DESIGNING A STARSHIP

The previous section introduced a number of concepts and guidelines. This section is where you actually design a starship. To design a starship, follow the procedure below:

1. **Select a hull class.** This initial decision determines the size parameters of your ship design. It also determines your crew requirement, fuel capacity, cargo space, and AGILITY and DEFENSE values.
   1. Determine the initial LUXURY rating of the ship based on hull class and quality.
   2. Choose a basic hull configuration (scientific, exploration, combat, etc.) and note the adjustments granted by that configuration.
2. **Choose sub-luminal engine(s).** These will determine the sub-luminal speed of the vessel.
   1. Note SPEED as total power from sub-luminal engines dived by the ship's hull class.
3. **Choose FTL engine(s).** These will determine the FTL capability of the vessel (although this is also limited by computer type, below).
   1. Note FTL speed as total power from FTL engines dived by the ship's hull class.
4. **Determine initial ship superstrucure**, and then allocate additional SS and/or armor.
   1. Note armor SOAK as total armor divided by the ship's hull class.
5. **Select deflector shield(s) if required.**
   1. Note shield SOAK as total shield power divided by the ship's hull class.
6. **Allocate weaponry.** This includes all types of weapon systems, including lasers, disruptors, phasers, projectile cannons, torpedoes, warheads, blasters, ion beams, and more.

7. **Choose command and control systems.** These systems – the computer and the sensor systems – have important effects on various aspects of the ship.

    1. Record maximum FTL, adjust crew requirement, and note INITIATIVE bonus, if any, from the control computer system.

    2. Record maximum sensor range, weaponry range adjustments, and scanning bonuses from the sensor systems.

8. **Select additional ship equipment,** including cloaking devices, tractor beams, fuel scoops, fuel bay alterations, and more.

9. **Select shuttle/fighter bays (if any).** Not all ships will include shuttle or fighter bays.

10. **Choose ship facilities.** These include cabins, sick bays, labs, mess halls, bars, lunges, and more.

    1. Calculate the ship's LUXURY value from the total of all facilities, and add the initial LUXURY rating from the hull (above).

    2. The final LUXURY value is a percentage using the calculation (LUXURY/CREW)*100%. Record this and determine the ship's overall die roll modifier.

11. **Determine final values.** These include fuel, cargo, crew, and other values.

    1. Determine fuel capacity and range. Fuel capacity is based on hull size plus any fuel bay alterations (above). Range is one parsec per fuel unit, multiplied by the FTL engine's fuel efficiency rating.

    2. Calculate available cargo space based on the ship hull class' initial cargo designation minus the space of all components and items. Note that if the space requirement of the components exceeds the initial cargo space, some components will need to be removed.

    3. Calculate the ship's tonnage. This value is based on hull class and remaining cargo space. Divide the total cargo units used by the base cargo space for the hull class and multiple the result by 100%. This gives you the ship's LOAD as a percentage. Then, using the Ship Class Chart, locate the tonnage range of the ship's class. Deduct the lower range boundary from the higher to determine an overall tonnage range, and then add tonnage to the lower boundary as a percentage of the tonnage range as determined by the LOAD percentage.

    4. Calculate monthly crew costs (200 Cr. times the crew compliment per month).