In-System Travel

Travel within a star system is sublight, though often at significant fractions of lightspeed. Ships use superscience thrusters to accelerate and decelerate. High accelerations are feasible due to artificial gravity compensation. Fast ships have accelerations of 25Gs or more; heavily loaded freighters in no hurry may be limited to 1G or less.

Operating a ship (or shuttle) in normal space requires Piloting (High-Performance Spacecraft) skill. Anyone with that skill can pilot a jumpship of similar size and performance at no penalty, as long as it stays in-system.

Ships

Ships fall into three main classes: *jumpships, in-system ships,* and *shuttles.* Jumpships travel from star system to star system, but very few are designed to land on planets. In-system ships are space-to-space ships that lack FTL drives, but are otherwise similar to jumpships. Shuttles are short-range ground-to-orbit spaceships based at ground shuttleports or orbital transfer stations, or carried as auxiliary craft by larger ships; they have streamlined hulls and short-duration life-support systems.

The function a ship serves, however, shapes it more than its class. There are three primary groups – *commercial ships, couriers,* and *warships* – and an assortment of specialized ship types.

Commercial Ships

The driving principle behind a commercial ship design is profit: the craft must pay off its cost, meet its operating expenses, and give its investors a reasonable return. For this reason, commercial vessels rarely have any weaponry, and only carry mass shields, which are required to deal with space debris while moving at velocities of 0.5c or greater.

The Wormhole Experience

Wormhole passage is relatively uneventful: Most people experience a mild dizziness or mental time distortion, while a few get actively jumpsick. Those with the potential for jump piloting (p. 59) may get hallucinations and severe time distortions. Passage takes only moments, though the mental effects can make it seem longer.

On a normal jump, there is no error in the arrival point. The ship either appears where it's supposed to be, or it never arrives *anywhere.*

Passengers on a jumpship voyage spend most of their time simply traveling through normal space to the next wormhole. Typical transit times from planets to wormholes, or between wormholes, range from a few days to several weeks, depending on the placement of wormholes in the system and the drive acceleration. Transit time is inversely proportional to the *square root* of the drive's acceleration, so a passage that takes a week on one of the fastest ships might take months on a slow freighter.