

Military Unit Deployments

Transportation for larger units is a serious issue. When no action is expected at the destination, troops can be placed in low berths and moved wherever is needed. In many cases, though, soldiers will need to be in fighting form as soon as they reach their destination. During transit times, plans will be finalized, alternatives discussed, and last minute checks and preparations will take all available time. Whether jumping between systems or traveling between planets, soldiers require barracks and staterooms just as every other sophont aboard ship uses.

It takes approximately 60 displacement tons to house a 30 person platoon. With a standard 4-5 platoon company and 5 platoon battalion, that yields 240-300 tons of housing per company and 1200-1500 tons housing for a battalion. Larger platoons of 50 or more are not uncommon and will require more transport space than a smaller platoon. Equipment will also vary dramatically, but many units will need as much cargo space as housing tonnage. A ship infantry company intended to fight within the confines of a spacecraft (whether their own or a target ship) will not need the same transportation or armored vehicles as a unit destined for a planetary conflict. Disembarking from a space transport will often require small craft as well. Troop transports are a high priority target for defending units as a lot of combat manpower will be concentrated in a single location.

Once at their destination, units need regular resupply and usually only carry 2-3 days worth of supplies with them. Power, fuel, spares, ammo, and food are some of the main items needed for soldiers spending more than minimal time at their destination. (Raider troops that leave as quickly as they arrive do not need long term supplies.) Units that become cut off from their supplies are very exposed and in danger of being overrun. Artillery is useless without ammunition, and lasers or battledress require power. Isolated units generally make reconnecting to their supply lines an immediate priority, and even raiders or special ops troops do their best to maintain a line of retreat.

Humans consume roughly 1 kg of food and 4 L of water per day; active troops typically use 2-3 times that amount. 10 kg of cargo per soldier per day only covers basic survival; fuel, ammunition, spares, etc depend upon the type of unit and their level of action, or 'combat tempo'. Accumulating supplies for a major military action takes either a great deal of time or a great deal of tonnage, and the enemy is rarely just waiting around for a build-up to continue. Getting troops to the field is only the first part of a long and protracted struggle. The saying "amateurs study tactics, while professionals study logistics" simply summarizes the challenge of a campaign versus a battle.

For any operation, different worlds will require different types of troops. Tracked vehicles will be nearly useless on a water world, and hundreds of infantry who are not trained in vacc suits won't be able to do much other than die on a barren, airless moon. Units must be equipped and trained for the environment, whether vacuum, roasting desert, or frozen tundra. Grav units are nearly universal in stellar class militaries, but even there vehicles are not created equal. Panzer grav tanks with beam lasers are very useful, but flying over the surface of a water world will not be as effective as grav vehicles able to submerge and patrol where the sophonts actually live. Lasers have very short range underwater. Whenever possible, troops that breathe the same atmosphere will be far less vulnerable than those that require filter masks. Temperature compatibility is another area that favors natives over aliens. A damaged cooling suit on a roasting planet will kill a soldier just as effectively as a sniper's shot.

Despite the problems, carrying troops in staterooms and barracks is much safer than low berths despite the increased tonnage. The key advantage of low berths, however, is capacity; even relatively small sleeper ships can carry hundreds of passengers. A sleeper troop ship, though, is an easy target should an enemy boarding party breach the ship. In addition, a ship which has thousands of troops, asleep or not,

will be a very high priority target. The time it takes to wake troops from cold sleep and return them to fighting trim is significant. Troops in staterooms with weapons, armor, and combat vehicles at least have a fighting chance. While sleeper troopships have been used by some for bulk troop movements and reinforcing garrisons, any mission that requires active troops at their destination will not use low berths.

Anzio Landing Craft Platoons

The Anzio landing craft is a small starship able to make 2 jump-1's in succession to reach a target. At only 300 tons, for its size it carries a large complement of 27 marines (+ one officer and space for 2 'extras') and only 5 tons of cargo space. It is streamlined for planetary landings and also has 2 breaching tubes so that it may attack ships or stations in orbit. It is small enough that many mercenary groups could use the vessel for minor missions, while far fewer groups could assemble enough troops to fill a company sized transport.

While it carries only a small platoon, many missions (piracy, anti-drug, smuggling, theft) are within its capabilities. The troops employed, however, need to be carefully optimized for their particular mission. They have no room for small craft or military vehicles aboard, so the ship itself must disperse its troops. Because the ship and unit is so small, a single platoon cannot be expected to engage in any long term mission so raids or police actions would be appropriate missions for this vessel. With only 5 tons of cargo space, troops cannot be expected to travel far from the ship. The cargo space is likely best used to carry supplies or several warbots and drones to provide additional punch to the platoon.

This being said, all scout and naval bases will have ships similar to this class for carrying out small missions. Risks are relatively low and scout bases in particular are widely dispersed. Timely assistance or action could be essential, and any information arriving by jump ship is already a week old, with another week (minimum) required to reach a destination in another system. Problems in the local system can be reported by radio with hours, and as Anzio ships have 4g acceleration they can reach most planets in a solar system within a few days at most. In this regard, many distant binary or trinary systems are still a jump away due to the time it takes to travel there in normal space.

Twenty seven marines break down nicely in several ways: 9 teams of 3, 5 teams of 5 +2, 2 squads of 13 +1, 4 teams of 6 +3, 3 squads of 9, 6 teams of 4 +3, etc. This flexibility allows a variety of breakdowns depending upon the purpose of the mission. Since there are 2 breaching tubes, a medic and 2 squads of 13 (1 sergeant and 4 teams of 3) would make an efficient unit for space assaults. RAM grenade, VRF gauss gun, drone, or even PGMP teams might all be appropriate for a boarding operation. Alternatively, a prize crew of 6 naval crew might be held in reserve while 2 squads of 10 soldiers (sergeant and 3 fire teams of 3) attempt to seize a vessel. Few damaged starships are likely to overcome a force of 20 combat marines even with the home ship advantage, and non-military capital ships operating with restricted manpower for budget reasons are also vulnerable to breaching.

For an assault on a planetary base, the landing craft would have to disembark troops relatively close to the target area. An indirect fire team could provide fire support and/or intel (likely mortars or drones), while 2 main assault squads move in for close combat. Any target would have to be minor, such as an isolated research lab, illegal mining operation, smuggler base or small compound, as a larger facility might be able to defeat an attack by a single platoon. The attacking troops would also need to be able to retreat quickly or have the local authorities on their side, as no single platoon can be expected to hold out for long against enemy reinforcements.

Otranto Troopship Teams

Otranto troopships are found all over the Cluster, but are particularly prevalent in the periphery due to their Jump-3 capability. At 800 tons, the starship has good armor, a stealth coating, and room for ~70 troops and 50 tons (maximum of 65 tons) of vehicles. While this provides fewer troops per ton than other troop ships, the Jump-3 capability is so critical in many regions that other inconveniences are overlooked. The ship provides a decent amount of hangar space to carry a number of vehicles which can amplify the combat power of the attached troops. The Otranto class, however, lacks breaching tubes so is not ideal for taking over spacecraft.

This vessel is particularly suited for landing on a planet and disembarking troops for a surface assault. While 50 tons of vehicles are somewhat limited, smaller combat vehicles and efficient grav transports such as air rafts and flying squad vehicles greatly expand the range troops can cover on a planet. Search and rescue missions, for example, benefit greatly from the extended vehicle range. Grav combat vehicles such as Panzer Grav tanks or regular Grav Tanks, along with Combat Grav Carriers, Atomic Defenders for preventing nuclear counterattacks, Laser Support Vehicles, and robotic combat vehicles such as the Laserdome, Nemesis Warbot, and Eradicator Tanklet provide a range of vehicle options for different missions.

There are no single units which fit nicely into Otranto Troopships. This allows a primary platoon to be supplemented with a variety of additional capabilities to optimize it for a given mission. An armored mechanized platoon with 40 armored troops and 4 combat grav carriers will take up much of the hangar space, leaving barely enough room for several air rafts and flying squads (stuffing the hangar and limiting access during travel) to support the main troops. Alternatively, a Platoon of 4 grav tanks (32 tons) with infantry and 4 flying squads (12 tons) would be able to transport all of the soldiers and leave room for several combat robots to supplement the infantry. If a particularly difficult structure needed to be breached, a platoon of armored infantry supplemented with robots and several engineering vehicles could force entry into many habitations.

Tarawa Assault Company

The Tarawa Troopship is a 1400 ton starship with a range of 2 parsecs and can carry 150 marines + ~10 marine officers and ~18 'extras'. The definition of 'officer' can be stretched to include sergeants, and they can share a stateroom instead of using the barracks with the rest of the troops. There is hangar capacity for 100 tons of craft, or 130 tons if stuffed to capacity. The cargo volume is 80 tons. This is enough to hold 5 platoons (approximately 1 company) of marines and at least some vehicles. As a large spacecraft, it carries relatively weak offensive weapons and should have one or more combat oriented ships escorting it. The Tarawa can carry a complement of fighters, but those will prevent it from carrying assault vehicles or small craft to ferry troops to the surface.

As a mid sized troop transport, Tarawa class vessels can be found at both scout and naval bases. Small scout bases may only have a single battalion of marines, and one mid sized ship. Deploying a company of marines in addition to all of the normal demand for troops will significantly deplete the combat strength of smaller bases. Larger scout bases will have more than a single battalion of marines and the depletion effects will be less notable. Naval bases have at least one brigade of troops and will have at least a squadron of Tarawa class ships present. Every naval base will have at least 1 such vessel on call for emergencies ready to deploy within hours.

Company sized training missions are probably the most common scale operation performed by the marines. Tarawa class ships are an excellent size for such deployments, and will usually be scheduled for such missions months in advance. Marines must be prepared for operations in any environment and

jumps always take approximately 1 week. This means that a 1 week training deployment in another system will require at least 3 weeks total. Scout bases usually have marines committed to so many different ships and small operations that they can rarely spare a company of marines at a time, so most training missions deploy from naval bases. Marines cycle through duty stations frequently enough that this is usually not a problem from a readiness standpoint.

Tarawa assault ships carry enough troops to carry out most combat operations. 5 platoons of soldiers are sufficient to occupy a large research center, overwhelm and control a small town, and invade small or medium sized space facilities. Unlike Anzio landing craft, Tarawa ships do not have breaching tubes and are not ideal for space assaults. As the largest spacecraft before getting into the realm of capital ships, they make tempting targets for enemy forces to destroy before troops can be deployed. As such, they typically deploy their troops well away from the expected site of action to minimize the risks to the ship. Loss of the troop ship will strand or kill all of the marines on board, making its loss very inconvenient. The hangar bay can support 2 modular cutters, each of which may carry 58 assault pods for planetary landings that do not endanger the mother ship itself. Deploying 2 cutters in this way, however, occupies all available hangar space and severely restricts what other types of vehicles may be carried.

Marine companies are often composed of homogeneous platoons, so in order to use combined arms tactics platoons of different types are usually employed. During deployments, typically one of the platoons is a command platoon that includes basic support units that will work with more combat oriented units that directly accomplish the mission. It includes small medical evacuation, logistics, and repair squads for the other platoons. Heavy armor is generally unavailable, as even a single nova fusion tank platoon will take up 160 tons of shipping capacity. Medium armor units and powered infantry are often deployed together, although lightly armored but more mobile platoons may be combined with 1 or perhaps 2 heavier units to provide mixed options. A panzer grav tank platoon of 6 tanks uses 42 tons of hangar capacity and provides significant firepower and protection for its tonnage. Standard grav tanks are less protected but carry infantry in a reasonably well protected vehicle. Armored troops in vacc suits or combat armor take up twice the seating capacity of lightly armored or unarmored troops in vehicles, although housing requirements aboard ship are the same. Not all marine vehicles need heavy armor, however, and having some fast but less protected vehicles increase the mobility of troops substantially.

Some military deployments are humanitarian in nature and not combat focused. Disaster relief or emergency aid may be supplied after natural or unnatural catastrophes, but dedicated cargo vessels will have to bring in the majority of supplies. Even distribution of supplies is problematic as medium grav transports are 10 tons, and a single platoon will use up most or all of the available hangar capacity. Grav medevac platoons use smaller vehicles and can be used to reach more distant regions around the landing site to speed the delivery of medical aid to isolated communities. Combat engineer platoons have substantial vehicle requirements, so unarmored or smaller engineering vehicles might be preferred for these types of missions.

Iwo Jima Troopship

The largest military transport is the Iwo Jima Troopship, a 5000 ton capital ship able to carry an entire battalion into combat. Each of these monstrous transports can deploy about 700 combat soldiers at a single location. There are 450 tons of hangars/docking bays and 400 tons of cargo space available for small craft and marine vehicles which comprise around 20 marine platoons of various sorts. While this appears to be a lot of hangar space and cargo, keep in mind that simply feeding the crew (860 sophonts

on a maxed out mission) takes over 6 tons of food every week, not including the increased consumption during stressful combat.

As one of the largest ships that can enter jump space, a 5000 ton capital ship will be a primary target as soon as it is identified. Ships of this class always deploy as part of a task force with a large number of screening vessels protecting it. Generally it will have at least one other capital ship providing space combat capacity to prevent the troop ship from being destroyed before it can deliver its troops. While it can technically land on a planet, it rarely will; troops are almost exclusively transferred by small craft down to the surface. Small craft from escorting ships may be borrowed for this purpose to speed disembarking. No admiral wants to waste their ground forces while the marines are sitting out in space.

Due to the size and cost of the escorting fleet, only naval bases and large pocket empires are able to field these giant transports. Defenders on a planet will always outnumber an attacking force, so orbital bombardment destroying planetary defenses and fleet battles guaranteeing space supremacy will all be completed well before the large troop ships arrive. Physical control a planet, however, requires boots on the ground. Landing marines is one of the final steps in planetary subjugation, but is absolutely essential to gaining full control. Even after a government surrenders, small unit actions designed to drive the invaders away may target occupiers for years. Marine units are far more suitable for finding and killing partisans and terrorists than artillery destroying an entire city to eliminate 5 subversives.

While 20 platoons of marines are overkill in most situations, they are a small fraction of the troops required for planetary scale military operations. For comparison, a brigade will require ~5 Iwo Jima sized troopships; a division needs ~20, a corps needs 80-100, and a full field army 250-300 ships merely to carry the soldiers to the system where the combat will happen. Supplying a massive force like this, delivering all of their vehicles, ammunition, and replacements, providing continual cover from space, evacuating the wounded, etc is a serious undertaking most worlds simply cannot support. As each large troopship costs over 4 billion credits, merely purchasing enough ships to move an army through space costs over 1 trillion credits at a minimum. Few pocket empires are willing to bear such costs for long.

The 20 or so platoons of marines aboard an Iwo Jima Troopship should be a diversified force combining combat and non-combat forces into a mostly independent fighting command. Both armored vehicles and infantry are essential for different types of fighting, while combat medics, engineers, and indirect fire units also make profound contributions to every battalion's operations. No relatively small force can cover the entire gamut of combat operations, but making sure all of the major capabilities are covered saves lives. Combined arms detachments are simply not as vulnerable to specific threats as homogeneous forces. Units are able to cover for the deficiencies of their comrades, so that the artillery battery can defeat an enemy formation at range while the infantry protects the artillery from a recon unit sneaking up behind them. Smaller ships simply do not have the capacity to carry a full combined arms detachment.

Many systems organize troops into battalion sized units as a convenient tool. Any system willing to purchase these large troop ships, however, will almost certainly have assets optimized for the space available. Most will have a variety of specialized units available for different types of missions. Any base large enough to field these ships will be called upon in many situations. While probably not as highly trained as special operations units, battalions designed to fit in one of these vessels (with or without accompanying ship carrying additional supplies/vehicles) will be well practiced in working together and deploying from the ship as quickly as possible. Battalion scale training missions are always planned well in advance, and will be arranged to keep at least some units available for

deployment for any actual operation. Drills using even larger forces are typically carried out in system, and few if any battalion deployments for training will be more than 1 jump away.