ZEALAND
- 7 SOUTH ATLANTIC

MEDIA 4 SPACE

- 1 LOW-ALTITUDE
- 2 MID-ALTITUDE
- 3 SYNCHRONOUS
- 4 SUPER SYNCHRONOUS

LEGEND
SOURCE DEFINITIONS BY MEDIA AND REGION

SOURCE	MEDIA	REGION
1 FINLAND	LAND	EUROPE
	AIR	NORTH ATLANTIC
	SEA	N. ATLANTIC/MEDITERRANEAN
2 MOROCCO	LAND	THIRD WORLD
	AIR	NORTH ATLANTIC
		EUROPE/MEDITERRANEAN
	SEA	N. ATLANTIC/MEDITERRANEAN
3 BOTSWANNA	LAND	THIRD WORLD
	AIR	THIRD WORLD
	SEA	PERSIAN GULF/INDIAN OCEAN
4 SOUTH AFRICA	LAND	THIRD WORLD
	AIR	THIRD WORLD
	SEA	PERSIAN GULF/INDIAN OCEAN
		SOUTH ATLANTIC
5 ZAIRE	LAND	THIRD WORLD
	AIR	THIRD WORLD
	SEA	SOUTH ATLANTIC
6 ZAMBIA	LAND	THIRD WORLD
	AIR	THIRD WORLD
	SEA	SOUTH ATLANTIC
7 PHILIPPINES	LAND	S. E. ASIA/AUST/NEW ZEALAND
	AIR	S. E. ASIA/AUST/NEW ZEALAND
	SEA	S. E. ASIA/AUST/NEW ZEALAND
8 AUSTRALIA	LAND	S. E. ASIA/AUST/NEW ZEALAND
	AIR	S. E. ASIA/AUST/NEW ZEALAND
	SEA	S. E. ASIA/AUST/NEW ZEALAND
9 NEW CALEDONIA	LAND	S. E. ASIA/AUST/NEW ZEALAND
	AIR	S. E. ASIA/AUST/NEW ZEALAND
	SEA	S. E. ASIA/AUST/NEW ZEALAND
10 CANADA	LAND	NORTH AMERICA
	AIR	N. AMERICA/W. ATLAN/CARIB.
		NORTH ATLANTIC
	SEA	N. ATLANTIC/MEDITERRANEAN
		N. E. PACIFIC(HAWAII/ALASKA)
11 U S	LAND	NORTH AMERICA
	AIR	N. AMERICA/W. ATLAN/CARIB.
	SEA	WEST ATLANTIC/CARIBBEAN
		N. E. PACIFIC(HAWAII/ALASKA)
12 ITALY	LAND	EUROPE
	AIR	EUROPE/MEDITERRANEAN
	SEA	N. ATLANTIC/MEDITERRANEAN
13 SPAIN	LAND	EUROPE
	AIR	EUROPE/MEDITERRANEAN
	SEA	N. ATLANTIC/MEDITERRANEAN
14 EAST AFRICA	LAND	THIRD WORLD
	AIR	THIRD WORLD
	SEA	PERSIAN GULF/INDIAN OCEAN
15 THAILAND	LAND	S. E. ASIA/AUST/NEW ZEALAND
	AIR	S. E. ASIA/AUST/NEW ZEALAND
	SEA	S. E. ASIA/AUST/NEW ZEALAND
16 MEXICO	LAND	NORTH AMERICA
	AIR	N. AMERICA/W. ATLAN/CARIB.
	SEA	WEST ATLANTIC/CARIBBEAN
		N. E. PACIFIC(HAWAII/ALASKA)

18 NETHERLANDS	AIR	EUROPE/MEDITERRANEAN
	SEA	N. ATLANTIC/MEDITERRANEAN
	LAND	EUROPE
19 FRG	AIR	EUROPE/MEDITERRANEAN
	SEA	N. ATLANTIC/MEDITERRANEAN
	LAND	EUROPE
20 YUGOSLAVIA	AIR	EUROPE/MEDITERRANEAN
	SEA	N. ATLANTIC/MEDITERRANEAN
	LAND	EUROPE
21 USSR	AIR	EUROPE/MEDITERRANEAN
	SEA	N. ATLANTIC/MEDITERRANEAN
	LAND	SOVIET UNION
22 DOM. REPUB.	AIR	SOVIET UNION
	SEA	N. ATLANTIC/MEDITERRANEAN
	LAND	CENTRAL AMERICA
	AIR	CENTRAL AMERICA
23 GUATAMALA	SEA	WEST ATLANTIC/CARIBBEAN
	LAND	CENTRAL AMERICA
	AIR	CENTRAL AMERICA
24 INDONESIA	SEA	N. E. PACIFIC (HAWAII/ALASKA)
	LAND	S. E. ASIA/AUST/NEW ZEALAND
	AIR	S. E. ASIA/AUST/NEW ZEALAND
25 UK	SEA	S. E. ASIA/AUST/NEW ZEALAND
	LAND	EUROPE
	AIR	EUROPE/MEDITERRANEAN
26 KENYA	SEA	N. ATLANTIC/MEDITERRANEAN
	LAND	THIRD WORLD
	AIR	THIRD WORLD
27 RWANDA	SEA	PERSIAN GULF/INDIAN OCEAN
	LAND	THIRD WORLD
	AIR	THIRD WORLD
28 TANZANIA	SEA	PERSIAN GULF/INDIAN OCEAN
	LAND	THIRD WORLD
	AIR	THIRD WORLD
29 BOLIVIA	SEA	PERSIAN GULF/INDIAN OCEAN
	LAND	SOUTH AMERICA
	AIR	SOUTH AMERICA
30 BRAZIL	SEA	N. E. PACIFIC (HAWAII/ALASKA)
	LAND	SOUTH AMERICA
	AIR	SOUTH AMERICA
31 PRC	SEA	SOUTH ATLANTIC
	LAND	S. E. ASIA/AUST/NEW ZEALAND
		REPUBLIC OF KOREA/JAPAN
	AIR	S. E. ASIA/AUST/NEW ZEALAND
		N. E. ASIA/(KOREA/JAPAN)
	SEA	PERSIAN GULF/INDIAN OCEAN
		N. W. PACIFIC (KOREA/JAPAN)
32 MALAYSIA	LAND	S. E. ASIA/AUST/NEW ZEALAND
	AIR	S. E. ASIA/AUST/NEW ZEALAND
	SEA	S. E. ASIA/AUST/NEW ZEALAND

SCENARIO 1
BASELINE

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	1.0
I/COEF	0.1786	0.1786	0.1250	0.0893	0.1250	0.0257	0.0257	0.0893	0.0257	0.1071
Level of Conflict 3 Media 2										
Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
I/COEF	0.1333	0.1333	0.1200	0.0533	0.0833	0.0667	0.0133	0.1067	0.0833	0.0667
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

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	0.0128	0.0128	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	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0171	0.0171	0.0154	0.0048	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	0.0193			
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	1	2	3	4	5	6	7	8	9	10
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	0.0043	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	8.244
3	3	ARMY GROUND	0.104	7.382
4	14	ATTACK SUBS	0.072	5.135
5	19	SURFACE COMBATANTS	0.060	4.249
6	12	THEATER NUCLEAR WEAPON	0.054	3.810
7	8	RAPID DEPLOY	0.052	3.701
8	6	CAS	0.044	3.132
9	14	ASW(LAND BASED)	0.043	3.083
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.910
11	15	ASW(SEA BASED)	0.033	2.315
12	21	AIR SUPERIORITY(SHIP BASED)	0.031	2.212
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.065
14	10	STRATEGIC BOMBER	0.025	1.734
15	25	SPACE BASED WEAPON(AIR CNTRL)	0.020	1.416
16	09	ASAT(SPACE BASED)	0.013	0.924
17	13	MINE WARFARE	0.013	0.891
18	7	AMPHIBIOUS ASSAULT	0.011	0.757
19	13	SPECIAL OPERATIONS	0.010	0.725
20	28	ASAT(LAND BASED)	0.007	0.510
21	21	AIR DEFENSE(LAND BASED)	0.004	0.273
22	5	SPACE BASED WEAPON(LAND CNTRL)	0.001	0.212
23	30	SPACE BASED WEAPON(SEA CNTRL)	0.002	0.113
24	27	ASM(SPACE BASED)	0.000	0.000
25	26	ASM(LAND BASED)	0.000	0.000
26	14	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLEB	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CEW	0.000	0.000

COMMODITY IMPORTANCE (LOC 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.52
CAS	1.75
ICBM	0.00
STRATEGIC BOMBER	1.79
SLEB	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
ASAT(LAND BASED)	0.51

34.99

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	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

PYRETHRUM

ARMY GROUND	2.69
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	9.90	(41.18)
FLUORSPAR ACID	9.60	(39.57)
COBALT	8.49	(34.94)
PYRETHRUM	4.14	(17.08)

FLUORSPAR ACID

AIR INTERDICTION	7.13
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	3.69
CAS	2.05
ICBM	0.00
STRATEGIC BOMBER	1.79
SLBM	0.00
ASW(LAND BASED)	3.08
ASW(SEA BASED)	1.40
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

TIN	
A-10	CAS
COBRA	CAS
F-4	AIR INTERDICTION
	CAS
F-16	AIR INTERDICTION
	CAS
ART ACFT	CAS
RADIO RLAY	AIR INTERDICTION
	CAS
F-111	AIR INTERDICTION
A-6	AIR INTERDICTION
F-15	AIR INTERDICTION
A-7	AIR INTERDICTION
F-14	AIR INTERDICTION
F-18	AIR INTERDICTION
SH-3	ASW(SEA BASED)
SH-2	ASW(SEA BASED)
SH-60B	ASW(SEA BASED)
S-3	ASW(SEA BASED)
ATT SUBS	ASW(SEA BASED)
FRIGATES	ASW(SEA BASED)
DSTROYERS	ASW(SEA BASED)
M-48	ARMY GROUND
M-60	ARMY GROUND
M-1	ARMY GROUND
M-551	ARMY GROUND
M-901	ARMY GROUND
M-2/M-3	ARMY GROUND
M-113	ARMY GROUND
MLRS	ARMY GROUND
TOWED ART.	ARMY GROUND
SELF-PROP.	ARMY GROUND
PERSHING	ARMY GROUND
GLOMS	ARMY GROUND
INFANTRY	ARMY GROUND
MORTERS	ARMY GROUND
RCLES LNCH	ARMY GROUND

72.7933	
64.6511	NORMALIZED VALUES
103.5050	F-111
7.2734	F-16
71.8785	F-4
40.4075	F-15
3.6367	A-10
3.2345	COBRA
2.7275	INFANTRY
129.3813	F-15
43.6662	A-7
57.5028	F-14
51.7525	A-6
48.5130	M-1
80.8633	S-3
5.2033	GLOMS
13.0231	SH-60B
20.2582	PERSHING
34.7284	FRIGATES
14.4701	ATT. SUBS
14.4701	SH-2
8.6821	MLRS
4.2185	DSTROYERS
6.7798	M-2/M-3
37.6655	M-901
0.0753	M-60
6.7798	SELF-PROP.
6.7798	RADIO RLAY
0.7533	MORTERS
10.1697	SH-3
4.5199	TOWED ART.
6.0265	M-48
15.8195	ART. ACFT
26.3659	M-113
60.2649	RCLES LNCH
5.2732	M-551
0.2260	

11.010
3.271
9.511
6.25
5.111
4.8
4.855
4.421
4.013
3.751
3.673
1.911
2.684
2.00
1.535
1.227
1.115
1.115
1.011
0.782
0.671
0.524
0.524
0.524
0.415
0.461
0.407
0.412
0.341
0.323
0.231
0.058
0.017
0.000

NICKEL
 A-10 CAS
 COBRA CAS
 F-4 AIR INTERDICTION
 F-16 CAS
 F-16 AIR INTERDICTION
 ART. ACRFT CAS
 RADIO RLY AIR INTERDICTION
 F-111 CAS
 A-6 AIR INTERDICTION
 F-15 AIR INTERDICTION
 A-7 AIR INTERDICTION
 F-14 AIR INTERDICTION
 F-18 AIR INTERDICTION
 SH-3 ASW(SEA BASED)
 SH-2 ASW(SEA BASED)
 SH-60F ASW(SEA BASED)
 S-3 ASW(SEA BASED)
 ATT. SUBS ASW(SEA BASED)
 FRIGATES ASW(SEA BASED)
 DESTROYERS ASW(SEA BASED)
 M-48 ARMY GROUND
 M-60 ARMY GROUND
 M-1 ARMY GROUND
 M-551 ARMY GROUND
 M-901 ARMY GROUND
 M-2/M-3 ARMY GROUND
 M-113 ARMY GROUND
 MLRS ARMY GROUND
 TOWED ART. ARMY GROUND
 SELF-PROP. ARMY GROUND
 PERSHING ARMY GROUND
 GLCMs ARMY GROUND
 INFANTRY ARMY GROUND
 MORTERS ARMY GROUND
 RCLES LNCH ARMY GROUND

72.7336
 48.4891
 77.6298
 5.4550
 71.8755
 40.4075
 2.4245
 3.2315
 2.7275
 129.3813
 38.8144
 57.5028
 51.7525
 48.5150
 80.8633
 6.9457
 17.3642
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 34.7294
 43.4104
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 15.6272
 42.1854
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 54.2384
 5.2732
 20.3384
 36.1589
 48.2119
 18.0795
 22.5993
 37.6655
 15.8195
 0.2260

NORMALIZED VALUES
 F-111
 F-16
 F-4
 F-18
 M-1
 A-10
 M-60
 F-15
 M-2/M-3
 A-7
 F-14
 COBRA
 SELF-PROP.
 M-901
 ATT. SUBS
 M-48
 A-6
 INFANTRY
 TOWED ART.
 S-3
 SH-60F
 FRIGATES
 GLCMs
 MLRS
 PERSHING
 SH-2
 MORTERS
 DESTROYERS
 SH-3
 RADIO RLY
 M-113
 ART. ACRFT
 M-551
 RCLES LNCH

10.0
 8.47
 4.21
 6.21
 5.81
 5.81
 5.81
 4.44
 4.14
 4.01
 3.75
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 1.39
 1.34
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 0.47
 0.13
 0.65
 0.017

THUORSPAR ACID

A-10	CAS
COBRA	CAS
F-4	AIR INTERDICTION
	CAS
F-16	AIR INTERDICTION
	CAS
ART. ACFT	CAS
RADIO RLAY	AIR INTERDICTION
	CAS
F-111	AIR INTERDICTION
A-6	AIR INTERDICTION
F-15	AIR INTERDICTION
A-7	AIR INTERDICTION
F-14	AIR INTERDICTION
F-18	AIR INTERDICTION
SH-3	ASW(SEA BASED)
SH-2	ASW(SEA BASED)
SH-60B	ASW(SEA BASED)
S-3	ASW(SEA BASED)
ATT. SUBS	ASW(SEA BASED)
FRIGATES	ASW(SEA BASED)
DSTROYERS	ASW(SEA BASED)
M-48	ARMY GROUND
M-60	ARMY GROUND
M-1	ARMY GROUND
M-551	ARMY GROUND
M-901	ARMY GROUND
M-2/M-3	ARMY GROUND
M-113	ARMY GROUND
MLRS	ARMY GROUND
TOWED ART.	ARMY GROUND
SELF-PROP.	ARMY GROUND
PERSHING	ARMY GROUND
GLCMS	ARMY GROUND
INFANTRY	ARMY GROUND
MORTERS	ARMY GROUND
RCLES LNCH	ARMY GROUND

90 9170 NORMALIZED VALUES

48. 4891	F-111	10. 000
129. 3813	F-16	8. 500
8. 0017	F-4	5. 600
89. 8481	A-10	5. 500
50. 5094	F-18	4. 400
3. 6367	F-15	4. 000
3. 2345	A-7	3. 700
2. 7275	INFANTRY	3. 350
161. 7266	M-2/M-3	3. 350
48. 5180	M-901	3. 300
71. 8785	F-14	3. 000
64. 6906	A-6	2. 990
53. 9035	COBRA	2. 600
89. 8491	S-3	2. 080
6. 9457	SH-60B	1. 860
17. 3642	SELF-PROP.	1. 780
33. 7637	ATT. SUBS	1. 600
43. 4104	MORTERS	1. 600
28. 9403	GLCMS	1. 390
20. 2592	TOWED ART.	1. 390
12. 1549	M-1	1. 250
12. 6556	M-60	1. 250
20. 3394	FRIGATES	1. 000
22. 5993	SH-2	1. 040
0. 2260	MLRS	0. 970
54. 2384	PERSHING	0. 780
54. 2384	M-48	0. 750
6. 0265	DSTROYERS	0. 420
16. 9495	SH-3	0. 370
22. 5993	M-113	0. 360
30. 1324	RADIO RLAY	0. 220
15. 8195	ART. ACFT	0. 010
26. 3659	RCLES LNCH	0. 010
60. 2649	M-551	
26. 3659		
0. 2260		

PYRETHRUM

ATT. SUBS	ARMY/SEA BASED	14.4701
M-48	ARMY GROUND	29.5198
M-60	ARMY GROUND	47.4586
M-113	ARMY GROUND	5.2732
TOWED ART.	ARMY GROUND	31.6390
SELF-PROP.	ARMY GROUND	42.1854
INFANTRY	ARMY GROUND	75.3311
MORTERS	ARMY GROUND	36.7122

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	1.9200
M-113	0.7000

ALL COMMODITIES

A-10 CAS
 COBRA CAS
 F-4 AIR INTERDICTION
 CAS
 F-16 AIR INTERDICTION
 CAS
 ART ACRFT CAS
 RADIO RLY AIR INTERDICTION
 CAS
 F-111 AIR INTERDICTION
 A-6 AIR INTERDICTION
 F-15 AIR INTERDICTION
 A-7 AIR INTERDICTION
 F-14 AIR INTERDICTION
 F-18 AIR INTERDICTION
 SH-3 ASW(SEA BASED)
 SH-2 ASW(SEA BASED)
 SH-60B ASW(SEA BASED)
 S-3 ASW(SEA BASED)
 ATT SUBS ASW(SEA BASED)
 FRIGATES ASW(SEA BASED)
 IT ROVERS ASW(SEA BASED)
 M-4 ARMY GROUND
 M-60 ARMY GROUND
 M-1 ARMY GROUND
 M-551 ARMY GROUND
 M-901 ARMY GROUND
 M-2/M-3 ARMY GROUND
 M-113 ARMY GROUND
 MLRS ARMY GROUND
 TOWED ART. ARMY GROUND
 SELF-PROP. ARMY GROUND
 PERSHING ARMY GROUND
 GLCMS ARMY GROUND
 INFANTRY ARMY GROUND
 MORTERS ARMY GROUND
 RCLES LNCH ARMY GROUND

3.0912
 2.1012
 4.1402
 0.2904
 3.0548
 1.7173
 0.1333
 0.1294
 0.1091
 5.4987
 1.6981
 2.4439
 2.1995
 1.9407
 3.2345
 0.2518
 0.6295
 1.0467
 1.4760
 1.2541
 0.7524
 0.4515
 1.2456
 2.0339
 2.0339
 0.0129
 1.6272
 0.2260
 0.6780
 1.2204
 1.6272
 0.6780
 1.0546
 2.4106
 1.2128
 0.0226

NORMALIZED VALUES

10.000
 8.60
 8.059
 5.42
 5.621
 4.48
 4.33
 4.00
 3.82
 3.69
 3.61
 3.51
 3.08
 2.95
 2.95
 2.69
 2.30
 2.28
 2.21
 2.20
 1.81
 1.80
 1.80
 1.23
 1.23
 1.14
 0.82
 0.45
 0.43
 0.41
 0.24
 0.04
 0.02

CRITICALITY OF SHORTFALL
ALL FEES
(LOC 3)

COMMODITY	STOCK FILE	SHORT FALL	FEES IMPORT.	CRITICALITY	CRITICALITY	NORMALIZED FEES	NORMALIZED CRITICALITY
(UNITS)	(UNITS)	(%)	LATED	IMPORT.	ALITY		
SALT	85.4	43.8	-43.7	402.5	8.5	3418.1	7.8
	42.0	190.6	353.8	0.0	10.0	0.0	0.0
WEL	200.0	32.2	-83.9	490.7	10.0	4377.1	10.0
UDSPAR ACID	1400.0	895.0	-36.1	399.9	9.6	3744.3	8.6
PETHRUM	500.0	0.0	-100.0	453.8	4.1	1380.7	4.1

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/01	% (1/01)
LAND	1350.	6.43	1.92	0.520	3.343
SECO	450.	2.14	1.50	0.667	1.429
TSWANNA	250.	1.19	0.71	1.404	1.671
TH AFRICA	150.	0.71	1.19	0.841	0.601
RE	12500	59.52	0.71	1.404	89.543
MBIA	3500	16.67	0.71	1.404	23.393
ILIPPINES	50.	0.24	0.92	1.087	0.253
TRALIA	400	1.90	0.92	1.087	2.073
SALEDONIA	250	1.19	0.92	1.087	1.293
NAIA	1100.	5.24	2.89	0.346	1.813
	1000.	4.76	2.56	0.391	1.843
TOTAL:	21000.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/01	% (1/01)
USTRALIA	100.	0.15	0.92	1.087	0.161
S	16100.	23.82	2.56	0.391	9.319
ILAND	5900.	8.73	0.92	1.087	9.483
ONESIA	5800.	8.58	0.92	1.087	9.322
K	100.	0.15	1.96	0.510	0.071
IVIA	10300.	15.24	0.98	1.020	15.543
IL	2400.	3.55	0.86	1.162	4.125
RC	3000	4.44	2.47	0.405	1.773
AYSIA	23900.	35.36	0.92	1.087	33.414
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	1.15	0.841	1.331
PHILIPPINES	5000.	1.64	0.92	1.087	1.785
AUSTRALIA	25000.	8.21	0.92	1.087	8.924
CANADA	150000.	49.28	2.89	0.346	17.654
U.S.	88000.	28.91	2.56	0.391	11.911
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	0.084
USSR	5000.	1.64	0.54	1.061	1.742
DOM. REPUB.	15000.	4.93	1.53	0.654	3.230
GUATEMALA	4000.	1.31	1.53	0.654	0.811
INDONESIA	5000.	1.64	0.92	1.087	1.785

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	18.903
U.S.	70.	8.70	2.56	0.391	3.401
ITALY	65.	8.07	1.96	0.510	4.120
SPAIN	100.	12.42	1.96	0.510	6.339
EAST AFRICA	25.	3.11	0.71	1.404	4.359
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	56.855
RUANDA	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
(LOC 3)

SOURCE	% (1/01) CONF. INF	FEV/NORTALL CRITICALITY	TOTAL	NORMALIZED 10-100
BALT				
FINLAND	3.343	7.81	26.11	4.00
MOROCCO	1.427	7.81	11.18	1.71
BOTSWANNA	1.671	7.81	13.05	2.00
SOUTH AFRICA	0.611	7.81	4.69	0.71
ZAIRE	83.548	7.81	652.43	100.00
ZAMBIA	13.393	7.81	102.68	23.01
PHILIPPINES	0.259	7.81	2.02	0.31
AUSTRALIA	2.070	7.81	16.16	2.41
NEW CALEDONIA	1.293	7.81	10.10	1.55
CANADA	1.813	7.81	14.19	2.17
U S	1.663	7.81	14.55	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	9.302	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.543	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
FRG	1.793	0.00	0.00	0.00
MALAYSIA	39.414	0.00	0.00	0.00
OKEL				
FINLAND	0.171	10.00	1.71	0.26
SOUTH AFRICA	1.381	10.00	13.81	2.12
PHILIPPINES	1.733	10.00	17.33	2.74
AUSTRALIA	8.924	10.00	89.24	13.62
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
UORSPAR 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

PI RETHRUM

SOUTH AFRICA

0.852

4.30

3.66

0.56

AUSTRALIA

0.825

4.30

3.55

0.54

UK

2.842

4.30

12.21

1.87

KENYA

56.855

4.30

244.29

31.44

RWANDA

17.767

4.30

76.34

11.70

TANZANIA

55.433

4.30

238.18

36.50

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

SOURCE	COMMODITY	VALUE
ZAIRE	COBALT	100.00
KENYA	PYRETHRUM	37.44
TANZANIA	PYRETHRUM	36.51
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	11.70
SPAIN	FLUORSPAR ACID	8.31
EAST AFRICA	FLUORSPAR ACID	5.72
ITALY	FLUORSPAR ACID	5.40
DOM REPUE	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
UK	PYRETHRUM	1.87
MOROCCO	COBALT	1.71
NEW CALEDONIA	COBALT	1.50
GUATAMALA	NICKEL	1.32
SOUTH AFRICA	COBALT	0.72
SOUTH AFRICA	PYRETHRUM	0.56
AUSTRALIA	PYRETHRUM	0.54
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 2

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

		Level of Conflict 3 Media 1									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.1563	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0713	0.0938
		Level of Conflict 3 Media 2									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.1190	0.1190	0.1190	0.1071	0.0476	0.0698	0.0595	0.1190	0.0952	0.0938	0.0938
		Level of Conflict 3 Media 3									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.1667	0.1667	0.1667	0.1667	0.1000	0.0667	0.1667	0.1667	0.1667	0.1667	0.1667
		Level of Conflict 3 Media 4									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/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 Media

		Media 1									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.0200	0.0000	0.0140	0.0100	0.0140	0.0200	0.0040	0.0100	0.0040	0.0120	0.0120
		Media 2									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.0152	0.0152	0.0137	0.0061	0.0107	0.0076	0.0152	0.0122	0.0107	0.0076	0.0076
		Media 3									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.0213	0.0213	0.0213	0.0213	0.0128	0.0035	0.0213	0.0213	0.0213	0.0213	0.0213
		Media 4									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/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									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.0087	0.0087	0.0061	0.0043	0.0061	0.0087	0.0017	0.0043	0.0017	0.0032	0.0032
		Media 2									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.0033	0.0033	0.0030	0.0013	0.0023	0.0017	0.0033	0.0026	0.0023	0.0017	0.0017
		Media 3									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.0056	0.0056	0.0056	0.0056	0.0033	0.0022	0.0056	0.0056	0.0056	0.0056	0.0056
		Media 4									
Region	Weight	1	2	3	4	5	6	7	8	9	10
1/COEF	0.0045	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	7.847
3	3	ARMY GROUND	0.090	6.800
4	16	ATTACK SUBS	0.078	5.900
5	19	SURFACE COMBATANTS	0.060	4.291
6	8	RAPID DEPLOY	0.058	4.147
7	12	THEATER NUCLEAR WEAPON	0.054	3.858
8	14	ASW(LAND BASED)	0.043	3.093
9	6	CAS	0.040	2.901
10	22	AIR SUPERIORITY(LAND BASED)	0.038	2.712
11	15	ASW(SEA BASED)	0.032	2.312
12	23	AIR SUPERIORITY(SHIP BASED)	0.030	2.143
13	21	AIR DEFENSE(SHIP BASED)	0.027	1.959
14	10	STRATEGIC BOMBER	0.025	1.781
15	25	SFCE BASED WEAPON(AIR CNTRL)	0.019	1.384
16	13	SPECIAL OPERATIONS	0.017	1.050
17	29	ASAT(SPACE BASED)	0.013	0.935
18	18	MINE WARFARE	0.013	0.914
19	22	AMPHIBIOUS ASSAULT	0.010	0.717
20	28	ASAT(LAND BASED)	0.007	0.517
21	20	AIR DEFENSE(LAND BASED)	0.004	0.244
22	9	SFCE BASED WEAPON(LND CNTRL)	0.003	0.202
23	30	SFCE BASED WEAPON(SEA CNTRL)	0.002	0.118
24	27	ARM(SPACE BASED)	0.000	0.000
25	26	ARM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLBN	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	LEW	0.000	0.000

COMMODITY IMPORTANCE (LOC 3)

CORALT

AIR INTERDICTION	5.43
ARMY GROUND	4.19
CAS	1.62
ICBM	0.00
STRATEGIC BOMBER	1.78
SLBN	0.00
ASW(SEA BASED)	1.27
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.29
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.14
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.52
	33.99

TIN

AIR INTERDICTION	5.62
ARMY GROUND	1.78
CAS	1.77
STRATEGIC BOMBER	1.78
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)	2.14
INTERCEPTOR AIRCRAFT	0.00
ARM(LAND BASED)	0.00
	40.47

NICKEL

AIR INTERDICTION	5.39
ARMY GROUND	4.56
CAS	1.60
STRATEGIC BOMBER	1.76
ASW(SEA BASED)	1.71
ATTACK SUB	5.22
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.92
SURFACE COMBATANTS	4.21
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.12
INTERCEPTOR AIRCRAFT	0.00
	40.30

FLUORSPAR ACID

AIR INTERDICTION	4.79
AMPHIBIOUS ASSAULT	0.71
ARMY GROUND	3.42
CAS	1.60
ICBM	0.00
STRATEGIC BOMBER	1.76
SLBM	0.00
ASW(LAND BASED)	3.03
ASW(SEA BASED)	1.43
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.21
AIR SUPERIORITY(LAND BASED)	2.73
AIR SUPERIORITY(SHIP BASED)	2.12
INTERCEPTOR AIRCRAFT	0.00
ARM(LAND BASED)	0.00
	38.50

PYRETHRUM

ARMY GROUND	2.41
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)

COLALT	CAS	67	4028
A-10	CAS	44	9311
COSRA	CAS	98	7342
F-4	CAS INTERDICTION	6	7403
F-16	AIR INTERDICTION	68	4168
ART ACFT	CAS	99	4460
RADIO RLAY	AIR INTERDICTION	92	3771
	CAS	99	0788
F-111	AIR INTERDICTION	22	5276
A-6	AIR INTERDICTION	123	1503
F-15	AIR INTERDICTION	36	9451
A-7	AIR INTERDICTION	34	7335
F-14	AIR INTERDICTION	43	2601
F-18	AIR INTERDICTION	41	0501
SH-3	ASW(SEA BASED)	68	4168
SH-2	ASW(SEA BASED)	6	0633
SH-60B	ASW(SEA BASED)	15	1708
SL-3	ASW(SEA BASED)	33	5940
ATT SUBS	ASW(SEA BASED)	24	6761
FRIGATES	ASW(SEA BASED)	24	0807
DSTROYERS	ASW(SEA BASED)	14	4434
M-48	ARMY GROUND	8	6690
M-60	ARMY GROUND	33	2004
M-1	ARMY GROUND	33	0724
M-551	ARMY GROUND	62	8182
M-901	ARMY GROUND	0	2070
M-27/M-3	ARMY GROUND	50	2864
M-113	ARMY GROUND	44	0003
MLRS	ARMY GROUND	4	8840
TOWED ART.	ARMY GROUND	18	8545
SELF-PROP.	ARMY GROUND	27	1433
PERSHING	ARMY GROUND	33	5044
GLCMs	ARMY GROUND	16	7427
INFANTRY	ARMY GROUND	27	9371
MORTERS	ARMY GROUND	6	9842
FCLES LNCH	ARMY GROUND	34	2203
		1	4667

NORMALIZED VALUES

F-111	10.0000
F-16	8.5962
F-4	8.5473
F-15	9.0506
A-10	10.4732
M-1	5.1042
M-60	4.5938
F-15	4.4444
M-901	4.0834
A-7	4.0000
COSRA	3.6488
M-27/M-3	3.5729
F-14	3.3333
A-6	3.0000
M-48	2.8583
S-3	2.8158
MORTERS	2.7789
SELF-PROP.	2.7222
GLCMs	2.2685
TOWED ART.	2.0417
ATT. SUBS	1.9554
SH-60B	1.9163
MLRS	1.5313
PERSHING	1.3611
SH-2	1.2319
FRIGATES	1.1732
DSTROYERS	0.7039
INFANTRY	0.5671
SH-3	0.4928
RADIO RLAY	0.4532
M-113	0.3970
ART. ACFT	0.2737
FCLES LNCH	0.1191
M-551	0.0170

TIN			
A-10	CAS	47	4028
COBRA	CAS	50	9137
F-4	AIR INTERDICTION	58	5002
	CAS	6	7402
F-16	AIR INTERDICTION	69	4168
	CAS	37	4460
AFT. ACFT	CAS	3	3701
RADIO RLY	AIR INTERDICTION	3	0788
	CAS	2	5276
F-111	AIR INTERDICTION	123	1503
A-6	AIR INTERDICTION	41	5632
F-15	AIR INTERDICTION	54	7035
A-7	AIR INTERDICTION	47	2601
F-14	AIR INTERDICTION	46	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	2177
S-3	ASW(SEA BASED)	34	4761
ATT. SUBS	ASW(SEA BASED)	14	4484
FRIGATES	ASW(SEA BASED)	14	4484
DESTROYERS	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	3874
PERSHING	ARMY GROUND	14	6669
GLCMs	ARMY GROUND	34	4444
INFANTRY	ARMY GROUND	55	8740
MORTERS	ARMY GROUND	4	8890
ROLES LNCH	ARMY GROUND	0	2095

NORMALIZED VALUES

F-111	10.0000
F-16	9.0942
F-4	8.5473
F-18	6.2500
A-10	5.4782
COBRA	4.8451
INFANTRY	4.3371
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
M-1	2.8337
S-3	2.8158
GLCMs	1.9850
SH-60B	1.6425
PERSHING	1.1910
FRIGATES	1.1732
ATT. SUBS	1.1732
SH-2	1.0559
MLRS	0.7656
DESTROYERS	0.7039
M-2/M-3	0.5104
M-901	0.5104
M-60	0.5104
RADIO RLY	0.4552
SELF-PROP.	0.4557
SH-3	0.4224
MORTERS	0.3970
TOWED ART.	0.3403
M-48	0.3176
ART. ACFT	0.2737
M-113	0.0567
ROLES LNCH	0.0170
M-551	0.0057

NICKEL	CAS	47	40008
A-10	CAS	44	93000
COBRA	CAS	73	89000
F-4	AIR INTERDICTION	50	05000
	CAS	60	41000
F-16	AIR INTERDICTION	37	44000
	CAS	22	24000
ART. ACFT	CAS	30	07000
RADIO RLY	AIR INTERDICTION	22	5276
	CAS	10	15000
F-111	AIR INTERDICTION	33	94001
A-6	AIR INTERDICTION	54	73000
F-15	AIR INTERDICTION	49	24001
A-7	AIR INTERDICTION	46	1814
F-14	AIR INTERDICTION	74	94000
F-18	AIR INTERDICTION	6	93000
SH-3	ASW (SEA BASED)	17	3381
SH-2	ASW (SEA BASED)	26	97000
SH-60B	ASW (SEA BASED)	34	6761
	ASW (SEA BASED)	43	34000
ATT. SUBS	ASW (SEA BASED)	24	0071
FRIGATES	ASW (SEA BASED)	15	6040
DESTROYERS	ASW (SEA BASED)	39	1110
M-48	ARMY GROUND	62	85000
M-60	ARMY GROUND	69	84000
M-1	ARMY GROUND	0	49000
M-551	ARMY GROUND	44	00000
M-901	ARMY GROUND	30	26000
M-2/M-3	ARMY GROUND	4	88000
M-113	ARMY GROUND	18	85000
MLRS	ARMY GROUND	32	5244
TOWED ART.	ARMY GROUND	44	89000
SELF-PROP.	ARMY GROUND	14	72000
PERSHING	ARMY GROUND	20	95000
GLCMS	ARMY GROUND	34	9010
INFANTRY	ARMY GROUND	14	66000
MORTERS	ARMY GROUND	0	20000
ROLES LNCH	ARMY GROUND		

NORMALIZED VALUES		
F-111	10	0000
F-16	8	0900
F-4	6	4100
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	0804
A-7	4	0000
F-14	3	7500
COBRA	3	6400
SELF-PROP.	3	6296
M-901	3	3729
ATT. SUBS	3	5197
M-48	3	1700
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	5313
SH-2	1	4079
PERSHING	1	3611
DESTROYERS	1	2671
MORTERS	1	1910
SH-3	0	5632
RADIO RLY	0	4532
M-113	0	3970
ART. ACFT	0	1824
M-551	0	0567
ROLES LNCH	0	0170

FLUORSPAR ACID
A-10 CAS
COBRA CAS
F-4 AIR INTERDICTION
CAS
F-16 AIR INTERDICTION
CAS
ART. ACFT CAS
RADIO RLAY AIR INTERDICTION
CAS
F-111 AIR INTERDICTION
A-6 AIR INTERDICTION
F-15 AIR INTERDICTION
A-7 AIR INTERDICTION
F-14 AIR INTERDICTION
F-18 AIR INTERDICTION
SH-3 ASW (SEA BASED)
SH-2 ASW (SEA BASED)
SH-60B ASW (SEA BASED)
S-3 ASW (SEA BASED)
ATT. SUBS ASW (SEA BASED)
FRIGATES ASW (SEA BASED)
DESTROYERS ASW (SEA BASED)
M-48 ARMY GROUND
M-60 ARMY GROUND
M-1 ARMY GROUND
M-351 ARMY GROUND
M-901 ARMY GROUND
M-2/M-3 ARMY GROUND
M-113 ARMY GROUND
MLRS ARMY GROUND
TOWED ART. ARMY GROUND
SELF-PROP. ARMY GROUND
FERRING ARMY GROUND
GLCMS ARMY GROUND
INFANTRY ARMY GROUND
MORTERS ARMY GROUND
ROLES LNCH ARMY GROUND

84 3701
44 3701
123 1503
42 54
30 10
4 3701
3701
3701
13 9378
44 1814
44 4148
41 5771
51 3126
83 5010
18 9378
13 3701
33 7129
4 3402
20 3968
20 2177
12 1347
11 7335
18 8575
20 9527
0 2095
50 2866
30 2866
5 5874
15 7146
20 9727
17 9370
14 4449
24 4449
50 8740
24 4449
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 3.6276
F-14 3.3333
M-2/M-3 3.2667
M-901 3.2667
A-6 3.0000
COBRA 2.9191
S-3 2.8153
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
FERRING 0.9528
DESTROYERS 0.7884
M-48 0.7622
SH-3 0.4505
RADIO RLAY 0.3642
M-113 0.3630
ART. ACFT 0.2189
ROLES LNCH 0.0136
M-351 0.0136

PYRETHRUM

ATT. SUBS	ASW (SEA BASED)	14	4484
M-48	ARMY GROUND	27	3783
M-60	ARMY GROUND	44	0000
M-113	ARMY GROUND	4	8890
TOWED ART.	ARMY GROUND	20	3333
SELF-PROP.	ARMY GROUND	39	1118
INFANTRY	ARMY GROUND	49	2425
MORTERS	ARMY GROUND	34	2220

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 2.0687
M-113 0.7000

ALL COMMODITIES

A-10	CAS	2	8646
COBRA	CAS	1	8446
F-4	AIR INTERDICTION	3	8446
	CAS	0	2688
F-16	AIR INTERDICTION	2	9077
	CAS	1	7513
ART ACFT	CAS	0	1236
RADIO RLAY	AIR INTERDICTION	0	1236
	CAS	0	1011
F-111	AIR INTERDICTION	5	2339
A-6	AIR INTERDICTION	1	4143
F-15	AIR INTERDICTION	2	3162
A-7	AIR INTERDICTION	2	0434
F-14	AIR INTERDICTION	1	8473
F-18	AIR INTERDICTION	3	0788
SH-3	ASW (SEA BASED)	0	2514
SH-2	ASW (SEA BASED)	0	2514
SH-60B	ASW (SEA BASED)	1	0411
S-3	ASW (SEA BASED)	1	4737
ATT. SUBS	ASW (SEA BASED)	1	2514
FRIGATES	ASW (SEA BASED)	0	7513
DESTROYERS	ASW (SEA BASED)	0	4508
M-48	ARMY GROUND	1	1734
M-60	ARMY GROUND	1	8837
M-1	ARMY GROUND	1	8837
M-551	ARMY GROUND	0	0119
M-901	ARMY GROUND	1	5086
M-2/M-3	ARMY GROUND	1	5086
M-113	ARMY GROUND	0	2095
MLRS	ARMY GROUND	0	6214
TOWED ART.	ARMY GROUND	1	1314
SELF-PROP.	ARMY GROUND	1	5086
PERSHING	ARMY GROUND	0	6214
GLCMS	ARMY GROUND	0	5773
INFANTRY	ARMY GROUND	2	2356
MORTERS	ARMY GROUND	1	1245
RCLES LNCH	ARMY GROUND	0	0210

NORMALIZED VALUES

F-111	10	0000
F-16	2	8862
F-4	3	0445
F-18	5	8824
A-10	4	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	7294
A-6	3	0832
M-2/M-3	2	8824
M-901	2	8824
SELF-PROP.	2	8824
S-3	2	8138
ATT. SUBS	2	3295
M-48	2	2418
TOWED ART.	2	1618
MORTERS	2	1484
SH-60B	1	9946
GLCMS	1	8682
FRIGATES	1	4355
PERSHING	1	2010
MLRS	1	2010
SH-2	1	2008
DESTROYERS	0	8613
SH-3	0	4803
RADIO RLAY	0	4285
M-113	0	4003
ART ACFT	0	2361
RCLES LNCH	0	0400
M-551	0	0227

CRITICALITY OF SHORTFALL

ALL FEES
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK FILE (UNITS)	SHORT FALL (%)	TRANS- LATED	FEV COMMODITY IMPORT	CRITIC- ALITY	Net 17-1 15-19-1
COBALT	25.4	42.5	-7.7	407.5	8.4	3379.4	4.4
TIN	20.0	100.0	-35.5	0.0	10.0	4358.1	4.4
NICKEL	200.0	100.0	-35.5	437.7	10.0	4358.1	4.4
FLUORSPAR ACID	1400.0	800.0	-35.1	355.9	9.5	3708.3	4.4
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	135.0	6.43	1.72	0.580	0.191
MOROCO	400.0	2.14	2.05	0.432	1.249
BOTSWANNA	250.0	1.19	1.76	0.569	0.710
SOUTH AFRICA	150.0	0.71	2.31	0.432	1.987
TAIRE	12500.0	59.02	1.76	0.569	0.087
ZAMBIA	3500.0	16.67	1.76	0.569	0.087
PHILIPPINES	50.0	0.24	0.82	1.216	0.259
AUSTRALIA	400.0	1.90	0.82	1.216	0.259
NEW CALEDONIA	250.0	1.19	0.82	1.216	0.259
CANADA	1100.0	5.24	2.61	0.383	1.987
U.S.	1000.0	4.76	2.31	0.432	1.249
TOTAL	21000.0	100.00			

COMPOSITE IMPORTANCE (LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
AUSTRALIA	100.0	0.15	0.82	1.216	0.191
U.S.	16100.0	23.82	2.31	0.432	1.249
THAILAND	5900.0	8.73	0.82	1.216	0.259
INDONESIA	5800.0	8.58	0.82	1.216	0.259
UK	100.0	0.15	1.76	0.569	0.087
BOLIVIA	10300.0	15.24	0.90	1.117	0.112
BRAZIL	2400.0	3.55	0.90	1.117	0.112
FRG	3000.0	4.44	2.33	0.429	1.905
MALAYSIA	23900.0	35.36	0.82	1.216	0.259
TOTAL	67600.0	100.00			

COMPOSITE IMPORTANCE (LOC 3)

NICKEL

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
FINLAND	1000.0	0.33	1.72	0.580	0.191
SOUTH AFRICA	5000.0	1.64	2.31	0.432	0.710
PHILIPPINES	5000.0	1.64	0.82	1.216	1.987
AUSTRALIA	25000.0	8.21	0.82	1.216	0.259
CANADA	150000.0	49.28	2.61	0.383	1.987
U.S.	88000.0	28.91	2.31	0.432	1.249
GREECE	600.0	0.20	1.76	0.569	0.112
NETHERLANDS	200.0	0.07	1.76	0.569	0.087
FRG	100.0	0.03	1.76	0.569	0.019
YUGOSLAVIA	500.0	0.16	1.76	0.569	0.087
USSR	5000.0	1.64	0.86	1.160	1.905
DOM. REPUB.	15000.0	4.93	1.38	0.727	0.582
GUATAMALA	4000.0	1.31	1.38	0.727	0.950
INDONESIA	5000.0	1.64	0.82	1.216	1.987
TOTAL	304400.0	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUORSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/01	% 1/01
SOUTH AFRICA	180	22.36	2.31	0.432	9.43
ITALY	70	8.70	2.31	0.432	3.76
FRANCE	40	5.07	1.76	0.569	4.87
WEST AFRICA	100	12.47	1.76	0.569	1.76
HAILAND	15	1.86	0.82	1.216	1.21
MEXICO	300	48.48	2.31	0.432	11.50
TOTAL:	800	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

PYRETHRUM

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/01	% 1/01
SOUTH AFRICA	2000	1.01	2.31	0.432	0.43
AUSTRALIA	1500	0.76	0.82	1.216	0.92
KENYA	11000	5.57	1.76	0.569	3.17
RWANDA	80000	40.51	1.76	0.569	23.06
TANZANIA	25000	12.64	1.76	0.569	12.64
	78000	39.49	1.76	0.569	22.48
TOTAL:	197500	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	% (1/01) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
DEALT				
FINLAND	3.734	7.76	28.93	11.01
MOROCCO	1.048	7.76	8.09	3.02
BOTSWANNA	0.478	7.76	2.26	0.80
SOUTH AFRICA	0.349	7.76	1.40	0.51
CHIRE	33.882	7.76	141.80	100.00
SEYSEL	9.490	7.76	73.60	28.00
PHILIPPINES	0.269	7.76	2.24	0.85
AUSTRALIA	2.316	7.76	17.96	6.83
NEW CALEDONIA	1.447	7.76	11.22	4.27
CANADA	2.007	7.76	15.16	5.82
U.S.	2.059	7.76	15.97	6.02
IN				
AUSTRALIA	0.180	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	10.421	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	1.907	0.00	0.00	0.00
MALAYSIA	41.983	0.00	0.00	0.00
NICKEL				
FINLAND	0.191	10.00	1.91	0.73
SOUTH AFRICA	0.710	10.00	7.10	2.70
PHILIPPINES	1.997	10.00	19.97	7.60
AUSTRALIA	0.987	10.00	9.87	3.70
CANADA	18.877	10.00	188.77	71.82
U.S.	12.501	10.00	125.01	47.01
GREECE	0.112	10.00	1.12	0.41
NETHERLANDS	0.037	10.00	0.37	0.14
FRG	0.019	10.00	0.19	0.07
YUGOSLAVIA	0.094	10.00	0.94	0.34
USSR	1.905	10.00	19.05	7.25
DOM. REPUB	3.087	10.00	30.87	11.68
GUATAMALA	0.933	10.00	9.33	3.49
INDONESIA	1.997	10.00	19.97	7.60
SULFURIC ACID				
SOUTH AFRICA	9.669	8.51	83.23	31.36
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	15.03	5.72
THAILAND	2.265	8.51	19.23	7.38
MEXICO	18.801	8.51	159.98	60.87
LYRETHAM				
SOUTH AFRICA	0.438	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	38.11
RWANDA	7.207	4.35	31.38	11.94
TANZANIA	22.487	4.35	97.91	37.25

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAMBIA	COBALT	100.00
2	CANADA	NICKEL	71.82
3	MEXICO	FLUORESPAR ACID	60.87
4	U.S.	NICKEL	47.54
5	KENYA	PYRETHRUM	38.21
6	AUSTRALIA	NICKEL	37.98
7	TANZANIA	PYRETHRUM	37.25
8	SOUTH AFRICA	FLUORESPAR ACID	31.30
9	ZAMBIA	COBALT	28.00
10	SPAIN	FLUORESPAR ACID	22.96
11	ITALY	FLUORESPAR ACID	14.88
12	DOM. REPUB	NICKEL	13.42
13	U.S.	FLUORESPAR ACID	12.17
14	RWANDA	PYRETHRUM	11.94
15	FINLAND	COBALT	11.01
16	INDONESIA	NICKEL	7.60
17	PHILIPPINES	NICKEL	7.60
18	THAILAND	FLUORESPAR ACID	7.37
19	USSR	NICKEL	7.25
20	AUSTRALIA	COBALT	6.93
21	U.S.	COBALT	6.03
22	CANADA	COBALT	5.93
23	EAST AFRICA	FLUORESPAR ACID	5.75
24	UK	PYRETHRUM	5.25
25	NEW CALEDONIA	COBALT	4.27
26	GUATAMALA	NICKEL	3.63
27	MOROCCO	COBALT	3.08
28	SOUTH AFRICA	NICKEL	2.70
29	BOTSWANNA	COBALT	2.00
30	AUSTRALIA	PYRETHRUM	1.38
31	SOUTH AFRICA	COBALT	0.91
32	PHILIPPINES	COBALT	0.80
33	SOUTH AFRICA	PYRETHRUM	0.73
34	FINLAND	NICKEL	0.73
35	GREECE	NICKEL	0.43
36	YUGOSLAVIA	NICKEL	0.34
37	NETHERLANDS	NICKEL	0.14
38	FRG	NICKEL	0.07
39	MALAYSIA	TIN	0.00
40	FRG	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 3

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict & Media 1

Region	1	2	3	4	5	6	7	8	9	10
eight	10.0	10.0	7.0	5.0	7.0	10.0	2.0	5.0	2.0	6.0
/COEF	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0313	0.0937

Level of Conflict & Media 2

Region	1	2	3	4	5	6	7	8	9	10
eight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	8.0	7.0	5.0
/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 & Media 3

Region	1	2	3	4	5	6	7
eight	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 & Media 4

Region	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

on the Importance of Controlling EACH region within its own Media

Media 1	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	0.0170

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

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

Media 4	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 of controlling ANY Region of any other Media

Media 1	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

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

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

Media 4	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	0.133	10.000
2	1	AIR INTERDICTION	0.112	8.470
3	3	ARMY GROUND	0.085	6.372
4	16	ATTACK SUB	0.073	5.481
5	19	SURFACE COMBATANTS	0.060	4.506
6	8	RAPID DEPLOY	0.054	4.052
7	12	THEATER NUCLEAR WEAPON	0.054	4.052
8	14	ASW(LAND BASED)	0.043	3.242
9	21	AIR SUPERIORITY(LAND BASED)	0.037	2.776
10	6	CAS	0.034	2.537
11	15	ASW(SEA BASED)	0.032	2.418
12	23	AIR SUPERIORITY(SHIP BASED)	0.030	2.274
13	10	STRATEGIC BOMBER	0.025	1.850
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	0.960
18	18	MINE WARFARE	0.013	0.970
19	2	AMPHIBIOUS ASSAULT	0.010	0.745
20	28	ASAT(LAND BASED)	0.007	0.542
21	20	AIR DEFENSE(LAND BASED)	0.004	0.295
22	9	SPACE-BASED WEAPON(LND CNTRL)	0.003	0.213
23	30	SPACE BASED WEAPON(SEA CNTRL)	0.002	0.124
24	27	ARM(SPACE BASED)	0.000	0.000
25	26	ARM(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	5.85
ARMY GROUND	3.90
CAS	1.45
ICBM	0.00
STRATEGIC BOMBER	1.85
SLBM	0.00
ASW(SEA BASED)	1.33
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

34.49

TIN

AIR INTERDICTION	6.05
ARMY GROUND	1.65
CAS	1.58
STRATEGIC BOMBER	1.85
ASW(LAND BASED)	3.25
ASW(SEA BASED)	1.16
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	3.19
CAS	1.70
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)	2.27
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
NICKEL	9.88	(41.07
FLUORSPAR ACID	9.46	(39.31
COBALT	8.30	(34.49
PYRETHRUM	4.08	(16.98

COBRA		
A-10	CAS	60 0798
COBRA	CAS	40 0532
F-4	AIR INTERDICTION	100 0511
	CAS	6 0080
F-16	AIR INTERDICTION	73 6480
	CAS	33 3776
ART. ACFT	CAS	3 0040
RADIO RLY	AIR INTERDICTION	3 3147
	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 0265
F-14	AIR INTERDICTION	44 1830
F-18	AIR INTERDICTION	73 6480
SH-2	ASW(SEA BASED)	6 3742
SH-2	ASW(SEA BASED)	10 9304
SH-60F	ASW(SEA BASED)	24 7834
S-3	ASW(SEA BASED)	36 4237
ATT. SUBS	ASW(SEA BASED)	25 2942
FRIGATES	ASW(SEA BASED)	15 1765
DESTROYERS	ASW(SEA BASED)	9 1039
M-48	ARMY GROUND	32 7691
M-60	ARMY GROUND	52 6647
M-1	ARMY GROUND	53 5163
M-551	ARMY GROUND	0 1901
M-561	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 3589
ROLES 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 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 2001
PERSHING	1 1771
FRIGATES	1 1449
DESTROYERS	0 6869
INFANTRY	0 1900
SH-3	0 4808
RADIO RLY	0 4200
M-113	0 9493
ART. ACFT	0 3265
ROLES LNCH	0 1030
M-551	0 0147

TIN		
A-10	CAS	60 0798
COBRA	CAS	53 4042
F-4	AIR INTERDICTION	104 0531
	CAS	6 0000
F-16	AIR INTERDICTION	73 6480
	CAS	33 3774
ART ACFT	CAS	3 0040
RADIO RLY	AIR INTERDICTION	3 3142
	CAS	2 2530
F-111	AIR INTERDICTION	132 5664
A-6	AIR INTERDICTION	44 7411
F-15	AIR INTERDICTION	58 9184
A-7	AIR INTERDICTION	53 0260
F-14	AIR INTERDICTION	49 7124
F-18	AIR INTERDICTION	82 8540
SH-3	ASW(SEA BASED)	5 4636
SH-2	ASW(SEA BASED)	13 6589
SH-60B	ASW(SEA BASED)	21 2472
S-3	ASW(SEA BASED)	36 4237
ATT SUBS	ASW(SEA BASED)	15 1763
FRIGATES	ASW(SEA BASED)	13 1763
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 0650
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	4.5321
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	1.7166
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 RLY	0.4200
SH-3	0.4121
SELF-PROP	0.3924
MORTERS	0.3433
TOWED ART	0.2943
M-48	0.2747
ART ACFT	0.2266
M-113	0.0490
ROLES LNCH	0.0147
M-551	0.0040

NICKEL		
A-10	CAS	40.0798
COBRA	CAS	40.0532
F-4	AIR INTERDICTION	79.5398
	CAS	4.5060
F-16	AIR INTERDICTION	73.6480
	CAS	33.3776
ART. ACFT	CAS	2.0027
RADIO RLY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	132.5644
A-6	AIR INTERDICTION	39.7699
F-15	AIR INTERDICTION	58.9184
A-7	AIR INTERDICTION	53.0265
F-14	AIR INTERDICTION	49.7124
F-18	AIR INTERDICTION	82.8540
SH-3	ASW (SEA BASED)	7.2847
SH-2	ASW (SEA BASED)	18.2119
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
DESTROYERS	ASW (SEA BASED)	16.3907
M-48	ARMY GROUND	36.4102
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	17.5549
TOWED ART.	ARMY GROUND	31.2087
SELF-PROP.	ARMY GROUND	41.6116
PERISHING	ARMY GROUND	15.6044
GLCMs	ARMY GROUND	19.5024
INFANTRY	ARMY GROUND	32.5091
MORTERS	ARMY GROUND	13.6538
ROLES LNCH	ARMY GROUND	0.1951

NORMALIZED VALUES	
F-111	10.0000
F-16	8.0734
F-4	6.3399
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	3.4343
SELF-PROP.	3.1389
M-901	3.0899
COBRA	3.0214
A-6	3.0000
S-3	2.7476
M-48	2.7446
INFANTRY	2.4523
TOWED ART.	2.3542
SH-60B	2.1370
FRIGATES	2.0607
GLCMs	1.4714
SH-2	1.3738
MLRS	1.3242
DESTROYERS	1.2364
PERISHING	1.1771
MORTERS	1.0300
SH-3	0.5495
RADIO RLY	0.4200
M-113	0.3433
ART. ACFT	0.1511
M-551	0.0490
ROLES LNCH	0.0147

FLUORESCAR ACID		
A-10	CAS	75.0997
COBRA	CAS	40.0522
F-4	AIR INTERDICTION	132.5664
	CAS	7.5100
F-16	AIR INTERDICTION	92.0600
	CAS	41.7221
ART. ACFT	CAS	3.0040
RADIO BLAY	AIR INTERDICTION	3.3142
	CAS	2.2530
F-111	AIR INTERDICTION	165.7080
A-6	AIR INTERDICTION	49.7124
F-15	AIR INTERDICTION	73.6480
A-7	AIR INTERDICTION	66.2832
F-14	AIR INTERDICTION	55.2360
F-18	AIR INTERDICTION	92.0600
SH-3	ASW(SEA BASED)	7.2547
SH-2	ASW(SEA BASED)	18.2119
SH-60B	ASW(SEA BASED)	35.4119
S-3	ASW(SEA BASED)	45.5296
ATT. SUBS	ASW(SEA BASED)	30.3531
FRIGATES	ASW(SEA BASED)	21.2472
DESTROYERS	ASW(SEA BASED)	12.7483
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
MURTERS	ARMY GROUND	22.7564
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	1.8317
SELF-PROP.	1.5695
MORTERS	1.3733
GLCMs	1.3733
FRIGATES	1.2822
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	0.6592
SH-3	0.4396
RADIO BLAY	0.3360
M-113	0.3139
ART. ACFT	0.1813
M-551	0.0118
ROLES LNCH	0.0118

PYRETHRUM

ATT. SUBS	ASB (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	36.4102
INFANTRY	ARMY GROUND	65.0182
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. SUBS	2.3342
M-113	0.7000

ALL COMMODITIES

A-10	CAS	2	5534
COBRA	CAS	1	7356
F-4	AIR INTERDICTION	4	2421
	CAS	0	2403
F-16	AIR INTERDICTION	3	1300
	CAS	1	4186
ART. ACFT	CAS	0	1101
RADIO RLY	AIR INTERDICTION	0	1326
	CAS	0	0901
F-111	AIR INTERDICTION	5	6341
A-6	AIR INTERDICTION	1	7399
F-15	AIR INTERDICTION	2	5040
A-7	AIR INTERDICTION	2	2536
F-14	AIR INTERDICTION	1	9885
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	0972
S-3	ASW(SEA BASED)	1	5480
ATT. SUBS	ASW(SEA BASED)	1	3153
FRIGATES	ASW(SEA BASED)	0	7892
DSTROYERS	ASW(SEA BASED)	0	4735
M-48	ARMY GROUND	1	0923
M-60	ARMY GROUND	1	7555
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	0463
ROLES 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	1173
M-60	3	1158
A-6	3	0882
COBRA	3	0806
S-3	2	7476
M-2/M-3	2	4927
M-901	2	4927
SELF-PROP.	2	4927
ATT. SUBS	2	3343
SH-60B	1	9484
M-48	1	9387
TOWED ART.	1	8695
MORTERS	1	8530
GLCMS	1	6156
FRIGATES	1	4007
SH-2	1	1718
PERSHING	1	0386
MLRS	1	0386
DSTROYERS	0	3404
SH-3	0	4687
RADIO RLY	0	3952
M-113	0	3462
ART. ACFT	0	1905
ROLES LNCH	0	0346
M-551	0	0195

CRITICALITY OF SHORTFALL
ALL FEES
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK FILE (UNITS)	SHORT FALL (%)	TRANS- LATED	FEV COMMODITY IMPORT.	CRITIC- ALITY	NET FEV CRITICALITY
COBALT	85.4	43.8	-48.7	402.5	8.3	3339.2	7.7
TIN	42.0	190.6	353.8	0.0	10.0	0.0	7.0
NICKEL	200.0	32.2	-83.9	437.7	9.9	4324.8	10.0
FLUORSPAR ACID	1400.0	895.0	-35.1	389.9	9.5	3883.5	9.5
URETHRUM	500.0	0.0	-100.0	453.8	4.1	1803.2	4.3

COMPOSITE IMPORTANCE
(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
INLAND	1350.	6.43	1.72	0.580	3.731
OROCOO	450.	2.14	2.03	0.487	1.043
OTSWANNA	250.	1.19	1.76	0.569	0.679
SOUTH AFRICA	150.	0.71	2.31	0.432	0.304
HAIRE	12500.	59.52	1.76	0.569	33.891
AMBIA	3500.	16.67	1.76	0.569	9.490
PHILIPPINES	50.	0.24	0.82	1.216	0.289
AUSTRALIA	400.	1.90	0.82	1.216	1.316
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	2.059
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	0.180
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
U.K.	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
PERU	3000.	4.44	2.33	0.429	1.903
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	9.960
CANADA	150000	49.28	2.61	0.383	18.877
US	88000	28.91	2.31	0.432	12.501
GREECE	600	0.20	1.76	0.569	0.111
NETHERLANDS	200	0.07	1.76	0.569	0.037
FRG	100	0.03	1.76	0.569	0.019
YUGOSLAVIA	500	0.16	1.76	0.569	0.034
USSR	5000	1.64	0.82	1.160	1.905
DEM REPUB	10000	4.93	1.38	0.727	3.581
GUATAMALA	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)

FLUORSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
SOUTH AFRICA	180	22.34	2.31	0.432	9.487
US	70	8.70	2.31	0.432	3.760
ITALY	65	8.07	1.76	0.569	4.597
FRANCE	100	12.42	1.76	0.569	7.079
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	19.801
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
(LOC 3)

SOURCE	%(1/C1) COMP INF	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
DEALT				
FINLAND	3.731	7.72	25.80	11.01
MOROCCO	1.042	7.72	8.05	3.63
BOTSWANNA	0.678	7.72	5.23	2.00
SOUTH AFRICA	0.304	7.72	2.38	0.91
ZAIRE	33.882	7.72	261.68	100.00
ZAMBIA	9.450	7.72	73.27	28.32
PHILIPPINES	0.289	7.72	2.24	0.85
AUSTRALIA	2.316	7.72	17.88	6.83
NEW CALEDONIA	1.447	7.72	11.18	4.27
CANADA	2.007	7.72	15.49	5.92
U S	2.059	7.72	15.90	6.05
IN				
AUSTRALIA	0.180	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	42.983	0.00	0.00	0.00
ROCKEL				
FINLAND	0.191	10.00	1.91	0.73
SOUTH AFRICA	0.710	10.00	7.10	2.71
PHILIPPINES	1.997	10.00	19.97	7.63
AUSTRALIA	9.905	10.00	99.05	38.15
CANADA	18.877	10.00	188.77	72.14
U S	12.501	10.00	125.01	47.77
GREECE	0.112	10.00	1.12	0.43
NETHERLANDS	0.037	10.00	0.37	0.14
FRG	0.019	10.00	0.19	0.07
YUGOSLAVIA	0.094	10.00	0.94	0.36
USSR	1.905	10.00	19.05	7.28
DOM. REPUB.	3.582	10.00	35.82	13.69
GUATAMALA	0.955	10.00	9.55	3.65
INDONESIA	1.997	10.00	19.97	7.63
LUORSPAR ACID				
SOUTH AFRICA	9.669	8.52	82.42	31.50
U S	3.760	8.52	32.05	12.25
ITALY	4.597	8.52	39.19	14.98
SPAIN	7.073	8.52	60.29	23.04
EAST AFRICA	1.768	8.52	15.07	5.76
THAILAND	2.265	8.52	19.31	7.33
MEXICO	18.801	8.52	160.27	61.25
PYRETHRUM				
SOUTH AFRICA	0.438	4.29	1.88	0.72
AUSTRALIA	0.923	4.29	3.96	1.51
UK	3.171	4.29	13.59	5.19
KENYA	23.063	4.29	98.83	37.77
RWANDA	7.207	4.29	30.88	11.80
TANZANIA	22.487	4.29	96.36	36.82

SOURCE IMPORTANCE
RANKED BY SOURCE
(LDC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	CANADA	NICKEL	72.14
3	MEXICO	FLUORSPAR ACID	61.25
4	U S	NICKEL	47.77
5	AUSTRALIA	NICKEL	38.16
6	KENYA	PYRETHRUM	37.77
7	TANZANIA	PYRETHRUM	36.82
8	SOUTH AFRICA	FLUORSPAR ACID	31.55
9	ZAMBIA	COBALT	28.00
10	SPAIN	FLUORSPAR ACID	23.04
11	ITALY	FLUORSPAR ACID	14.98
12	DOM REPUB	NICKEL	13.69
13	U S	FLUORSPAR ACID	12.25
14	RWANDA	PYRETHRUM	11.80
15	FINLAND	COBALT	11.01
16	INDONESIA	NICKEL	7.63
17	PHILIPPINES	NICKEL	7.63
18	THAILAND	FLUORSPAR ACID	7.42
19	USSR	NICKEL	7.28
20	AUSTRALIA	COBALT	6.83
21	U S	COBALT	6.08
22	CANADA	COBALT	5.92
23	EAST AFRICA	FLUORSPAR ACID	5.76
24	UK	PYRETHRUM	5.19
25	NEW CALEDONIA	COBALT	4.27
26	GUATAMALA	NICKEL	3.65
27	MOROCCO	COBALT	3.08
28	SOUTH AFRICA	NICKEL	2.71
29	BOTSWANNA	COBALT	2.00
30	AUSTRALIA	PYRETHRUM	1.51
31	SOUTH AFRICA	COBALT	0.91
32	PHILIPPINES	COBALT	0.80
33	FINLAND	NICKEL	0.73
34	SOUTH AFRICA	PYRETHRUM	0.72
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 4

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
/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									
/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

region	1	2	3	4	5	6	7
weight	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

region	1	2	3	4
weight	10.0	4.0	2.0	1.0
/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
/COEF	0.0228	0.0228	0.0160	0.0114	0.0160	0.0040	0.0040	0.0114	0.0040	0.0117	

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

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

media 4	region	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 of controlling ANY Region of any other Media

media 1	region	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	0.0050	

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

media 3	region	1	2	3	4	5	6	7
/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048	

media 4	region	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	0.132	10.000
2	1	AIR INTERDICTION	0.107	8.061
3	3	ARMY GROUND	0.080	6.035
4	16	ATTACK SUBS	0.072	5.464
5	19	SURFACE COMBATANTS	0.060	4.523
6	12	THEATER NUCLEAR WEAPON	0.054	4.000
7	8	RAPID DEPLOY	0.052	3.915
8	14	ASW(LAND BASED)	0.043	3.212
9	6	CAS	0.037	2.808
10	23	AIR SUPERIORITY(LAND BASED)	0.034	2.543
11	15	ASW(SEA BASED)	0.033	2.464
12	23	AIR SUPERIORITY(SHIP BASED)	0.032	2.425
13	10	STRATEGIC BOMBER	0.025	1.910
14	21	AIR DEFENSE(SHIP BASED)	0.021	1.604
15	25	SPACE BASED WEAPON(AIR CNTRL)	0.020	1.507
16	29	ASAT(SPACE BASED)	0.013	0.984
17	18	MINE WARFARE	0.013	0.946
18	2	AMPHIBIOUS ASSAULT	0.011	0.805
19	13	SPECIAL OPERATIONS	0.010	0.758
20	28	ASAT(LAND BASED)	0.007	0.543
21	9	SPACE-BASED WEAPON(LND CNTRL)	0.003	0.223
22	20	AIR DEFENSE(LAND BASED)	0.003	0.197
23	30	SPACE BASED WEAPON(SEA CNTRL)	0.002	0.125
24	27	ARM(SPACE BASED)	0.000	0.000
25	26	ARM(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	3.57
ARMY GROUND	3.69
CAS	1.57
ICBM	0.00
STRATEGIC BOMBER	1.91
SLBM	0.00
ASW(SEA BASED)	1.35
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
ASAT(LAND BASED)	0.54

34.13

TIN

AIR INTERDICTION	5.76
ARMY GROUND	1.57
CAS	1.72
STRATEGIC BOMBER	1.91
ASW(LAND BASED)	3.22
ASW(SEA BASED)	1.18
ATTACK SUBS	3.47
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
ABM(LAND BASED)	0.00
	41.32

NICKEL

AIR INTERDICTION	5.42
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

PYRETHRUM

FLUORSPAR ACID		ARMY GROUND	2.19
		CIVIL DEFENSE	0.00
AIR INTERDICTION	6.95	ASW(SEA BASED)	0.15
AMPHIBIOUS ASSAULT	0.81	CARRIER BATTLE GROUP	10.00
ARMY GROUND	3.02	SURFACE COMBATANTS	4.52
CAS	1.84		
ICBM	0.00		16.87
STRATEGIC BOMBER	1.91		
SLBM	0.00		
ASW(LAND BASED)	3.28		
ASW(SEA BASED)	1.73		
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)	0.00		
	39.04		

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00	(41.32)
NICKEL	9.84	(40.67)
FLUORSPAR ACID	9.45	(39.04)
COBALT	8.26	(34.11)
PYRETHRUM	4.08	(16.87)

COBALT		
A-10	CAS	65.2197
COBRA	CAS	43.4793
F-4	AIR INTERDICTION	100.9364
	CAS	6.5220
F-16	AIR INTERDICTION	70.0147
	CAS	36.2332
ART. ACRFT	CAS	3.2410
RADIO RLAY	AIR INTERDICTION	3.1543
	CAS	2.4437
F-111	AIR INTERDICTION	106.1703
A-6	AIR INTERDICTION	37.8512
F-15	AIR INTERDICTION	56.0758
A-7	AIR INTERDICTION	50.4682
F-14	AIR INTERDICTION	42.0568
F-18	AIR INTERDICTION	75.0947
SH-3	ASW(SEA BASED)	6.4653
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	31.0396
M-60	ARMY GROUND	49.8800
M-1	ARMY GROUND	55.4278
M-551	ARMY GROUND	0.1840
M-901	ARMY GROUND	44.3423
M-2/M-3	ARMY GROUND	39.7995
M-113	ARMY GROUND	4.3111
MLRS	ARMY GROUND	16.6283
TOWED ART.	ARMY GROUND	22.1711
SELF-PROP.	ARMY GROUND	29.5415
PERSHING	ARMY GROUND	14.7808
GLCMS	ARMY GROUND	24.6346
INFANTRY	ARMY GROUND	6.1586
MORTERS	ARMY GROUND	30.1774
ROLES LNCH	ARMY GROUND	1.2933

NORMALIZED VALUES	
10.0000	F-111
8.5162	F-4
8.4273	F-16
5.5556	F-18
5.1692	A-10
4.4444	F-15
4.8931	M-1
4.0000	A-7
3.9533	M-60
3.5145	M-901
3.4461	COBRA
3.3233	F-14
3.0752	M-2/M-3
3.0000	A-6
2.9300	S-3
2.4601	M-48
2.3918	MORTERS
2.3430	SELF-PROP.
2.0347	ATT. SUBS
1.9940	SH-60B
1.9525	GLCMS
1.7572	TOWED ART.
1.3179	MLRS
1.2819	SH-2
1.2208	FRIGATES
1.1715	PERSHING
0.7325	DST. YERS
0.5127	SH-3
0.4881	INFANTRY
0.4433	RADIO RLAY
0.3417	M-113
0.2535	ART. ACRFT
0.1025	ROLES LNCH
0.0126	M-551

T1N		
A-10	CAS	65.2197
COBRA	CAS	57.9711
F-4	AIR INTERDICTION	100.9364
	CAS	6.5220
F-16	AIR INTERDICTION	70.0947
	CAS	36.2332
ART. ACFT	CAS	3.2610
RADIO RLY	AIR INTERDICTION	3.1543
	CAS	2.4457
F-111	AIR INTERDICTION	126.1705
A-6	AIR INTERDICTION	42.5826
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)	5.3451
SH-2	ASW(SEA BASED)	13.8628
SH-60B	ASW(SEA BASED)	21.5643
S-3	ASW(SEA BASED)	36.9674
ATT. SUBS	ASW(SEA BASED)	15.4031
FRIGATES	ASW(SEA BASED)	15.4031
DSTROYERS	ASW(SEA BASED)	9.2418
M-48	ARMY GROUND	3.4488
M-60	ARMY GROUND	5.5428
M-1	ARMY GROUND	30.7932
M-551	ARMY GROUND	0.0616
M-901	ARMY GROUND	5.5428
M-2/M-3	ARMY GROUND	5.5428
M-113	ARMY GROUND	0.6159
MLRS	ARMY GROUND	8.3142
TOWED ART.	ARMY GROUND	3.6952
SELF-PROP.	ARMY GROUND	4.9269
PERSHING	ARMY GROUND	12.9332
GLCMS	ARMY GROUND	21.5553
INFANTRY	ARMY GROUND	49.2692
MORTERS	ARMY GROUND	4.3111
ROLES 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	1.2203
ATT. SUBS	1.2208
SH-2	1.0987
PERSHING	1.0251
DSTROYERS	0.7325
MLRS	0.6590
RADIO RLY	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.	0.2922
M-48	0.2733
COB ALRET	0.2585
M-113	0.0913
ROLES LNCH	0.0146
M-551	0.0019

NICKEL		
A-10	CAS	65.2197
COBRA	CAS	43.4794
F-4	AIR INTERDICTION	75.7023
	CAS	4.8910
F-16	AIR INTERDICTION	70.0947
	CAS	36.2301
ART. ACFT	CAS	2.1740
RADIO RLY	AIR INTERDICTION	3.1543
	CAS	2.4457
F-111	AIR INTERDICTION	126.1705
A-6	AIR INTERDICTION	37.8512
F-15	AIR INTERDICTION	56.0738
A-7	AIR INTERDICTION	50.4682
F-14	AIR INTERDICTION	47.3140
F-18	AIR INTERDICTION	78.8566
SH-3	ASW(SEA BASED)	7.3935
SH-2	ASW(SEA BASED)	18.4837
SH-60B	ASW(SEA BASED)	29.7524
S-3	ASW(SEA BASED)	36.9674
ATT. SUBS	ASW(SEA BASED)	46.2092
FRIGATES	ASW(SEA BASED)	27.7255
DESTROYERS	ASW(SEA BASED)	16.6353
M-48	ARMY GROUND	34.4884
M-60	ARMY GROUND	55.4278
M-1	ARMY GROUND	61.5865
M-551	ARMY GROUND	0.6109
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	39.4153
PERSHING	ARMY GROUND	14.7808
GLCMs	ARMY GROUND	18.4739
INFANTRY	ARMY GROUND	30.7932
MORTERS	ARMY GROUND	12.9332
ROLES LNCH	ARMY GROUND	0.1848

NORMALIZED VALUES	
F-111	10.0000
F-16	8.4273
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	3.5143
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	2.1973
SH-2	1.4650
GLCMs	1.4644
DESTROYERS	1.3185
MLRS	1.3179
PERSHING	1.1715
MORTERS	1.0231
SH-3	0.5860
RADIO RLY	0.4433
M-113	0.3417
ART. ACFT	0.1739
M-551	0.0488
SELF LNCH	0.0126

FLUORSPAR ACID		
A-10	CAS	81.5247
COBRA	CAS	43.4798
F-4	AIR INTERDICTION	126.1705
	CAS	8.1525
F-16	AIR INTERDICTION	87.6184
	CAS	45.2915
ART. ACFT	CAS	3.2610
RADIO RELAY	AIR INTERDICTION	3.1543
	CAS	2.4457
F-111	AIR INTERDICTION	157.7132
A-6	AIR INTERDICTION	47.3140
F-15	AIR INTERDICTION	70.0947
A-7	AIR INTERDICTION	63.0853
F-14	AIR INTERDICTION	52.5711
F-18	AIR INTERDICTION	87.6184
SH-3	ASW(SEA BASED)	7.3935
SH-2	ASW(SEA BASED)	18.4837
SH-60B	ASW(SEA BASED)	35.9403
S-3	ASW(SEA BASED)	46.2092
ATT. SUBS	ASW(SEA BASED)	30.8061
FRIGATES	ASW(SEA BASED)	21.5643
DESTROYERS	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	24.6344
PERSHING	ARMY GROUND	12.9332
GLCMs	ARMY GROUND	21.5553
INFANTRY	ARMY GROUND	49.2692
MORTERS	ARMY GROUND	21.5553
RCLES LNCH	ARMY GROUND	0.1848

NORMALIZED VALUES

F-111	10.0000
F-4	8.5169
F-16	8.4273
F-18	5.5504
A-10	5.1692
F-15	4.4444
A-7	4.0000
F-14	3.8331
INFANTRY	3.1240
A-6	3.0000
S-3	2.9300
M-2/M-3	2.8116
M-901	2.8116
COBRA	2.7519
SH-60B	2.2789
ATT. SUBS	1.9503
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	1.0543
MLRS	0.8786
DESTROYERS	0.8204
PERSHING	0.8200
M-48	0.6560
SH-3	0.4688
RADIO RLAY	0.3551
M-113	0.3124
ART. ACFT	0.2068
RCLES 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	38.7995
M-113	ARMY GROUND	4.3111
TOWED ART.	ARMY GROUND	25.8663
SELF-PROP.	ARMY GROUND	34.4884
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	2.7718
COBRA	CAS	1.8841
F-4	AIR INTERDICTION	4.0375
	CAS	0.2609
F-16	AIR INTERDICTION	2.9790
	CAS	1.5399
ART. ACFT	CAS	0.1196
RADIO RLY	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	2.1449
F-14	AIR INTERDICTION	1.8926
F-18	AIR INTERDICTION	3.1543
SH-3	ASW(SEA BASED)	0.2680
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
DESTROYERS	ASW(SEA BASED)	0.4506
M-48	ARMY GROUND	1.0347
M-60	ARMY GROUND	1.6628
M-1	ARMY GROUND	1.6628
M-351	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	1.9708
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	4.0900
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	1.4937
SH-2	1.2495
PERSHING	1.0337
MLRS	1.0337
DESTROYERS	0.8942
SH-3	0.4998
RADIO RLY	0.4177
M-113	0.3446
ART. ACFT	0.2230
ROLES LNCH	0.0345
M-351	0.0195

CRITICALITY OF SHORTFALL

ALL FEES

(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK FILE (UNITS)	SHORT- FALL (%)	TRANS- LATED	FE/ COMMODITY IMPORT.	CRITIC- ALITY	FE/SHORT- FALL CRITICALITY
COBALT	80.4	43.8	-43.7	402.5	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	427.7	9.8	4207.6	10.0
FLUORSPAR ACID	1400.0	895.0	-36.1	389.9	9.4	3683.4	8.6
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1832.8	4.3

COMPOSITE IMPORTANCE

(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/OI	% (1/OI)
INLAND	1350.	6.43	1.92	0.520	3.343
BRUCCO	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
LAIRE	12500.	59.52	0.71	1.404	83.548
ZAMBIA	3500.	16.67	0.71	1.404	13.393
PHILIPPINES	50.	0.24	0.92	1.087	0.259
AUSTRALIA	400.	1.90	0.92	1.087	2.070
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/OI	% (1/OI)
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
OLIVIA	10300.	15.24	0.98	1.020	15.548
BRASIL	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)
INLAND	1000.	0.33	1.92	0.520	0.171
SOUTH AFRICA	5000.	1.64	1.19	0.841	1.301
PHILIPPINES	5000.	1.64	0.92	1.087	1.781
AUSTRALIA	20000.	8.21	0.92	1.087	8.924
CANADA	150000.	49.28	2.89	0.346	10.054
U.S.	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
FRG	100.	0.03	1.96	0.510	0.017
YUGOSLAVIA	500.	0.16	1.96	0.510	0.034
SSR	5000.	1.64	0.94	1.061	1.742
DEM. REPUB.	15000.	4.93	1.53	0.656	3.210
GUATEMALA	4000.	1.31	1.53	0.656	0.861
INDONESIA	5000.	1.64	0.92	1.087	1.789
TOTAL: 304400.		100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUORESPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	%(1/CI)
SOUTH AFRICA	180	22.36	1.19	0.841	13.803
U.S.	70.	8.70	2.56	0.391	3.402
ITALY	65.	8.07	1.96	0.510	4.120
FRANCE	100	12.42	1.96	0.510	4.938
EAST AFRICA	25.	3.11	0.71	1.404	4.359
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	0.892
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	56.853
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	% (1/01) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
OBALT				
FINLAND	3.348	7.72	25.81	4.00
MOROCCO	1.428	7.72	11.03	1.71
BOTSWANNA	1.671	7.72	12.90	2.00
SOUTH AFRICA	0.601	7.72	4.64	0.72
ZAIRE	83.548	7.72	644.90	100.00
ZAMBIA	23.998	7.72	130.57	23.00
PHILIPPINES	0.259	7.72	2.00	0.31
AUSTRALIA	2.070	7.72	15.98	2.48
NEW CALEDONIA	1.293	7.72	9.98	1.55
CANADA	1.811	7.72	13.99	2.17
U S	1.863	7.72	14.38	2.22
IN				
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	2.14
PHILIPPINES	1.785	10.00	17.85	2.77
AUSTRALIA	8.924	10.00	89.24	13.84
CANADA	17.054	10.00	170.54	26.44
U S	11.311	10.00	113.11	17.54
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	2.70
DOM. REPUB.	3.230	10.00	32.30	5.01
GUATAMALA	0.861	10.00	8.61	1.34
INDONESIA	1.785	10.00	17.85	2.77
FLUORSPAR ACID				
SOUTH AFRICA	18.803	8.55	160.78	24.93
U S	3.402	8.55	29.09	4.51
ITALY	4.120	8.55	35.23	5.46
SPAIN	6.338	8.55	54.20	8.40
EAST AFRICA	4.359	8.55	37.27	5.78
THAILAND	2.025	8.55	17.31	2.68
MEXICO	17.011	8.55	145.46	22.56
PYRETHRUM				
SOUTH AFRICA	0.852	4.30	3.66	0.57
AUSTRALIA	0.825	4.30	3.55	0.55
UK	2.842	4.30	12.22	1.90
KENYA	56.853	4.30	244.55	37.92
RWANDA	17.767	4.30	76.42	11.85
TANZANIA	55.433	4.30	238.43	36.97

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	37.92
3	TANZANIA	PYRETHRUM	36.97
4	ZAMBIA	COBALT	28.00
5	CANADA	NICKEL	26.44
6	SOUTH AFRICA	FLUORSPAR ACID	24.93
7	MEXICO	FLUORSPAR ACID	22.56
8	U S	NICKEL	17.54
9	AUSTRALIA	NICKEL	13.84
10	RWANDA	PYRETHRUM	11.85
1	SPAIN	FLUORSPAR ACID	8.40
2	EAST AFRICA	FLUORSPAR ACID	5.77
3	ITALY	FLUORSPAR ACID	5.46
4	DOM. REPUB.	NICKEL	5.01
5	U S	FLUORSPAR ACID	4.51
16	FINLAND	COBALT	4.00
17	INDONESIA	NICKEL	2.77
18	PHILIPPINES	NICKEL	2.77
19	USSR	NICKEL	2.70
20	THAILAND	FLUORSPAR ACID	2.68
1	AUSTRALIA	COBALT	2.48
2	U S	COBALT	2.23
23	CANADA	COBALT	2.17
24	SOUTH AFRICA	NICKEL	2.14
5	BOTSWANNA	COBALT	2.00
26	UK	PYRETHRUM	1.90
27	MOROCCO	COBALT	1.71
28	NEW CALEDONIA	COBALT	1.55
29	GUATAMALA	NICKEL	1.34
30	SOUTH AFRICA	COBALT	0.72
1	SOUTH AFRICA	PYRETHRUM	0.57
2	AUSTRALIA	PYRETHRUM	0.55
33	PHILIPPINES	COBALT	0.31
24	FINLAND	NICKEL	0.24
5	GREECE	NICKEL	0.16
36	YUGOSLAVIA	NICKEL	0.13
37	NETHERLANDS	NICKEL	0.05
8	FRG	NICKEL	0.03
39	MALAYSIA	TIN	0.00
40	PRC	TIN	0.00
1	BRAZIL	TIN	0.00
2	BOLIVIA	TIN	0.00
43	UK	TIN	0.00
44	INDONESIA	TIN	0.00
5	THAILAND	TIN	0.00
46	U S	TIN	0.00
47	AUSTRALIA	TIN	0.00

SCENARIO 5

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict & 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	3.0	2.0	1.0
1/CDEF	0.1784	0.1784	0.1250	0.0833	0.1250	0.0333	0.0333	0.0833	0.0333	0.1000

Level of Conflict & Media 2

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
1/CDEF	0.1333	0.1333	0.1200	0.0533	0.0833	0.0667	0.0133	0.1067	0.0933	0.0750
1/CDEF	0.1200									

Level of Conflict & 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
1/CDEF	0.1784	0.1784	0.1784	0.1429	0.1071	0.0714	0.1429

Level of Conflict & Media 4

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

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICTS

as the Importance of Controlling EACH region within its Media

Media 1	Region	1	2	3	4	5	6	7	8	9	10
1/CDEF		0.0228	0.0228	0.0160	0.0114	0.0160	0.0043	0.0043	0.0114	0.0043	0.0137

Media 2	Region	1	2	3	4	5	6	7	8	9	10
1/CDEF		0.0171	0.0171	0.0154	0.0068	0.0119	0.0083	0.0017	0.0136	0.0119	0.0085

Media 3	Region	1	2	3	4	5	6	7
1/CDEF		0.0228	0.0228	0.0228	0.0183	0.0127	0.0091	0.0127

Media 4	Region	1	2	3	4
1/CDEF		0.0750	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
1/CDEF		0.0089	0.0089	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
1/CDEF		0.0037	0.0037	0.0033	0.0015	0.0026	0.0019	0.0004	0.0030	0.0026	0.0019

Media 3	Region	1	2	3	4	5	6	7
1/CDEF		0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048

Media 4	Region	1	2	3	4
1/CDEF		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	8.261
3	3	ARMY GROUND	0.104	7.382
4	16	ATTACK SUBS	0.072	5.135
5	19	SURFACE COMBATANTS	0.060	4.245
6	12	THEATER NUCLEAR WEAPON	0.054	3.812
7	8	RAPID DEPLOY	0.052	3.765
8	6	CAS	0.044	3.132
9	14	ASW(LAND BASED)	0.043	3.083
10	27	AIR SUPERIORITY(LAND BASED)	0.041	2.910
11	15	ASW(SEA BASED)	0.038	2.815
12	21	AIR SUPERIORITY(SHIP BASED)	0.030	2.203
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.065
14	10	STRATEGIC BOMBER	0.020	1.744
15	25	SPACE 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	SPACE-BASED WEAPON(LAND CNTRL)	0.003	0.212
23	30	SPACE-BASED WEAPON(SEA CNTRL)	0.002	0.118
24	27	ARM(SPACE BASED)	0.000	0.000
25	26	ARM(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	CRW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.52
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	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.51

34.99

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.91
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	3.00
ASW(SEA BASED)	1.11
ATTACK SUBS	5.13
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.84
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	5.40
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	0.84
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
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)	2.28
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	8.49	(34.75
PYRETHRUM	4.14	(17.08

COBALT		
A-10	CAS	72.7336
COBRA	CAS	48.4841
F-4	AIR INTERDICTION	103.5050
	CAS	7.2704
F-16	AIR INTERDICTION	71.8765
	CAS	42.4075
ART. ACFT	CAS	3.4367
RADIO RLY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	118.3813
A-6	AIR INTERDICTION	38.8144
F-15	AIR INTERDICTION	57.5028
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	43.1271
F-18	AIR INTERDICTION	71.8765
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)	8.6811
M-4F	ARMY GROUND	37.9669
M-60	ARMY GROUND	41.0182
M-1	ARMY GROUND	67.7930
M-551	ARMY GROUND	0.2280
M-901	ARMY GROUND	54.2384
M-2/M-3	ARMY GROUND	47.4516
M-113	ARMY GROUND	5.2732
MLRS	ARMY GROUND	20.3394
TOWED ART.	ARMY GROUND	27.1192
SELF-PROP.	ARMY GROUND	36.1589
PERSHING	ARMY GROUND	18.0755
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	5.2402
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	1.1134
DESTROYERS	0.6710
INFANTRY	0.5827
SH-3	0.4697
RADIO RLY	0.4608
M-113	0.4076
ART. ACFT	0.2811
ROLES LNCH	0.1273
M-551	0.0170

TIN		
A-10	CAS	72.7336
COBRA	CAS	64.6521
F-4	AIR INTERDICTION	103.5050
	CAS	7.2734
F-16	AIR INTERDICTION	71.8735
	CAS	40.4075
ART. ACFT	CAS	3.6367
RADIO RLY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	43.6662
F-15	AIR INTERDICTION	57.5023
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	48.5180
F-18	AIR INTERDICTION	80.8633
SH-3	ASW(SEA BASED)	5.2093
SH-2	ASW(SEA BASED)	13.0231
SH-60B	ASW(SEA BASED)	20.2502
S-3	ASW(SEA BASED)	34.7284
ATT. SUBS	ASW(SEA BASED)	14.4701
FRIGATES	ASW(SEA BASED)	14.4701
DESTROYERS	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	26.3639
INFANTRY	ARMY GROUND	60.2649
MORTARS	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
DESTROYERS	0.6710
M-2/M-3	0.5240
M-901	0.5240
M-60	0.5240
SELF-PROP.	0.4658
RADIO RLY	0.4403
MORTARS	0.4076
SH-3	0.4026
TOWED ART.	0.3493
M-48	0.3261
ART. ACFT	0.2811
M-113	0.0532
ROLES LNCH	0.0175
M-551	0.0094

NICKEL		
A-10	CAS	72.7336
COBRA	CAS	48.4891
F-4	AIR INTERDICTION	77.6288
	CAS	5.4560
F-16	AIR INTERDICTION	71.8785
	CAS	40.4075
ART ACFT	CAS	2.4245
RADIO RLY	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	51.7525
F-14	AIR INTERDICTION	48.5180
F-18	AIR INTERDICTION	80.8633
SH-3	ASW(SEA BASED)	6.9457
SH-2	ASW(SEA BASED)	17.3642
SH-60B	ASW(SEA BASED)	27.0104
S-3	ASW(SEA BASED)	34.7284
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	0.7533
M-901	ARMY GROUND	47.4586
M-2/M-3	ARMY GROUND	54.2314
M-113	ARMY GROUND	5.2732
MLRS	ARMY GROUND	20.3394
TOWED ART	ARMY GROUND	34.1589
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
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
DESTROYERS	1.2079
SH-3	0.5348
RADIO RLY	0.4409
M-113	0.4076
ART. ACFT	0.1874
M-551	0.0530
ROLES LNCH	0.0175

FLUORSPAR ACID		
A-10	CAS	50. 8170
COBRA	CAS	48. 4891
F-4	AIR INTERDICTION	129. 3813
	CAS	9. 6917
F-16	AIR INTERDICTION	89. 8481
	CAS	50. 5094
ART. ACFT	CAS	3. 6367
RADIO BLAY	AIR INTERDICTION	3. 1345
	CAS	2. 7275
F-111	AIR INTERDICTION	161. 7266
A-6	AIR INTERDICTION	49. 5180
F-15	AIR INTERDICTION	71. 8733
A-7	AIR INTERDICTION	64. 6906
F-14	AIR INTERDICTION	53. 9087
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. 7647
S-3	ASW(SEA BASED)	43. 4104
ATT. SUBS	ASW(SEA BASED)	28. 9403
FRIGATES	ASW(SEA BASED)	20. 2082
DESTROYERS	ASW(SEA BASED)	12. 1549
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	54. 2384
M-2/M-3	ARMY GROUND	34. 2384
M-113	ARMY GROUND	6. 0265
MLRS	ARMY GROUND	16. 9443
TOWED ART.	ARMY GROUND	22. 5993
SELF-PROP.	ARMY GROUND	30. 1314
PERSHING	ARMY GROUND	15. 8195
GLCMs	ARMY GROUND	26. 3659
INFANTRY	ARMY GROUND	60. 2449
MORTARS	ARMY GROUND	26. 3659
ROLES LNCH	ARMY GROUND	0. 2260

NORMALIZED VALUES

F-111	10.0000
F-16	8.6707
F-4	8.5611
A-10	5.6216
F-18	5.5504
F-15	4.4444
A-7	4.0000
INFANTRY	3.7243
I-27M-3	3.3537
M-901	3.3537
F-14 -	3.3333
A-6	3.0000
COPRA	2.9982
S-3	2.6642
SH-60F	2.0877
SELF-PROP.	1.8601
ATT. SUBS	1.7895
MORTERS	1.6303
GLCHS	1.6303
TOWED ART	1.3974
M-1	1.3974
M-60	1.2576
FRIGATES	1.2526
SH-2	1.0737
MLPS	1.0480
PERISHING	0.9787
M-48	0.7825
DESTROYERS	0.7516
SH-3	0.4295
M-113	0.3776
RADIO FLAY	0.3686
ART. ACFT	0.2249
POLES LNCH	0.0140
M-551	0.0140

PYRETHRUM

ATT. SUBS	ASW (SEA BASED)	14.4701
M-48	ARMY GROUND	29.5298
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	1.9200
M-113	0.7000

ALL COMMODITIES

A-10	CAS	3.0912
COBRA	CAS	2.1012
F-4	AIR INTERDICTION	4.1402
	CAS	0.2909
F-16	AIR INTERDICTION	3.0548
	CAS	1.7175
ART. ACFT	CAS	0.1333
RADIO BLAY	AIR INTERDICTION	0.1244
	CAS	0.1091
F-111	AIR INTERDICTION	5.4987
A-6	AIR INTERDICTION	1.6981
F-15	AIR INTERDICTION	2.4439
A-7	AIR INTERDICTION	2.1995
F-14	AIR INTERDICTION	1.9437
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)	1.0447
S-3	ASW(SEA BASED)	1.4750
ATT. SUBS	ASW(SEA BASED)	1.2541
FRIGATES	ASW(SEA BASED)	0.7524
DISTROYERS	ASW(SEA BASED)	0.4513
M-48	ARMY GROUND	1.2656
M-60	ARMY GROUND	2.0339
M-1	ARMY GROUND	2.0339
M-551	ARMY GROUND	0.0128
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-111	10.0000
F-16	3.6787
F-4	3.0585
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	3.5224
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	1.9484
PERSHING	1.2330
MLRS	1.2330
SH-2	1.1447
DISTROYERS	0.8210
SH-3	0.4579
RADIO BLAY	0.4337
M-113	0.4110
ART. ACFT	0.7429
ROLES LNCH	0.0411
M-551	0.0226

CRITICALITY OF SHORTFALL

ALL FEED

(LOC 3)

COMMODITY	GRAN. (UNITS)	STOCK PILE (UNITS)	SHORT FALL (%)	TRAIL-- LATER	FEED COMMODITY IMPORT.	CRITIC- ALITY	IMPORTANCE CRITIC-ALITY
COBALT	85.4	48.8	-48.7	402.5	8.5	3418.1	7.0
IN	42.0	190.6	352.8	0.0	10.0	0.0	0.0
NICKEL	1000.0	80.2	-82.9	437.7	10.0	4377.1	10.0
FLUORSPAR ACID	1400.0	895.0	-36.1	389.9	9.6	3744.3	8.6
URETHRUM	500.0	0.0	-100.0	453.8	4.1	1860.7	4.1

COMPOSITE IMPORTANCE

(LOC 3)

COBALT

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/01	% (1/01)
INLAND	1350	6.43	1.92	0.520	3.343
MOROCCO	450	2.14	1.50	0.667	1.419
BOTSWANA	250	1.19	0.71	1.404	1.671
SOUTH AFRICA	150	0.71	1.19	0.841	0.671
HAIRE	12000	58.52	1.80	0.554	11.072
ZAMBIA	3500	16.67	0.71	1.404	23.341
PHILIPPINES	50	0.24	0.92	1.087	0.259
AUSTRALIA	400	1.90	0.91	1.087	2.070
NEW CALEDONIA	250	1.19	0.92	1.087	1.243
CANADA	1100	5.24	2.89	0.346	1.813
U.S.	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	1/01	% (1/01)
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	9.483
INDONESIA	5800	8.58	0.92	1.087	9.322
UK	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
PRC	3000	4.44	2.47	0.405	1.793
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	1.380
PHILIPPINES	5000.	1.64	0.92	1.087	1.780
AUSTRALIA	25000.	8.21	0.92	1.087	8.81
CANADA	150000.	49.28	2.89	0.348	17.004
U.S.	86000.	28.91	2.56	0.391	11.911
GREECE	600.	0.20	1.96	0.510	0.161
NETHERLANDS	200.	0.07	1.96	0.510	0.034
FR	100.	0.03	1.96	0.510	0.017
YUGOSLAVIA	500.	0.16	1.96	0.510	0.044
USSR	5000.	1.64	0.94	1.061	1.742
DEM. REPUB.	15000.	4.93	1.53	0.656	3.21
GUATAMALA	4000.	1.31	1.53	0.656	0.861
INDONESIA	5000.	1.64	0.92	1.087	1.780
TOTAL:	304400.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOREPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
SOUTH AFRICA	180	22.36	1.19	0.841	18.801
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	6.336
EAST AFRICA	25	3.11	0.71	1.404	4.359
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	56.855
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	% (1/01) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
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COBALT

FINLAND	8.343	7.81	26.11	10.13
MOROCCO	1.429	7.81	11.16	4.31
BOTSWANNA	1.671	7.81	13.05	5.06
SOUTH AFRICA	0.601	7.81	4.69	1.82
ZAIRE	33.002	7.81	257.71	100.00
ZAMBIA	23.393	7.81	182.68	70.88
PHILIPPINES	0.259	7.81	2.02	0.78
AUSTRALIA	2.070	7.81	16.16	6.27
NEW CALEDONIA	1.293	7.81	10.10	3.91
CANADA	1.813	7.81	14.16	5.49
U S	1.863	7.81	14.55	5.65

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	9.323	0.00	0.00	0.00
UK	0.075	0.00	0.00	0.00
BOLIVIA	15.348	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
FRG	1.786	0.00	0.00	0.00
MALAYSIA	28.414	0.00	0.00	0.00

NICKEL

FINLAND	0.171	10.00	1.71	0.66
SOUTH AFRICA	1.381	10.00	13.81	5.38
PHILIPPINES	1.785	10.00	17.85	6.93
AUSTRALIA	8.914	10.00	89.14	34.7
CANADA	17.054	10.00	170.54	66.17
U S	11.311	10.00	113.11	43.89
GREECE	0.101	10.00	1.01	0.38
NETHERLANDS	0.034	10.00	0.34	0.13
FRG	0.017	10.00	0.17	0.07
YUGOSLAVIA	0.084	10.00	0.84	0.32
USSR	1.742	10.00	17.42	6.76
DOM. REPUB.	3.230	10.00	32.30	12.53
GUATAMALA	0.861	10.00	8.61	3.34
INDONESIA	1.785	10.00	17.85	6.93

FLUORSPAR ACID

SOUTH AFRICA	18.803	8.55	160.85	62.11
U S	3.402	8.55	29.10	11.29
ITALY	4.120	8.55	35.24	13.67
SPAIN	6.338	8.55	54.22	21.04
EAST AFRICA	4.359	8.55	37.29	14.47
THAILAND	2.025	8.55	17.32	6.72
MEXICO	17.011	8.55	145.52	56.47

PYRETHRUM

SOUTH AFRICA	0.852	4.30	3.66	1.42
AUSTRALIA	0.825	4.30	3.53	1.38
UK	2.842	4.30	12.21	4.74
KENYA	56.855	4.30	244.29	94.79
RWANDA	17.767	4.30	76.34	29.62
TANZANIA	55.433	4.30	238.18	92.42

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	94.79
3	TANZANIA	PYRETHRUM	92.42
4	ZAMBIA	COBALT	70.94
5	CANADA	NICKEL	66.17
6	SOUTH AFRICA	FLUORSPAR ACID	62.41
7	MEXICO	FLUORSPAR ACID	56.47
8	U S	NICKEL	43.49
9	AUSTRALIA	NICKEL	34.63
10	RWANDA	PYRETHRUM	29.62
11	SPAIN	FLUORSPAR ACID	21.04
12	EAST AFRICA	FLUORSPAR ACID	14.47
13	ITALY	FLUORSPAR ACID	13.67
14	DOM. REPUB	NICKEL	12.53
15	U S	FLUORSPAR ACID	11.29
16	FINLAND	COBALT	10.12
17	INDONESIA	NICKEL	6.93
18	PHILIPPINES	NICKEL	6.93
19	USSR	NICKEL	6.76
20	THAILAND	FLUORSPAR ACID	5.72
21	AUSTRALIA	COBALT	6.27
22	U S	COBALT	5.65
23	CANADA	COBALT	5.49
24	SOUTH AFRICA	NICKEL	5.36
25	BOTSWANNA	COBALT	5.06
26	UK	PYRETHRUM	4.74
27	MOROCCO	COBALT	4.33
28	NEW CALEDONIA	COBALT	3.92
29	GUATAMALA	NICKEL	3.34
30	SOUTH AFRICA	COBALT	1.82
31	SOUTH AFRICA	PYRETHRUM	1.42
32	AUSTRALIA	PYRETHRUM	1.30
33	PHILIPPINES	COBALT	0.78
34	FINLAND	NICKEL	0.66
35	GREECE	NICKEL	0.39
36	YUGOSLAVIA	NICKEL	0.33
37	NETHERLANDS	NICKEL	0.13
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 6

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
Weight	10.0	10.0	7.0	5.0	7.0	10.0	2.0	5.0	2.0
I/CDEF	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0781

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9
Region 11									
Weight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	9.0	7.0
Weight	1.0								
I/CDEF	0.1190	0.1190	0.1071	0.0476	0.0833	0.0595	0.1190	0.0952	0.0833
I/CDEF	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/CDEF	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/CDEF	0.5833	0.2303	0.1176	0.0500

INFLUENCE COEFFICIENTS OVER ALL LEVEL OF CONFLICT on the Importance of Controlling EACH region with its own

Media 1

Region	1	2	3	4	5	6	7	8	9
I/CDEF	0.0100	0.0100	0.0140	0.0100	0.0140	0.0100	0.0040	0.0100	0.0040

Media 2

Region	1	2	3	4	5	6	7	8	9
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Media 11

Region									
I/CDEF	0.0152	0.0152	0.0137	0.0061	0.0107	0.0076	0.0152	0.0122	0.0107
I/CDEF	0.0137								

Media 3

Region	1	2	3	4	5	6	7
I/CDEF	0.0213	0.0213	0.0213	0.0213	0.0129	0.0085	0.0213

Media 4

Region	1	2	3	4
I/CDEF	0.0712	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
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RANKING	NUMBER	NAME	VALUE	VALUE
1	17	CARRIER BATTLE GROUP	0.139	10.000
2	1	AIR INTERDICTION	0.110	7.843
3	3	ARMY GROUND	0.095	6.845
4	16	ATTACK SUBS	0.073	5.217
5	19	SURFACE COMBATANTS	0.060	4.292
6	8	RAPID DEPLOY	0.058	4.141
7	12	THEATER NUCLEAR WEAPON	0.054	3.853
8	14	ASW(LAND BASED)	0.043	3.093
9	6	CAS	0.040	2.901
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	SPACE BASED WEAPON(AIR CNTRL)	0.019	1.334
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	SPACE-BASED WEAPON(LND CNTRL)	0.003	0.201
23	30	SPACE 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	SLEM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CEW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.44
ARMY GROUND	4.19
CAS	1.62
ICBM	0.00
STRATEGIC BOMBER	1.76
SLEM	0.00
ASW(SEA BASED)	1.27
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
ASAT(LAND BASED)	0.52
	33.99

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	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)	2.16
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00

	38.50

PYRETHRUM

ARMY GROUND	2.43
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	(31.99)
PYRETHRUM	4.18	(16.92)

COBALT		
A-10	CAS	67.4028
COBRA	CAS	44.9352
F-4	AIR INTERDICTION	98.5202
	CAS	6.7403
F-16	AIR INTERDICTION	68.4168
	CAS	37.4460
ART. ACFT	CAS	3.3701
RADIO FLAY	AIR INTERDICTION	3.0788
	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	41.0501
F-18	AIR INTERDICTION	68.4168
SH-3	ASW(SEA BASED)	6.0483
SH-2	ASW(SEA BASED)	15.1708
SH-60B	ASW(SEA BASED)	23.5990
S-3	ASW(SEA BASED)	34.6761
ATT. SUBS	ASW(SEA BASED)	24.0807
FRIGATES	ASW(SEA BASED)	14.4484
DSTROYERS	ASW(SEA BASED)	8.6690
M-48	ARMY GROUND	35.2006
M-60	ARMY GROUND	56.5724
M-1	ARMY GROUND	62.8582
M-551	ARMY GROUND	0.2095
M-901	ARMY GROUND	50.2866
M-2/M-3	ARMY GROUND	44.0008
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
GLOMS	ARMY GROUND	27.9370
INFANTRY	ARMY GROUND	6.9842
MORTERS	ARMY GROUND	34.2226
ROLES LNCH	ARMY GROUND	1.4667

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5962
F-4	8.5473
F-18	5.5556
A-10	5.4732
M-1	5.1042
M-60	4.5938
F-15	4.4444
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	2.8158
MORTERS	2.7789
SELF-PROP.	2.7222
GLOMS	2.2685
TOWED ART.	2.0417
ATT. SUBS	1.9554
SH-60B	1.9163
MLRS	1.5313
PERSHING	1.3611
SH-2	1.2319
FRIGATES	1.1732
DSTROYERS	0.7039
INFANTRY	0.5671
SH-3	0.4928
RADIO FLAY	0.4552
M-113	0.3970
ART. ACFT	0.2737
ROLES LNCH	0.1191
M-551	0.0170

TIN		
A-10	CAS	67.4028
COBRA	CAS	59.9136
F-4	AIR INTERDICTION	98.5002
	CAS	6.7403
F-16	AIR INTERDICTION	68.4168
	CAS	87.4480
ART. ACRFT	CAS	3.3701
RADIO RLY	AIR INTERDICTION	3.0769
	CAS	2.5276
F-111	AIR INTERDICTION	123.1503
A-6	AIR INTERDICTION	41.5432
F-15	AIR INTERDICTION	54.7335
A-7	AIR INTERDICTION	49.2601
F-14	AIR INTERDICTION	46.1814
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
FOLES 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	1.9850
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 RLY	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
FOLES LNCH	0.0170
M-551	0.0057

NICHEL		
A-10	CAS	67.4028
COBRA	CAS	44.9352
F-4	AIR INTERDICTION	73.8902
	CAS	5.0552
F-16	AIR INTERDICTION	68.4168
	CAS	37.4440
ART. ACRFT	CAS	2.2468
RADIO RLAY	AIR INTERDICTION	3.0788
	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	76.9689
SH-3	ASW(SEA BASED)	6.9272
S-3	ASW(SEA BASED)	17.3381
SH-60B	ASW(SEA BASED)	26.9703
S-3	ASW(SEA BASED)	34.6761
ATT. SUBS	ASW(SEA BASED)	43.3452
FRIGATES	ASW(SEA BASED)	26.0071
DESTROYERS	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	44.6892
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	8.5262
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	3.1759
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	1.5313
SH-2	1.4079
PERSHING	1.3611
DESTROYERS	1.2671
MORTERS	1.1910
SH-3	0.5632
RADIO RLAY	0.4552
M-113	0.3970
ART. ACRFT	0.1824
M-551	0.0767
ROLES LNCH	0.0170

FLUORSPAR ACID		
A-10	CAS	84.2536
COBRA	CAS	44.9352
F-4	AIR INTERDICTION	123.1503
	CAS	8.4254
F-16	AIR INTERDICTION	85.5210
	CAS	46.8075
ART. ACFT	CAS	3.3701
RADIO RLY	AIR INTERDICTION	3.0781
	CAS	2.5276
F-111	AIR INTERDICTION	153.9373
A-6	AIR INTERDICTION	46.1814
F-15	AIR INTERDICTION	68.4163
A-7	AIR INTERDICTION	61.5751
F-14	AIR INTERDICTION	51.3126
F-18	AIR INTERDICTION	85.5210
SH-3	ASW(SEA BASED)	6.9352
SH-2	ASW(SEA BASED)	17.3381
SH-60B	ASW(SEA BASED)	33.7129
S-3	ASW(SEA BASED)	43.3452
ATT. SUBS	ASW(SEA BASED)	28.8963
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
GLOMS	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	8.5262
F-4	8.5473
F-18	5.5556
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	1.5880
GLOMS	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	0.9523
DSTROYERS	0.7884
M-48	0.7622
SH-3	0.4505
RADIO RLY	0.3642
M-113	0.3630
ART. ACFT	0.2189
ROLES LNCH	0.0136
M-551	0.0136

PYRETHRUM		
ATT SUBS	ASW (SEA BASED)	14 4484
M-43	ARMY GROUND	27 3781
M-60	ARMY GROUND	44 0008
M-113	ARMY GROUND	4 8890
TOWED ART	ARMY GROUND	29 3338
SELF-PROP.	ARMY GROUND	39 1118
INFANTRY	ARMY GROUND	69 8425
MORTERS	ARMY GROUND	34 2228

NORMALIZED VALUES

INFANTRY	10.0000
M-60	6.3000
SELF-PROP.	5.6000
MORTERS	4.9000
TOWED ART.	4.2000
M-43	3.9200
ATT. SUBS	2.0687
M-113	0.7000

ALL COMMODITIES

A-10	CAS	2.8646
COBRA	CAS	1.8472
F-4	AIR INTERDICTION	3.9408
	CAS	0.2696
F-16	AIR INTERDICTION	2.9077
	CAS	1.5815
ART. ACRFT	CAS	0.1236
RADIO RLAY	AIR INTERDICTION	0.1232
	CAS	0.1011
F-111	AIR INTERDICTION	5.2339
A-6	AIR INTERDICTION	1.6163
F-15	AIR INTERDICTION	2.3262
A-7	AIR INTERDICTION	2.0936
F-14	AIR INTERDICTION	1.8473
F-18	AIR INTERDICTION	3.0788
SH-3	ASW(SEA BASED)	0.2514
SH-2	ASW(SEA BASED)	0.6285
SH-60B	ASW(SEA BASED)	1.0451
S-3	ASW(SEA BASED)	1.4737
ATT. SUBS	ASW(SEA BASED)	1.2522
FRIGATES	ASW(SEA BASED)	0.7513
DESTROYERS	ASW(SEA BASED)	0.4508
M-48	ARMY GROUND	1.1734
M-60	ARMY GROUND	1.8857
M-1	ARMY GROUND	1.8857
M-551	ARMY GROUND	0.0119
M-901	ARMY GROUND	1.5086
M-2/M-3	ARMY GROUND	1.5086
M-113	ARMY GROUND	0.2095
MLRS	ARMY GROUND	0.6286
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	5.8824
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	1.9963
GLCMS	1.8682
FRIGATES	1.4355
PERSHING	1.2010
MLRS	1.2010
SH-2	1.2008
DESTROYERS	0.8613
SH-3	0.4803
RADIO RLAY	0.4285
M-113	0.4003
ART. ACRFT	0.2361
ROLES LNCH	0.0400
M-551	0.0227

CRITICALITY OF SHORTFALL

ALL FEYS

(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK FILE (UNITS)	SHORT FALL (%)	TRANS- LATED	FE/ COMMODITY IMPORT	CRITIC- ALITY	NORMALIZED FE/SHORTFALL CRITICALITY
COBALT	85.4	43.8	-48.7	402.5	8.4	3379.9	7.8
TIN	42.0	190.6	353.8	0.0	10.0	0.0	0.0
COBALT	200.0	32.2	-83.9	437.7	10.0	4358.1	10.0
FLUOREPHAR ACID	1400.0	895.0	-36.1	389.9	9.5	3708.3	3.5
PERETHRUM	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)
INDONESIA	1350.	6.43	1.72	0.580	3.731
BRUNDA	450.	2.14	2.05	0.487	1.043
LESOTWANA	250.	1.19	1.76	0.569	0.678
SOUTH AFRICA	150.	0.71	2.31	0.432	0.309
IRE	12500.	59.52	1.72	0.580	34.543
LIBERIA	3500.	16.67	1.76	0.569	9.490
PHILIPPINES	50.	0.24	0.82	1.216	0.289
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
US	1000.	4.76	2.31	0.432	2.059
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	0.180
US	16100.	23.82	2.31	0.432	10.299
TAIWAN	5900.	8.73	0.82	1.216	10.611
INDONESIA	5800.	8.58	0.82	1.216	10.431
LIBERIA	100.	0.15	1.76	0.569	0.084
PERU	10300.	15.24	0.90	1.117	17.014
BRAZIL	2400.	3.55	0.90	1.117	3.964
PERU	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.	49.28	2.61	0.383	18.877
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
F.G.	100.	0.03	1.76	0.569	0.019
YUGOSLAVIA	500.	0.16	1.76	0.569	0.094
USSR	5000.	1.64	0.86	1.160	1.905
DEM. REPUB.	15000.	4.93	1.38	0.727	3.582
C. AMERICA	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)

FLUORSPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
SOUTH AFRICA	180.	22.36	2.31	0.432	9.669
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	1.763
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
(LOC 3)

SOURCE	%(1/CI) COMP IMF	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	3.731	7.76	28.93	10.80
MOROCCO	1.043	7.76	8.09	3.01
BOTSWANNA	0.678	7.76	5.26	1.96
SOUTH AFRICA	0.309	7.76	2.40	0.89
ZAIRE	34.543	7.76	267.90	100.00
ZAMBIA	9.490	7.76	73.60	27.47
PHILIPPINES	0.239	7.76	2.24	0.84
AUSTRALIA	2.316	7.76	17.96	6.70
NEW CALEDONIA	1.447	7.76	11.22	4.19
CANADA	2.007	7.76	15.56	5.81
U S	2.059	7.76	15.97	5.96
TIN				
AUSTRALIA	0.180	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	42.983	0.00	0.00	0.00
NICKEL				
FINLAND	0.191	10.00	1.91	0.71
SOUTH AFRICA	0.710	10.00	7.10	2.65
PHILIPPINES	1.997	10.00	19.97	7.45
AUSTRALIA	9.985	10.00	99.85	37.27
CANADA	18.877	10.00	188.77	70.46
U S	12.501	10.00	125.01	46.66
GREECE	0.112	10.00	1.12	0.42
NETHERLANDS	0.037	10.00	0.37	0.14
FRG	0.019	10.00	0.19	0.07
YUGOSLAVIA	0.094	10.00	0.94	0.35
USSR	1.905	10.00	19.05	7.11
DOM. REPUB.	3.582	10.00	35.82	13.37
GUATAMALA	0.955	10.00	9.55	3.57
INDONESIA	1.997	10.00	19.97	7.45
FLUORSPAR ACID				
SOUTH AFRICA	9.669	8.51	82.28	30.71
U S	3.760	8.51	32.00	11.94
ITALY	4.597	8.51	39.12	14.60
SPAIN	7.073	8.51	60.19	22.47
EAST AFRICA	1.768	8.51	15.05	5.62
THAILAND	2.265	8.51	19.28	7.20
MEXICO	18.801	8.51	159.98	59.72
F. RETHRUM				
SOUTH AFRICA	0.438	4.35	1.91	0.71
AUSTRALIA	0.923	4.35	4.02	1.50
UK	3.171	4.35	13.81	5.15
KENYA	23.063	4.35	100.42	37.49
RWANDA	7.207	4.35	31.38	11.71
TANZANIA	22.487	4.35	97.91	36.55

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	CANADA	NICKEL	70.46
3	MEXICO	FLUORSPAR ACID	59.72
4	U S	NICKEL	46.66
5	KENYA	PYRETHRUM	37.49
6	AUSTRALIA	NICKEL	37.27
7	TANZANIA	PYRETHRUM	36.55
8	SOUTH AFRICA	FLUORSPAR ACID	30.71
9	ZAMBIA	COBALT	27.47
10	SPAIN	FLUORSPAR ACID	22.47
11	ITALY	FLUORSPAR ACID	14.60
12	DOM. REPUB.	NICKEL	13.37
13	U S	FLUORSPAR ACID	11.94
14	RWANDA	PYRETHRUM	11.71
15	FINLAND	COBALT	10.80
16	INDONESIA	NICKEL	7.45
17	PHILIPPINES	NICKEL	7.45
18	THAILAND	FLUORSPAR ACID	7.20
19	USSR	NICKEL	7.11
20	AUSTRALIA	COBALT	6.70
21	U S	COBALT	5.96
22	CANADA	COBALT	5.81
23	EAST AFRICA	FLUORSPAR ACID	5.62
24	UK	PYRETHRUM	5.15
25	NEW CALEDONIA	COBALT	4.19
26	GUATAMALA	NICKEL	3.57
27	MOROCCO	COBALT	3.02
28	SOUTH AFRICA	NICKEL	2.63
29	BOTSWANNA	COBALT	1.96
30	AUSTRALIA	PYRETHRUM	1.50
31	SOUTH AFRICA	COBALT	0.89
32	PHILIPPINES	COBALT	0.84
33	SOUTH AFRICA	PYRETHRUM	0.71
34	FINLAND	NICKEL	0.71
35	GREECE	NICKEL	0.42
36	YUGOSLAVIA	NICKEL	0.35
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 7

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	2.0
1/COEF	0.1786	0.1786	0.1250	0.0833	0.1250	0.0357	0.0357	0.0833	0.0357	0.1071

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
1/COEF	0.1333	0.1333	0.1200	0.0553	0.0833	0.0667	0.0133	0.1067	0.0833	0.0553
1/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
1/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
1/COEF	0.0882	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
1/COEF		0.0228	0.0228	0.0160	0.0114	0.0160	0.0046	0.0046	0.0114	0.0046	0.0117

Media 2	Region	1	2	3	4	5	6	7	8	9	10
1/COEF		0.0171	0.0171	0.0154	0.0068	0.0119	0.0083	0.0017	0.0136	0.0119	0.0068

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

Media 4	Region	1	2	3	4
1/COEF		0.0732	0.0301	0.0150	0.0075

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

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

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

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

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

Media 4	Region	1	2	3	4
1/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	10.00
2	1	AIR INTERDICTION	0.117	8.266
3	3	ARMY GROUND	0.104	7.361
4	16	ATTACK SUB	0.072	5.101
5	19	SURFACE COMBATANTS	0.060	4.249
6	12	THEATER NUCLEAR WEAPON	0.054	3.817
7	8	RAPID DEPLOY	0.052	3.704
8	6	CAS	0.044	3.132
9	14	ASW(LAND BASED)	0.043	3.088
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.910
11	15	ASW(SEA BASED)	0.033	2.310
12	23	AIR SUPERIORITY(SHIP BASED)	0.032	2.276
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.045
14	10	STRATEGIC BOMBER	0.025	1.794
15	25	SPACE BASED WEAPON(AIR CNTRL)	0.020	1.416
16	29	ASAT(SPACE BASED)	0.013	0.914
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	0.276
22	9	SPACE-BASED WEAPON(LND CNTRL)	0.003	0.212
23	30	SPACE BASED WEAPON(SSA CNTRL)	0.002	0.118
24	27	ARM(SPACE BASED)	0.000	0.000
25	26	AIM(LAND BASED)	0.000	0.000
26	24	INTERCEPTOR AIRCRAFT	0.000	0.000
27	11	SLEM	0.000	0.000
28	7	ICBM	0.000	0.000
29	5	CIVIL DEFENSE	0.000	0.000
30	4	CEW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.52
CAS	1.75
ICBM	0.00
STRATEGIC BOMBER	1.79
SLEM	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
ASAT(LAND BASED)	0.51

34.99

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.91
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	3.00
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	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	0.74
ARMY GROUND	3.69
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)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
39.57	

PYRETHRUM

ARMY GROUND	2.43
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	(.34.9)
PYRETHRUM	4.14	(.17.08)

COPALT		
A-10	CAS	72 7336
COEFA	CAL	43 43-1
F-4	AIR INTERDICTION	103 5050
	CAS	7 2734
F-16	AIR INTERDICTION	71 8735
	CAS	43 4075
ART. ACFT	CAS	3 6367
RADIO RLY	AIR INTERDICTION	3 2345
	CAS	2 7175
F-111	AIR INTERDICTION	123 3313
A-6	AIR INTERDICTION	38 8144
F-15	AIR INTERDICTION	57 5028
A-7	AIR INTERDICTION	51 7005
F-14	AIR INTERDICTION	43 1271
F-18	AIR INTERDICTION	71 8735
SH-3	ASW(SEA BASED)	6 0770
SH-2	ASW(SEA BASED)	15 1937
SH-60B	ASW(SEA BASED)	23 6343
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 6321
M-48	ARMY GROUND	37 9649
M-60	ARMY GROUND	61 0132
M-1	ARMY GROUND	67 7330
M-551	ARMY GROUND	0 2260
M-901	ARMY GROUND	54 2384
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 1509
PERSHING	ARMY GROUND	18 0795
GLCMs	ARMY GROUND	30 1324
INFANTRY	ARMY GROUND	7 5331
MORTARS	ARMY GROUND	36 9122
ROLES LNCH	ARMY GROUND	1 5820

NORMALIZED VALUES	
F-111	10.0000
F-16	8.6737
F-4	8.5622
A-10	5.6216
F-15	5.5556
M-1	5.2402
M-60	4.7162
F-15	4.4444
M-901	4.1921
A-7	4.0000
COERA	3.7473
M-2/M-3	3.6681
F-14	3.3333
A-6	3.0000
M-48	2.9345
MORTARS	2.8530
SELF-PROP.	2.7943
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
DESTROYERS	0.6710
INFANTRY	0.5322
SH-3	0.4697
RADIO RLY	0.4403
M-113	0.4076
ART. ACFT	0.3911
ROLES LNCH	0.1723
M-551	0.0175

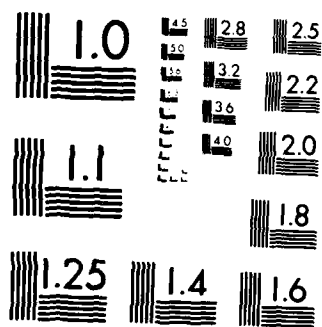
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

TIN		
A-10	CAS	72 7386
COBRA	CAS	64 6521
F-4	AIR INTERDICTION	103 5050
	CAS	7 2734
F-16	AIR INTERDICTION	71 8785
	CAS	40 4075
ART. ACFT	CAS	3 6367
RADIO RLY	AIR INTERDICTION	3 2343
	CAS	2 7275
F-111	AIR INTERDICTION	129 3813
A-6	AIR INTERDICTION	43 6662
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)	5 2093
SH-2	ASW(SEA BASED)	13 0231
SH-60B	ASW(SEA BASED)	20 2532
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 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 0213
PERSHING	ARMY GROUND	15 8195
GLCMS	ARMY GROUND	26 3639
INFANTRY	ARMY GROUND	60 2649
MORTERS	ARMY GROUND	5 2732
RCLES 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	2.0373
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 RLY	0.4608
MORTERS	0.4076
SH-3	0.4026
TOWED ART.	0.3493
M-48	0.3261
ART. ACFT	0.2811
M-113	0.0582
MLRS LNCH	0.0175
M-771	0.0000

NICKEL		
A-10	CAS	72.7336
COBRA	CAS	48.4891
F-4	AIR INTERDICTION	77.6288
	CAS	5.4550
F-16	AIR INTERDICTION	71.8795
	CAS	40.4075
ART. ACFT	CAS	2.4145
RADIO RLY	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	51.7525
F-14	AIR INTERDICTION	48.5180
F-18	AIR INTERDICTION	80.8633
SH-3	ASW(SEA BASED)	6.9437
SH-2	ASW(SEA BASED)	17.3642
SH-60B	ASW(SEA BASED)	27.0107
S-3	ASW(SEA BASED)	34.7284
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	47.4526
M-2/M-3	ARMY GROUND	54.2384
M-113	ARMY GROUND	5.2732
MLRS	ARMY GROUND	20.3394
TOWED ART.	ARMY GROUND	36.1539
SELF-PROP.	ARMY GROUND	49.2119
PERSHING	ARMY GROUND	18.0795
GLCMs	ARMY GROUND	22.5993
INFANTRY	ARMY GROUND	37.6655
MORTERS	ARMY GROUND	15.8195
ROLLS 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.	3.7243
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 RLY	0.4608
M-113	0.4074
ART. ACFT	0.1874
M-551	0.0782
ROLLS LNCH	0.0175

FLUORSPAR ACID		
A-10	CAS	50.9170
COBRA	CAS	48.4891
F-4	AIR INTERDICTION	129.3813
	CAS	9.0917
F-16	AIR INTERDICTION	89.6481
	CAS	50.5094
ART. ACFT	CAS	3.6367
RADIO BLAY	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	64.6906
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)	12.1549
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	54.2384
M-2/M-3	ARMY GROUND	54.2384
M-113	ARMY GROUND	6.0265
MLRS	ARMY GROUND	16.9480
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	5.5556
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.	1.8632
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 BLAY	0.3686
ART. ACFT	0.2249
ROLES LNCH	0.0140
M-551	0.0140

PYRETHRUM

ATT. SUBS	ASW(SEA BASED)	14. 4701
M-48	ARMY GROUND	29. 5299
M-60	ARMY GROUND	47. 4586
M-113	ARMY GROUND	5. 2732
TOWED ART.	ARMY GROUND	31. 6390
SELF-PROP.	ARMY GROUND	42. 1854
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	1. 9209
M-113	0. 7000

ALL COMMODITIES

A-10	CAS	3.0912
COBRA	CAS	2.1012
F-4	AIR INTERDICTION	4.1402
	CAS	0.2909
F-16	AIR INTERDICTION	3.0548
	CAS	1.7173
ART. ACFT	CAS	0.1333
RADIO RLY	AIR INTERDICTION	0.1294
	CAS	0.1091
F-111	AIR INTERDICTION	5.4987
A-6	AIR INTERDICTION	1.6981
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)	1.0447
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	1.2656
M-60	ARMY GROUND	2.0339
M-1	ARMY GROUND	2.0339
M-551	ARMY GROUND	0.0128
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
PERISHING	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-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	3.5294
F-14	3.0882
A-6	2.9592
SELF-PROP.	2.9592
M-2/M-3	2.9592
M-901	2.6842
S-3	2.3016
M-48	2.2807
ATT. SUBS	2.2194
TOWED ART.	2.2057
MORTERS	1.9180
GLCMS	1.9035
SH-60B	1.8684
FRIGATES	1.2330
PERISHING	1.2330
MLRS	1.1447
SH-2	0.8210
DSTROYERS	0.4579
SH-3	0.4337
RADIO RLY	0.4110
M-113	0.2424
ART. ACFT	0.0111
ROLES LNCH	0.0226
M-771	0.0226

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
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
GLUCOPAR ACID	1400.0	895.0	-36.1	388.9	9.6	3744.3	8.6
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1880.7	4.3

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	1.459
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	1.92	0.520	30.954
AMBIA	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	2.070
NEW CALEDONIA	250.	1.19	0.92	1.087	1.259
CANADA	1100.	5.24	2.89	0.346	1.519
U S	1000.	4.76	2.56	0.391	1.843
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
U S	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
<	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
ROC	3000.	4.44	2.47	0.405	1.794
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)
INLAND	1000.	0.33	1.92	0.520	0.171
SOUTH AFRICA	5000.	1.64	1.19	0.841	1.311
PHILIPPINES	5000.	1.64	0.92	1.087	1.785
AUSTRALIA	25000.	8.21	0.92	1.087	8.929
CANADA	150000.	49.28	2.89	0.346	17.050
USA	88000.	28.91	2.56	0.391	11.311
REECE	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	0.084
USSR	5000.	1.64	0.94	1.061	1.742
DEM. REPUB.	15000.	4.93	1.53	0.656	3.260
GUATEMALA	4000.	1.31	1.53	0.656	0.981
INDONESIA	5000.	1.64	0.92	1.087	1.785
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	18.808
USA	70.	8.70	2.56	0.391	3.402
ITALY	65.	8.07	1.96	0.510	4.120
FRANCE	100.	12.42	1.96	0.510	6.338
EAST AFRICA	25.	3.11	0.71	1.404	4.359
HAILAND	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
INDIA	11000.	5.57	1.96	0.510	2.842
KENYA	80000.	40.51	0.71	1.404	56.875
TANZANIA	25000.	12.66	0.71	1.404	17.767
ANGOLA	78000.	39.49	0.71	1.404	55.433
TOTAL:	197500.	100.00			

SOURCE IMPORTANCE
(LOC 3)

SOURCE	% (1/01) COMP IMP	FE/SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	3.343	7.81	26.11	10.69
MOROCCO	1.429	7.81	11.16	4.5
BOTSWANA	1.671	7.81	13.05	5.34
SOUTH AFRICA	0.601	7.81	4.69	1.92
ZAIRE	30.856	7.81	241.74	98.96
ZAMBIA	23.393	7.81	182.68	74.72
PHILIPPINES	0.259	7.81	2.02	0.83
AUSTRALIA	2.070	7.81	16.16	6.62
NEW CALEDONIA	1.293	7.81	10.10	4.13
CANADA	1.813	7.81	14.16	5.79
U S	1.863	7.81	14.55	5.96
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
FRG	1.794	0.00	0.00	0.00
MALAYSIA	38.414	0.00	0.00	0.00
NICKEL				
FINLAND	0.171	10.00	1.71	0.70
SOUTH AFRICA	1.381	10.00	13.81	5.63
PHILIPPINES	1.785	10.00	17.85	7.31
AUSTRALIA	8.924	10.00	89.24	36.52
CANADA	17.054	10.00	170.54	69.81
U S	11.311	10.00	113.11	46.30
GREECE	0.101	10.00	1.01	0.41
NETHERLANDS	0.034	10.00	0.34	0.14
FRG	0.017	10.00	0.17	0.07
YUGOSLAVIA	0.084	10.00	0.84	0.34
USSR	1.742	10.00	17.42	7.13
DOM REPUB	3.230	10.00	32.30	13.22
GUATAMALA	0.861	10.00	8.61	3.53
INDONESIA	1.785	10.00	17.85	7.31
FLUORSPAR ACID				
SOUTH AFRICA	18.803	8.55	160.85	65.84
U S	3.402	8.55	29.10	11.91
ITALY	4.120	8.55	35.24	14.43
SPAIN	6.338	8.55	54.22	22.19
EAST AFRICA	4.359	8.55	37.29	15.26
THAILAND	2.025	8.55	17.32	7.09
MEXICO	17.011	8.55	145.52	59.57
YRETHRUM				
SOUTH AFRICA	0.852	4.30	3.66	1.50
AUSTRALIA	0.825	4.30	3.55	1.45
UK	2.842	4.30	12.21	5.00
KENYA	56.855	4.30	244.29	100.00
RWANDA	17.767	4.30	76.34	31.25
TANZANIA	55.433	4.30	238.18	97.50

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	KENYA	PYRETHRUM	100.00
2	ZAIRE	COBALT	98.96
3	TANZANIA	PYRETHRUM	97.50
4	ZAMBIA	COBALT	74.72
5	CANADA	NICKEL	69.81
6	SOUTH AFRICA	FLUORSPAR ACID	65.24
7	MEXICO	FLUORSPAR ACID	59.57
8	U S	NICKEL	46.30
9	AUSTRALIA	NICKEL	36.53
0	RWANDA	PYRETHRUM	31.25
1	SPAIN	FLUORSPAR ACID	22.19
2	EAST AFRICA	FLUORSPAR ACID	15.24
3	ITALY	FLUORSPAR ACID	14.43
4	DOM. REPUB.	NICKEL	13.22
5	U S	FLUORSPAR ACID	11.91
6	FINLAND	COBALT	10.49
7	INDONESIA	NICKEL	7.31
8	PHILIPPINES	NICKEL	7.31
9	USSR	NICKEL	7.13
0	THAILAND	FLUORSPAR ACID	7.09
1	AUSTRALIA	COBALT	6.62
2	U S	COBALT	5.96
3	CANADA	COBALT	5.79
4	SOUTH AFRICA	NICKEL	5.65
5	BOTSWANNA	COBALT	5.34
6	UK	PYRETHRUM	5.00
7	MOROCCO	COBALT	4.57
8	NEW CALEDONIA	COBALT	4.13
9	GUATEMALA	NICKEL	3.53
0	SOUTH AFRICA	COBALT	1.92
1	SOUTH AFRICA	PYRETHRUM	1.50
2	AUSTRALIA	PYRETHRUM	1.43
3	PHILIPPINES	COBALT	0.83
4	FINLAND	NICKEL	0.70
5	GREECE	NICKEL	0.41
6	YUGOSLAVIA	NICKEL	0.34
7	NETHERLANDS	NICKEL	0.14
8	FRG	NICKEL	0.07
9	MALAYSIA	TIN	0.00
0	PRC	TIN	0.00
1	BRAZIL	TIN	0.00
2	BOLIVIA	TIN	0.00
3	UK	TIN	0.00
4	INDONESIA	TIN	0.00
5	THAILAND	TIN	0.00
6	U S	TIN	0.00
7	AUSTRALIA	TIN	0.00

SCENARIO 8

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
COEF	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0313	0.0781

Level of Conflict 3 Media 2

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	8.0	7.0	5.0
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

Region	1	2	3	4	5	6	7
Weight	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

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
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	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	0.0100

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

Media 3	1	2	3	4	5	6	7
COEF	0.0213	0.0213	0.0213	0.0213	0.0123	0.0085	0.0213

Media 4	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 of controlling ANY Region of any other Media

Media 1	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

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

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

Media 4	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	7.869
3	3	ARMY GROUND	0.095	6.845
4	16	ATTACK SUBS	0.073	5.227
5	19	SURFACE COMBATANTS	0.060	4.292
6	8	RAPID DEPLOY	0.058	4.146
7	12	THEATER NUCLEAR WEAPON	0.054	3.858
8	14	ASW(LAND BASED)	0.043	3.093
9	6	CAS	0.040	2.901
10	22	AIR SUPERIORITY(LAND BASED)	0.038	2.732
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	1.760
15	25	SPACE 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	SPACE-BASED WEAPON(LND CNTRL)	0.003	0.201
23	30	SPACE 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	CEW	0.000	0.000

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.44
ARMY GROUND	4.19
CAS	1.62
ICBM	0.00
STRATEGIC BOMBER	1.76
SLBM	0.00
ASW(SEA BASED)	1.27
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
ASAT(LAND BASED)	0.52

33.99

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	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)	2.16
INTERCEPTOR AIRCRAFT	0.00
ABM(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
NICKEL	9.96	(40
FLUORSPAR ACID	9.51	(38
COBALT	8.40	(33
PYRETHRUM	4.18	(16

COBALT		
A-10	CAS	67.4028
COBRA	CAS	44.9352
F-4	AIR INTERDICTION	98.5202
	CAS	6.7403
F-16	AIR INTERDICTION	68.4168
	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	36.9451
F-15	AIR INTERDICTION	54.7335
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)	15.1708
SH-60B	ASW(SEA BASED)	23.5990
S-3	ASW(SEA BASED)	34.6761
ATT. SUBS	ASW(SEA BASED)	24.0807
FRIGATES	ASW(SEA BASED)	14.4484
DESTROYERS	ASW(SEA BASED)	8.6690
M-48	ARMY GROUND	35.2006
M-60	ARMY GROUND	56.5724
M-1	ARMY GROUND	62.8582
M-551	ARMY GROUND	0.2095
M-901	ARMY GROUND	50.2866
M-2/M-3	ARMY GROUND	44.0008
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	34.2223
RCLES LNCH	ARMY GROUND	1.4667

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5962
F-4	8.5473
F-18	5.5556
A-10	5.4732
M-1	5.1042
M-60	4.5938
F-15	4.4444
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	2.8158
MORTERS	2.7789
SELF-PROP.	2.7222
GLCMS	2.2685
TOWED ART.	2.0417
ATT. SUBS	1.9554
SH-60B	1.9163
MLRS	1.5313
PERSHING	1.3611
SH-2	1.2319
FRIGATES	1.1732
DESTROYERS	0.7039
INFANTRY	0.5671
SH-3	0.4928
RADIO RLAY	0.4552
M-113	0.3970
ART. ACRFT	0.2737
RCLES LNCH	0.1191
M-551	0.0170

1111		
A-10	CAS	67.4028
COBRA	CAS	59.9136
F-4	AIR INTERDICTION	98.5202
	CAS	6.7403
F-16	AIR INTERDICTION	68.4168
	CAS	37.4450
ART. ACRFT	CAS	3.3701
RADIO RLAY	AIR INTERDICTION	3.0788
	CAS	2.5276
F-111	AIR INTERDICTION	123.1508
A-6	AIR INTERDICTION	41.5632
F-15	AIR INTERDICTION	54.7335
A-7	AIR INTERDICTION	49.2601
F-14	AIR INTERDICTION	46.1814
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)	14.4434
FRIGATES	ASW(SEA BASED)	14.4484
DSTROYERS	ASW(SEA BASED)	8.6650
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
RCLES 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	1.9850
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
RCLES LNCH	0.0170
M-551	0.0057

NICKEL		
A-10	CAS	67.4028
COBRA	CAS	44.9352
F-4	AIR INTERDICTION	73.8902
	CAS	5.0552
F-16	AIR INTERDICTION	68.4168
	CAS	37.4460
ART. ACRFT	CAS	2.2468
RADIO RLAY	AIR INTERDICTION	3.0788
	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	76.9689
SH-3	ASW(SEA BASED)	6.9352
SH-2	ASW(SEA BASED)	17.3381
SH-60B	ASW(SEA BASED)	26.9703
S-3	ASW(SEA BASED)	34.6761
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
RCLES 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	3.1759
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	1.5313
SH-2	1.4079
PERSHING	1.3611
DSTROYERS	1.2671
MORTERS	1.1910
SH-3	0.5632
RADIO RLAY	0.4552
M-113	0.3970
ART. ACRFT	0.1824
M-551	0.0567
RCLES LNCH	0.0170

FLUORSPAR ACID		
A-10	CAS	84 2536
COBRA	CAS	44 9352
F-4	AIR INTERDICTION	123 1502
	CAS	8 4204
F-16	AIR INTERDICTION	85 5210
	CAS	46 8075
ART. ACFT	CAS	3 3701
RADIO RLAY	AIR INTERDICTION	3 0788
	CAS	2 5276
F-111	AIR INTERDICTION	153 9378
A-6	AIR INTERDICTION	46 1814
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 9322
SH-2	ASW(SEA BASED)	17 3381
SH-60B	ASW(SEA BASED)	33 7129
S-3	ASW(SEA BASED)	43 3452
ATT. SUBS	ASW(SEA BASED)	28 8968
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
RCLES 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	3.6296
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	1.5880
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	0.4505
RADIO RLAY	0.3642
M-113	0.3630
ART. ACFT	0.2189
RCLES LNCH	0.0136
M-551	0.0136

PYRETHRUM		14.4484
ATT. SUBS	ASW(SEA BASED)	27.3783
M-48	ARMY GROUND	44.0008
M-60	ARMY GROUND	4.8890
M-113	ARMY GROUND	29.3338
TOWED ART.	ARMY GROUND	39.1118
SELF-PROP.	ARMY GROUND	69.8425
INFANTRY	ARMY GROUND	34.2223
MORTERS	ARMY GROUND	

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	2.0687
M-113	0.7000

ALL COMMODITIES

A-10	CAS	2.8646
COBRA	CAS	1.9472
F-4	AIR INTERDICTION	3.9408
	CAS	0.2696
F-16	AIR INTERDICTION	2.9077
	CAS	1.5915
ART. ACFT	CAS	0.1236
RADIO RLY	AIR INTERDICTION	0.1232
	CAS	0.1011
F-111	AIR INTERDICTION	5.2339
A-6	AIR INTERDICTION	1.6163
F-15	AIR INTERDICTION	2.3162
A-7	AIR INTERDICTION	2.0936
F-14	AIR INTERDICTION	1.8473
F-18	AIR INTERDICTION	3.0788
SH-3	ASW(SEA BASED)	0.2514
SH-2	ASW(SEA BASED)	0.6285
SH-60B	ASW(SEA BASED)	1.0451
S-3	ASW(SEA BASED)	1.4737
ATT. SUBS	ASW(SEA BASED)	1.2522
FRIGATES	ASW(SEA BASED)	0.7513
DSTROYERS	ASW(SEA BASED)	0.4508
M-48	ARMY GROUND	1.1734
M-60	ARMY GROUND	1.8857
M-1	ARMY GROUND	1.8857
M-551	ARMY GROUND	0.0119
M-901	ARMY GROUND	1.5086
M-2/M-3	ARMY GROUND	1.5086
M-113	ARMY GROUND	0.2095
MLRS	ARMY GROUND	0.6286
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
RCLES LNCH	ARMY GROUND	0.0210

NORMALIZED VALUES

F-111	10.0000
F-16	8.5262
F-4	8.0445
F-18	5.8824
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	1.9968
GLCMS	1.8682
FRIGATES	1.4355
PERSHING	1.2010
MLRS	1.2010
SH-2	1.2008
DSTROYERS	0.8613
SH-3	0.4803
RADIO RLY	0.4285
M-113	0.4003
ART. ACFT	0.2361
RCLES LNCH	0.0400
M-551	0.0227

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
BALT	85.4	43.8	-48.7	402.5	8.4	3379.9	7.8
N	41.0	190.6	353.8	0.0	10.0	0.0	0.0
DNEL	200.0	32.2	-83.9	437.7	10.0	4358.1	10.0
DIORSPAR ACID	1400.0	895.0	-36.1	389.9	9.5	3708.3	8.5
RETHRUM	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/C1	% (1/C1)
INLAND	1350.	6.43	1.72	0.580	3.731
ROCCO	450.	2.14	2.05	0.487	1.013
TSWANNA	250.	1.19	1.76	0.569	0.678
OUTH AFRICA	150.	0.71	2.31	0.432	0.309
IRE	12500	59.52	1.72	0.580	34.543
MBIA	3500.	16.67	1.76	0.569	9.490
ILIPPINES	50.	0.24	0.82	1.216	0.289
USTRALIA	400.	1.90	0.82	1.216	2.316
W CALEDONIA	250.	1.19	0.82	1.216	1.447
NADA	1100	5.24	2.61	0.383	2.007
S	1000	4.76	2.31	0.432	2.059
TOTAL:	21000.	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/C1	% (1/C1)
USTRALIA	100.	0.15	0.82	1.216	0.180
S	16100	23.82	2.31	0.432	10.299
AILAND	5900.	8.73	0.82	1.216	10.611
ONESIA	5800.	8.58	0.82	1.216	10.431
	100.	0.15	1.76	0.569	0.084
OLIVIA	10300.	15.24	0.90	1.117	17.014
PAZIL	2400.	3.55	0.90	1.117	3.964
C	3000	4.44	2.33	0.429	1.905
ALAYSIA	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	0.181
SOUTH AFRICA	5000.	1.64	2.31	0.432	0.711
PHILIPPINES	5000.	1.64	0.82	1.216	1.997
AUSTRALIA	25000.	8.21	0.82	1.216	9.981
CANADA	150000.	49.28	2.61	0.383	18.877
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
F.G.	100.	0.03	1.76	0.569	0.019
YUGOSLAVIA	500.	0.16	1.76	0.569	0.084
USSR	5000.	1.64	0.84	1.160	1.905
DEM. REPUB.	15000.	4.93	1.38	0.727	3.592
G. ATAMALA	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)

FLUOREPAR ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
SOUTH AFRICA	180.	22.36	2.31	0.432	9.669
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
E. ST. 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
UI	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
BALT				
FINLAND	3.721	7.76	28.93	10.80
MOROCCO	1.043	7.76	8.09	3.02
BOTSWANNA	0.678	7.76	5.26	1.96
SOUTH AFRICA	0.309	7.76	2.40	0.89
ZAIRE	34.543	7.76	267.90	100.00
ZAMBIA	9.490	7.76	73.60	27.47
PHILIPPINES	0.289	7.76	2.24	0.84
AUSTRALIA	2.316	7.76	17.96	6.70
NEW CALEDONIA	1.447	7.76	11.22	4.19
CANADA	2.007	7.76	15.56	5.81
U S	2.057	7.76	15.77	5.92
V				
AUSTRALIA	0.180	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	42.983	0.00	0.00	0.00
WEL				
FINLAND	0.191	10.00	1.91	0.71
SOUTH AFRICA	0.710	10.00	7.10	2.65
PHILIPPINES	1.997	10.00	19.97	7.45
AUSTRALIA	9.985	10.00	99.85	37.27
CANADA	18.877	10.00	188.77	70.46
U S	12.501	10.00	125.01	46.66
GREECE	0.112	10.00	1.12	0.42
NETHERLANDS	0.037	10.00	0.37	0.14
FRG	0.019	10.00	0.19	0.07
YUGOSLAVIA	0.094	10.00	0.94	0.35
USSR	1.905	10.00	19.05	7.11
DOM. REPUB.	3.582	10.00	35.82	13.37
GUATAMALA	0.955	10.00	9.55	3.57
INDONESIA	1.997	10.00	19.97	7.45
WORSFAR ACID				
SOUTH AFRICA	9.669	8.51	82.28	30.71
U S	3.760	8.51	32.00	11.94
ITALY	4.597	8.51	39.12	14.60
SPAIN	7.073	8.51	60.19	22.47
EAST AFRICA	1.768	8.51	15.05	5.62
THAILAND	2.265	8.51	19.28	7.20
MEXICO	18.801	8.51	159.98	59.72
WRETHRUM				
SOUTH AFRICA	0.438	4.35	1.91	0.71
AUSTRALIA	0.923	4.35	4.02	1.50
UK	3.171	4.35	13.81	5.15
KENYA	23.063	4.35	100.42	37.49
RWANDA	7.207	4.35	31.38	11.71
TANZANIA	22.487	4.35	97.91	36.55

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

SOURCE	COMMODITY	VALUE
ZAIRE	COBALT	100.00
CANADA	NICKEL	70.45
MEXICO	FLUORSPAR ACID	59.72
U S	NICKEL	46.66
KENYA	PYRETHRUM	37.49
AUSTRALIA	NICKEL	37.27
TANZANIA	PYRETHRUM	36.55
SOUTH AFRICA	FLUORSPAR ACID	30.71
ZAMBIA	COBALT	27.47
SPAIN	FLUORSPAR ACID	22.47
ITALY	FLUORSPAR ACID	14.60
DOM. REPUB	NICKEL	13.37
U S	FLUORSPAR ACID	11.94
RWANDA	PYRETHRUM	11.71
FINLAND	COBALT	10.80
INDONESIA	NICKEL	7.45
PHILIPPINES	NICKEL	7.45
THAILAND	FLUORSPAR ACID	7.20
USSR	NICKEL	7.11
AUSTRALIA	COBALT	6.70
U S	COBALT	5.96
CANADA	COBALT	5.81
EAST AFRICA	FLUORSPAR ACID	5.62
UK	PYRETHRUM	3.15
NEW CALEDONIA	COBALT	4.19
GUATAMALA	NICKEL	3.57
MOROCCO	COBALT	3.02
SOUTH AFRICA	NICKEL	2.65
BOTSWANNA	COBALT	1.96
AUSTRALIA	PYRETHRUM	1.50
SOUTH AFRICA	COBALT	0.89
PHILIPPINES	COBALT	0.84
SOUTH AFRICA	PYRETHRUM	0.71
FINLAND	NICKEL	0.71
GREECE	NICKEL	0.42
YUGOSLAVIA	NICKEL	0.35
NETHERLANDS	NICKEL	0.14
FRG	NICKEL	0.07
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 9

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict & 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	5.0
COEF	0.1563	0.1563	0.1094	0.0781	0.1094	0.1563	0.0313	0.0781	0.0313	0.0781

Level of Conflict & Media 2

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	9.0	4.0	7.0	5.0	10.0	8.0	7.0	5.0
COEF	0.1190	0.1190	0.1071	0.0476	0.0833	0.0585	0.1190	0.0952	0.0833	0.0585
COEF	0.1071									

Level of Conflict & 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
COEF	0.1667	0.1667	0.1667	0.1667	0.1000	0.0667	0.1667

Level of Conflict & Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
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	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	0.0100

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

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

Media 4	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 of controlling ANY Region of any other Media

Media 1	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	0.0032

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

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

Media 4	1	2	3	4
COEF	0.0045	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	0.138	10.000
2	1	AIR INTERDICTION	0.105	7.500
3	3	ARMY GROUND	0.090	6.500
4	16	ATTACK SUBS	0.073	5.264
5	8	RAPID DEPLOY	0.064	4.596
6	19	SURFACE COMBATANTS	0.060	4.329
7	12	THEATER NUCLEAR WEAPON	0.046	3.298
8	14	ASW(LAND BASED)	0.043	3.074
9	6	CAS	0.038	2.757
10	22	AIR SUPERIORITY(LAND BASED)	0.037	2.632
11	15	ASW(SEA BASED)	0.032	2.279
12	23	AIR SUPERIORITY(SHIP BASED)	0.029	2.051
13	21	AIR DEFENSE(SHIP BASED)	0.026	1.867
14	10	STRATEGIC BOMBER	0.024	1.707
15	13	SPECIAL OPERATIONS	0.020	1.416
16	25	SPCE BASED WEAPON(AIR CNTRL)	0.019	1.352
17	29	ASAT(SPACE BASED)	0.013	0.938
18	18	MINE WARFARE	0.013	0.915
19	2	AMPHIBIOUS ASSAULT	0.009	0.664
20	28	ASAT(LAND BASED)	0.007	0.517
21	20	AIR DEFENSE(LAND BASED)	0.003	0.252
22	9	SPCE-BASED WEAPON(LND CNTRL)	0.003	0.186
23	30	SPCE BASED WEAPON(SEA CNTRL)	0.002	0.117
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	5.22
ARMY GROUND	3.98
CAS	1.54
ICBM	0.00
STRATEGIC BOMBER	1.71
SLBM	0.00
ASW(SEA BASED)	1.25
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.33
AIR SUPERIORITY(LAND BASED)	2.63
AIR SUPERIORITY(SHIP BASED)	2.06
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.52

33.23

TIN

AIR INTERDICTION	5.31
ARMY GROUND	1.69
CAS	1.69
STRATEGIC BOMBER	1.71
ASW(LAND BASED)	3.07
ASW(SEA BASED)	1.09
ATTACK SUBS	5.26
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.91
SURFACE COMBATANTS	4.33
AIR SUPERIORITY(LAND BASED)	2.63
AIR SUPERIORITY(SHIP BASED)	2.06
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	39.84

NICKEL

AIR INTERDICTION	5.11
ARMY GROUND	4.33
CAS	1.52
STRATEGIC BOMBER	1.71
ASW(SEA BASED)	1.68
ATTACK SUBS	5.26
CARRIER BATTLE GROUP	10.00
MINE WARFARE	0.91
SURFACE COMBATANTS	4.33
AIR SUPERIORITY(LAND BASED)	2.63
AIR SUPERIORITY(SHIP BASED)	2.06
INTERCEPTOR AIRCRAFT	0.00
	39.55

PYRETHRUM

ARMY GROUND	2
CIVIL DEFENSE	0
ASW(SEA BASED)	0
CARRIER BATTLE GROUP	10
SURFACE COMBATANTS	4
	16

FLUORSPAR ACID

AIR INTERDICTION	4.51
COVERT ASSAULT	0.66
ARMY GROUND	3.25
CAS	1.81
ICBM	0.00
STRATEGIC BOMBER	1.71
SLBM	0.00
ASW(LAND BASED)	3.07
ASW(SEA BASED)	1.60
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.33
AIR SUPERIORITY(LAND BASED)	2.63
AIR SUPERIORITY(SHIP BASED)	2.06
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00
	37.64

COMMODITY NORMALIZED IMPORTANCE

TIN	10.00
NICKEL	9.93
FLUORSPAR ACID	9.45
COBALT	8.34
PYRETHRUM	4.23

COBALT		
A-10	CAS	64 0447
COBRA	CAS	42 6960
F-4	AIR INTERDICTION	94 5532
	CAS	6 4075
F-16	AIR INTERDICTION	65 6640
	CAS	35 5804
ART. ACRFT	CAS	3 2022
RADIO RLAY	AIR INTERDICTION	2 9549
	CAS	2 4017
F-111	AIR INTERDICTION	118 1973
A-6	AIR INTERDICTION	35 4586
F-15	AIR INTERDICTION	52 5312
A-7	AIR INTERDICTION	47 2781
F-14	AIR INTERDICTION	39 3984
F-18	AIR INTERDICTION	65 6640
SH-3	ASW(SEA BASED)	5 9835
SH-2	ASW(SEA BASED)	14 9588
SH-60B	ASW(SEA BASED)	23 2692
S-3	ASW(SEA BASED)	34 1915
ATT. SUBS	ASW(SEA BASED)	23 7441
FRIGATES	ASW(SEA BASED)	14 2465
DESTROYERS	ASW(SEA BASED)	8 5479
M-48	ARMY GROUND	33 4283
M-60	ARMY GROUND	53 7241
M-1	ARMY GROUND	59 6934
M-551	ARMY GROUND	0 1990
M-901	ARMY GROUND	47 7547
M-2/M-3	ARMY GROUND	41 7854
M-113	ARMY GROUND	4 6428
MLRS	ARMY GROUND	17 9080
TOWED ART.	ARMY GROUND	23 8774
SELF-PROP.	ARMY GROUND	31 8365
PERSHING	ARMY GROUND	15 9182
GLCMS	ARMY GROUND	26 5304
INFANTRY	ARMY GROUND	6 6326
MORTERS	ARMY GROUND	32 4998
ROLES LNCH	ARMY GROUND	1 3928

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5659
F-4	8.5419
F-18	9.5536
A-10	5.4186
M-1	5.0504
M-60	4.5454
F-15	4.4444
M-901	4.0403
A-7	4.0000
COBRA	3.6124
M-2/M-3	3.5353
F-14	3.3333
A-6	3.0000
S-3	2.8928
M-48	2.8282
MORTERS	2.7497
SELF-PROP.	2.6936
GLCMS	2.2446
TOWED ART.	2.0202
ATT. SUBS	2.0089
SH-60B	1.9687
MLRS	1.5151
PERSHING	1.3468
SH-2	1.2656
FRIGATES	1.2053
DESTROYERS	0.7232
INFANTRY	0.5612
SH-3	0.5062
RADIO RLAY	0.4532
M-113	0.3928
ART. ACRFT	0.2709
ROLES LNCH	0.1178
M-551	0.0169

TIN		
A-10	CAS	64 0447
COBRA	CAS	56 9284
F-4	AIR INTERDICTION	94 5562
	CAS	6 4045
F-16	AIR INTERDICTION	65 6640
	CAS	35 5804
ART. ACRFT	CAS	3 2022
RADIO RLAY	AIR INTERDICTION	2 9549
	CAS	2 4017
F-111	AIR INTERDICTION	118 1953
A-6	AIR INTERDICTION	39 8909
F-15	AIR INTERDICTION	52 5812
A-7	AIR INTERDICTION	47 2781
F-14	AIR INTERDICTION	44 3232
F-18	AIR INTERDICTION	73 8720
SH-3	ASW(SEA BASED)	5 1297
SH-2	ASW(SEA BASED)	12 8218
SH-60B	ASW(SEA BASED)	19 9450
S-3	ASW(SEA BASED)	34 1915
ATT. SUBS	ASW(SEA BASED)	14 2465
FRIGATES	ASW(SEA BASED)	14 2465
DSTROYERS	ASW(SEA BASED)	8 5479
M-48	ARMY GROUND	3 7143
M-60	ARMY GROUND	5 9693
M-1	ARMY GROUND	33 1630
M-551	ARMY GROUND	0 0663
M-901	ARMY GROUND	5 9693
M-2/M-3	ARMY GROUND	5 9693
M-113	ARMY GROUND	0 6633
MLRS	ARMY GROUND	8 9540
TOWED ART.	ARMY GROUND	3 9786
SELF-PROP.	ARMY GROUND	5 3061
PERSHING	ARMY GROUND	13 9285
GLCMs	ARMY GROUND	23 2141
INFANTRY	ARMY GROUND	53 0608
MORTERS	ARMY GROUND	4 6428
FCLES LNCH	ARMY GROUND	0 1990

	NORMALIZED VALUES
F-111	10.0000
F-16	8.5659
F-4	8.5419
F-18	6.2500
A-10	5.4186
COBRA	4.8165
INFANTRY	4.4893
F-15	4.4444
A-7	4.0000
F-14	3.7500
A-6	3.3750
S-3	2.8928
M-1	2.8058
GLCMs	1.9640
SH-60B	1.6875
FRIGATES	1.2053
ATT. SUBS	1.2053
PERSHING	1.1784
SH-2	1.0848
MLRS	0.7576
DSTROYERS	0.7232
M-2/M-3	0.5050
M-901	0.5050
M-60	0.5050
RADIO RLAY	0.4532
SELF-PROP.	0.4487
SH-3	0.4339
MORTERS	0.3928
TOWED ART.	0.3367
M-48	0.3142
ART. ACRFT	0.2702
M-113	0.0561
FCLES LNCH	0.0168
M-551	0.0036

NICHEL		
A-10	CAS	64 0447
COBRA	CAS	42 6965
F-4	AIR INTERDICTION	70 9172
	CAS	4 8014
F-16	AIR INTERDICTION	65 6640
	CAS	35 5304
ART ACFT	CAS	1 1343
RADIO RLY	AIR INTERDICTION	2 9549
	CAS	2 4017
F-111	AIR INTERDICTION	118 1953
A-6	AIR INTERDICTION	35 4586
F-15	AIR INTERDICTION	52 5312
A-7	AIR INTERDICTION	47 2781
F-14	AIR INTERDICTION	44 3232
F-18	AIR INTERDICTION	73 8710
SH-3	ASW(SEA BASED)	6 8383
SH-2	ASW(SEA BASED)	17 0957
SH-60B	ASW(SEA BASED)	26 5934
S-3	ASW(SEA BASED)	34 1915
ATT. SUBS	ASW(SEA BASED)	42 7394
FRIGATES	ASW(SEA BASED)	25 6436
DSTROYERS	ASW(SEA BASED)	15 3862
M-48	ARMY GROUND	37 1426
M-60	ARMY GROUND	59 6934
M-1	ARMY GROUND	66 3260
M-551	ARMY GROUND	0 6633
M-901	ARMY GROUND	41 7854
M-2/M-3	ARMY GROUND	47 7547
M-113	ARMY GROUND	4 6423
MLRS	ARMY GROUND	17 9080
TOWED ART.	ARMY GROUND	31 8365
SELF-PROP.	ARMY GROUND	42 4487
PERSHING	ARMY GROUND	15 9182
GLCMs	ARMY GROUND	19 8978
INFANTRY	ARMY GROUND	33 1630
MORTERS	ARMY GROUND	13 9285
ROLES LNCH	ARMY GROUND	0 1990

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5659
F-4	6.4064
F-18	6.2500
M-1	5.6116
A-10	5.4186
M-60	5.0504
F-15	4.4444
M-2/M-3	4.0403
A-7	4.0000
F-14	3.7500
ATT. SUBS	3.6160
COBRA	3.6124
SELF-PROP.	3.5914
M-901	3.5353
M-48	3.1425
A-6	3.0000
S-3	2.8928
INFANTRY	2.8058
TOWED ART.	2.6936
SH-60B	2.2500
FRIGATES	2.1696
GLCMs	1.6835
MLRS	1.5151
SH-2	1.4464
PERSHING	1.3463
DSTROYERS	1.3018
MORTERS	1.1784
SH-3	0.5786
RADIO RLY	0.4532
M-113	0.3928
ART ACFT	0.1806
M-551	0.0541
ROLES LNCH	0.0143

FLUORSPAR ACID		
A-10	CAS	80.0559
COBRA	CAS	42.6965
F-4	AIR INTERDICTION	118.1953
	CAS	8.0056
F-16	AIR INTERDICTION	82.0800
	CAS	44.4755
ART. ACFT	CAS	3.2022
RADIO RLY	AIR INTERDICTION	2.9547
	CAS	2.4017
F-111	AIR INTERDICTION	147.7441
A-6	AIR INTERDICTION	44.3232
F-15	AIR INTERDICTION	65.6640
A-7	AIR INTERDICTION	59.0976
F-14	AIR INTERDICTION	48.2480
F-18	AIR INTERDICTION	82.0800
SH-3	ASW(SEA BASED)	6.8381
SH-2	ASW(SEA BASED)	17.0957
SH-60B	ASW(SEA BASED)	33.2417
S-3	ASW(SEA BASED)	42.7394
ATT. SUBS	ASW(SEA BASED)	28.4829
FRIGATES	ASW(SEA BASED)	19.9450
DSTROYERS	ASW(SEA BASED)	11.9670
M-48	ARMY GROUND	11.1428
M-60	ARMY GROUND	17.9080
M-1	ARMY GROUND	19.8978
M-551	ARMY GROUND	0.1990
M-901	ARMY GROUND	47.7547
M-2/M-3	ARMY GROUND	47.7547
M-113	ARMY GROUND	5.3061
MLRS	ARMY GROUND	14.9294
TOWED ART.	ARMY GROUND	19.8978
SELF-PROP.	ARMY GROUND	26.5304
PERSHING	ARMY GROUND	13.9285
GLOMS	ARMY GROUND	23.2141
INFANTRY	ARMY GROUND	53.0608
MORTERS	ARMY GROUND	23.2141
RCLES LNCH	ARMY GROUND	0.1990

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5659
F-4	8.5419
F-18	5.5536
A-10	5.4186
F-15	4.4444
A-7	4.0000
INFANTRY	3.5914
F-14	3.3333
M-2/M-3	3.2323
M-901	3.2323
A-6	3.0000
S-3	2.8928
COBRA	2.8899
SH-60B	2.2500
ATT. SUBS	1.9285
SELF-PROP.	1.7957
MORTERS	1.5712
GLOMS	1.5712
FRIGATES	1.3500
M-1	1.3468
TOWED ART.	1.3468
M-60	1.2121
SH-2	1.1571
MLRS	1.0101
PERSHING	0.9427
DSTROYERS	0.8100
M-48	0.7542
SH-3	0.4628
RADIO RLY	0.3676
M-113	0.3591
ART. ACFT	0.2167
RCLES LNCH	0.0135
M-551	0.0135

PYRETHRUM		
ATT. SUBS	ASW (SEA BASED)	14. 2465
M-48	ARMY GROUND	25. 9248
M-60	ARMY GROUND	41. 7854
M-113	ARMY GROUND	4. 6428
TOWED ART.	ARMY GROUND	27. 8569
SELF-PROP.	ARMY GROUND	37. 1426
INFANTRY	ARMY GROUND	66. 3260
MORTERS	ARMY GROUND	32. 4998

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. 1478
M-113	0. 7000

ALL COMMODITIES

A-10	CAS	2.7219
COBRA	CAS	1.8502
F-4	AIR INTERDICTION	2.7812
	CAS	0.2562
F-16	AIR INTERDICTION	2.7907
	CAS	1.5122
ART. ACFT	CAS	0.1174
RADIO RLY	AIR INTERDICTION	0.1182
	CAS	0.0961
F-111	AIR INTERDICTION	5.0233
A-6	AIR INTERDICTION	1.5513
F-15	AIR INTERDICTION	2.2316
A-7	AIR INTERDICTION	2.0093
F-14	AIR INTERDICTION	1.7729
F-18	AIR INTERDICTION	2.9549
SH-3	ASW(SEA BASED)	0.2479
SH-2	ASW(SEA BASED)	0.6197
SH-60B	ASW(SEA BASED)	1.0305
S-3	ASW(SEA BASED)	1.4531
ATT. SUBS	ASW(SEA BASED)	1.2347
FRIGATES	ASW(SEA BASED)	0.7408
DESTROYERS	ASW(SEA BASED)	0.4445
M-48	ARMY GROUND	1.1143
M-60	ARMY GROUND	1.7908
M-1	ARMY GROUND	1.7908
M-551	ARMY GROUND	0.0113
M-901	ARMY GROUND	1.4326
M-2/M-3	ARMY GROUND	1.4326
M-113	ARMY GROUND	0.1990
MLRS	ARMY GROUND	0.5969
TOWED ART.	ARMY GROUND	1.0745
SELF-PROP.	ARMY GROUND	1.4326
PERSHING	ARMY GROUND	0.5969
GLCMs	ARMY GROUND	0.9286
INFANTRY	ARMY GROUND	2.1224
MORTERS	ARMY GROUND	1.0678
RCLES LNCH	ARMY GROUND	0.0199

NORMALIZED VALUES	
F-111	10.0000
F-16	8.5659
F-4	8.0394
F-18	5.8824
A-10	5.4186
F-15	4.4444
INFANTRY	4.2252
A-7	4.0000
COBRA	3.6832
M-1	3.5650
M-60	3.5650
F-14	3.5294
A-6	3.0882
S-3	2.8928
M-2/M-3	2.8520
M-901	2.8520
SELF-PROP.	2.8520
ATT. SUBS	2.4579
M-48	2.2182
TOWED ART.	2.1390
MORTERS	2.1258
SH-60B	2.0517
GLCMs	1.8485
FRIGATES	1.4748
SH-2	1.2337
PERSHING	1.1883
MLRS	1.1883
DESTROYERS	0.8849
SH-3	0.4935
RADIO RLY	0.4265
M-113	0.3961
ART. ACFT	0.2397
RCLES LNCH	0.0396
M-551	0.0224

CRITICALITY OF SHORTFALL
ALL FEES
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK FILE (UNITS)	SHORT FALL (%)	TRANS- LATED	FE/ COMMODITY IMPORT.	CRITIC- ALITY	NORMALIZED FE/SHORTFALL CRITICALITY
COBALT	85.4	43.8	-48.7	401.5	8.8	3357.8	7.7
TIN	42.0	190.4	355.8	0.0	10.0	10.0	0.0
NICKEL	200.0	32.2	-83.9	437.7	9.9	4345.8	10.0
FLUORSPAR ACID	1400.0	895.0	-36.1	399.9	9.4	3683.7	8.5
PYRETHRUM	500.0	0.0	-100.0	453.8	4.2	1917.6	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
LESOTWANA	250.	1.19	1.76	0.569	0.678
SOUTH AFRICA	150.	0.71	2.31	0.432	0.309
ZAIRE	12500.	59.52	1.72	0.580	34.543
ZIMBIA	3500.	16.67	1.76	0.569	9.401
PHILIPPINES	50.	0.24	0.82	1.216	0.209
AUSTRALIA	400.	1.90	0.82	1.216	2.311
NEW CALEDONIA	250.	1.19	0.82	1.216	1.447
CANADA	1100.	5.24	2.61	0.383	2.037
U.S.	1000.	4.76	2.31	0.432	2.059
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	0.180
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
U.S.	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
P.O.	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)
INLAND	1000	0.33	1.72	0.580	0.151
SOUTH AFRICA	5000	1.64	2.31	0.432	0.710
PHILIPPINES	5000	1.64	0.82	1.216	1.937
AUSTRALIA	25000	8.21	0.82	1.216	9.930
CANADA	150000	48.29	2.61	0.383	19.977
US	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
YUG	100	0.03	1.76	0.569	0.019
YUGOSLAVIA	500	0.16	1.76	0.569	0.034
USSR	5000	1.64	0.86	1.160	1.905
DEM. REPUB.	15000	4.93	1.38	0.727	3.531
MEXICAN	4000	1.31	1.38	0.727	0.955
INDONESIA	5000	1.64	0.82	1.216	1.937

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	2.31	0.432	9.649
US	70	8.70	2.31	0.432	3.760
ITALY	65	8.07	1.76	0.569	4.597
FRANCE	100	12.42	1.76	0.569	7.073
SOUTH AFRICA	25	3.11	1.76	0.569	1.768
NETHERLANDS	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
INDONESIA	11000	5.57	1.76	0.569	3.171
INDONESIA	80000	40.51	1.76	0.569	23.063
INDONESIA	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
TOTAL				
FINLAND	1.731	7.73	28.82	-10.80
MOROCCO	1.043	7.73	8.06	3.01
BOTSWANNA	0.673	7.73	5.24	1.94
SOUTH AFRICA	0.309	7.73	2.39	0.89
ZAIRE	34.543	7.73	264.90	100.00
ZAMBIA	9.490	7.73	73.32	27.47
PHILIPPINES	0.239	7.73	2.24	0.84
AUSTRALIA	2.316	7.73	17.89	6.70
NEW CALEDONIA	1.447	7.73	11.19	4.19
CANADA	2.007	7.73	15.50	5.81
U S	2.059	7.73	15.91	5.94
TIN				
AUSTRALIA	0.180	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	0.034	0.00	0.00	0.00
BOLIVIA	17.014	0.00	0.00	0.00
BRAZIL	3.964	0.00	0.00	0.00
FRG	1.925	0.00	0.00	0.00
MALAYSIA	42.983	0.00	0.00	0.00
ICHEL				
FINLAND	0.191	10.00	1.91	0.71
SOUTH AFRICA	0.710	10.00	7.10	2.66
PHILIPPINES	1.997	10.00	19.97	7.48
AUSTRALIA	9.985	10.00	99.85	37.41
CANADA	18.877	10.00	188.77	70.73
U S	12.501	10.00	125.01	46.84
GREECE	0.112	10.00	1.12	0.42
NETHERLANDS	0.037	10.00	0.37	0.14
FRG	0.019	10.00	0.19	0.07
YUGOSLAVIA	0.094	10.00	0.94	0.35
USSR	1.905	10.00	19.05	7.14
DOM. REPUB	3.582	10.00	35.82	13.42
GUATAMALA	0.955	10.00	9.55	3.58
INDONESIA	1.997	10.00	19.97	7.48
FLUORSPAR ACID				
SOUTH AFRICA	9.669	8.48	81.96	30.71
U S	3.760	8.48	31.87	11.94
ITALY	4.597	8.48	38.97	14.60
SPAIN	7.073	8.48	59.95	22.46
EAST AFRICA	1.768	8.48	14.99	5.62
THAILAND	2.265	8.48	19.20	7.19
MEXICO	18.801	8.48	159.37	59.71
PYRETHRUM				
SOUTH AFRICA	0.438	4.41	1.93	0.72
AUSTRALIA	0.923	4.41	4.07	1.59
UK	3.171	4.41	13.99	5.24
KENYA	23.063	4.41	101.77	38.13
RWANDA	7.207	4.41	31.80	11.92
TANZANIA	22.487	4.41	99.22	37.18

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	CANADA	NICKEL	70.73
3	MEXICO	FLUORSPAR ACID	59.71
4	U S	NICKEL	46.84
5	KENYA	PYRETHRUM	38.13
6	AUSTRALIA	NICKEL	37.41
7	TANZANIA	PYRETHRUM	37.18
8	SOUTH AFRICA	FLUORSPAR ACID	30.71
9	ZAMBIA	COBALT	27.47
10	SPAIN	FLUORSPAR ACID	22.46
11	ITALY	FLUORSPAR ACID	14.60
12	DOM. REPUB	NICKEL	13.42
13	U S	FLUORSPAR ACID	11.94
14	RWANDA	PYRETHRUM	11.92
15	FINLAND	COBALT	10.80
16	INDONESIA	NICKEL	7.43
17	PHILIPPINES	NICKEL	7.43
18	THAILAND	FLUORSPAR ACID	7.19
19	USSR	NICKEL	7.14
20	AUSTRALIA	COBALT	6.70
21	U S	COBALT	5.96
22	CANADA	COBALT	5.81
23	EAST AFRICA	FLUORSPAR ACID	5.62
24	UK	PYRETHRUM	5.74
25	NEW CALEDONIA	COBALT	4.19
26	GUATAMALA	NICKEL	3.58
27	MOROCCO	COBALT	3.02
28	SOUTH AFRICA	NICKEL	2.66
29	BOTSWANNA	COBALT	1.96
30	AUSTRALIA	PYRETHRUM	1.53
31	SOUTH AFRICA	COBALT	0.89
32	PHILIPPINES	COBALT	0.84
33	SOUTH AFRICA	PYRETHRUM	0.72
34	FINLAND	NICKEL	0.71
35	GREECE	NICKEL	0.42
36	YUGOSLAVIA	NICKEL	0.35
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 10

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	3.0	5.0	2.0	4.0
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	0.1303	0.1200	0.0533	0.0933	0.0667	0.0133	0.1067	0.0733	0.0556
I/COEF	0.1200									

Level of Conflict 3 Media 3										
Region	1	2	3	4	5	6	7	8	9	10
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	5	6	7	8	9	10
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	0.0128	0.0114	0.0160	0.0114	0.0180	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	8	9	10
I/COEF	0.0228	0.0228	0.0230	0.0183	0.0137	0.0091	0.0103			

Media 4										
Region	1	2	3	4	5	6	7	8	9	10
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	8	9	10
I/COEF	0.0060	0.0060	0.0060	0.0048	0.0036	0.0024	0.0048			

Media 4										
Region	1	2	3	4	5	6	7	8	9	10
I/COEF	0.0065	0.0026	0.0013	0.0007						

FORIE ELEMENT IMPORTANCE
(LOC 3)

RANKING	ELEMENT NUMBER	FORIE ELEMENT NAME	CALCULATED VALUE	NORMALIZED VALUE
1	17	CARRIER BATTLE GROUP	0.141	10.00
2	1	AIR INTERDICTION	0.117	8.29
3	3	ARMY GROUND	0.104	7.39
4	16	ATTACK SUB	0.072	5.14
5	19	SURFACE COMBATANTS	0.069	4.94
6	12	THEATER NUCLEAR WEAPON	0.054	3.81
7	8	RAPID DEPLOY	0.052	3.70
8	6	CAS	0.044	3.10
9	14	ASW(LAND BASED)	0.043	3.09
10	27	AIR SUPERIORITY(LAND BASED)	0.141	10.00
11	15	ASW(SEA BASED)	0.036	2.61
12	23	AIR SUPERIORITY(SHIP BASED)	0.037	2.62
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.08
14	10	STRATEGIC BOMBER	0.025	1.74
15	25	SPACE BASED WEAPON(AIR CNTRL)	0.020	1.41
16	29	ASAT(SPACE BASED)	0.013	0.90
17	18	MINE WARFARE	0.013	0.89
18	2	AMPHIBIOUS ASSAULT	0.011	0.77
19	13	SPECIAL OPERATIONS	0.010	0.70
20	28	ASAT(LAND BASED)	0.007	0.50
21	20	AIR DEFENSE(LAND BASED)	0.004	0.29
22	9	SPACE-BASED WEAPON(LND CNTRL)	0.003	0.21
23	30	SPACE BASED WEAPON(SEA CNTRL)	0.002	0.15
24	27	ADM(SPACE BASED)	0.000	0.00
25	26	ARM(LAND BASED)	0.000	0.00
26	24	INTERCEPTOR AIRCRAFT	0.000	0.00
27	11	SLBM	0.000	0.00
28	7	ICBM	0.000	0.00
29	5	CIVIL DEFENSE	0.000	0.00
30	4	CBW	0.000	0.00

COMMODITY IMPORTANCE
(LOC 3)

COBALT

AIR INTERDICTION	5.71
ARMY GROUND	4.52
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	4.25
AIR SUPERIORITY(LAND BASED)	2.91
AIR SUPERIORITY(SHIP BASED)	2.28
INTERCEPTOR AIRCRAFT	0.00
ASAT(LAND BASED)	0.51

34.99

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.91
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	3.02
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	5.62		
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	PYRETHRUM	
AIR SUPERIORITY(LAND BASED)	2.91		
AIR SUPERIORITY(SHIP BASED)	2.28	ARMY GROUND	2.68
INTERCEPTOR AIRCRAFT	0.00	CIVIL DEFENSE	0.00
		ASW(SEA BASED)	0.14
	41.21	CARRIER BATTLE GROUP	10.00
		SURFACE COMBATANTS	4.25
			17.08

FLUORSPAR ACID

AIR INTERDICTION	7.13		
AMPHIBIOUS ASSAULT	0.76	COMMODITY NORMALIZED IMPORTANCE	
ARMY GROUND	3.69	NICKEL	10.00 ()
CAS	2.05	TIN	9.99 ()
ICBM	0.00	FLUORSPAR ACID	9.60 ()
STRATEGIC BOMBER	1.79	COBALT	8.49 ()
SLBM	0.00	PYRETHRUM	4.14 ()
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)	2.28		
INTERCEPTOR AIRCRAFT	0.00		
ABM(LAND BASED)	0.00		

	39.57		

COBALT		
A-10	CAS	71.7336
COBRA	CAS	48.4891
F-4	AIR INTERDICTION	103.5050
	CAS	7.2734
F-16	AIR INTERDICTION	71.8785
	CAS	40.4075
ART. ACFT	CAS	3.6367
RADIO RLY	AIR INTERDICTION	3.2343
	CAS	2.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	38.8144
F-15	AIR INTERDICTION	57.5012
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	43.1071
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
DSTROYERS	ASW(SEA BASED)	8.6821
M-48	ARMY GROUND	37.9669
M-60	ARMY GROUND	61.0102
M-1	ARMY GROUND	67.7980
M-551	ARMY GROUND	0.2260
M-901	ARMY GROUND	54.2384
M-2/M-3	ARMY GROUND	47.4586
M-113	ARMY GROUND	5.2732
MLRS	ARMY GROUND	20.3294
TOWED ART.	ARMY GROUND	27.1192
SELF-PROP.	ARMY GROUND	36.1589
PERSHING	ARMY GROUND	18.0795
GLCMs	ARMY GROUND	30.1224
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	5.2402
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	3.0090
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
DSTROYERS	0.6710
INFANTRY	0.5822
SH-3	0.4697
RADIO RLY	0.4603
M-113	0.4076
ART. ACFT	0.2311
ROLES LNCH	0.1253
M-551	0.0170

TIN		
A-10	CAS	72.7336
COBRA	CAS	64.6521
F-4	AIR INTERDICTION	103.5055
	CAS	7.2734
F-16	AIR INTERDICTION	71.8785
	CAS	40.4075
ART. ACFT	CAS	3.6367
RADIO RLY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	43.6662
F-15	AIR INTERDICTION	57.5028
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	48.5120
F-18	AIR INTERDICTION	80.8633
SH-3	ASW(SEA BASED)	5.2093
SH-2	ASW(SEA BASED)	13.0291
SH-60B	ASW(SEA BASED)	20.2582
S-3	ASW(SEA BASED)	34.7284
ATT. SUBS	ASW(SEA BASED)	14.4701
FRIGATES	ASW(SEA BASED)	14.4701
DISTROYERS	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	0.0733
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	26.3639
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	2.0373
SH-60B	1.5658
PERSHING	1.2227
FRIGATES	1.1184
ATT. SUBS	1.1184
SH-2	1.0066
MLRS	0.7860
DISTROYERS	0.6710
M-2/M-3	0.5240
M-901	0.5240
M-60	0.5240
SELF-PROP.	0.4658
RADIO RLY	0.4603
MORTERS	0.4076
SH-3	0.4026
TOWED ART.	0.3493
M-48	0.3261
ART. ACFT	0.2811
M-113	0.0582
ROLES LNCH	0.0175
M-771	0.0000

NICKEL		
A-10	CAS	72.7334
COBRA	CAS	48.4891
F-4	AIR INTERDICTION	77.6033
	CAS	5.4530
F-16	AIR INTERDICTION	71.8733
	CAS	40.4075
ART. ACFT	CAS	2.4245
RADIO RLY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	38.8144
F-15	AIR INTERDICTION	57.0023
A-7	AIR INTERDICTION	51.7525
F-14	AIR INTERDICTION	48.5154
F-18	AIR INTERDICTION	80.8633
SH-3	ASW(SEA BASED)	6.9417
SH-2	ASW(SEA BASED)	17.3642
SH-60P	ASW(SEA BASED)	27.0107
S-3	ASW(SEA BASED)	34.7284
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	75.3911
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	20.3334
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
MORTARS	ARMY GROUND	15.8191
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
MORTARS	1.2227
DESTROYERS	1.2079
SH-3	0.9348
RADIO RLY	0.4608
M-113	0.4074
ART. ACFT	0.1877
M-551	0.0780
ROLES LNCH	0.0179

FLUORSPAR ACID		
A-10	CAS	90.9170
COBRA	CAS	48.4891
F-4	AIR INTERDICTION	109.2813
	CAS	9.0917
F-16	AIR INTERDICTION	89.8481
	CAS	30.5094
ART. ACFT	CAS	3.6367
RADIO KLAY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	161.7266
A-6	AIR INTERDICTION	48.5180
F-15	AIR INTERDICTION	71.8783
A-7	AIR INTERDICTION	64.6906
F-14	AIR INTERDICTION	53.9087
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)	33.7617
S-3	ASW(SEA BASED)	43.4104
ATT. SUBS	ASW(SEA BASED)	28.9403
FRIGATES	ASW(SEA BASED)	20.2582
DSTROYERS	ASW(SEA BASED)	12.1549
M-48	ARMY GROUND	12.6556
M-60	ARMY GROUND	20.3394
M-1	ARMY GROUND	22.0993
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	16.9495
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	5.5556
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.	1.8632
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	0.3776
RADIO KLAY	0.3686
ART. ACFT	0.2247
ROLES LNCH	0.0140
M-551	0.0120

PYRETHRUM

ATT. SUBS	ASW/SEA BASED)	14	4701
M-48	ARMY GROUND	29	5298
M-60	ARMY GROUND	47	4584
M-113	ARMY GROUND	5	2732
TOWED ART.	ARMY GROUND	31	6290
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.	5.4000
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	0 2909
F-16	AIR INTERDICTION	3 0548
	CAS	1 7179
ART. ACFT	CAS	0 1333
RADIO RLY	AIR INTERDICTION	0 1294
	CAS	0 1091
F-111	AIR INTERDICTION	5 4987
A-6	AIR INTERDICTION	1 6981
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 6290
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 4513
M-48	ARMY GROUND	1 2656
M-60	ARMY GROUND	2 0339
M-1	ARMY GROUND	2 0339
M-551	ARMY GROUND	0 0128
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-111	10 0000
F-16	3 6787
F-4	3 0585
F-18	5 8824
A-10	5 6216
F-15	4 4464
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 9130
SH-60B	1 9035
FRIGATES	1 8684
PERSHING	1 2330
MLRS	1 2330
SH-2	1 1447
DSTROYERS	0 8210
SH-3	0 4579
RADIO RLY	0 4337
M-113	0 4110
ART. ACFT	0 2470
ROLES LNCH	0 0411
M-551	0 0226

CRITICALITY OF SHORTFALL
ALL FEES
(LOC 3)

COMMODITY	GOAL (UNITS)	STOCK FILE (UNITS)	SHORT FALL (%)	TRANS- LATED	FEY COMMODITY IMPORT	CRITIC- ALITY	NO. OF FEES
CODALT	85.4	43.8	-48.7	402.5	8.5	3418.1	1
TIN	42.0	120.4	283.8	0.0	10.0	0.0	1
NICKEL	200.0	32.2	-83.9	437.7	10.0	4377.1	10.0
FLUORSPAR ACID	1400.0	885.0	-36.1	389.9	9.6	3744.3	1
PYRETHRUM	500.0	0.0	-100.0	453.8	4.1	1850.7	1

COMPOSITE IMPORTANCE
(LOC 3)

CORAL T

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
FINLAND	1350.	7.71	1.92	0.526	4.612
MOROCCO	450.	2.57	1.50	0.667	1.710
BOTSWANNA	250.	1.43	0.71	1.404	1.000
SOUTH AFRICA	150.	0.86	1.19	0.841	0.721
ZAIRE	12500.	71.43	0.71	1.404	10.000
PHILIPPINES	50.	0.29	0.92	1.087	0.310
AUSTRALIA	400.	2.29	0.92	1.087	2.483
NEW CALEDONIA	250.	1.43	0.92	1.087	1.500
CANADA	1100.	6.29	2.89	0.346	2.170
U S	1000.	5.71	2.56	0.391	2.230

TOTAL: 17500 100.00

COMPOSITE IMPORTANCE
(LOC 3)

TIN

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/CI	% (1/CI)
AUSTRALIA	100.	0.15	0.92	1.087	0.141
J S	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	9.312
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	4.120
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	1/01	% (1/01)
FINLAND	1000	0.33	1.92	0.520	0.171
SOUTH AFRICA	5000	1.64	1.19	0.841	1.331
PHILIPPINES	5000	1.64	0.92	1.087	1.785
AUSTRALIA	25000	8.21	0.92	1.087	8.924
CANADA	150000	49.28	2.89	0.346	17.054
U.S.	80000	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	0.014
FRG	100	0.03	1.96	0.510	0.017
YUGOSLAVIA	500	0.16	1.96	0.510	0.073
SSR	5000	1.64	0.94	1.061	1.741
DOM. REPUB.	15000	4.93	1.53	0.656	3.132
GUATEMALA	4000	1.31	1.53	0.656	0.831
INDONESIA	5000	1.64	0.92	1.087	1.785
TOTAL:	304400	100.00			

COMPOSITE IMPORTANCE
(LOC 3)

FLUOROSULFONIC ACID

SOURCE	AMOUNT SUPPLIED	% OF TOTAL	COMPOSITE IMPORTANCE	1/01	% (1/01)
SOUTH AFRICA	180	22.36	1.19	0.841	18.303
U.S.	70	8.70	2.56	0.391	3.402
ITALY	60	8.07	1.96	0.510	4.125
SPAIN	100	12.42	1.96	0.510	6.338
EAST AFRICA	25	3.11	0.71	1.404	4.359
HAILAND	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	1/01	% (1/01)
SOUTH AFRICA	2000	1.01	1.19	0.841	0.852
AUSTRALIA	1500	0.76	0.92	1.087	0.823
UK	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	50.488
TOTAL:	197500	100.00			

SOURCE IMPORTANCE
(LUG 3)

SOURCE	% (1/01) CONF. INF.	FEEDBACK CRITICALITY	TOTAL	NORMALIZED TO 100
COBALT				
FINLAND	4.012	7.81	31.33	4.00
MOROCCO	1.715	7.81	13.40	1.71
BOTSWANNA	2.005	7.81	15.66	2.00
SOUTH AFRICA	0.721	7.81	5.63	0.72
ZAIRE	100.344	7.81	782.91	100.00
PHILIPPINES	0.310	7.81	2.42	0.31
AUSTRALIA	2.483	7.81	19.39	2.48
NEW CALEDONIA	1.552	7.81	12.17	1.55
CANADA	2.175	7.81	16.99	2.17
U.S.	2.236	7.81	17.46	2.23

TIN

AUSTRALIA	0.161	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	15.548	0.00	0.00	0.00
BRAZIL	4.125	0.00	0.00	0.00
FRG	1.734	0.00	0.00	0.00
MALAYSIA	33.414	0.00	0.00	0.00

IRON

FINLAND	0.171	10.00	1.71	0.22
SOUTH AFRICA	1.381	10.00	13.81	1.73
PHILIPPINES	1.785	10.00	17.85	2.28
AUSTRALIA	8.924	10.00	89.24	11.40
CANADA	17.054	10.00	170.54	21.78
U.S.	11.311	10.00	113.11	14.43
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	0.084	10.00	0.84	0.11
USSR	1.742	10.00	17.42	2.23
DOM. REPUB.	3.230	10.00	32.30	4.13
GUATAMALA	0.861	10.00	8.61	1.10
INDONESIA	1.785	10.00	17.85	2.28

FLUORSPAR ACID

SOUTH AFRICA	18.803	8.55	160.85	20.54
U.S.	3.402	8.55	29.10	3.72
ITALY	4.120	8.55	35.24	4.50
SPAIN	6.338	8.55	54.22	6.93
EAST AFRICA	4.359	8.55	37.29	4.76
THAILAND	2.025	8.55	17.32	2.21
MEXICO	17.011	8.55	145.52	18.58

HYDRETHUM

SOUTH AFRICA	0.852	4.30	3.66	0.47
AUSTRALIA	0.825	4.30	3.55	0.45
UK	2.842	4.30	12.21	1.56
KENYA	56.855	4.30	244.29	31.20
RWANDA	17.767	4.30	76.34	9.75
TANZANIA	55.433	4.30	238.18	30.42

SOURCE IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	31.20
3	TANZANIA	PYRETHRUM	30.42
4	CANADA	NICKEL	21.78
5	SOUTH AFRICA	FLUORSPAR ACID	20.54
6	MEXICO	FLUORSPAR ACID	18.58
7	U S	NICKEL	14.45
8	AUSTRALIA	NICKEL	11.40
9	RWANDA	PYRETHRUM	9.75
10	SPAIN	FLUORSPAR ACID	6.91
11	EAST AFRICA	FLUORSPAR ACID	4.76
12	ITALY	FLUORSPAR ACID	4.5
13	DOM. REPUB	NICKEL	4.13
14	FINLAND	COBALT	4.00
15	U S	FLUORSPAR ACID	3.72
16	AUSTRALIA	COBALT	2.48
17	INDONESIA	NICKEL	2.28
18	PHILIPPINES	NICKEL	2.28
19	U S	COBALT	2.23
20	USSR	NICKEL	2.23
21	THAILAND	FLUORSPAR ACID	2.11
22	CANADA	COBALT	2.17
23	BOTSWANA	COBALT	2.00
24	SOUTH AFRICA	NICKEL	1.74
25	MOROCCO	COBALT	1.71
26	UK	PYRETHRUM	1.54
27	NEW CALEDONIA	COBALT	1.55
28	GUATAMALA	NICKEL	1.10
29	SOUTH AFRICA	COBALT	0.72
30	SOUTH AFRICA	PYRETHRUM	0.47
31	AUSTRALIA	PYRETHRUM	0.45
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 11

WEIGHTS on REGION by LEVEL of CONFLICT and MEDIA

Level of Conflict & 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	4.0
I/CDEF	0.1786	0.1786	0.1250	0.0833	0.1250	0.0357	0.0357	0.0893	0.0357	0.1000

Level of Conflict & Media 2

Region	1	2	3	4	5	6	7	8	9	10
Weight	10.0	10.0	9.0	4.0	7.0	5.0	1.0	8.0	7.0	5.0
I/CDEF	0.1333	0.1333	0.1200	0.0533	0.0933	0.067	0.0133	0.1067	0.0933	0.067
I/CDEF	0.1200									

Level of Conflict & 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/CDEF	0.1794	0.1794	0.1794	0.1429	0.1071	0.0714	0.14

Level of Conflict & Media 4

Region	1	2	3	4
Weight	10.0	4.0	2.0	1.0
I/CDEF	0.5842	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/CDEF	0.0228	0.0228	0.0140	0.0114	0.0140	0.0044	0.0044	0.0114	0.0140	0.0114	0.0114

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

Media 3	Region	1	2	3	4	5	6	7
I/CDEF	0.0228	0.0228	0.0228	0.0182	0.0137	0.0091	0.0137	

Media 4	Region	1	2	3	4
I/CDEF	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/CDEF	0.0099	0.0099	0.0070	0.0050	0.0070	0.0020	0.0020	0.0050	0.0020	0.0020	0.0040

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

Media 3	Region	1	2	3	4	5	6	7
I/CDEF	0.0040	0.0040	0.0040	0.0048	0.0036	0.0024	0.0048	

Media 4	Region	1	2	3	4
I/CDEF	0.0045	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	10.0
2	1	AIR INTERDICTION	0.117	8.2
3	3	ARMY GROUND	0.104	7.381
4	16	ATTACK SUBS	0.072	5.103
5	19	SURFACE COMBATANTS	0.060	4.24
6	12	THEATER NUCLEAR WEAPON	0.054	3.81
7	8	RAPID DEPLOY	0.051	3.706
8	6	CAS	0.044	3.132
9	14	ASW(LAND BASED)	0.043	3.003
10	22	AIR SUPERIORITY(LAND BASED)	0.041	2.910
11	15	ASW(SEA BASED)	0.038	2.811
12	23	AIR SUPERIORITY(SHIP BASED)	0.032	2.273
13	21	AIR DEFENSE(SHIP BASED)	0.029	2.065
14	10	STRATEGIC BOMBER	0.020	1.754
15	25	SPEE BASED WEAPON(AIR CNTRL)	0.020	1.411
16	29	ASAT(SPACE BASED)	0.013	0.914
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)	0.007	0.503
22	9	SPEE-BASED WEAPON(LND CNTRL)	0.007	0.512
23	30	SPEE BASED WEAPON(SEA CNTRL)	0.001	0.118
24	27	ARM(SPACE BASED)	0.000	0.000
25	26	ARM(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	1.75
ICBM	0.00
STRATEGIC BOMBER	1.79
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
ASAT(LAND BASED)	0.51

34.99

TIN

AIR INTERDICTION	5.90
ARMY GROUND	1.92
CAS	1.91
STRATEGIC BOMBER	1.79
ASW(LAND BASED)	3.09
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	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

PYRETHRUM

ARMY GROUND	2.61
CIVIL DEFENSE	1.00
ASW(SEA BASED)	0.14
CARRIER BATTLE GROUP	10.00
SURFACE COMBATANTS	4.25

17.08

FLUORSPAR ACID

AIR INTERDICTION	7.13
AMPHIBIOUS ASSAULT	0.76
ARMY GROUND	3.69
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)	2.28
INTERCEPTOR AIRCRAFT	0.00
ABM(LAND BASED)	0.00

39.57

COMMODITY NORMALIZED IMPORTANCE

NICKEL	10.00	(
TIN	9.99	(
FLUORSPAR ACID	9.60	(
COBALT	8.49	(
PYRETHRUM	4.14	(

COBALT		
A-10	CAS	72 7386
COBRA	CAS	48 4891
F-4	AIR INTERDICTION	103 5050
	CAS	7 2784
F-16	AIR INTERDICTION	71 8785
	CAS	40 4076
ART. ACFT	CAS	3 6367
RADIO BLAY	AIR INTERDICTION	3 2345
	CAS	2 7275
F-111	AIR INTERDICTION	125 3813
A-6	AIR INTERDICTION	38 8144
F-15	AIR INTERDICTION	57 5023
A-7	AIR INTERDICTION	51 7525
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 6921
M-48	ARMY GROUND	37 9669
M-60	ARMY GROUND	61 0182
M-1	ARMY GROUND	67 7480
M-571	ARMY GROUND	0 3260
M-901	ARMY GROUND	54 2384
M-2/M-3	ARMY GROUND	47 4586
M-113	ARMY GROUND	5 2732
MLRS	ARMY GROUND	20 3354
TOWED ART.	ARMY GROUND	27 1192
SELF-PROP.	ARMY GROUND	34 1589
PERSHING	ARMY GROUND	18 0795
GLCMs	ARMY GROUND	30 1324
INFANTRY	ARMY GROUND	7 5331
MORTARS	ARMY GROUND	34 9113
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	5.2402
M-60	4.7162
F-15	4.4444
M-901	4.1921
A-7	4.0000
COBRA	3.7479
M-2/M-3	3.6681
F-14	3.3333
A-6	3.0000
M-48	2.9345
MORTARS	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
DESTROYERS	0.6710
INFANTRY	0.5331
SH-3	0.4697
RADIO BLAY	0.4705
M-113	0.4076
ART. ACFT	0.2611
ROLES LNCH	0.1213
M-571	0.0195

TIN		
A-10	CAS	72.7336
COBRA	CAS	44.4521
F-4	AIR INTERDICTION	103.5050
	CAS	7.2734
F-16	AIR INTERDICTION	71.8785
	CAS	40.4075
ART. ACFT	CAS	3.6367
RADIO RLY	AIR INTERDICTION	3.2345
	CAS	2.7275
F-111	AIR INTERDICTION	129.3813
A-6	AIR INTERDICTION	43.6640
F-15	AIR INTERDICTION	57.5028
F-7	AIR INTERDICTION	51.7500
F-14	AIR INTERDICTION	48.5180
F-18	AIR INTERDICTION	80.8633
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)	34.7284
ATT. SUBS	ASW(SEA BASED)	14.4701
FRIGATES	ASW(SEA BASED)	14.4701
DESTROYERS	ASW(SEA BASED)	8.6821
M-49	ARMY GROUND	4.2185
M-60	ARMY GROUND	6.7798
M-1	ARMY GROUND	37.6655
M-501	ARMY GROUND	0.0753
M-901	ARMY GROUND	6.7798
M-2/M-3	ARMY GROUND	6.7798
M-113	ARMY GROUND	0.7503
MLRS	ARMY GROUND	10.1697
TOWED ART.	ARMY GROUND	4.5199
SELF-PROP.	ARMY GROUND	6.0245
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-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	1.0046
MLRS	0.7860
DESTROYERS	0.4710
M-2/M-3	0.5240
M-901	0.5240
M-60	0.5240
SELF-PROP.	0.4658
RADIO RLY	0.4603
MORTERS	0.4076
SH-3	0.4024
TOWED ART.	0.3493
M-48	0.3241
ART. ACFT	0.2811
M-113	0.0502
ROLES LNCH	0.0175
M-501	0.0023

NICKEL		
A-10	CAS	72.7336
COBRA	CAS	48.4891
F-4	AIR INTERDICTION	77.6239
	CAS	5.4530
F-16	AIR INTERDICTION	71.8765
	CAS	40.4075
ART. ACFT	CAS	2.4245
RADIO RLY	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	51.7529
F-14	AIR INTERDICTION	48.5100
F-18	AIR INTERDICTION	80.8633
SH-3	ASW (SEA BASED)	6.9457
SH-2	ASW (SEA BASED)	17.3642
SH-60B	ASW (SEA BASED)	27.0134
S-3	ASW (SEA BASED)	34.7184
ATT. SUBS	ASW (SEA BASED)	43.4104
FRIGATES	ASW (SEA BASED)	26.0463
DESTROYERS	ASW (SEA BASED)	15.6273
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	54.2381
M-113	ARMY GROUND	5.2732
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	15.8123
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	3.6631
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	1.2237
DESTROYERS	1.2079
SH-3	0.9368
RADIO RLY	0.4603
M-113	0.4076
ART. ACFT	0.1824
M-551	0.0532
ROLES LNCH	0.0115

FLUORSPAR ACID		90.9170
A-10	CAS	48.4881
COBRA	CAS	129.3813
F-4	AIR INTERDICTION	9.0917
	CAS	89.8481
F-16	AIR INTERDICTION	30.5094
	CAS	3.6367
ART. ACFT	CAS	3.2345
RADIO RLAY	AIR INTERDICTION	2.7275
	CAS	161.7266
F-111	AIR INTERDICTION	48.5180
A-6	AIR INTERDICTION	71.8785
F-15	AIR INTERDICTION	64.6906
A-7	AIR INTERDICTION	53.9089
F-14	AIR INTERDICTION	89.8481
F-18	AIR INTERDICTION	6.9477
SH-3	ASW(SEA BASED)	17.3642
SH-2	ASW(SEA BASED)	32.7457
SH-60F	ASW(SEA BASED)	43.4104
S-3	ASW(SEA BASED)	28.9403
ATT. SUBS	ASW(SEA BASED)	20.2582
FRIGATES	ASW(SEA BASED)	12.1549
DSTROYERS	ASW(SEA BASED)	12.6556
M-48	ARMY GROUND	20.3394
M-60	ARMY GROUND	22.5993
M-1	ARMY GROUND	0.2260
M-551	ARMY GROUND	54.2384
M-901	ARMY GROUND	54.2384
M-2/M-3	ARMY GROUND	6.0265
M-113	ARMY GROUND	16.9495
MLRS	ARMY GROUND	22.5993
TOWED ART.	ARMY GROUND	30.1324
SELF-PROP.	ARMY GROUND	15.8195
PERSHING	ARMY GROUND	26.3659
GLCMS	ARMY GROUND	60.2649
INFANTRY	ARMY GROUND	26.3659
MORTERS	ARMY GROUND	0.2260
ROLES LNCH	ARMY GROUND	

NORMALIZED VALUES	10.0000
F-111	8.6787
F-16	8.5622
F-4	5.6216
A-10	5.5556
F-18	4.4444
F-15	4.0000
A-7	3.7263
INFANTRY	3.3537
M-2/M-3	3.3537
M-901	3.3333
F-14	3.0000
A-6	2.9282
COBRA	2.6842
S-3	2.0877
SH-60F	1.8632
SELF-PROP.	1.7895
ATT. SUBS	1.6303
MORTERS	1.6303
GLCMS	1.3974
TOWED ART.	1.3974
M-1	1.2576
M-60	1.2526
FRIGATES	1.0737
SH-2	1.0480
MLRS	0.9782
PERSHING	0.7825
M-48	0.7516
DSTROYERS	0.4295
SH-3	0.3726
M-113	0.3486
RADIO RLAY	0.2249
ART. ACFT	0.0140
ROLES LNCH	0.0140
M-551	0.0140

BYRETHRUH		
ATT. SUBS	ASW (SEA BASED)	14 4701
M-48	ARMY GROUND	29 5298
M-60	ARMY GROUND	47 4086
M-113	ARMY GROUND	5 2732
TOWED ART.	ARMY GROUND	31 6390
SELF-PROP.	ARMY GROUND	42 1854
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	1.9200
M-113	0.7000

ALL COMMODITIES

A-10	CAS	3 0912
COBRA	CAS	2 1012
F-4	AIR INTERDICTION	4 1402
	CAS	0 2909
F-16	AIR INTERDICTION	3 0548
	CAS	1 7173
ART. ACFT	CAS	0 1333
RADIO RLY	AIR INTERDICTION	0 1294
	CAS	0 1091
F-111	AIR INTERDICTION	5 4987
A-6	AIR INTERDICTION	1 6981
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 2541
FRIGATES	ASW(SEA BASED)	0 7524
DESTROYERS	ASW(SEA BASED)	0 4515
M-48	ARMY GROUND	1 2656
M-60	ARMY GROUND	2 0371
M-1	ARMY GROUND	2 0339
M-551	ARMY GROUND	0 0128
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-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 RLY	0 4337
M-113	0 4110
ART. ACFT	0 2479
ROLES LNCH	0 0411
M-551	0 0226

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 (% OF GOAL)
COBALT	83.4	43.8	-48.7	401.3	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	9.6
PYRETHRUM	503.0	0.0	-100.0	453.8	4.1	1880.7	4.1

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	100.	0.71	1.19	0.841	0.601
ZAIRE	12500.	59.52	0.71	1.404	99.548
PHILIPPINES	50.	0.24	0.92	1.087	0.219
AUSTRALIA	400.	1.90	0.92	1.087	2.070
NEW CALEDONIA	250.	1.19	0.92	1.087	1.293
CANADA	1100.	5.24	2.89	0.346	1.813
S	4500.	21.43	2.56	0.391	8.384

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
S	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
K	100.	0.15	1.96	0.510	0.075
BOLIVIA	10300.	15.24	0.98	1.020	15.548
BRAZIL	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	0.03	1.92	0.520	0.171
SOUTH AFRICA	5000	1.64	1.19	0.841	1.341
PHILIPPINES	5000	1.64	0.92	1.087	1.785
AUSTRALIA	25000	8.21	0.92	1.087	1.814
CANADA	150000	49.28	2.89	0.344	17.054
U.S.	88000	29.91	2.56	0.391	11.011
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	0.034
SSR	5000	1.64	0.94	1.041	1.742
ROM. REPUB.	15000	4.93	1.53	0.656	3.230
GUATEMALA	4000	1.31	1.53	0.656	0.811
INDONESIA	5000	1.64	0.92	1.017	1.785
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	18.807
U.S.	70	8.70	2.56	0.391	3.412
ITALY	60	8.07	1.96	0.510	4.120
SPAIN	100	12.42	1.96	0.510	6.338
EAST AFRICA	25	3.11	0.71	1.404	4.039
HAILAND	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	56.855
WANDA	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 8)

SOURCE	% (1/01) CUMPL INF	FE / SHORTFALL CRITICALITY	TOTAL	NORMALIZED TO 1%
COBALT				
FINLAND	3.341	7.81	26.11	4.01
MOROCCO	1.414	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	83.543	7.81	652.43	100.00
PHILIPPINES	0.259	7.81	2.02	0.31
AUSTRALIA	2.070	7.81	16.16	2.40
NEW CALEDONIA	1.293	7.81	10.10	1.50
CANADA	1.813	7.81	14.14	2.17
U S	8.384	7.81	65.47	10.04

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	17.544	0.00	0.00	0.00
BRAZIL	4.123	0.00	0.00	0.00
PERU	1.786	0.00	0.00	0.00
MALAYSIA	35.414	0.00	0.00	0.00

NICKEL				
FINLAND	0.171	10.00	1.71	0.26
SOUTH AFRICA	1.331	10.00	13.31	2.12
PHILIPPINES	1.785	10.00	17.85	2.74
AUSTRALIA	8.924	10.00	89.24	13.63
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

MYRETHRUM				
SOUTH AFRICA	0.852	4.30	3.66	0.56
AUSTRALIA	0.825	4.30	3.55	0.54
UK	2.842	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 IMPORTANCE
RANKED BY SOURCE
(LOC 3)

#	SOURCE	COMMODITY	VALUE
1	ZAIRE	COBALT	100.00
2	KENYA	PYRETHRUM	37.44
3	TANZANIA	PYRETHRUM	36.51
4	CANADA	NICKEL	26.14
5	SOUTH AFRICA	FLUORESPAR ACID	24.65
6	MEXICO	FLUORESPAR ACID	22.30
7	U S	NICKEL	17.34
8	AUSTRALIA	NICKEL	13.68
9	RWANDA	PYRETHRUM	11.70
10	U S	COBALT	10.04
11	SPAIN	FLUORESPAR ACID	8.31
12	EAST AFRICA	FLUORESPAR ACID	5.71
13	ITALY	FLUORESPAR ACID	5.40
14	DOM. REPUB.	NICKEL	4.80
15	U S	FLUORESPAR ACID	4.46
16	FINLAND	COBALT	4.00
17	INDONESIA	NICKEL	2.74
18	PHILIPPINES	NICKEL	2.74
19	USSR	NICKEL	2.67
20	THAILAND	FLUORESPAR ACID	2.40
21	AUSTRALIA	COBALT	2.46
22	CANADA	COBALT	2.17
23	SOUTH AFRICA	NICKEL	2.12
24	BOTSWANNA	COBALT	2.00
25	UK	PYRETHRUM	1.87
26	MOROCCO	COBALT	1.71
27	NEW CALEDONIA	COBALT	1.55
28	GUATAMALA	NICKEL	1.37
29	SOUTH AFRICA	COBALT	0.72
30	SOUTH AFRICA	PYRETHRUM	0.56
31	AUSTRALIA	PYRETHRUM	0.54
32	PHILIPPINES	COBALT	0.31
33	FINLAND	NICKEL	0.26
34	GREECE	NICKEL	0.15
35	YUGOSLAVIA	NICKEL	0.13
36	NETHERLANDS	NICKEL	0.05
37	FRG	NICKEL	0.03
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

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