```
 _____/\/____/\  /_____/\ /_/\ /_/\ /_____/\ /_/\   /_/\   /____/\ /____/\
 \_.::._\/\::._\ \ \ \::._   \ \\:\ \\ \ \\::::_\/_\:\ \   \:\ \   \::::_\/_\::._\ \
  \::\ \   \:(_) ) )_\::(_)   \ \\:\ \\ \ \\::\/__/\\:\ \   \:\ \   \:\/___/\\::(_) )_
   \::\ \   \: ___`\ \\::   _  \ \\:\_/.:\ \\::___\/_\:\ \___\:\ \___\::   _\/_ \`\ \
    \::\ \   \ \`\ \ \ \\::.\ \ \ \ \...::/ / \:\____/\\::\/___/\\:\/___/\\::\/___/\ \_\ \
     \__\/    \_\/ \_\/ \__\/\__\/\__\/ \___\/  \____\/  \____\/ \____\/  \___\/ \_\/ \_\/
 _____/\/____/\  /_____/\ /_/\ /_/\ /_____/\ /_/\   /_/\
 \_.::._\/\::._\ \ \ \::._   \ \\:::._\ \\::::_\/_\:::._\ \
  \::\ \   \:(_) ) )_\::(_)   \ \\:\`\ \ \\::\/__/\\:(_) )_
   \::\ \   \: ___`\ \\::   _  \ \\:\ \ \ \ \\::_  _\/_\::  _\`\ \
    \::\ \   \ \`\ \ \ \\::.\ \ \ \ \\:\/.:| |\::\___/\\ \`\ \ \
     \__\/    \_\/ \_\/ \_\/\__\/ \____/_/ \___\/ \_\/ \_\/
```

Pre-Alpha version 0.11.21

INSTRUCTION MANUAL

This guide explains the controls of your trader, and how to explore a
little corner of Charted Space.

YOUR SHIP. Your ship is a Beowulf-class Free Trader. Its statistics are:

   Type: A - Free Trader
        Class: Beowulf
        Volume: 200 tons
        Configuration: Streamlined
        Maneuver: 1
        Jump: 1
        Cargo: 82 tons
        Passengers: 6
        Low Berths: 20
        Fuel Scoops: yes
        Armor: 11

CHARTED SPACE. Your designated area consists of the Spinward Marches and
Deneb sectors. You begin on Regina, the sector capital of the Spinward
Marches. Your jump-1 drive makes it possible to visit many worlds in these
two sectors.

STARTUP. On startup, a splash screen is displayed. Press a key to move on
to the PILOT'S VIEW.

PILOT'S VIEW. This is the default view.

The current Pilot's View does two things: first, it shows you the status of your ship along the top "alarm bar". This bar shows the state of the
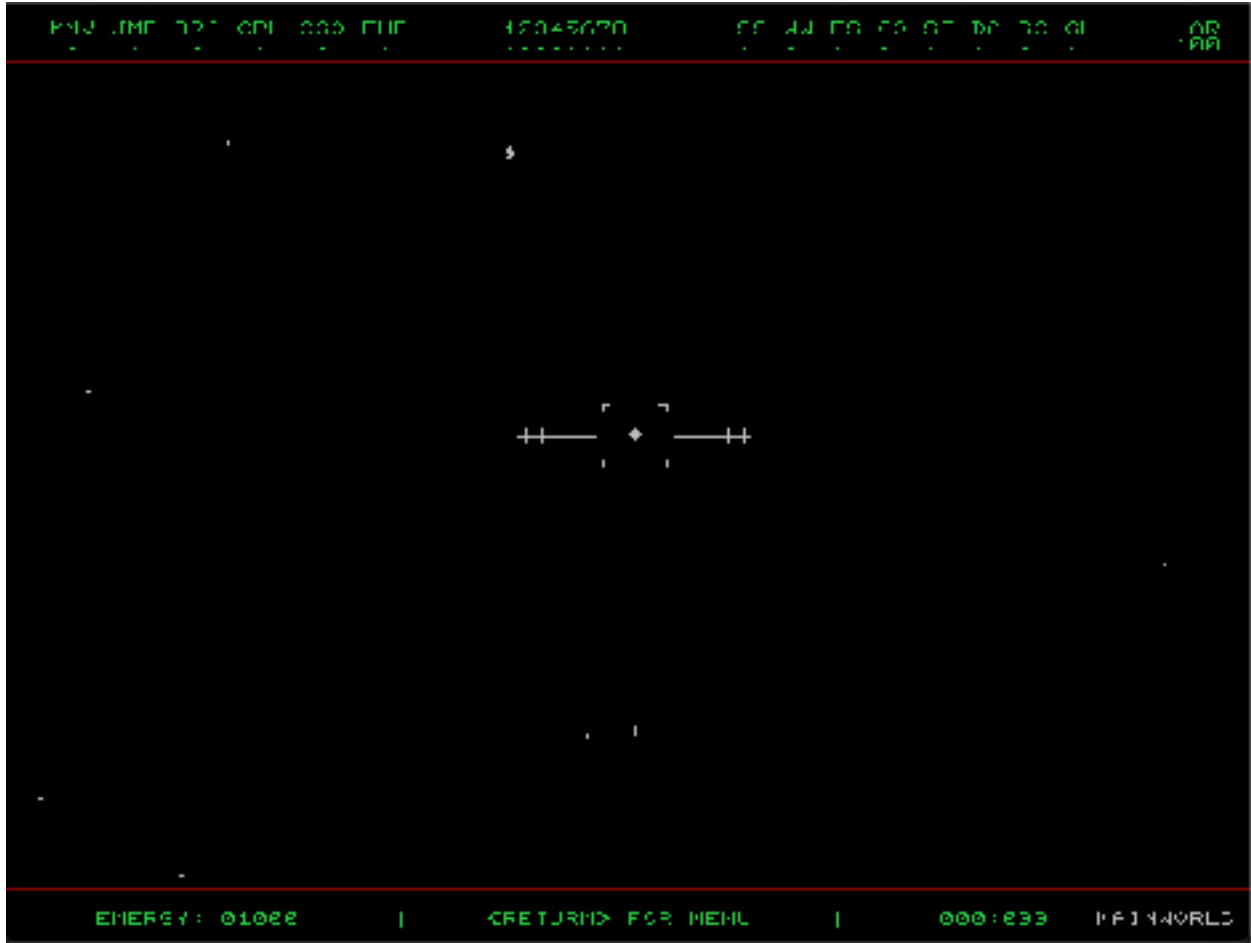
components your ship has. A plain green dot means the component is OK. The component labels are:

MNV	Maneuver Drive	SS and WW	Sensor Packages
JMP	Jump Drive	FS	Fuel Scoops
BRI	Bridge	CO	Collector
CPU	Ship's Computer	ST	Stealthing
CGO	Cargo Hold	DA	Nuclear Damper
FUE	Fuel Tanks	SC	Meson Screen
1, 2, 3, 4, 5, 6, 7, 8	Hardpoints	GL	Globe Generator

When your fuel is low, you'll see "LOW" displayed under the FUE alarm.

OTHER SHIPS. Currently there are no ship encounters. Consequently, there is currently no piracy, no patrol or Letters of Marque, and no ship combat. You are alone.

MAINWORLD. Currently, being able to access the Pilot's View means your ship is in orbit around the mainworld, allowing access to the starport.

GAS GIANTS. Currently, there is no access to the local gas giant for frontier refueling.

PLANETOIDS. Currently, there is no access to local planetoid belts for prospecting.

MENU. Pressing <return> in the Pilot's View opens up the Menu:
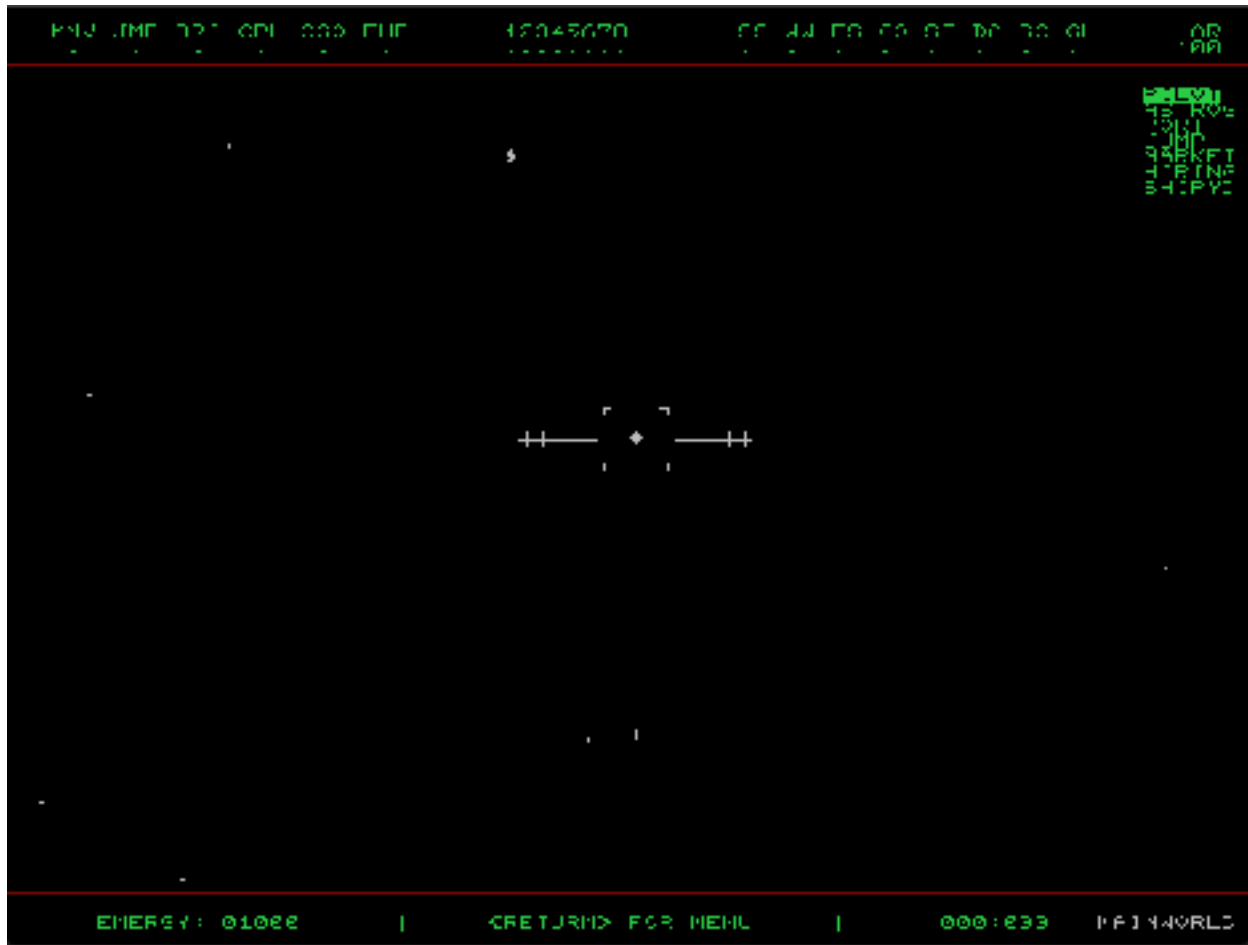
Use the cursor keys to scroll through the options, and press <return> to select the option:

PILOT – return to the Pilot's View
ASTROG – enter the Astrogator's View
PORT   – visit the starport ship outfitter
JUMP   – jump to the destination system
MARKET – visit the starport commodity exchange
HIRING – visit the starport hiring hall
SHIPYD – visit the starport shipyard

ASTROGATOR'S VIEW. Use the cursor keys or the I,J,K,L keys to examine local space. Press <return> on a system to set it as your destination. Pay attention to your maximum jump range when selecting a destination.
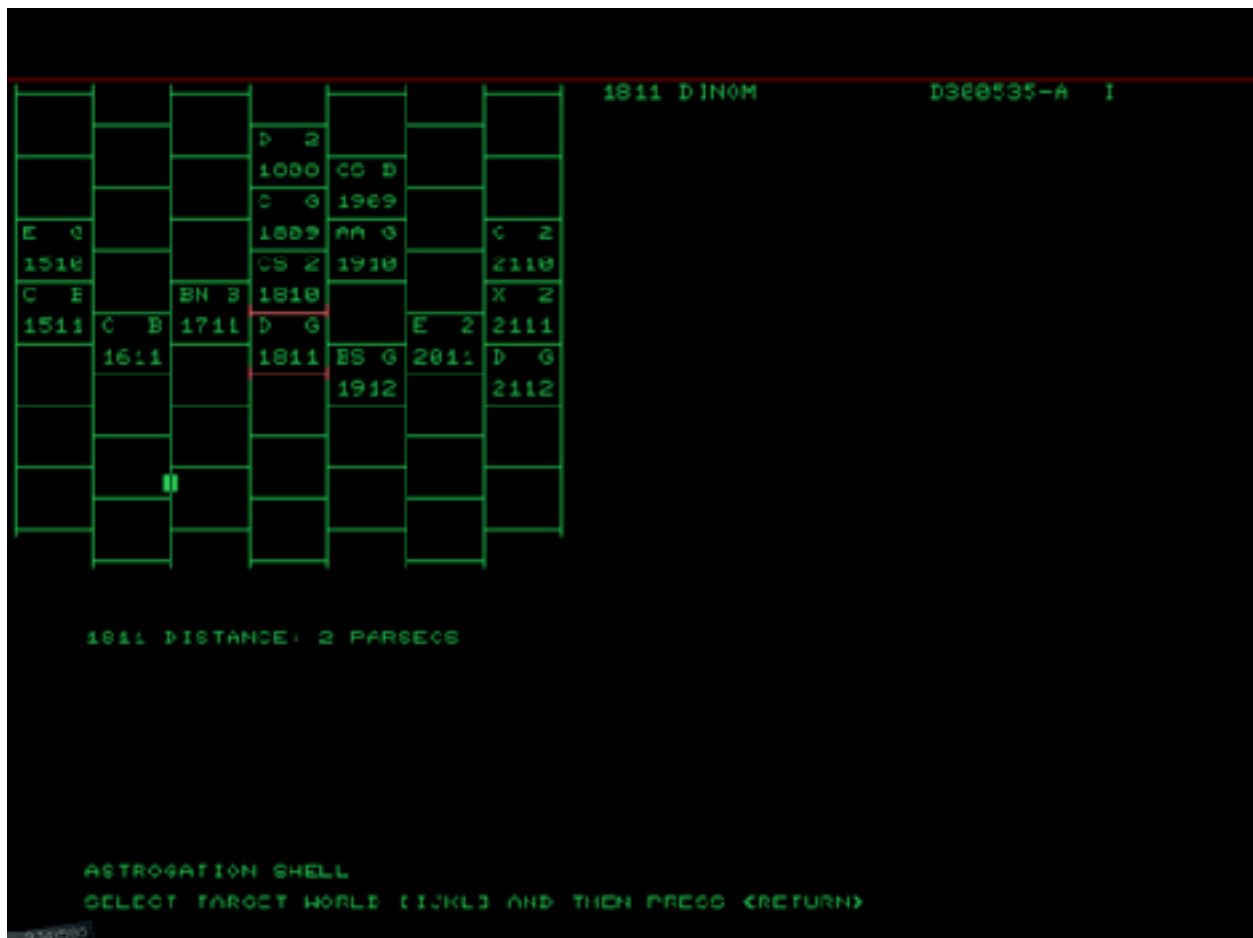
In the screen shot above, we're looking at Dinom, which is 2 parsecs away from our current location (Regina). Pressing <return> now sets the destination as Dinom.

Once you've selected a destination, you'll return to the Pilot's View. If you have enough fuel, you can then select JUMP to jump to your destination.

PORT VIEW. The starport view is where you can maintain your ship. For example, if your ship needs refueling, use the cursor keys to select "FUEL", then press the "R" key to refuel.

Theoretically, repairs work the same way, except currently there is no way for your ship to be damaged.

Again, pressing <return> returns you to the Pilot's View.

JUMP. If you're already set a destination from the ASTROGATOR'S VIEW, then selecting this option will start the jump process.

First, passengers and freight are brought onboard, earning you some money.
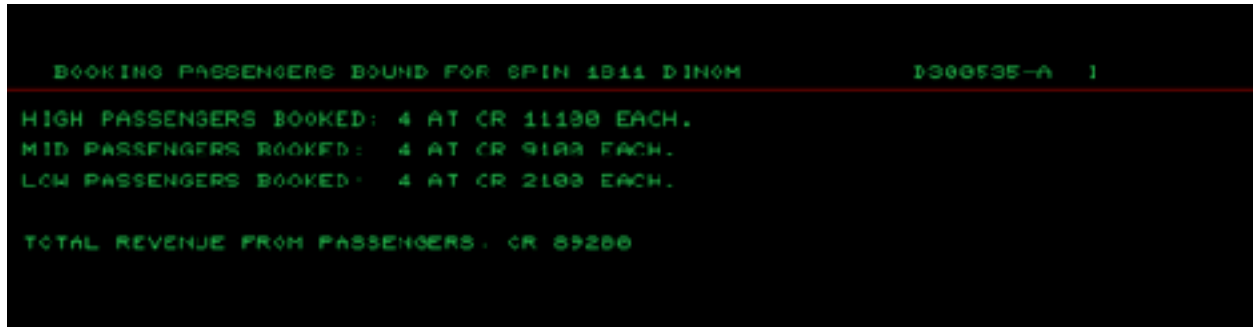
Then, pressing <return> transitions your ship into jump-space, emerging in the destination system. Undamaged drives and an expert Astrogator will put you in jump space for only a few seconds.
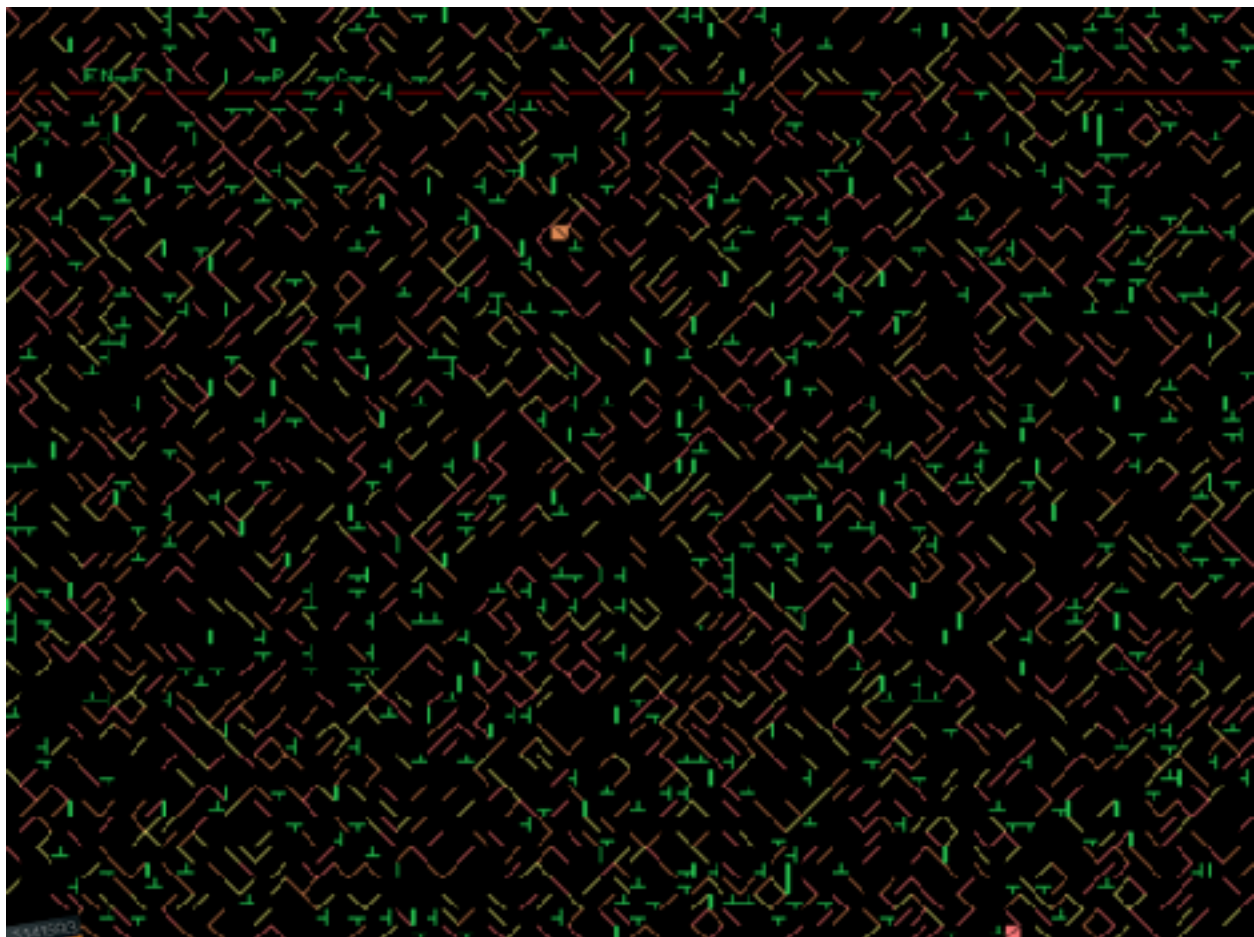
MARKET VIEW. This is where you buy and sell speculative cargo. Use the cursor keys to scroll through the list to a cargo type you wish to buy or sell. Use the left and right cursor keys to buy or sell one ton at a time. You may also use J to buy 10 tons, and L to sell 10 tons.


```
SPIN 1910 REGINA              A788899-C   I   RI
THIS WORLD IS SELLING TL-12 MACHINE TOOLS   AT 5200 CR/TON
SPIN 1811 DINOM              D3A0535-A   I   NI VA
DESTINATION SALE VALUE  5200


        SHIP        CARGO TYPE        STARPORT      CR/TON        DEST.PRICE
        10          MACHINE TOOLS        90          5200          5200
         1          ALLOYS                7          3600          4800
         0          ARCHAEOLOGICALS       8          4200          4400
         0          VACC SUITS            8          4600          5800
         2          MINERALS              6          4100          5300
         0          PROCESSED ORE         8          5700          5900
         1          RED TAPE              7          4800          5000
         2          ART                   6          2800          4000
         0          PROCESSED METAL       8          3900          4100
         0          SILANES               8          4300          5500
         0          COPPER                8          4400          5600




        64 TONS FREE


   CR    781600
```

Pressing <return> returns you to the Pilot's View.

HIRING HALL. Your ship works better with a competent Pilot/Astrogator/ Engineer. By default, you operate every position on your starship at a basic, functional level, with no bonuses.

At the hiring hall, you can hire additional crew with varying skill sets.
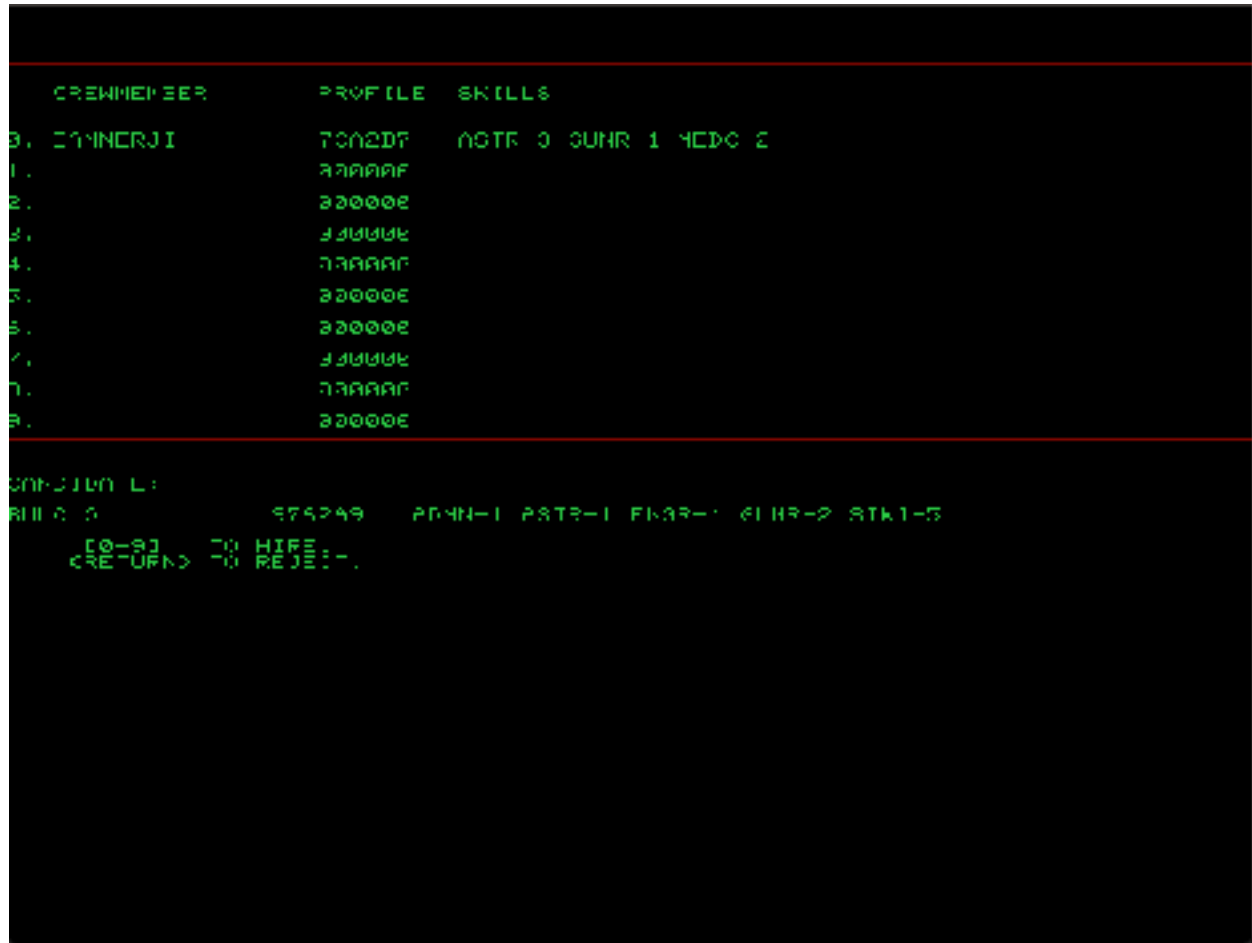
Each skill benefits your operation in a specific way:

Skill	Advantage
Admin	Helps in finding "middle" passengers.
Astrogation	Shortens the subjective time spent in jump space.
Engineer	Helps keep damaged drives operational.
Gunner	Improves the ability to defend your ship.
Medic	Keeps crew healthy.
Pilot	Helps avoid damage from refueling, surveying, and combat.

Skill	Advantage
Steward	Helps in finding "high" passengers.
Streetwise	Helps in finding "low" passengers.

SHIPYARD VIEW. This view shows you the ships for sale at this starport's shipyard. Available ships vary based on the local UWP.

TYPE	AR	CLASSNAME	CMJ	TONS	CARGO	PX	LO	SCOOPS	MCR	DOWN
TRADER	10	MAADA	S11	200	60	8	4			8
TRADER	10	BEOWULF	S11	200	76	9	20			11
TRADER	11	EMPRESS MARAVA	S12	200	64	7	4			10
TRADER	12	EMPRESS NICHOLLE	S12	200	60	3	4			11
CRUISER	12	BROADSWORD	H33	000	00	1	0			52
LINER	12	LINER	U13	600	120	21	20	NO		26
MERCHANT	10	MARCH HARRIER	A11	400	200	8	9			19
SCOUT	10	MURPHY	L22	100	3	1	0			10
PACKET	12	ARMED PACKET	A33	300	3	10	4			22
BARGE	11	ISLAND PRINCESS	U22	100	14	0	8			8
YACHT	9	YACHT	B11	200	12	9	0	NO		14

PRESS <RETURN> TO CONTINUE

Press <return> to return to the Pilot's View.

See the Appendix for available starships and their characteristics.

SURVEY VIEW. Turn in completed system surveys at a Survey Office for credit.

…once I implement survey ops.

APPENDIX: **STARSHIPS.** Here is a list of the ships available in the game and their characteristics. Table key:

A   Ship allegiance code. Values include:
             A: Aslan
             B: Baraccai Technum (independent)
             D: Droyne
             I: Imperial
             J: MC&S (independent / Judges Guild)
             L: Delta (independent / Paranoia Press)
             M: Al Morai (independent)
             R: Republic of Regina (independent)
             S: Sworld Worlds
             T: Tukera (independent)
             U: A universal or ubiquitous ship design
             V: Vargr
             X: Exotic
             Y: DayStar–Mityo (independent)
             Z: Zhodani

Bridge   DM to ship operations
Cpu   Computer model number
SS:WS   Space Sensors: World Sensors
SR:LB   Staterooms : Low Berths
Weapons   The emplacements installed on the ship

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
A	A–DS12	Eakhau	+2	2	0:0	160	48	9:16	92	
A	E–BU72	Stayow	+2	5	6:0	2	34	0:0	122	T3M B2PA
A	E–HU44	Ekawsykua	+1	5	5:2	24	112	0:0	416	T3S T3L T3M
A	G–DL71	Khosaa	+2	5	6:0	0	68	0:0	276	BaPA BaSR
A	J–BS22	Kteiroa	+2	3	4:5	78	22	0:4	74	T1ML
A	L–DL14	Hkiyrerao	+0	5	5:8	0	48	10:10	224	T1ML
A	R–FB22	Khtukhao	+2	3	0:0	138	72	24:1	162	
A	S–BL43	Ktiyhui	+2	4	5:0	16	26	0:0	114	T3M T3HY
A	T–KL33	Aositaoh	+2	5	6:1	80	110	0:0	470	T3S BaPA BaSR T3L
A	V–BS44	Hkauiya	+2	4	5:0	16	28	0:0	104	

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
B	R–TB43	Leviathan	+2	4	6:3	54	252	4:4	630	T3M B2PA T3L
D	A–BL11	Miymosa	+1	1	0:0	88	22	8:0	60	T1M
D	A–CA22	Loskay	+1	2	3:1	60	36	12:0	102	T2M T2PL T2S
D	E–CA62	Escort	+2	4	6:0	18	39	2:0	183	B1PA T3M T4L
D	S–AS22	Syunutstryak	+1	1	4:6	6	12	0:0	82	
D	T–KU33	Bretremoy	+2	3	0:0	0	130	4:0	330	B1PA
H	F–BU41	YT Packet	+2	4	5:0	50	20	0:0	210	B1M B1L
I	A–BS11	Beowulf	+2	1	0:0	82	22	6:20	40	
I	A–BS11	Maada	+2	1	0:0	60	24	8:4	40	T3HY
I	A–BS12	Empress Marava	+1	1	0:0	64	24	7:4	52	

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
I	A–CL22	Fat Cat	+2	1	0:0	99	36	8:0	93	
I	A–CS11	Lishda	+1	1	0:0	90	36	17:12	63	T3HY
I	A–HS23	Flat Trader	+1	3	6:0	144	104	4:0	312	T3L T2S T1ML
I	C–HU33	Broadsword	+2	5	3:0	80	104	0:0	264	T3L T3M T3M
I	E–DU55	Gazelle	+2	6	6:0	0	60	0:0	272	T3L B2PA
I	E–EA53	Kilaalum	+2	3	6:6	5	65	0:0	305	B1M B1L
I	F–KS13	Susa	+1	3	0:0	410	130	12:10	220	
I	F–TS13	Dakaar	+1	3	1:0	918	234	0:0	324	T2M T2PL T2S
I	G–AL52	Hoshisame	+0	3	5:0	1	13	0:0	83	

```
I L-DC12 Laknir               +1    2   5:4     48    36    0:0    136
```

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
I	L-DC22	Lab Mark II	+2	4	6:6	48	36	20:0	148	
I	M-BS11	Tramp Liner	+1	1	0:0	50	24	20:8	36	
I	M-FB13	Enkidu	+2	3	0:0	120	78	21:20	132	
I	M-FU13	Liner	+2	2	0:0	120	78	21:20	132	
I	M-HS14	Brilliance	+1	3	0:0	0	104	28:0	248	
I	N-DU23	Donosev	+2	5	5:9	20	40	0:0	188	
I	R-DA11	March	+2	1	0:0	200	44	8:9	92	
I	R-DA11	Merchant	+1	1	0:0	212	44	8:9	96	
I	R-DA11	Sheshar	+2	1	0:0	148	44	20:10	108	
I	R-EU12	Maru	+1	2	0:0	195	60	14:14	110	T1L

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
I	S-AL22	Murphy	+2	1	3:0	3	12	0:0	52	T2L
I	T-MA50	Orca	+2	6	4:5	492	156	9:0	516	T3TP B1FG
I	U-CA33	Armed Packet	+2	3	0:0	3	36	10:4	114	T1M
I	W-AS21	Shumshuga	+0	1	0:0	20	12	0:0	32	
I	Y-BB11	Yacht	+1	1	1:0	12	22	9:0	72	
I	Y-EU42	Sunflower	+2	3	5:1	20	55	0:0	195	
J	A-BA11	MC&S Alpha	+1	1	0:0	82	22	6:20	44	
J	A-DA12	MC&S-Beta	+1	2	0:0	136	48	8:14	100	
J	C-HB33	MC&S Gamma	+2	5	6:6	80	104	0:0	304	
J	M-FB13	MC&S-Mu	+1	3	3:0	120	72	21:63	144	

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
J	R-DA11	MC&S Rho	+2	1	3:0	200	44	8:9	84	
J	S-AA22	MC&S-Sigma	+2	1	4:3	3	12	0:0	46	
J	Y-BB11	MC&S-Ypsilon	+1	1	3:0	12	18	10:0	56	
L	A-BA22	Avian	+2	2	0:0	68	24	6:2	70	T3HY
L	S-AA22	Serpent	+2	3	5:7	5	12	0:0	60	T3HY
L	S-BA22	Wind	+2	2	0:0	2	24	0:0	68	T3HY
M	E-DU44	Route Protector	+2	4	0:0	8	56	0:0	168	B1PA T3M T3S T3L
M	F-ZC14	Risek	+2	4	0:0	888	288	16:16	528	T1M T1S T1L
R	A-DA11	Grendel	+2	1	0:0	88	44	0:8	108	T3L T3S T3M
R	N-DS23	Kurgulash	+1	3	4:3	20	40	0:20	172	T2S T2L

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
S	C-FS22	Tulgan	+0	2	6:0	6	72	0:0	168	BaPA BaSR T3L T3S
S	C-VB22	Jarl	+2	2	5:0	80	240	0:0	460	BaSR BaKK BaM B2M T3S T3M T3L
S	G-EB32	Surtr	+2	2	5:0	15	65	0:0	155	BaKK B2M T3HY
S	P-AS42	Derjus	+1	2	4:0	0	14	0:0	54	B1M
T	M-KU14	Tukera RT	+1	4	0:0	130	130	36:14	250	T3HY
U	G-HB53	Avenger	+2	3	6:0	56	112	0:0	296	T3S B2M B2PA T2L
U	K-BA12	Tarkine Centaur	+2	1	0:2	6	22	0:0	86	T2L
U	P-DA42	Kforgzue	+1	2	5:0	128	44	0:12	156	T3L T3M
V	G-HS44	Se Koez	+1	5	6:1	24	112	0:0	320	T3L BaPA B2M
V	J-BC11	Zukseg	+2	1	0:3	64	22	0:0	58	

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
V	M-FU13	Dhaztuen	+2	2	0:0	30	78	24:10	150	T1L T1M T1S
V	P-CU42	Fang	+2	2	7:0	45	42	0:0	126	T2M T3L
V	P-DA41	Aedokhaz	+1	2	6:2	72	52	0:12	184	T3M T3JD T3L
V	P-DA62	Az Alrrak	+2	2	5:1	12	68	0:12	384	T3L T3M T3S
V	S-AS42	Kanllaz	+2	4	2:0	0	14	0:0	66	T3HY
V	S-BA33	Tathoe	+2	5	3:0	8	26	0:0	124	T1L T1L
X	E-HA86	Warlock	+2	6	0:0	24	152	0:0	1016	BaSR B2PA B2M B2S T4L
X	K-FC03	ANNIC NOVA	+2	3	3:2	0	66	0:0	210	T1L
Z	C-VS42	Vlezhdatl	+2	5	6:0	80	280	0:0	1060	BaKK B1L
Z	C-VS44	Council Cruiser	+2	5	6:0	40	240	0:0	940	B2M B2PA B1PA B1M

A	QSP	Name	Bridge	cpu	SS:WS	Cargo	Fuel	SR:LB	MCr	Weapons
Z	E-DS64	Zhdits	+2	5	6:0	0	64	0:0	256	T3L
Z	E-FS41	Sesavetl	+2	5	6:0	24	72	0:0	318	BaM B1S B1L B2PA

```
Z G—FU21 Shivva          +2    4   6:0     0    78    0:0    318 B1PA B1M T4L T4S
Z M—HB14 Chtabl          +1    4   0:0    56   104  36:34    224
Z X—BS24 Qliaf           +1    3   5:0    16    24    5:0     94
```

SHIP DATA NOTES. Each ship design takes up 48 bytes of data. Each record contains a header, and a component array:

Header (26 bytes)
    index
    name (15 characters plus a null)
    allegiance code
    mission code
    hull size (1=100 tons, 2=200 tons, etc)
    hull configuration (3 bits)
    hull tl (5 bits)
    armor rating
    cost
    number of staterooms
    number of low berths
    crew comfort (3 bits)
    passenger demand (5 bits)

Component Array (22 bytes)

    Maneuver rating
    Jump rating
    Bridge rating
    Computer model
    Cargo hold
    Fuel tankage
    Space sensors count
    World sensors count
    Fuel Scoops rating
    Collectors rating
    Stealth rating
    Damper rating
    Screen rating
    Globe rating
    Hardpoint 1 configuration
    Hardpoint 2 configuration
    Hardpoint 3 configuration
    Hardpoint 4 configuration
    Hardpoint 5 configuration
    Hardpoint 6 configuration
    Hardpoint 7 configuration
    Hardpoint 8 configuration

Hardpoints are configured by emplacement (which is one of single turret, double turret, triple turret, barbette, dual barbette, bay, large bay, and main gun) and weapon type (which is one of mining laser, pulse laser, beam laser, plasma gun, fusion gun, salvo rack, missile launcher, kinetic-kill missile launcher, antimatter missile launcher, jump damper, tractor/pressor, jump inducer, disruptor, stasis gun, sandcaster, hybrid laser-sand-missile, particle accelerator gun, and meson gun).

Each weapon has different capabilities. The emplacement indicates the overall power of the installed weapon element.

Ships have one hardpoint per 100 tons of volume, to a maximum of eight hardpoints. This limitation is offset by the ability of larger ships to field larger emplacements — for example, a Mercenary Cruiser with eight turrets has no chance against a Vlezhdatl with eight bay weapons.