

# Lunion                    A995984-D Hi In Cp

## 2124 Spinward Marches

[http://wiki.travellerrpg.com/Lunion\\_\(world\)](http://wiki.travellerrpg.com/Lunion_(world))

### FIRST IMPRESSIONS WHEN YOU OPEN THE AIRLOCK:

A yellow Sun shines from a sky dotted with a few clouds. A gale is blowing. The mornings are warm, the nights are warm, during the day it is hot. The atmospheric pressure is comparable to earth conditions in a depth of 2175 m. The atmosphere is highly polluted. The air is quite dry. Gravity is close to earth values. A standard sized human (80kg) will weigh about 74 kg.

### THE SOLAR SYSTEM, PLANETARY DATA:

Lunion's sun is a Yellow Star (G5 V). It has a Mass of .94 and a Luminosity of .9. It's perceived size is 94% SOL. The system has 11 worlds, but no gas giant and 1 asteroid belt. Lunion circles its sun in Orbit 3, at a distance of 149.6 Million kilometers, one year has a duration of 338.63 planetary days of 26.7 hours, each. The planetary axis is tilted 36°. The majority of Lunion's surface is covered by land, with the exception of one major Ocean, 5 minor Oceans, 15 small Seas, 8 scattered Lakes.

|                   |   |                               |
|-------------------|---|-------------------------------|
| Density           | : | 0.82 Molten Core              |
| Mass              | : | 1.17                          |
| Gravity           | : | 0.92                          |
| Seismic Factor    | : | 2.40                          |
| Air pressure      | : | 1.87 Atm, -2175 m, Pollutants |
| Weather factor    | : | 71% 5.0                       |
| Energy absorption | : | 78%                           |

### GOVERNMENT, LAW, ECONOMIC AND CULTURAL INFORMATION:

Lunion has a population of 8.777 Billion sentient. The world is governed by a Civil Service Beureaucracy. The rulers are agencies, employing individuals selected by merit. Several councils, wether equal in power or ranked according to system, each exercise influence over the government. The authority is undivided.

The general law level is low. Most infringements will not be punished. The Weapons law level is restricting. No ranged weapons are allowed, but concealed carrying of blade weapons is allowed. The Criminal Law level is very restricting. Even the smallest infringements will be punished.

Buyer beware, many laws favour the seller. The Civil law level is low. A well placed bribe can smooth things out. Personal freedom is impeded, the state controls many areas.

Lunion has 7 giant Metroplexes with over a Billion Inhabitants, 15 huge Metroplexes with hundreds of Millions of Inhabitants, 24 Metroplexes with tens of Millions of Inhabitants, 32 huge Cities with Millions of Inhabitants, 50 large Cities with 100K+ Inhabitants, 63 Cities with 10K+ Inhabitants, 73 small Cities with thousands of Inhabitants, 81 Outposts with hundreds of Inhabitants.

Lunion is a high population, high Tech, industrial, extremely important world, with very huge resources and an average labour force as well as a fantastic infrastructure. The overall efficiency is very high. The world generates 4896 Resource units, which puts it in the 40% Range. The Homogeneity Rating is 60%, Acceptance reaches 100%, Strangeness is 30%, Symbols = 11. Lunion is a member of the 3rd Imperium.

## STARPORT TYPE A

This port is outstanding, large and efficient, they don't come any better. Lunion has an immense orbital port, containing passenger terminals, several hotels and a grand concourse, as well as a freight terminal with a dispersed logistic base. All freight traffic is handled in orbit, containers are shuttled to surface destinations. Refined Fuel is available, be advised, this is the only source of fuel in this system. Scooping fuel from the planetary oceans is seen as a direct infringement of planetary law. Starships up to 1000 Kt can be constructed. This port is one of the huge crossroads of the spaceways. Thousands of Travellers find a temporary home here, either waiting for an interstellar connection, a shipboard job, or just a working passage to Somewhere Else. The transient accommodations are more varied than at any smaller port, plenty of luxury hotel rooms, but also more cheap hostel space. The same is true of shopping; there are of course more high-end retailers, but also more, and more varied, goods at the budget shops. Each year 5.94 Million passengers are handled and 181.05 Million tons of cargo shipped. The system has a very high traffic volume.

Docked at the orbital part of the Starport are 12 x Rigel Class Bulk Carrier (50 kt), 22 x Maru Class bulk freighter (20 kt), 108 x Hercules Class cargo transport (5000 t), 128 x Tukera freighter (3000 t), 148 x Imperialines TI Transport (2000 t), 90 x Tukera Long Liner (1000 t), 164 x Bloodwell Class Merchant (1000 t), 90 x Ad Astra Class Liner (600 t), 172 x Far Trader (400 t), 192 x Free Trader (200 t), a total of 1126 Starships.

The planet bound part of the port has a diameter of 4.6 km. It has a single fence and a cleared buffer zone with patrolling guards. Lunion hosts an Imperial Naval as well as a Scout Base.

Berthed at the downbelow port are currently 20 x Tukera freighter (3000 t), 36 x Imperialines TI Transport (2000 t), 34 x Tukera Long Liner (1000 t), 52 x Bloodwell Class Merchant (1000 t), 32 x Ad Astra Class Liner (600 t), 56 x Far Trader (400 t), 80 x Free Trader (200 t), a total of 310 starships.

The following trade goods are usually available : Above average amounts (+1) of Ores. Average amounts of Processed Non-Metals. Mediocre amounts (-2) of Radioactives, Crystals, Compounds, Recordings, Software, Documents. Small amounts (-3) of Processed Metals, Manufactured Consumables. Very small amounts (-4) of Processed Agroproducts, Manufactured parts. Tiny amounts (-5) of Agricultural Resources, Manufactured Durables, Weapons.

## Purchase Prices

This list shows all the goods available on Lunion.

|    |   |           |                     |            |
|----|---|-----------|---------------------|------------|
| 12 | Common Industrial Goods   | 2D+3 x 10 | 10,000 Cr, +5 75%   | 7,500 Cr   |
|    | Machine components and spare parts for common machinery             |           |                     |            |
| 13 | Common Manufactured Goods   | 2D+3 x 10 | 20,000 Cr, +5 75%   | 15,000 Cr  |
|    | Household appliances, clothing and so forth                         |           |                     |            |
| 11 | Common Electronics  | 2D+3 x 10 | 20,000 Cr, +2 90%   | 18,000 Cr  |
|    | Simple electronics including basic computers up to TL10             |           |                     |            |
| 21 | Advanced Electronics  | 1D+3 x 5  | 100,000 Cr, +2 90%  | 90,000 Cr  |
|    | Advanced sensors, computers and other electronics up to TL15        |           |                     |            |
| 22 | Advanced Machine Parts  | 1D+3 x 5  | 75,000 Cr, +2 90%   | 67,500 Cr  |
|    | Machine components and spare parts, including gravitic components   |           |                     |            |
| 56 | Vehicles  | 1D+3 x 10 | 15,000 Cr, +2 90%   | 13,500 Cr  |
|    | Wheeled, tracked and other vehicles from TL10 or lower              |           |                     |            |
| 23 | Advanced Manufactured Goods   | 1D+3 x 5  | 100,000 Cr, +1 95%  | 95,000 Cr  |
|    | Devices and clothing incorporating advanced technologies            |           |                     |            |
| 43 | Polymers  | 1D+3 x 10 | 7,000 Cr, +1 95%    | 6,650 Cr   |
|    | Plastics and other synthetics                                       |           |                     |            |
| 46 | Robots  | 1D+3 x 5  | 400,000 Cr, +1 95%  | 380,000 Cr |
|    | Industrial and personal robots and drones                           |           |                     |            |
| 15 | Common Consumables  | 2D+3 x 20 | 500 Cr, +0 100%     | 500 Cr     |
|    | Food, drink and other agricultural products                         |           |                     |            |
| 24 | Advanced Weapons  | 1D+3 x 5  | 150,000 Cr, +0 100% | 150,000 Cr |
|    | Firearms, explosives, ammunition, and other military-grade weaponry |           |                     |            |
| 25 | Advanced Vehicles   | 1D+3 x 5  | 180,000 Cr, +0 100% | 180,000 Cr |
|    | Air/rafts, spacecraft, grav tanks and other vehicles up to TL15     |           |                     |            |
| 35 | Luxury Goods  | 1D+3      | 200,000 Cr, +0 100% | 200,000 Cr |
|    | Rare or extremely high-quality manufactured goods                   |           |                     |            |
| 42 | Pharmaceuticals   | 1D+3      | 100,000 Cr, +0 100% | 100,000 Cr |
|    | Drugs, medical supplies, anagathics, fast or slow drugs             |           |                     |            |
| 63 | Drugs, Illegal  | 1D+3      | 100,000 Cr, +0 100% | 100,000 Cr |
|    | Addictive drugs, combat drugs                                       |           |                     |            |
| 65 | Weapons, Illegal  | 1D+3 x 5  | 150,000 Cr, -1 105% | 157,500 Cr |
|    | Weapons of mass destruction, naval weapons                          |           |                     |            |
| 14 | Common Raw Materials  | 2D+3 x 20 | 5,000 Cr, -2 110%   | 5,500 Cr   |
|    | Metal, plastics, chemicals and other basic materials                |           |                     |            |
| 36 | Medical Supplies  | 1D+3 x 5  | 50,000 Cr, -2 110%  | 55,000 Cr  |
|    | Diagnostic equipment, basic drugs, cloning technology               |           |                     |            |
| 16 | Common Ore  | 2D+3 x 20 | 1,000 Cr, -3 115%   | 1,150 Cr   |
|    | Ore bearing common metals   |           |                     |            |

## Sale Prices

This list shows only goods that can be sold at a profit.

|    |   |                       |              |
|----|---|-----------------------|--------------|
| 61 | Illegal Biochemicals<br>Dangerous chemicals, extracts from endangered species | 50,000 Cr,+ 6 130%    | 65,000 Cr    |
| 16 | Common Ore<br>Ore bearing common metals                                       | 1,000 Cr,+ 3 115%     | 1,150 Cr     |
| 31 | Crystals & Gems<br>Diamonds, synthetic or natural gemstones                   | 20,000 Cr,+ 3 115%    | 23,000 Cr    |
| 45 | Radioactives<br>Uranium, plutonium, nobelium, rare elements                   | 1,000,000 Cr,+ 3 115% | 1,150,000 Cr |
| 53 | Uncommon Ore<br>Ore containing precious or valuable metals                    | 5,000 Cr,+ 3 115%     | 5,750 Cr     |
| 14 | Common Raw Materials<br>Metal, plastics, chemicals and other basic materials  | 5,000 Cr,+ 2 110%     | 5,500 Cr     |
| 26 | Biochemicals<br>Biofuels, organic chemicals, extracts                         | 50,000 Cr,+ 2 110%    | 55,000 Cr    |
| 36 | Medical Supplies<br>Diagnostic equipment, basic drugs, cloning technology     | 50,000 Cr,+ 2 110%    | 55,000 Cr    |
| 41 | Petrochemicals<br>Oil, liquid fuels   | 10,000 Cr,+ 2 110%    | 11,000 Cr    |
| 44 | Precious Metals<br>Gold, silver, platinum, rare elements                      | 50,000 Cr,+ 2 110%    | 55,000 Cr    |
| 54 | Uncommon Raw Materials<br>Valuable metals like titanium, rare elements        | 20,000 Cr,+ 2 110%    | 22,000 Cr    |
| 55 | Wood<br>Hard or beautiful woods and plant extracts                            | 1,000 Cr,+ 1 105%     | 1,050 Cr     |
| 65 | Weapons, Illegal<br>Weapons of mass destruction, naval weapons                | 150,000 Cr,+ 1 105%   | 157,500 Cr   |

DAILY freight and passenger amounts:

MAIN ROUTE: Adabiccì (J-3) 27 Kt, 548 P. Tenalphi (J-3) 27 Kt, 1385 P. Persephone (J-4) 27 Kt, 263 P. Strouden (J-3) 273 Kt, 9880 P. Heroni (J-5) 27 Kt, 771 P.

FEEDER ROUTE: Lanth (J-6) 2739 t, 199 P. Ivendo (J-5) 2739 t, 74 P. Cogri (J-5) 2739 t, 299 P. Skull (J-5) 2739 t, 87 P. Natoko (J-6) 13 Kt, 110 P. Dyrnwyn (J-6) 13 Kt, 83 P. Durendal (J-6) 2739 t, 76 P. Hofud (J-6) 13 Kt, 1113 P. Sting (J-6) 2739 t, 85 P. Biter (J-6) 2739 t, 88 P. Smoug (J-6) 2739 t, 149 P. Spirelle (J-3) 2739 t, 244 P. Derchon (J-1) 2739 t, 106 P. Harvosette (J-5) 2739 t, 118 P. Capon (J-2) 13 Kt, 143 P. Fosey (J-5) 13 Kt, 188 P.

MINOR ROUTE: Sonthert (J-6) 273 t, 6 P. D'Ganzio (J-4) 1369 t, 13 P. Icetina (J-6) 1369 t, 15 P. Pannet (J-6) 273 t, 4 P. Garrincski (J-5) 1369 t, 17 P. Wardn (J-5) 1369 t, 7 P. Rabwhar (J-3) 1369 t, 28 P. Zaibon (J-3) 1369 t, 25 P. Shirene (J-1) 1369 t, 22 P. Byret (J-4) 1369 t, 89 P. Mercury (J-5) 1369 t, 21 P.

## TRAFFIC CONTROL, ENCOUNTERS AND REQUIREMENTS

The STARPORT CONTROL Zone covers the physical extent of the starport (on the surface or in orbit), a 15 km radius around it and up to 15 km above it. This is followed by the AEROSPACE Zone. It extends from ground level to 1440 km above the surface. After leaving the planetary atmosphere, control is switched to the ORBITAL Zone. It extends from the upper limit of the Aerospace Zone to a distance of 144K kilometers from the planet. Between orbit and jump point, traffic control is again switched, this time to the TRANSITION Zone. It extends from the upper limit of the ORBITAL Zone to a distance of 1.44 Million kilometers. It controls ships up to the event of jump. Traffic control and traffic separation rely on positive identification, constant tracking and direction of all craft up to the transition into jump space.

During the flight from the jump point to Lunion you encounter 16 x Hercules Class cargo transport (5000 t), 20 x Tukera freighter (3000 t), 25 x Imperialines TI Transport (2000 t), 34 x Tukera Long Liner (1000 t), 30 x Bloodwell Class Merchant (1000 t), 33 x Ad Astra Class Liner (600 t), 30 x Far Trader (400 t), 36 x Free Trader (200 t), altogether 224 vessels.

To be cleared for landing, you need a bill of health for crew and passengers and you need to contact traffic control with your intentions as well as a customs declaration.

## BUDGET, FLEET AND ARMY

The exchange rate for 1 Imperial CR is 1.11. The military budget in peacetime amounts to 4.34 Trillion local Credits, during conflicts it rises to 4.73 Trillion Credits.

The flagship of the fleet is a Dreadnought of 500.000 t. The worlds annual naval budget can maintain a fleet of 59.8 Million Tons. But this amount leaves no room for repairs or the construction of new ships, so the actual size of the Navy will be much smaller. The size is further limited by the worlds industrial capacity which can maintain, repair or construct a maximum amount of 9.4 Million tons of ships at the same time. In addition, the system is protected by 265 TL-13 System Defence Boats.

The planetary defense consists of 20 Field Armies, altogether 10000 Battalions. Counter 20 x [XXXX 5C-13]. 500 of these are mobile Lift Infantry.

## TECH LEVEL ( 13 ) :

SCIENCE 13 : Continued elaboration on unified field theory leads to practical methods for manipulating the strong and weak nuclear forces.

MATERIAL 13 : Techniques for reinforcing the electron bonds in superdense material, increasing its strength further. Industrial nanotechnology spreads into new applications, reducing production costs for many items and producing new materials.

ENERGY 15 : First large-scale production of antimatter. The new material has industrial uses, but is very expensive and strictly controlled. Antimatter-based power is not yet practical.

COMPUTER / ROBOTICS 12 : Artificial intelligence makes computers capable of some of the same self-programming capability and flexibility as biological intelligence.

TRANSPORTATION 15 : Grav vehicles are the basis for all forms of transportation (land, sea, air and space). Personal grav belts are the preferred medium of transport. SPACE 13 : Jump-drive 3 is available.

PERSONAL WEAPONS 15 : Laser and gauss rifles are the standard infantry weapons, Fusion guns, FGMP-15 is the standard squad-support weapon. Experimental neural weapons and stunners are available but not generally used in military applications.

HEAVY WEAPONS 15 : Blackglobe technology is sometimes applied in deep-space combat.

BIOLOGY 10 : Full theory of genetic morphology allows radical modification of species. First integration of mechanical implants with peripheral or sensory nerves. Experimental nanosurgery.

MEDICINE 10 : Experimental nanosurgical techniques. Mechanical implants can be integrated with peripheral or sensory nerves, allowing a variety of bionic replacement organs. Clone transplants are available.

ENVIRONMENTAL 10 : Orbital and deep-space settlements with complete recycling efficiency (microworlds). Similar techniques make arcologies common in crowded planetary urban centers. Practical weather control. Terraforming can cause gradual change in planetary environments.

TEMPERATURES PER HEXROW (HR) in °C:

Year length : 1.03 Terra = 339 planetary days

| HR | Spring |      |      | Summer                      |     |     | Autumn |      |                 | Winter |      |      |
|----|--------|------|------|-----------------------------|-----|-----|--------|------|-----------------|--------|------|------|
|    | 85     | 85   | 85   | 85                          | 85  | 85  | 85     | 85   | 85              | 85     | 85   |      |
| 1  | 55°    | 50°  | 43°  | 61°                         | 55° | 49° | 55°    | 50°  | 43°             | 46°    | 41°  | 34°  |
| 2  | 48°    | 43°  | 36°  | 59°                         | 54° | 47° | 48°    | 43°  | 36°             | 30°    | 25°  | 18°  |
| 3  | 41°    | 36°  | 29°  | 58°                         | 52° | 46° | 41°    | 36°  | 29°             | 14°    | 9°   | 2°   |
| 4  | 34°    | 29°  | 22°  | 56°                         | 51° | 44° | 34°    | 29°  | 22°             | -2°    | -7°  | -14° |
| 5  | 27°    | 22°  | 15°  | 49°                         | 44° | 37° | 27°    | 22°  | 15°             | -9°    | -14° | -21° |
| 6  | 20°    | 15°  | 8°   | 42°                         | 37° | 30° | 20°    | 15°  | 8°              | -16°   | -21° | -28° |
| 7  | 13°    | 8°   | 1°   | 35°                         | 30° | 23° | 13°    | 8°   | 1°              | -23°   | -28° | -35° |
| 8  | 6°     | 1°   | -6°  | 28°                         | 23° | 16° | 6°     | 1°   | -6°             | -30°   | -35° | -42° |
| 9  | -1°    | -6°  | -13° | 21°                         | 16° | 9°  | -1°    | -6°  | -13°            | -37°   | -42° | -49° |
| 10 | -8°    | -13° | -20° | 14°                         | 9°  | 2°  | -8°    | -13° | -20°            | -44°   | -49° | -56° |
| 11 | -15°   | -20° | -27° | 7°                          | 2°  | -5° | -15°   | -20° | -27°            | -51°   | -56° | -63° |
|    | :      | :    | :    | Length of day               |     |     |        |      | 26:42           |        |      |      |
|    | :      | :    | :    | L.....Deepest Night temp at |     |     |        |      | 6:00            |        |      |      |
|    | :      | :    | :    | L.....Medium values at      |     |     |        |      | 11:00 and 22:00 |        |      |      |
|    | :      | :    | :    | L.....Highest Noon temp at  |     |     |        |      | 17:00           |        |      |      |