Beam Weapon Damage

1) Write the target and firing ship's vectors in the hex halves around the Targeting AVID. The target ship's vector goes in the top half, your ship's vector goes in the bottom.

2) Add vectors in the same hexagon together. Consolidate those vectors 180° apart first, then consolidate those vectors 120° apart until only one vertical and a maximum of two horizontal vectors, separated by 60°, remain.

3) Add the two horizontal vectors together. Cross reference this sum with the vertical vector on the RALT. This final number is the Rate of Closure in hexes per turn.

4) Divide by 8 to determine the Rate of Closure (RoC) in hexes per segment.

RoC Worksheet

	/8 =	
Rate of Closure In Hexes/Turn		Rate of Closure In Hexes/Segment

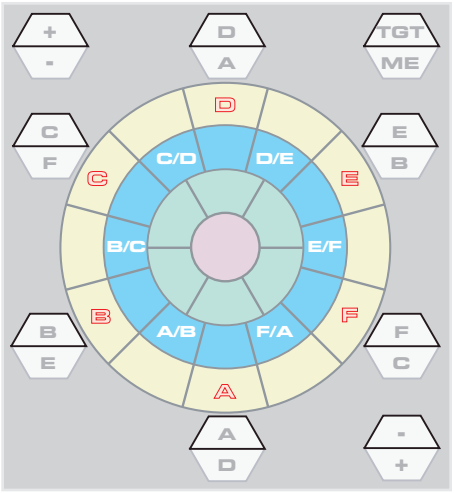
Grav Lance

Roll a variance roll of 3d10v and add it to the Grav Lance quality. If the result is greater than the strength of the sidewall, the sidewall goes down.

Energy Torpedos

Type	Range	Damage
1ET	2	100
2ET	2	250

Targeting AVID



Missile Range Table

Range	0-7	8	9-10	11	12	13-14	15-17	18	19-22	23-27	28-33	34	35-41	42-51	52-63	64-79
Max Salvos	5	4	4	4	3	3	3	2	2	2	2	2	1	1	1	1
Range Mod		2	4	6	6	8	10	10	12	14	16	18	18	20	22	24

Missile Range Table (cont)

Range	80-99	100-103	104-124	125-136	137+
Max Salvos	1/2	1/2	1/3	1/3	1/4
Range Mod	26	28	28	30	30

Damage

Type	Laser	Nuke
2M	2	20
3M	4	40
7M	9	90

Range Angle Lookup Table (RALT)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
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45	45	45	45	45	45	45	45	45	45	46	46	46	46	47	47	47	48	48	48	49	49	50	50																											
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24	24	24	24	24	24	24	25	25	25	26	26	26	27	27	28	28	29	30	30	31	31	32	33	33	34	35	36	36	37	38	39	40	40	41	42	43	44	44	45	46	47	48	49	50						
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2	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
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0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

Graser Damage

	RoC >	0	4	10.5	18.5	29.5	50+
4G	Range	-3.5	-10	-18	-29	-49.5	
	0	20	15	10	8	6	4
	1	12	9	6	5	4	3
	2	4	3	2	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
6G	Range	-3.5	-10	-18	-29	-49.5	
	0	30	23	15	11	8	6
	1	18	14	9	7	5	4
	2	6	5	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
8G	Range	-3.5	-10	-18	-29	-49.5	
	0	40	30	20	15	11	8
	1	24	18	12	9	7	5
	2	8	6	4	3	2	1

	RoC >	0	4	10.5	18.5	29.5	50+
10G	Range	-3.5	-10	-18	-29	-49.5	
	0	50	38	25	19	14	10
	1	30	23	15	11	8	6
	2	10	8	5	4	3	2
	3	3	2	1	1	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
12G	Range	-3.5	-10	-18	-29	-49.5	
	0	60	45	30	23	17	12
	1	36	27	18	14	10	7
	2	12	9	6	5	4	3
	3	4	3	2	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
14G	Range	-3.5	-10	-18	-29	-49.5	
	0	70	53	35	26	19	14
	1	42	32	21	16	12	9
	2	14	11	7	5	4	3
	3	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
16G	Range	-3.5	-10	-18	-29	-49.5	
	0	80	60	40	30	22	16
	1	48	36	24	18	13	10
	2	16	12	8	6	4	3
	3	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
18G	Range	-3.5	-10	-18	-29	-49.5	
	0	90	68	45	34	25	18
	1	54	41	27	20	15	11
	2	18	14	9	7	5	4
	3	6	5	3	2	1	1

Laser Damage

	RoC >	0	4	10.5	18.5	29.5	50+
1L	Range	-3.5	-10	-18	-29	-49.5	
	0	4	3	2	2	1	1
	1	3	2	1	1	1	1
	2	2	2	1	1	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
2L	Range	-3.5	-10	-18	-29	-49.5	
	0	8	6	4	3	2	1
	1	6	5	3	2	1	1
	2	4	3	2	2	1	1
	3	3	2	1	1	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
3L	Range	-3.5	-10	-18	-29	-49.5	
	0	12	9	6	5	4	3
	1	9	7	5	4	3	2
	2	6	5	3	2	1	1
	3	4	3	2	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
4L	Range	-3.5	-10	-18	-29	-49.5	
	0	16	12	8	6	4	3
	1	12	9	6	5	4	3
	2	8	6	4	3	2	1
	3	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
5L	Range	-3.5	-10	-18	-29	-49.5	
	0	20	15	10	8	6	4
	1	15	11	7	5	4	3
	2	10	8	5	4	3	2
	3	7	5	3	2	1	1
	4	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
6L	Range	-3.5	-10	-18	-29	-49.5	
	0	24	18	12	9	7	5
	1	18	14	9	7	5	4
	2	12	9	6	5	4	3
	3	8	6	4	3	2	1
	4	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
7L	Range	-3.5	-10	-18	-29	-49.5	
	0	28	21	14	11	8	6
	1	21	16	11	8	6	4
	2	14	11	7	5	4	3
	3	9	7	5	4	3	2
	4	6	5	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
8L	Range	-3.5	-10	-18	-29	-49.5	
	0	32	24	16	12	9	7
	1	24	18	12	9	7	5
	2	16	12	8	6	4	3
	3	11	8	5	4	3	2
	4	7	5	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
9L	Range	-3.5	-10	-18	-29	-49.5	
	0	36	27	18	14	10	7
	1	27	20	13	10	7	5
	2	18	14	9	7	5	4
	3	12	9	6	5	4	3
	4	8	6	4	3	2	1

	RoC >	0	4	10.5	18.5	29.5	50+
10L	Range	-3.5	-10	-18	-29	-49.5	
	0	40	30	20	15	11	8
	1	30	23	15	11	8	6
	2	20	15	10	8	6	4
	3	13	10	7	5	4	3
	4	9	7	5	4	3	2
	5	6	5	3	2	1	1

Beam Weapon Damage

1) Write the target and firing ship's vectors in the hex halves around the Targeting AVID. The target ship's vector goes in the top half, your ship's vector goes in the bottom.

2) Add vectors in the same hexagon together. Consolidate those vectors 180° apart first, then consolidate those vectors 120° apart until only one vertical and a maximum of two horizontal vectors, separated by 60°, remain.

3) Add the two horizontal vectors together. Cross reference this sum with the vertical vector on the RALT. This final number is the Rate of Closure in hexes per turn.

4) Divide by 8 to determine the Rate of Closure (RoC) in hexes per segment.

RoC Worksheet

	/8 =	
Rate of Closure In Hexes/Turn		Rate of Closure In Hexes/Segment

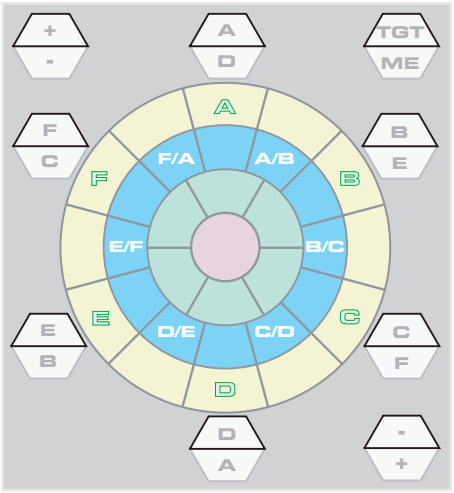
Grav Lance

Roll a variance roll of 3d10v and add it to the Grav Lance quality. If the result is greater than the strength of the sidewall, the sidewall goes down.

Energy Torpedos

Type	Range	Damage
1ET	2	100
2ET	2	250

Targeting AVID



Missile Range Table

Range	0-7	8	9-10	11	12	13-14	15-17	18	19-22	23-27	28-33	34	35-41	42-51	52-63	64-79
Max Salvos	5	4	4	4	3	3	3	2	2	2	2	2	1	1	1	1
Range Mod		2	4	6	6	8	10	10	12	14	16	18	18	20	22	24

Missile Range Table (cont)

Range	80-99	100-103	104-124	125-136	137+
Max Salvos	1/2	1/2	1/3	1/3	1/4
Range Mod	26	28	28	30	30

Damage

Type	Laser	Nuke
2M	2	20
3M	4	40
7M	9	90

Range Angle Lookup Table (RALT)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
50	50	50	50	50	50	50	50	50	50	50																																										
49	49	49	49	49	49	49	49	49	49	50	50	50	50	50																																							
48	48	48	48	48	48	48	48	48	48	49	49	49	49	50	50	50	50																																			
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Graser Damage

	RoC >	0	4	10.5	18.5	29.5	50+
4G	Range	-3.5	-10	-18	-29	-49.5	
	0	20	15	10	8	6	4
	1	12	9	6	5	4	3
	2	4	3	2	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
6G	Range	-3.5	-10	-18	-29	-49.5	
	0	30	23	15	11	8	6
	1	18	14	9	7	5	4
	2	6	5	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
8G	Range	-3.5	-10	-18	-29	-49.5	
	0	40	30	20	15	11	8
	1	24	18	12	9	7	5
	2	8	6	4	3	2	1

	RoC >	0	4	10.5	18.5	29.5	50+
10G	Range	-3.5	-10	-18	-29	-49.5	
	0	50	38	25	19	14	10
	1	30	23	15	11	8	6
	2	10	8	5	4	3	2
	3	3	2	1	1	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
12G	Range	-3.5	-10	-18	-29	-49.5	
	0	60	45	30	23	17	12
	1	36	27	18	14	10	7
	2	12	9	6	5	4	3
	3	4	3	2	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
14G	Range	-3.5	-10	-18	-29	-49.5	
	0	70	53	35	26	19	14
	1	42	32	21	16	12	9
	2	14	11	7	5	4	3
	3	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
16G	Range	-3.5	-10	-18	-29	-49.5	
	0	80	60	40	30	22	16
	1	48	36	24	18	13	10
	2	16	12	8	6	4	3
	3	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
18G	Range	-3.5	-10	-18	-29	-49.5	
	0	90	68	45	34	25	18
	1	54	41	27	20	15	11
	2	18	14	9	7	5	4
	3	6	5	3	2	1	1

Laser Damage

	RoC >	0	4	10.5	18.5	29.5	50+
1L	Range	-3.5	-10	-18	-29	-49.5	
	0	4	3	2	2	1	1
	1	3	2	1	1	1	1
	2	2	2	1	1	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
2L	Range	-3.5	-10	-18	-29	-49.5	
	0	8	6	4	3	2	1
	1	6	5	3	2	1	1
	2	4	3	2	2	1	1
	3	3	2	1	1	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
3L	Range	-3.5	-10	-18	-29	-49.5	
	0	12	9	6	5	4	3
	1	9	7	5	4	3	2
	2	6	5	3	2	1	1
	3	4	3	2	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
4L	Range	-3.5	-10	-18	-29	-49.5	
	0	16	12	8	6	4	3
	1	12	9	6	5	4	3
	2	8	6	4	3	2	1
	3	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
5L	Range	-3.5	-10	-18	-29	-49.5	
	0	20	15	10	8	6	4
	1	15	11	7	5	4	3
	2	10	8	5	4	3	2
	3	7	5	3	2	1	1
	4	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
6L	Range	-3.5	-10	-18	-29	-49.5	
	0	24	18	12	9	7	5
	1	18	14	9	7	5	4
	2	12	9	6	5	4	3
	3	8	6	4	3	2	1
	4	5	4	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
7L	Range	-3.5	-10	-18	-29	-49.5	
	0	28	21	14	11	8	6
	1	21	16	11	8	6	4
	2	14	11	7	5	4	3
	3	9	7	5	4	3	2
	4	6	5	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
8L	Range	-3.5	-10	-18	-29	-49.5	
	0	32	24	16	12	9	7
	1	24	18	12	9	7	5
	2	16	12	8	6	4	3
	3	11	8	5	4	3	2
	4	7	5	3	2	1	1

	RoC >	0	4	10.5	18.5	29.5	50+
9L	Range	-3.5	-10	-18	-29	-49.5	
	0	36	27	18	14	10	7
	1	27	20	13	10	7	5
	2	18	14	9	7	5	4
	3	12	9	6	5	4	3
	4	8	6	4	3	2	1

	RoC >	0	4	10.5	18.5	29.5	50+
10L	Range	-3.5	-10	-18	-29	-49.5	
	0	40	30	20	15	11	8
	1	30	23	15	11	8	6
	2	20	15	10	8	6	4
	3	13	10	7	5	4	3
	4	9	7	5	4	3	2
	5	6	5	3	2	1	1

SEQUENCE OF PLAY

SEGMENT PROCEDURE

A — Place Future Position Marker For This Segment

B — Order Writing
- Record Orders For This Segment
- Cover Them With Your Hand When You're Done

C — Reveal Fire Orders
- Fire Beams, Resolve Beam Damage
- Launch Missile Weapons

D — Reveal Long Orders
- Change Thrust
- Record Facing Changes On AVID
- Deploy Decoys In Response To Missile Launch

E — Resolve Thrust
- Record Acceleration Dots
- Cross Off Pulse On Thrust Chart
- Displace Future Position Marker

F — Move Ships
- Move All Ships to Future Position Markers
- Change Ship Orientation Per Pivots & Rolls
- Resolve Missile Defense
  - Longest Ranged Shots to Shortest Range
- Resolve Missile Damage

G — Thrust Break Condition

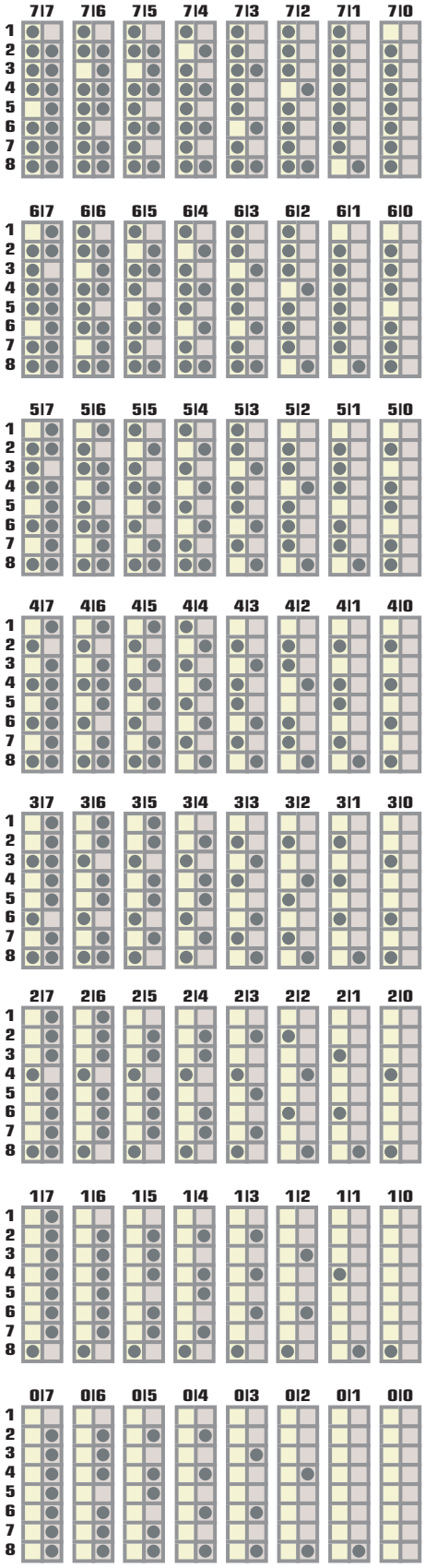
If
- You Reach The End Of Thrust Chart
  - **or**
- You Set Thrust to Zero as a Long Order
  - **or**
- You Complete A Pivot

Then
- Count Acceleration Dots
- Add Acceleration Dots To Existing Vectors
- Resolve Vectors 180 Degrees Apart
- Resolve Vectors 120 Degrees Apart
- Fill Out Movement Grid From New Vectors

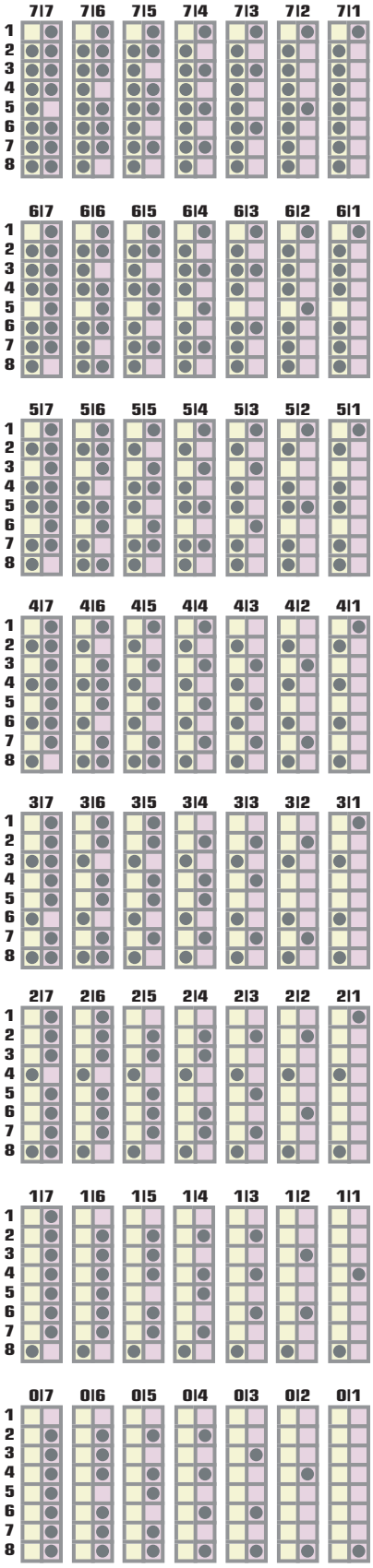
H — Regeneration Step
- Go To Next Segment
  - **or**
- If Segment 8, Go To Turn Break Procedure

TURN BREAK PROCEDURE
- Track Damage Control Attempts
- Draw Miracle Cards As Appropriate.
- Go to Segment 1 of Next Turn

HORIZONTAL REMAINDER GRID



VERTICAL REMAINDER GRID



Horizontal Movement Grid:

1) If the two horizontal vectors are each less than 8, find the pattern corresponding to them, with the larger vector in the yellow column. A vector of 5 and 3 would use the 5|3 split. Copy the pattern of dots into the narrow column on the movement grid.
2) If a vector is greater than 8, divide it by 8, recording the result in wide column of Movement Grid, retaining remainders. Use the procedure above to place the remainders in the narrow columns.

Vertical Movement Grid:

1) Sum remainders of horizontal vectors. If greater than 8, subtract 8 from the total.
2) If the vertical vector is greater than 8, divide it by 8, recording the result in wide pink column, retaining the remainder. If less than 8, treat it as a remainder.
3) Using the remainders from Steps 1 and 2 for a remainder split, leaving the sum of the horizontals as the first vector in the split, and the vertical in the pink column. Record the pattern of dots in pink in the narrow pink column of the Movement Grid.

SAGANAMI ISLAND TACTICAL SIMULATOR

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