

## Spaceship Classes

Before Carter and the recruits had their first flying lessons in space, they had to learn what classes of spaceships there were. In order to make this introduction more vivid, the recruits joined chief mechanic Willis Thompson at the Utopia shipyard.

It wasn't an excursion in the true sense of the word, because they didn't land. They only floated closer to the landing areas. The recruits all stood close to the ship's large panorama window. Among them, one could see a huge number of different ships in construction. »Here you can see the biggest shipyard of Utopia. Of course, I show you all the different models in detail with holograms, but I think you can't imagine the actual dimensions of a warship until you've stood in front of it.«

The sun was shining on the majestic flying machines, as powerful as they were waiting for their liberation in the mounts attached to them. First, Willis turned his attention to a large, bellied ship with its wings bent downwards, wide and short.

»What you see down there is a transport ship, either for goods or as a troop carrier. These ships have only rudimentary armament, but stable armor. They're not very fast, but they are persistent.«

Next, they saw a strange, almost square ship with rounded corners, from whose roof and floor several long, multi-unit mechanical arms looked out.

»This ugly thing is a work ship. It is used to dismantle asteroids, to collect scrap metal or, if a large tank is attached underneath, as a refueling ship. Since this type of ship is never used in combat, it has no

significant armor or armament on board. By the way, I spare you the names of manufacturers, ship names like Winston or Haldrich, because these things change and evolve so often that nobody can see through them anyway. To recognize the class is usually enough, anyway.«

They flew over a ship whose size on edge certainly resembled an eight-story building. It was long and narrow, without wings and with only a few windows. »This one is a so-called tech ship. It serves as a communication node in space battles and as a processing center for all combat data. Since it radiates a lot of heat through the whole technology, the armor has to be a little lighter and thinner and it usually doesn't have many weapons. These ships are protected by much stronger ships.«

They headed for an assembly line where there were several small ships for only one person. They looked like compressed old-fashioned fighter jets, with a wider cockpit for better visibility, close-fitting wings and shorter bodies for better maneuverability. »The fighter. The classic vehicle of the simple pilot. These racers are very fast, agile and surprisingly well-armed. They have distance hacking modules, precision cannons, rapid-fire cannons, pursuit missiles and various types of bombs. Plasma, EMP, vacuum, and frost. I believe. There are also more types, but these are the classics. In a few weeks, you'll learn to fly one of these.«

A surprised murmur went around because they didn't want to believe that they would soon be allowed to steer a spaceship. »Don't get wet now, or we'll have to think about it again. Better have a look there! There you see a frigate. A great ship, if you ask me. Big enough for a crew of forty to fifty soldiers, powerful weapons, good armor, and powerful engines. Agile despite the length and with movable wings for various

maneuvers.«

The frigate was shorter than the tech ship but also flatter and with rounded triangular wings that could be angled up, down or straight. Beside them, they saw a ship that had exactly the same appearance, but three times the size. It was difficult for them to imagine how they would one day walk around in it.

»The frigate's big brother is the battleship, it used to be called a galleon, but it wasn't considered timely anymore. Battleships look like frigates, but they are much more heavily armored and equipped with larger weapons. Poor maneuverability and speed are the price for such colossuses.«

However, these values were still very good if one compared them with those of the ship next to it. The largest ship that humans could build, the warship. It had the size of at least two metropolises. These huge ships were built in space, but this one was just floating above New Vienna. It had an elongated and thick form with a slightly wider muzzle, comparable to an elongated snake. The diameter of the drives was unbelievably large. »That there is a real warship of the Initiative. When they appear, things really get going. Slow, but unstoppable. More cannons on the outer hull than there are recruits in Osilon and an insanely strong armoring and armament.«

Leena asked where all the raw materials came from that were needed for such a huge thing.

»Good question. The materials are extracted on different worlds where the Initiative operates mines. The beauty of an infinite universe is that there are infinite resources. So you don't have to plunder your own world. Rather one that doesn't allow life anyway.«

They saw a protected and closed area of the shipyard, into which one could not see. When Jimbo asked him, Willis said:

»Oh, that's the special shipyard for extraordinary ships. So-called command ships. Ships specially designed for covert and secret operations with camouflage, armament and all the bells and whistles that would be too expensive for regular ships. They also build stealth ships in it. Those are not as good for combat as they are for sabotage and secret transportation.« After floating around for a while to take a closer look at some of the details, they flew back again. Willis used the time to tell them some facts about the evolution from the old airplane to the spaceship and some important technical jumps they could make with the help of the Salvani. Rod asked: »How do the engines work? I mean ... how can they release such a huge amount of energy to move a warship? So much thrust is unimaginable.«

»The answer is: Iom drives. This is an element found in rough quantities in space nebulae. When exposed to the right external stimuli, it produces an extremely exothermic reaction. Talon series drives use Iom cores to harness this energy. With the right technology, one can even reach the speed of light. Within our four sectors, however, this is usually not necessary at all.«

Carter found the variety of ships amazing. The idea that every nation had such colossuses in space was impressive.