NAZI STAR EMPIRE

c. 2268

VERSION 1.2

STARSHIP CONSTRUCTION CHARTS
FASA *Star Trek* Starship Tactical Combat Simulator

4/7/2009 2:27

INDEX

CREDITS

EQUIPMENT DESIGN
- DROCK
- h_rayz
- UFC465537

CONSTRUCTION CHARTS AND FORMATTING

COURTESY

STARSHIP TACTICAL COMBAT SIMULATOR DESIGN CONSORTIUM

CONTROL COMPUTER TYPES

Computer Control Type	System Mass (mt)	Appropriate Ship Classes		SS Requirement	Maximum WDF Allowed	Availability	Cost	Date Entered Service
		Min Class	Max Class					
ZD-K1	100	I	III	0.2	3	III 25%	6	N/A
ZD-K2	800	II	VII	0.5	7	III 11%	25	N/A
ZD-K3	2,400	IV	X	1.0	15	III 5%	35	N/A
ZD-K4	4,200	IV	XIV	1.5	30	III 3%	80	N/A
ZD-K5	8,400	VII	XVII	2.1	50	III 2%	130	N/A
ZD-K6	12,250	IX	XX	2.8	90	III 1%	500	N/A

WARP ENGINE TYPES

SINGLE ENGINE USE

Warp Engine Type	Mass (MT)	Power Units Available	Computer Control Required	Stress Column (Eng/SS)		Superstructure	Appropriate Ship Class		Availablilty	Cost	Year
KMWA-1	4,700	5	ZD-K1	Q	R	0.4	I	III	III 17%	49	N/A
KMWA-2	11,000	9	ZD-K2	O	Q	0.9	II	V	III 9%	84	N/A
KMWA-3	13,000	10	ZD-K2	O	P	1.1	II	V	III 8%	99	N/A
BMW-1	18,000	12	ZD-K2	L	M	1.5	III	VI	III 7%	119	N/A
BMW-2	24,000	14	ZD-K2	N	M	2	IV	VII	III 6%	130	N/A
BMW-3	28,000	16	ZD-K3	K	O	2.3	IV	VIII	III 5%	148	N/A
KMWH-1	32,000	18	ZD-K3	Q	P	2.7	IV	IX	III 5%	168	N/A
KMWH-2	38,000	22	ZD-K3	Q	O	3.2	V	X	III 4%	209	N/A
KMWH-3	42,000	26	ZD-K4	R	P	3.5	V	XI	III 3%	248	N/A

WARP ENGINE TYPES

DUAL ENGINE USE

Warp Engine Type	Mass (MT)	Power Units Available	Computer Control Required	Stress Column (Eng/SS)		Superstructure	Appropriate Ship Class		Availablilty	Cost	Year
KMWA-1	9,400	10	ZD-K2	Q	R	0.8	II	IV	III 8%	108	N/A
KMWA-2	22,000	18	ZD-K2	O	Q	1.8	III	VII	III 5%	184	N/A
KMWA-3	26,000	20	ZD-K3	O	P	2.2	IV	VIII	III 4%	218	N/A
BMW-1	36,000	26	ZD-K3	L	M	3	IV	X	III 3%	263	N/A
BMW-2	48,000	30	ZD-K4	N	M	4	V	XII	III 3%	287	N/A
BMW-3	56,000	34	ZD-K4	L	M	4.7	V	XIII	III 2%	326	N/A
KMWH-1	64,000	36	ZD-K4	Q	P	5.3	VI	XIV	III 2%	369	N/A
KMWH-2	76,000	44	ZD-K5	Q	O	6.3	VII	XV	III 2%	461	N/A
KMWH-3	84,000	52	ZD-K5	R	P	7	VII	XV	III 2%	545	N/A

WARP ENGINE TYPES

TRINARY ENGINE USE

Warp Engine Type	Mass (MT)	Power Units Available	Computer Control Required	Stress Column (Eng/SS)		Superstructure	Appropriate Ship Class		Availablilty	Cost	Year
KMWA-1	14,100	15	ZD-K2	R	P	1.2	II	V	III 6%	162	N/A
KMWA-2	33,000	27	ZD-K3	P	N	2.8	IV	IX	III 3%	277	N/A
KMWA-3	39,000	30	ZD-K3	N	P	3.3	V	X	III 3%	327	N/A
BMW-1	54,000	39	ZD-K4	L	M	4.5	V	XIII	III 2%	394	N/A
BMW-2	72,000	45	ZD-K4	O	N	6	VI	XIV	III 2%	430	N/A
BMW-3	84,000	51	ZD-K5	M	N	7	VII	XV	III 2%	488	N/A
KMWH-1	96,000	54	ZD-K5	P	O	8	VIII	XVI	III 2%	553	N/A
KMWH-2	114,000	66	ZD-K6	Q	N	9.5	IX	XVIII	III 1%	691	N/A
KMWH-3	126,000	78	ZD-K6	Q	P	10.5	IX	XIX	III 1%	817	N/A

WARP ENGINE TYPES

QUADRARY ENGINE USE

Warp Engine Type	Mass (MT)	Power Units Available	Computer Control Required	Stress Column (Eng/SS)		Superstructure	Appropriate Ship Class		Availablilty	Cost	Year
KMWA-1	18,800	20	ZD-K2	Q	R	1.6	III	VI	III 4%	216	N/A
KMWA-2	44,000	36	ZD-K4	O	Q	3.7	V	XI	III 2%	369	N/A
KMWA-3	52,000	40	ZD-K4	O	P	4.3	V	XII	III 2%	436	N/A
BMW-1	72,000	56	ZD-K4	L	M	6	VI	XIV	III 1%	525	N/A
BMW-2	96,000	64	ZD-K5	N	M	8	VIII	XVI	III 1%	573	N/A
BMW-3	112,000	72	ZD-K5	L	M	9.3	VIII	XVII	III 1%	651	N/A
KMWH-1	128,000	76	ZD-K6	Q	P	10.7	IX	XIX	III 1%	737	N/A
KMWH-2	152,000	92	ZD-K6	Q	O	12.7	XI	XX	III 1%	921	N/A
KMWH-3	168,000	108	ZD-K6	R	P	14	XI	XX	III 1%	1090	N/A

MOVEMENT POINT RATIO TABLE

SINGLE WARP DRIVES

Movement Point Ratios

Ship Class	1/2	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1
I	KMWA-1 14 6/7	KMWA-1 7 5/7	KMWA-1 3.5 5/6									
II		KMWA-2 13 5/6 KMWA-3 14 4/5	KMWA-1 3.5 5/6 KMWA-2 6.5 4/6 KMWA-3 7 3/5	KMWA-1 2.5 4/6 KMWA-2 4 4/5 KMWA-3 4.5 3/4								
III		BMW-1 17 6/7	KMWA-2 6.5 4/6 KMWA-3 7 3/5 BMW-1 8.5 5/7	KMWA-1 2.5 4/6 KMWA-2 4 4/5 KMWA-3 4.5 3/4 BMW-1 5.5 5/6	KMWA-1 1.5 4/5 KMWA-2 3 3/5	KMWA-1 1.5 3/5						
IV			BMW-2 10 6/7 BMW-3 11.5 5/7 KMWH-1 13 6/7	KMWA-2 4 4/5 KMWA-3 4.5 3/4 BMW-1 5.5 5/6 BMW-2 6.5 5/7 BMW-3 7.5 5/6 KMWH-1 8.5 5/7	KMWA-2 3 3/5 KMWA-3 3.5 2/4 BMW-1 4 4/6 BMW-3 5.5 4/6 KMWH-1 6.5 5/6	KMWA-2 2.5 3/4					
V			KMWH-2 15.5 5/6 KMWH-3 18.5 4/5	BMW-1 5.5 5/6 BMW-2 6.5 5/7 KMWH-1 8.5 5/7 KMWH-2 10.5 4/6	KMWA-2 3 3/5 KMWA-3 3.5 2/4 BMW-1 4 4/6 BMW-2 5 5/6 BMW-3 5.5 4/6 KMWH-1 6.5 5/6 KMWH-2 8 4/5	KMWA-2 2.5 3/4 KMWA-3 3 2/3 BMW-1 3.5 4/5 BMW-3 4.5 4/5 KMWH-1 5 4/6	KMWA-2 2 2/4 BMW-3 3.5 3/5				

SINGLE WARP DRIVES

Movement Point Ratios

	1/2	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1
VI			KMWH-3 18.5 4/5	KMWH-2 10.5 4/6 KMWH-3 12.5 3/5	BMW-1 4 4/6 BMW-2 5 5/6 KMWH-1 6.5 5/6 KMWH-2 8 4/5	BMW-1 3.5 4/5 BMW-2 4 4/6 KMWH-1 5 4/6 KMWH-2 6 3/5	BMW-1 3 3/5 BMW-3 3.5 3/5 KMWH-1 4 4/5	BMW-3 3 3/4	BMW-3 3 2/4			
VII				KMWH-3 12.5 3/5	KMWH-2 8 4/5 KMWH-3 9 3/4	BMW-2 4 4/6 KMWH-1 5 4/6 KMWH-2 6 3/5	BMW-2 3 4/5 KMWH-1 4 4/5 KMWH-2 5 3/4	BMW-3 3 3/4 KMWH-1 3.5 3/5	BMW-3 3 2/4			
VIII					KMWH-3 9 3/4	KMWH-2 6 3/5 KMWH-3 7.5 2/4	KMWH-1 4 4/5 KMWH-2 5 3/4	BMW-3 3 3/4 KMWH-1 3.5 3/5 KMWH-2 4.5 2/4	BMW-3 3 2/4 KMWH-1 3 3/4	BMW-3 2.5 2/3		
IX						KMWH-3 7.5 2/4	KMWH-2 5 3/4 KMWH-3 6 2/3	KMWH-1 3.5 3/5 KMWH-2 4.5 2/4	KMWH-1 3 3/4 KMWH-2 4 2/3	KMWH-1 3 2/4		
X							KMWH-3 6 2/3	KMWH-2 4.5 2/4 KMWH-3 5 1/3	KMWH-2 4 2/3	KMWH-2 3.5 1/3		
XI								KMWH-3 5 1/3	KMWH-3 4.5 1/2			

MOVEMENT POINT RATIO TABLE

DUAL WARP DRIVES

Movement Point Ratios

Ship Class	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1
I	KMWA-1 14 6/7	KMWA-1 7 5/7	KMWA-1 4.5 5/6								
II		KMWA-1 7 5/7	KMWA-1 4.5 5/6	KMWA-1 3.5 4/6							
III		KMWA-2 13 5/6	KMWA-1 4.5 5/6 KMWA-2 8.5 4/6	KMWA-1 3.5 4/6	KMWA-1 3 4/5						
IV		KMWA-3 14 4/5 BMW-1 18.5 6/7	KMWA-2 8.5 4/6 KMWA-3 9.5 3/5 BMW-1 12.5 5/7	KMWA-1 3.5 4/6 KMWA-2 6.5 4/5 BMW-1 9 5/6	KMWA-1 3 4/5	KMWA-1 2.5 3/5					
V		BMW-2 21 6/7	KMWA-3 9.5 3/5 BMW-1 12.5 5/7 BMW-2 14 5/7 BMW-3 16 5/7	KMWA-2 6.5 4/5 KMWA-3 7 3/4 BMW-1 9 5/6 BMW-3 12 5/6	KMWA-2 5 3/5 BMW-1 7.5 4/6						
VI			BMW-2 14 5/7 KMWH-1 17 6/7	KMWA-3 7 3/4 BMW-1 9 5/6 BMW-2 10.5 5/6 BMW-3 12 5/6 KMWH-1 13 5/7	KMWA-2 5 3/5 KMWA-3 5.5 2/4 BMW-1 7.5 4/6 BMW-3 9.5 4/6	KMWA-2 4 3/4 BMW-1 6 4/5					

DUAL WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1
VII			KMWH-1 17 6/7 KMWH-2 21 5/6	BMW-2 10.5 5/6 KMWH-1 13 5/7 KMWH-2 15.5 4/6 KMWH-3 18.5 4/5	KMWA-3 5.5 2/4 BMW-1 7.5 4/6 BMW-2 8.5 4/6 BMW-3 9.5 4/6 KMWH-1 10 5/6	KMWA-2 4 3/4 KMWA-3 4.5 2/3 BMW-1 6 4/5 BMW-3 8 4/5	KMWA-2 3.5 2/4 BMW-1 5 3/5				
VIII			KMWH-2 21 5/6	KMWH-1 13 5/7 KMWH-2 15.5 4/6 KMWH-3 18.5 4/5	BMW-2 8.5 4/6 KMWH-1 10 5/6	KMWA-3 4.5 2/3 BMW-1 6 4/5 BMW-2 7 4/5 BMW-3 8 4/5	KMWA-3 4 1/3 BMW-1 5 3/5 BMW-3 7 3/5	BMW-1 4.5 3/4			
IX				KMWH-2 15.5 4/6	KMWH-1 10 5/6 KMWH-2 12.5 4/5 KMWH-3 15 3/5	BMW-2 7 4/5 KMWH-1 8.5 4/6	BMW-1 5 3/5 BMW-2 6 3/5 BMW-3 7 3/5	BMW-1 4.5 3/4 BMW-3 6 3/4	BMW-1 4 2/4		

DUAL WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1
X					KMWH-2 12.5 4/5 KMWH-3 15 3/5	KMWH-1 8.5 4/6 KMWH-2 10.5 3/5 KMWH-3 12.5 3/4	BMW-2 6 3/5 KMWH-1 7 4/5	BMW-1 4.5 3/4 BMW-2 5.5 3/4 BMW-3 6 3/4	BMW-1 4 2/4 BMW-3 5.5 2/4	BMW-1 3.5 2/3	
XI						KMWH-2 10.5 3/5 KMWH-3 12.5 3/4	KMWH-1 7 4/5 KMWH-2 9 3/4 KMWH-3 10.5 2/4	BMW-1 3.5 3/4 BMW-2 5.5 3/4	BMW-1 3 2/4 BMW-2 4.5 2/4 BMW-3 5.5 2/4	BMW-3 5 2/3	
XII						KMWH-2 10.5 3/5	KMWH-1 7 4/5 KMWH-2 9 3/4 KMWH-3 10.5 2/4	KMWH-1 6.5 3/5	BMW-2 4.5 2/4	BMW-2 4 2/3 BMW-3 5 2/3	BMW-3 4.5 1/3
XIII							KMWH-2 9 3/4	KMWH-1 6.5 3/5 KMWH-2 8 2/4 KMWH-3 9 2/3	KMWH-1 5.5 3/4		BMW-3 4.5 1/3

DUAL WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1
XIV								KMWH-2 8 2/4 KMWH-3 9 2/3	KMWH-1 5.5 3/4 KMWH-2 7 2/3 KMWH-3 8 1/3	KMWH-1 5 2/4	KMWH-1 4.5 2/3
XV								KMWH-2 7 2/3	KMWH-2 6 1/3 KMWH-3 8 1/3	KMWH-3 7.5 1/2	

MOVEMENT POINT RATIO TABLE

TRINARY WARP DRIVES

Movement Point Ratios

Ship Class	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
II	KMWA-1 21 6/7	KMWA-1 10.5 5/7	KMWA-1 7 5/6									
III		KMWA-1 10.5 5/7	KMWA-1 7 5/6	KMWA-1 5.5 4/6								
IV			KMWA-1 7 5/6	KMWA-1 5.5 4/6	KMWA-1 4 4/5							
		KMWA-2 19 5/6	KMWA-2 13 4/6	KMWA-2 9.5 4/5								
V				KMWA-1 5.5 4/6	KMWA-1 4 4/5	KMWA-1 3.5 3/5						
			KMWA-2 13 4/6	KMWA-2 9.5 4/5	KMWA-2 7.5 3/5							
		KMWA-3 21 4/5	KMWA-3 14 3/5	KMWA-3 10.5 3/4								
			BMW-1 18.5 6/7	BMW-1 14 5/7	BMW-1 11 5/6							
VI				KMWA-2 9.5 4/5	KMWA-2 7.5 3/5	KMWA-2 6.5 3/4						
			KMWA-3 14 3/5	KMWA-3 10.5 3/4	KMWA-3 8.5 2/4							
				BMW-1 14 5/7	BMW-1 11 5/6	BMW-1 9 4/6						
			BMW-2 21 6/7	BMW-2 16 5/7								
VII					KMWA-2 7.5 3/5	KMWA-2 6.5 3/4	KMWA-2 5.5 2/4					
				KMWA-3 10.5 3/4	KMWA-3 8.5 2/4	KMWA-3 7 2/3						
					BMW-1 11 5/6	BMW-1 9 4/6	BMW-1 8 4/5					
				BMW-2 16 5/7	BMW-2 13 5/6							
				BMW-3 18 5/7	BMW-3 14.5 5/6							
VIII						KMWA-2 6.5 3/4	KMWA-2 5.5 2/4	KMWA-2 4.5 2/3				
					KMWA-3 8.5 2/4	KMWA-3 7 2/3	KMWA-3 6 1/3					
						BMW-1 9 4/6	BMW-1 8 4/5	BMW-1 7 3/5				
					BMW-2 13 5/6	BMW-2 10.5 4/6						
					BMW-3 14.5 5/6							
				KMWH-1 19 6/7	KMWH-1 15.5 5/7							

TRINARY WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
IX					KMWH-1 15.5 5/7 KMWH-2 19 5/6 KMWH-3 22 4/5	KMWA-3 7 2/3 BMW-2 10.5 4/6 BMW-3 12 4/6 KMWH-2 15.5 4/6	KMWA-2 5.5 2/4 KMWA-3 6 1/3 BMW-1 8 4/5 BMW-2 9 4/5	KMWA-2 4.5 2/3 KMWA-3 5.5 1/2 BMW-1 7 3/5	KMWA-2 4 1/3 BMW-1 6 3/4			
X					KMWH-1 15.5 5/7 KMWH-3 22 4/5	BMW-3 12 4/6 KMWH-1 13 5/6 KMWH-2 15.5 4/6	KMWA-3 6 1/3 BMW-2 9 4/5 BMW-3 10.5 4/5 KMWH-2 13.5 4/5	KMWA-3 5.5 1/2 BMW-1 7 3/5 BMW-2 8 3/5	KMWA-3 4.5 1/1 BMW-1 6 3/4	BMW-1 5.5 2/4		
XI					KMWH-3 22 4/5	BMW-3 12 4/6 KMWH-1 13 5/6 KMWH-3 18.5 3/5	BMW-3 10.5 4/5 KMWH-2 13.5 4/5	BMW-2 8 3/5 KMWH-2 12 3/5	BMW-1 6 3/4 BMW-2 7 3/4	BMW-1 5.5 2/4	BMW-1 5 2/3	

TRINARY WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
XII						KMWH-1 13 5/6 KMWH-3 18.5 3/5	BMW-3 10.5 4/5 KMWH-1 11 4/6	BMW-3 9 3/5 KMWH-2 12 3/5	BMW-2 7 3/4 KMWH-2 10.5 3/4	BMW-1 5.5 2/4 BMW-2 6.5 2/4	BMW-1 5 2/3	
XIII							KMWH-1 11 4/6	BMW-3 9 3/5	KMWH-2 10.5 3/4	BMW-2 6.5 2/4	BMW-1 5 2/3 BMW-2 5.5 2/3	
XIV						KMWH-3 18.5 3/5	KMWH-1 11 4/6 KMWH-3 16 3/4	BMW-3 9 3/5 KMWH-1 9.5 4/5	BMW-3 8 3/4 KMWH-2 10.5 3/4	KMWH-2 9.5 2/4	BMW-2 5.5 2/3	
XV							KMWH-3 16 3/4	KMWH-1 9.5 4/5	BMW-3 8 3/4	BMW-3 7 2/4 KMWH-2 9.5 2/4		
XVI							KMWH-3 16 3/4	KMWH-1 9.5 4/5 KMWH-3 14 2/4	KMWH-1 8.5 3/5	KMWH-2 9.5 2/4	KMWH-2 8.5 2/3	

TRINARY WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
XVII								KMWH-3 14 2/4			KMWH-2 8.5 2/3	KMWH-2 8 1/3
XVIII								KMWH-3 14 2/4	KMWH-3 12.5 2/3			KMWH-2 8 1/3
XIX									KMWH-3 12.5 2/3			

MOVEMENT POINT RATIO TABLE

QUADRARY WARP DRIVES

Movement Point Ratios

Ship Class	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
II		KMWA-1 14 6/7	KMWA-1 9.5 5/7	KMWA-1 7 5/6								
III			KMWA-1 9.5 5/7	KMWA-1 7 5/6	KMWA-1 5.5 4/6							
IV				KMWA-1 7 5/6	KMWA-1 5.5 4/6	KMWA-1 4.5 4/5						
V			KMWA-2 17 5/6 KMWA-3 19 4/5	KMWA-2 13 4/6 KMWA-3 14 3/5	KMWA-1 5.5 4/6 KMWA-2 10 4/5	KMWA-1 4.5 4/5	KMWA-1 4 3/5					
VI				KMWA-2 13 4/6 KMWA-3 14 3/5 BMW-1 20 6/7	KMWA-2 10 4/5 BMW-1 16 5/7	KMWA-1 4.5 4/5 KMWA-2 8.5 3/5 BMW-1 13 5/6	KMWA-1 4 3/5	KMWA-1 3.5 3/4				
VII				KMWA-3 14 3/5	KMWA-2 10 4/5 KMWA-3 11.5 3/4 BMW-1 16 5/7	KMWA-2 8.5 3/5 BMW-1 13 5/6	KMWA-2 7 3/4 BMW-1 11.5 4/6					
VIII					KMWA-3 11.5 3/4 BMW-2 18 6/7 BMW-3 20.5 5/7	KMWA-2 8.5 3/5 BMW-1 13 5/6 BMW-2 15 5/7 BMW-3 17 5/6	KMWA-2 7 3/4 BMW-1 11.5 4/6	KMWA-2 6.5 2/4 BMW-1 10 4/5				

QUADRARY WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
IX					KMWA-3 11.5 3/4 KMWH-1 21.5 6/7	KMWA-3 9.5 2/4 BMW-2 15 5/7 BMW-3 17 5/6 KMWH-1 18 5/7	KMWA-2 7 3/4 BMW-1 11.5 4/6 BMW-2 13 5/6	KMWA-2 6.5 2/4 BMW-1 10 4/5	KMWA-2 5.5 2/3 BMW-1 9 3/5			
X						KMWA-3 9.5 2/4 BMW-3 17 5/6 KMWH-1 18 5/7	 BMW-2 13 5/6 BMW-3 14.5 4/6	KMWA-2 6.5 2/4 BMW-1 10 4/5 BMW-2 11.5 4/6	KMWA-2 5.5 2/3 BMW-1 9 3/5	KMWA-2 5 1/3 BMW-1 8 3/4		
XI						KMWA-3 9.5 2/4 KMWH-1 18 5/7 KMWH-2 22 5/6	KMWA-3 8 2/3 BMW-3 14.5 4/6 KMWH-1 15.5 5/6 KMWH-2 19 4/6 KMWH-3 22 4/5	 BMW-2 11.5 4/6	KMWA-2 5.5 2/3 BMW-1 9 3/5 BMW-2 10 4/5	KMWA-2 5 1/3 BMW-1 8 3/4	KMWA-2 4.5 1/2 BMW-1 7 2/4	

QUADRARY WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
XII							KMWA-3 8 2/3 BMW-3 14.5 4/6 KMWH-1 15.5 5/6 KMWH-2 19 4/6 KMWH-3 22 4/5	 BMW-3 13 4/5 KMWH-2 16 4/5 KMWH-3 19 3/5	 BMW-2 10 4/5	 BMW-1 8 3/4 BMW-2 9 3/5	 BMW-1 7 2/4	 BMW-1 6.5 2/3
XIII							 KMWH-1 15.5 5/6	 BMW-3 13 4/5 KMWH-1 13.5 4/6 KMWH-2 16 4/5 KMWH-3 19 3/5		 BMW-2 9 3/5	BMW-1 7 2/4 BMW-2 8 3/4	BMW-1 6.5 2/3
XIV								 BMW-3 13 4/5 KMWH-1 13.5 4/6 KMWH-2 16 4/5 KMWH-3 19 3/5	 BMW-3 11.5 3/5 KMWH-2 14.5 3/5 KMWH-3 17 3/4		 BMW-2 8 3/4	BMW-1 6.5 2/3 BMW-2 7.5 2/4

QUADRARY WARP DRIVES

Movement Point Ratios

	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
XV								KMWH-1 13.5 4/6	BMW-3 11.5 3/5 KMWH-1 12 4/5 KMWH-2 14.5 3/5 KMWH-3 17 3/4	KMWH-2 13 3/4	BMW-2 8 3/4	BMW-2 7.5 2/4
XVI									BMW-3 11.5 3/5 KMWH-1 12 4/5 KMWH-3 17 3/4	BMW-3 10 3/4 KMWH-2 13 3/4 KMWH-3 15.5 2/4		BMW-2 7.5 2/4
XVII									KMWH-1 12 4/5	BMW-3 10 3/4 KMWH-1 11 3/5 KMWH-2 13 3/4 KMWH-3 15.5 2/4	KMWH-2 12 2/4	
XVIII										KMWH-1 11 3/5 KMWH-3 15.5 2/4	KMWH-2 12 2/4 KMWH-3 14 2/3	KMWH-2 11 2/3
XIX										KMWH-1 11 3/5	KMWH-1 10 3/4 KMWH-2 12 2/4 KMWH-3 14 2/3	KMWH-2 11 2/3
XX											KMWH-3 14 2/3	KMWH-2 11 2/3 KMWH-3 13 1/3

IMPULSE ENGINE TYPES

Engine Type	Mass (MT)	Power Units Available	Control Computer Type	Appropriate Ship Class		Superstructure	Cost (MCr)	Year
KMIA-1	380	1	ZD-K1	I	III	0.1	3	N/A
KMIA-2	380	2	ZD-K2	II	IV	0.1	5	N/A
KMIA-3	380	4	ZD-K2	III	VI	0.1	9	N/A
BMIC-1	765	3	ZD-K2	II	V	0.1	7	N/A
BMIC-2	765	6	ZD-K3	IV	VII	0.1	19	N/A
BMIC-3	765	8	ZD-K3	V	IX	0.1	19	N/A
KMIH-1	1525	10	ZD-K4	VIII	XI	0.1	28	N/A
KMIH-2	1525	12	ZD-K4	IX	XIV	0.1	30	N/A
KMIH-3	1525	16	ZD-K5	XII	XVII	0.1	40	N/A
BMIK-1	2485	12	ZD-K4	VIII	XIV	0.1	36	N/A
BMIK-2	2485	18	ZD-K5	IX	XVI	0.1	48	N/A
BMIK-3	2485	22	ZD-K6	XII	XX	0.1	66	N/A

MOVEMENT POINT RATIO TABLE

IMPULSE ENGINES

Movement Point Ratios

Ship Class	1/3	1/2	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
I	KMIA-1 4	KMIA-1 3	KMIA-1 1.5											
II	KMIA-2 8.5 BMIC-1 13	KMIA-1 3 KMIA-2 5.5 BMIC-1 8.5	KMIA-1 1.5 KMIA-2 3 BMIC-1 4											
III	KMIA-3 17	KMIA-1 3 KMIA-2 5.5 KMIA-3 11.5 BMIC-1 8.5	KMIA-1 1.5 KMIA-2 3 KMIA-3 5.5 BMIC-1 4	KMIA-2 1.5 BMIC-1 2										
IV		KMIA-3 11.5 BMIC-2 17	KMIA-2 3 KMIA-3 5.5 BMIC-1 4 BMIC-2 8.5	KMIA-2 1.5 KMIA-3 3 BMIC-1 2 BMIC-2 4	BMIC-1 1.5									
V	BMIC-3 23	KMIA-3 5.5 BMIC-2 8.5 BMIC-3 11.5 KMIH-1 14 KMIH-2 17	KMIA-3 3 BMIC-1 2 BMIC-2 4 BMIC-3 5.5 KMIH-1 7 KMIH-2 8.5	KMIA-3 2 BMIC-1 1.5 BMIC-2 3 BMIC-3 3.5 KMIH-1 4.5 KMIH-2 5.5	BMIC-3 3 KMIH-1 3.5									
VI	BMIC-3 11.5	KMIA-3 3 BMIC-2 4 BMIC-3 5.5 KMIH-1 7 KMIH-2 8.5	KMIA-3 2 BMIC-2 3 BMIC-3 3.5 KMIH-1 4.5 KMIH-2 5.5	KMIA-3 1.5 BMIC-2 2 BMIC-3 3 KMIH-1 3.5 KMIH-2 4	KMIH-1 3									

IMPULSE ENGINES

Movement Point Ratios

	1/3	1/2	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
VII			KMIH-3 23	BMIC-3 5.5 KMIH-3 11.5	BMIC-2 3 BMIC-3 3.5 KMIH-1 4.5 KMIH-2 5.5 KMIH-3 7.5	BMIC-2 2 BMIC-3 3 KMIH-1 3.5 KMIH-2 4	BMIC-2 1.5 KMIH-1 3 KMIH-2 3.5	KMIH-1 2.5						
VIII			BMIK-1 17	KMIH-3 11.5 BMIK-1 8.5	KMIH-3 7.5 BMIK-1 5.5	BMIC-3 3 KMIH-1 3.5 KMIH-2 4 KMIH-3 5.5	BMIC-3 2 KMIH-1 3 KMIH-2 3.5	KMIH-1 2.5 KMIH-2 3	KMIH-1 2					
IX			BMIK-2 25.5	BMIK-1 8.5 BMIK-2 13	KMIH-3 7.5 BMIK-1 5.5 BMIK-2 8.5	KMIH-3 5.5 BMIK-1 4	BMIC-3 2 KMIH-1 3 KMIH-2 3.5 KMIH-3 4.5	BMIC-3 2 KMIH-1 2.5 KMIH-2 3	KMIH-1 2 KMIH-2 2.5	KMIH-1 1.5				
X				BMIK-2 13	BMIK-1 5.5 BMIK-2 8.5	KMIH-3 5.5 BMIK-1 4 BMIK-2 6.5	KMIH-1 3 KMIH-3 4.5 BMIK-1 3.5	KMIH-1 2.5 KMIH-2 3 KMIH-3 3.5	KMIH-1 2 KMIH-2 2.5	KMIH-1 1.5 KMIH-2 2	KMIH-1 1.5			
XI					BMIK-2 8.5	BMIK-1 4 BMIK-2 6.5	KMIH-3 4.5 BMIK-1 3.5 BMIK-2 5	KMIH-1 2.5 KMIH-3 3.5 BMIK-1 3	KMIH-1 2 KMIH-2 2.5 KMIH-3 3	KMIH-1 1.5 KMIH-2 2	KMIH-1 1.5 KMIH-2 2	KMIH-1 1.5		

IMPULSE ENGINES

Movement Point Ratios

	1/3	1/2	1/1	2/1	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1
XII				BMIK-3 15.5	BMIK-3 10.5	BMIK-2 6.5 BMIK-3 8	BMIK-1 3.5 BMIK-2 5	KMIH-3 3.5 BMIK-1 3 BMIK-2 4	KMIH-3 3 BMIK-1 2.5	KMIH-2 2 KMIH-3 3	KMIH-2 2	KMIH-2 1.5		
XIII					BMIK-3 10.5	BMIK-3 8	BMIK-2 5 BMIK-3 6	BMIK-1 3 BMIK-2 4	KMIH-3 3 BMIK-1 2.5 BMIK-2 3.5	KMIH-3 3 BMIK-1 2	KMIH-2 2 KMIH-3 2.5	KMIH-2 1.5	KMIH-2 1.5	
XIV						BMIK-3 8	BMIK-3 6	BMIK-2 4 BMIK-3 5	BMIK-1 2.5 BMIK-2 3.5	KMIH-3 3 BMIK-1 2 BMIK-2 3	KMIH-3 2.5 BMIK-1 2	KMIH-2 1.5 KMIH-3 2	KMIH-2 1.5	KMIH-2 1.5
XV						BMIK-3 6	BMIK-3 5	BMIK-2 3.5 BMIK-3 4.5	BMIK-2 3	KMIH-3 2.5 BMIK-2 3	KMIH-3 2	KMIH-3 2		
XVI							BMIK-3 5	BMIK-3 4.5	BMIK-2 3 BMIK-3 4	BMIK-2 3	KMIH-3 2 BMIK-2 2.5	KMIH-3 2	KMIH-3 2	
XVII								BMIK-3 4.5	BMIK-3 4	BMIK-3 3.5	BMIK-3 3			
XVIII									BMIK-3 4	BMIK-3 3.5	BMIK-3 3	BMIK-3 3		
XIX										BMIK-3 3.5	BMIK-3 3	BMIK-3 3	BMIK-3 2.5	
XX											BMIK-3 3	BMIK-3 3	BMIK-3 2.5	

SHIELD GENERATORS

Shield Generator Type	Mass (MT)	Control Computer Type	SER	Superstructure	Availability	Cost (MCr)	Year
KMSA	375	ZD-K2	1/2	1.4	III 38%	13	N/A
KMSB	500	ZD-K6	2	2.6	III 36%	15	N/A
KMSC	275	ZD-K4	1 1/2	1.4	III 42%	12	N/A
KMSD	230	ZD-K3	1	1.2	III 50%	11	N/A
KMSE	325	ZD-K3	1/2	2.6	III 36%	15	N/A
KMSF	285	ZD-K3	1	1.3	III 42%	12	N/A
KMSG	427	ZD-K4	1/2	3.2	III 28%	19	N/A
KMSH	210	ZD-K3	1	1.2	III 56%	9	N/A
KMSI	335	ZD-K4	2/3	2.6	III 36%	15	N/A
KMSJ	374	ZD-K5	1 1/2	2.3	III 31%	16	N/A
KMSK	139	ZD-K1	1/2	0.6	III 83%	6	N/A
KMSL	336	ZD-K4	2/3	2.9	III 36%	15	N/A
KMSM	300	ZD-K3	1	1.5	III 38%	13	N/A
KMSN	286	ZD-K5	2	2.3	III 42%	13	N/A

SHIELD POINT RATIO TABLE

Shield Point Ratio

Ship Class	2/1				3/2		1/1				2/3		1/2	
	KMSK	KMSG	KMSE	KMSA	KMSI	KMSL	KMSF	KMSH	KMSD	KMSM	KMSC	KMSJ	KMSN	KMSB
I	6	18	14	15	12	14	12	9	10	13	13	16	12	14
	17	*51.5*	*40*	*43*	*25.5*	*30*	*17*	*13*	*14.5*	*27.5*	*12.5*	*15*	*8.5*	*10*
II	6	17	13	14	12	14	11	9	10	13	13	16	12	13
	17	*48.5*	*37*	*40*	*25.5*	*30*	*15.5*	*13*	*14.5*	*27.5*	*12.5*	*15*	*8.5*	*9.5*
III	5	16	13	13	11	14	10	8	9	13	13	16	12	13
	14.5	*45.5*	*37*	*37*	*23.5*	*30*	*14.5*	*11.5*	*13*	*27.5*	*12.5*	*15*	*8.5*	*9.5*
IV	5	15	13	13	10	13	9	7	9	12	12	15	11	13
	14.5	*43*	*37*	*37*	*21.5*	*27.5*	*13*	*10*	*13*	*25.5*	*11.5*	*14.5*	*8*	*9.5*
V	4	14	13	12	10	13	8	7	9	12	12	15	11	12
	11.5	*40*	*37*	*34.5*	*21.5*	*27.5*	*11.5*	*10*	*13*	*25.5*	*11.5*	*14.5*	*8*	*8.5*
VI	4	13	12	11	9	13	7	6	8	12	12	15	10	12
	11.5	*37*	*34.5*	*31.5*	*19*	*27.5*	*10*	*8.5*	*11.5*	*25.5*	*11.5*	*14.5*	*7*	*8.5*
VII	3	12	12	11	8	13	6	5	8	11	11	15	10	11
	8.5	*34.5*	*34.5*	*31.5*	*17*	*27.5*	*8.5*	*7*	*11.5*	*23.5*	*10.5*	*14.5*	*7*	*8*
VIII	3	11	12	10	8	12	5	5	7	11	11	14	10	11
	8.5	*31.5*	*34.5*	*28.5*	*17*	*25.5*	*7*	*7*	*10*	*23.5*	*10.5*	*13.5*	*7*	*8*
IX	2	10	11	9	7	12	4	4	7	11	11	14	9	11
	5.5	*28.5*	*31.5*	*25.5*	*15*	*25.5*	*5.5*	*5.5*	*10*	*23.5*	*10.5*	*13.5*	*6.5*	*8*
X	1	9	11	9	6	12	3	3	7	11	11	14	9	10
	3	*25.5*	*31.5*	*25.5*	*13*	*25.5*	*4.5*	*4.5*	*10*	*23.5*	*10.5*	*13.5*	*6.5*	*7*
XI	-	8	11	8	6	11	2	3	6	10	10	13	8	10
	-	*23*	*31.5*	*23*	*13*	*23.5*	*3*	*4.5*	*8.5*	*21.5*	*9.5*	*12.5*	*5.5*	*7*
XII	-	7	11	7	5	10	1	2	6	10	10	13	8	9
	-	*20*	*31.5*	*20*	*10.5*	*21.5*	*1.5*	*3*	*8.5*	*21.5*	*9.5*	*12.5*	*5.5*	*6.5*
XIII	-	6	10	7	4	9	-	1	5	10	10	13	8	9
	-	*17*	*28.5*	*20*	*8.5*	*19*	-	*1.5*	*7*	*21.5*	*9.5*	*12.5*	*5.5*	*6.5*
XIV	-	5	10	6	4	8	-	1	5	9	10	13	7	9
	-	*14.5*	*28.5*	*17*	*8.5*	*17*	-	*1.5*	*7*	*19*	*9.5*	*12.5*	*5*	*6.5*
XV	-	4	10	5	3	7	-	-	5	9	9	12	7	8
	-	*11.5*	*28.5*	*14.5*	*6.5*	*15*	-	-	*7*	*19*	*8.5*	*11.5*	*5*	*5.5*
XVI	-	3	9	5	2	6	-	-	4	9	9	12	6	8
	-	*8.5*	*25.5*	*14.5*	*4.5*	*13*	-	-	*5.5*	*19*	*8.5*	*11.5*	*4.5*	*5.5*
XVII	-	2	9	4	2	5	-	-	4	9	9	12	6	7
	-	*5.5*	*25.5*	*11.5*	*4.5*	*10.5*	-	-	*5.5*	*19*	*8.5*	*11.5*	*4.5*	*5*
XVIII	-	1	9	3	1	4	-	-	4	8	8	11	6	7
	-	*3*	*25.5*	*8.5*	*2*	*8.5*	-	-	*5.5*	*17*	*7.5*	*10.5*	*4.5*	*5*
XIX	-	-	9	3	-	3	-	-	3	8	8	11	5	7
	-	-	*25.5*	*8.5*	-	*6.5*	-	-	*4.5*	*17*	*7.5*	*10.5*	*3.5*	*5*
XX	-	-	8	2	-	2	-	-	3	8	8	11	5	6
	-	-	*23*	*5.5*	-	*4.5*	-	-	*4.5*	*17*	*7.5*	*10.5*	*3.5*	*4.5*

BEAM WEAPON TYPES

Beam Weapon Type	Mass (Mt)	Damage	+3	+2	+1	Firing Chart	WDF	Superstructure (Single/Bank)	Availability	Cost (MCr)	Year
KMD-1	150	4				G	1.10/1.66	.4/.8	III 31%	44	N/A
KMD-2	180	4			1-10	G	1.38/2.07	.4/.8	III 31%	54	N/A
KMD-3	210	5			1-12	I	2.23/3.35	.6/1.2	III 25%	64	N/A
KMD-4	800	9	1-2	3-4	5-8	B	1.87/2.81	2/4	III 14%	225	N/A
KMD-5	212	3			1-3	E	.73/1.09	.3/.6	III 42%	45	N/A
KMD-6	340	3		1-4	5-8	K	1.62/2.43	.6/1.2	III 42%	58	N/A
KMD-7	220	4			1-5	H	1.16/1.73	.7/1.4	III 31%	120	N/A
KMD-8	470	5		1-6	7-12	L	2.89/4.33	1.1/2.2	III 25%	155	N/A
KMD-9	1000	12	1-2	3-4	5-8	G	3.67/5.51	2/4	III 10%	480	N/A
KMD-10	650	5	1-8	9-12	13-18	W	5.26/7.89	1.2/2.4	III 25%	160	N/A
KMD-11	700	7	1-8	9-14		S	5.83/8.74	1.4/2.8	III 18%	180	N/A
KMD-12	600	3		1-10	11-20	Y	3.67/5.51	1/2	III 42%	140	N/A

ACCELERATOR CANNON TYPES

Missile Type	Mass (Mt)	Power to Arm	Damage	Range	Firing Chart	WDF	Superstructure	Availability	Cost (MCr)	Year
KAC-1	480	3	8	8	F	2.02/3.03	1.5	RRI 16%	10	N/A
KAC-2	660	4	10	10	G	2.76/4.14	2.4	RRI 13%	14	N/A
KAC-3	840	4	10	12	I	3.96/5.94	2.9	RRI 13%	16	N/A
KAC-4	1020	5	15	10	J	6.03/9.05	3.4	RRI 8%	25	N/A

MISSILE WEAPON TYPES

Missile Type	Mass (Mt)	Power to Arm	Damage	Range	Firing Chart	WDF	Superstructure	Availability	Cost (MCr)	Year
KMP-1	100	1	4	4	A	.48/.72	0.5	III 31%	20	N/A
KMP-2	200	2	8	8	E	1.08/1.62	0.8	III 16%	50	N/A
KMP-3	345	2	7	10	G	1.93/2.9	1	III 18%	68	N/A
KMP-4	375	2	5	12	I	1.86/2.79	1	III 25%	75	N/A
KMP-5	425	2	8	15	K	3.41/5.12	1.2	III 16%	125	N/A
KMP-6	350	1	10	12	L	4.44/6.66	1.3	III 13%	150	N/A

PLASMA WEAPON TYPES

Missile Type	Mass (Mt)	Power to Arm	Damage	Range	Firing Chart	WDF	Superstructure	Availability	Cost (MCr)	Year
KMPL-1	620	6	15	10	B	2.03 / 3.04	5.5	III 8%	120	N/A
KMPL-2	810	8	20	12	I	4.19 / 6.28	7.1	III 6%	159	N/A
KMPL-3	980	11	24	15	K	3.83 / 5.75	8.8	III 5%	192	N/A

RANGE	KMPL-1	KMPL-2	KMPL-3
1	15	20	24
2	15	20	22
3	12	16	22
4	12	16	22
5	10	12	18
6	10	12	18
7	7	10	18
8	7	10	14
9	5	8	14
10	5	8	14
11	-	6	10
12	-	6	10
13	-	-	9
14	-	-	8
15	-	-	6

CLOAKING DEVICE TYPES

Warp Engine Type	Appropriate Ship Classes: Min Class	Max Class	Power To Arm	Computer Control Required	Availability	Cost (Mcr)	Year
NCA	II	III	12	ZD-K2	III 5%	10	N/A
NCB	IV	V	22	ZD-K3	III 3%	15	N/A
NCC	VI	IX	32	ZD-K4	III 2%	30	N/A
NCD	X	XI	48	ZD-K5	III 1%	50	N/A
NCE	XII	XIV	72	ZD-K6	III 1%	100	N/A