# Military Operations in the Post-Imperium Realms

Novo Venizia is one of the few systems never to have been successfully invaded during the long centuries since the fall of the old Imperium, though it has been attacked several times. Most systems have fallen not once, but several times, to successive invaders and plunderers. Population and technology have fallen since Imperial times, and the wars show no sign of ending, as the Atlanteans continue their inexorable push, and the New Imperial League begins to tear itself apart in a struggle between the Universalists and the Reformers. No system neglects military preparations, lest it become a doormat for stronger powers.

Space combat is something every starship captain must be ready for. Even merchantmen sometimes find themselves running from pirates and raiders. Warship captains train for escort, system security, repelling of invasion, and attack.

Since Imperial times, the primary offensive weapon of all known systems is the guided missile. These can be launched from internal or external bays. Missiles can also be "laid" in an inactive state for later launch, in which case they are called mines. The highest technology known in the Imperium can create missiles with an effective range of about 100,000km -- most systems use missiles of significantly less range.

Missile guidance systems typically use a combination of passive and active sensors to acquire and maintain their targets. There is a constant struggle between developers of offensive sensors and developers of anti-sensor defenses. At present, no missile system can guarantee an actual hit on a defended spaceship. Most missiles strive to get within 10km of their targets. Missile warheads are usually fusion bombs, which can cause damage through irradiation and EMP effects, but shrapnel is the main cause of damage (even vaporized metal is very damaging if it is traveling fast enough). Advanced missiles carry a laser warhead, where the energy of the exploding fusion bomb powers a high-frequency laser for the split second before the warhead is destroyed. When such a laser scores a hit, it can be massively destructive to a spaceship.

The railgun is the most common secondary armament on spaceships. It works by sending a charge from the ship's batteries to an accelerator tube, which then ejects some solid ammunition (usually iron or nickel, but almost any substance can be used). The range of railguns is usually no more than 10km, so it is only useful as a close-range weapon. In fact, railguns are most often used offensively in boarding actions to soften up a target. Railguns are also a primary defensive weapon against oncoming missiles.

Spaceship defensive measures are designed to "evade, elude, endure, or erase" attackers. Thus, the primary means of defense is to escape attack by high-G acceleration. If that proves impossible, then anti-sensor countermeasures are used (which can range from low-tech chaff dispensers to high-tech stealth fields). If that fails, then anti-radiation hull coatings and ablative armor provide some protection against nuclear radiation. No armor can protect against a laser warhead, so railguns are used to destroy oncoming missiles.

Invasion of systems usually begins with a battle to establish "space superiority" -- that is, to eliminate the defender's mobile units. That accomplished, the siege begins, as missiles are used against the system's fortifications. For long sieges, attackers will sometimes accelerate small asteroids to use as bombs against planets and moons. This usually has negative effects on the defender's population and wealth. So, for attackers who are motivated by loot, assault ships are used to land marines to capture valuable targets.

Jump drives add another factor to consider for attacking starships -- where do you attempt to jump to? If a ship jumps close to its target, it will likely be detected right away and defenders will be roused. If it jumps far away, it may avoid detection, but then the attacker may have a long journey to get to attack range, which can present logistical difficulties (and there is no guarantee that early detection will not happen anyway). This affects smugglers and pirates, too. They can lurk in the outer reaches of a system in relative safety, but to make a delivery, attack, or refuel, they must come closer to likely defenders. Jump drives present difficulties for defenders, as well. It is the rare system that has the resources to be able to defend everything of value, much less have the resources for chasing smugglers and pirates in the outer system.