Equipment

Maurice was just telling me about how safe he felt with the new autosentries surrounding his office when there was a loud thump outside. All the air alarms went off simultaneously. Half-expecting the boom of a fireball I threw myself to the cantina floor like most of the patrons. Everybody fumbled after their airmasks. A woman with a child screamed that she couldn't find hers; a neighbour gave her his spare. Just as everything seemed to calm down there was another thump, and this time we could see the reflected orange fire glow from further down the hallway-street. In the chaos Maurice didn't notice that I took his key card. My friends had organized hell of a distraction.



-- From Kimanjaro Libre, Eduardo Hébert

Survival

Breathing mask

The breathing mask's main function is to remove carbon dioxide and add oxygen. It usually works as a respirator connected to a small oxygen canister. Even without oxygen the masks protect against hypercapnia, at least as long as the carbon filters work. Some models are little more than a breathing tube, most cover just the mouth and a few are full-face. People often customize their masks with paint or decorations, improving ease of recognition. There also exist breathing masks for horses, helping them when used for riding or carrying.

TL: 7, Weight: 0.1-0.3 kg, Price: Lv150 Replacement Filter: Weight: Insignificant, Price: Lv15 Oxygen canister (8 hours): Weight: 1 kg, Price: Lv10 (refills Lv 2)

Canister recharger

A device that is connected to a power supply like a vehicle or wall socket that extracts oxygen from the air and compresses it into a canister. It takes about 10 hours to refill a canister outdoors, and 3 hours indoors with a terrestrial atmosphere.

TL: 7, Weight 2 kg, Price: Lv 200

Envirofilm

Transparent plastic that is used to cover greenhouses, shelters, temporary housing or repair damage. It does not let through Kimanjano air or water; the downside is its tendency to drip condensation.

TL: 7 Price: Lv 1 per square meter

KimChem SoudacherTM

The noxious atmospheres, vacuum and other hazards of the frontier have produced a plethora of emergency sealing systems. On Kimanjano Soudacher sealfoam is used to fix leaks. A relative to SofstuffTM, the foam is sprayed on surfaces and immediately hardens into

a solid in contact with methane and carbon dioxide. Used in a terrestrial atmosphere is very slowly solidifies and can be easily wiped off. Used outdoors it tends to solidify almost immediately, but can be sprayed into loose walls for temporary shelter.

If Soudacher canisters break open on the outside they tend to detonate with a dull thump, turning into a cubic meter of soggy fluff.

TL: 7 Price: Lv 1 per canister Weight: 0.2 kg

Minicooler

Portable air conditioning unit. Useful both for creating a cool environment and for producing emergency quasi-drinkable water (it tastes terrible, but does not contain the toxins of seawater).

TL: 7 Price: Lv 50 Weight: 1kg.

Air Cleaner

Used for temporary shelters and to freshen up houses. The cleaner absorbs hydrocarbons and carbon dioxide. Usually combined with an oxygen canister. Formal building norms require that houses have air-cleaning capability, but few can implement them these days.

TL: 7 Weight: 2 kg (smaller versions exist) Price: Lv 50

Environment suit

The Kimanjano environment suit is intended for working in chemical-heavy environments such as the pipeline harbor, the lagoons or polluted parts of Les Déchets. Combined with a breathing mask, it keeps toxic chemicals out and cools the wearer similar to a cooling suit.

TL: 8 Weight: 2 kg Price: Lv 200

EnvironmentaleTM Cooling suit

The hot, muggy environment of Kimanjano makes most humans uncomfortable. By wearing smart material underclothing that removes heat people can stay comfortably cool outside. Very popular among people who can afford it. Cheaper knock-offs exist (like the Rafraix[™] series by Fromme Envirotech), but often have problems like condensation.

TL: 7 Weight: 0.5 kg Price: Lv 200

Carbstick

Simple device that detects excessive carbon dioxide in the air and loudly warns people in the vicinity to wear breathing masks.

TL:6 Weight: negligible Price: Lv 1

RCIR (Ration de Combat Individuelle Rechauffable)

Despite 300 years of advances, military "meals ready to eat" food is still not very good compared to normal food. But the French are reputed to have the best MREs anyway, quite often approximating a normal meal. The RCIR (Ration de Combat Individuelle Rechauffable) of 2300 includes not only an appetizer, a main dish, a hors d'oeuvre and a dessert as well as a package of instant soup, crackers or bread with cheese spread, chocolate, caramels, instant café-au-lait or cocoa powder, and water purifying tablets. Sometimes wine is supplied

separately, but there is also a relatively successful instant wine in each package. Advanced materials enable self-heating or self-cooling packages

This has led to a trade among joint military efforts: foreign soldiers are often willing to trade several MREs or other goods for a RCIR. On Kimanjano military MREs are hotly desired by many refugees who have to eat the far less enticing Zapamoga pap, producing a brisk and profitable trade. The going rate is one RCIR for six MRE and eight Zapamoga rations.

TL: 7 Price: Lv 0.5 Weight: 1kg

Information Processing

Inertial rings

Gesture interface based on small rings worn on the hands that sense hand movement. Feedback can be provided by vibration. Once a user has got used to the system it is often said to be very responsive and quick.

TL: 9 Lv 10, connects to a portacomp or compatible system.

FromLink

The Fromme communications network. It mainly functions in and near the main settlements, and even there it misbehaves occasionally. It is based on a far more centralized structure than the normal Link, with military nodes actively censoring and logging traffic. While link-enabled devices spontaneously set up ad hoc link networks anywhere they congregate, when linked to FromLink traffic tends to be routed through the central nodes. Satellite uplinks are available but requires access permits and codes from the military.

Qlink

Quantum encrypted laser communication system. Impossible to eavesdrop even in principle. The drawback is that it requires line-of-sight for the laser and that bandwidth tends to be low; at best it suitable for voice communications, but often just text is used. On Kimanjano the military are using Qlink uplink communicators. They are similar to normal tight-beam uplink communicators. They can operate in normal encrypted mode, quantum encrypted mode and in quantum augmented mode, where random keys are chosen every second and exchanged by quantum to encrypt ordinary high-bandwidth communication.

TL: 11 Weight: 10 kg Price: Lv 1000

Engineering

DuracâbleTM

One of Kimanjano's former major exports, ultra-strong carbon nanotube filament cable. Related to the beanstalk cable material, it has a tensile strength of 50 GPascal: a single one millimetre thread can lift around 5 tons, and the thicker one centimetre cable 500 tons.

TL: 9 Weight: 2 gram/m (1mm²), 0.2 kg/m (1 cm²) Price: Lv 1/70 for 50 m.

Graphene paper

Another local product. The paper consists of graphite-like layers, making it very strong and stiff, yet bendable. It is chemically quite inert and it takes much energy to rip. Graphene paper has been used as a component in personal armour, reinforcement and electrical/chemical shielding.

TL: 9 Weight: 1 kg/m² Price: Lv 2/m²

CarbofilTM

Carbon nanotubes with metallic conductivity, conducting about a thousand times better than copper. While still no match for superconductors, Carbofil is a cheaper substitute on Kimanjano. One of its weaknesses is that it is mostly carbon and can be burned. Overloaded Carbofil burns spectacularly.

TL: 9 Weight: 0.5 kg/m Price: 10 Lv/m

ChandellixTM

Locally produced chemical light source. The substance, a gooey liquid, reacts to air by glowing a soft orange. It can be painted on surfaces (in which case it will last a few hours) or placed in semipermeable tubes that last a few days. The fact that Kafers have a hard time seeing the reddish light proved very useful during the war.

TL:8 Weight: 1 kg for a can, Price: Lv 3

Armor and Weapons

Balle en Etiquette, "Tagged bullets"

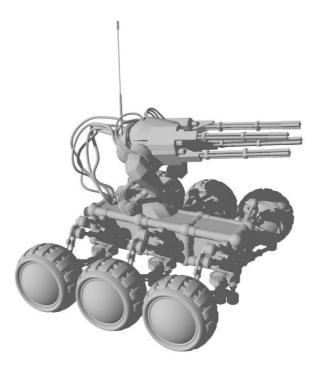
Widely used in the Core, bullets are individually tagged with micromarkers that makes it possible to determine which batch an individual bullet is from, and then by running purchase and delivery history who ought to have fired it. The French military largely uses tagged bullets (unless forced to use primitive colonial-made bullets), enabling after action accounting and tracing. However, on Kimanjano so much ammunition has been lost, found, sold and given away that most bullets are untraceable. Still, new ammunition can sometimes be determined to belong to a particular batch, making quartermasters unwilling to sell or leak any – if used improperly it could be traced to them.

TL:10 Price: as normal bullets

Guiscard Salamandre 3 Amphibious Armour

Legion amphibious marines use a combined environment suit and armour for underwater operations. It works as a combination of Vedette half armour, full-body nonrigid armour, environment suit and diving suit. While somewhat cumbersome on land, it enables submerged attacks on port and ship targets without preventing land incursions (which is the problem with Combat Swimmers).

TL: 11 Price: Lv1000



Sagem Robotics Epée-4

Robotic guard, intended to patrol installations and detect intruders, possibly warn them and attack. Brought in during the war to keep Kafers from exploiting outlying bunkers or stockpiles, later reprogrammed to protect them from looters and rebels. The guard is essentially a Sortech Explorer equipped with assault weapons and a hard-to-jam communications suite. It can be teleoperated and when it detects something amiss it contacts its headquarters, but if no connection can be found it will act autonomously.

The guiding idea was to make the Epée-4 cheap enough that it could be widely distributed. When an Epée-4 installation finds itself under attack all local robots and cameras network their information and use it to hit targets. While not very smart, the coordinated firing of several robots tends to deter many enemies. TL: 12

Sagem Robotics Hauteclere

Advanced robotic guard intended for invading Kafer bunkers. Like the Epée-4, but equipped with more armor and grenade launchers. TL: 12

Cloudeye Drone

English-designed battlefield awareness drones. Each cloudeye is a 10 cm ultralight helicopterfloater, equipped with 360 degree vision and reporting back wirelessly. Cloudeyes are useful in urban terrain and during relatively calm weather in the countryside; their 5 m/s speed is not enough to keep them stationary when it is too windy. The drone can keep flying for two hours, then it either returns to base or self-destructs.

TL: 11

Restraint tape

Carbofiliament tape used to restrain criminals or prisoners. It is practically unbreakable, glues itself to the skin with a reversible bioglue, lets air and water through and can (relatively) easily be removed by applying a releaser spray. Being conductive it makes tasers efficient.

Carbofiliament tape is used in many places on Kimanjano; it has the same properties as duct tape but is far stronger. Using it for restraints is less pleasant and safe. Price: Lv 50 for a roll, releaser spray Lv 50. Ordinary carbofiliament: 1 Lv for a roll. TL: 9

Burp Bomb

Improvised weapon used first against the Kafers and later by the rebels. The bomb consists of a number of oxygen canisters wired to explode together with a small ignition charge. The oxygen mixes with the methane in the air and is then ignited. Highly unreliable, with a detonation strength varying between a small fuel-air explosive and just the ignition charge. TL: 5

Light trigger

A booby trap device invented by the IEX researchers during the war. Single-walled nanotubes are light sensitive, and a treatment with some sensitising chemicals makes them even more reactive. A pile of treated tubes will burst into flame as it is exposed to light, triggering some other explosive. Given the availability of nanotubes in the Kimanjano industries, this provided humans with a nasty surprise for the Kafers – hide explosives sprinkled with nanotubes in boxes or under objects that might get moved, and watch the fireworks. Even better, Kafer installations often use harsh UV-rich lamps that set off tubes that doesn't go off in the milder Kimanjano sun. Several successful sabotage operations were based on getting unwitting Kafers to carry apparently safe equipment indoors, only to have it blow up.

Medical and Lifestyle Drugs

Diurnals

Medication that helps maintain sleep rhythms despite 3:2 shift work. Without them people get confusing "day-lag" and desynchronization of when they get hungry, sleepy and their body temperature. Diurnals are slow-release pills that set a biological rhythm independent of daylight. Diurnal pills or patches are commonplace in space and on planets with troublesome periods. Slow-release subdermal implants are also popular since there is no need to remember to take the pill; however, when traveling to other time zones they have to be adjusted.

TL: 6

Health Supplements

The "health supplements" are a cocktail of antioxidants, chelators and artificial enzymes that protect the body from the chemicals in the Kimanjano environment. Without them the hydrocarbons increase the risk of cancer, mutations and various diseases significantly. Normally taken as pills and aerosol sprays.

[A person not taking supplements has to roll stamina once a month or contract a minor illness. A botch corresponds to a more serious condition such as cancer.]

Price: Lv 1 per dose TL: 8

Negain™

Toxin blocker. A wide-spectrum drug that attacks many kinds of drug molecules (it targets unusual bonds or groups that are not normally found in terrestrial biochemistry but are common in pharmaceuticals). Used to treat poisonings and as a Kimanjano "health supplement" (but see also Sobristat). Available as a pill, dermal patches, aerosol spray and for injection.

TL: 10 Price: Lv 5 for 10 doses.

RionexTM

One of the major products of Kimanjano was a RNA-inhibitor abzyme very suitable for antifungal treatments. Rionex antifungal gel is used across human space both to protect people and objects from fungi. On Kimanjano it is popular to protect from athletes foot and mask infections.

TL: 9 Price: Lv 2 for a jar with 10 applications.

Immunostatics

Sometimes severe immune reactions have to be stopped straight away. Immunostatic drugs are medical sledgehammers that turn off the immune system nearly instantly: rejection, allergic and autoimmune reactions stop, but so does defence against pathogens. The patient must be kept in a clean environment (ideally a sterile bubble) or given massive doses of antibiotics to avoid severe infections. More advanced immunostatics can turn off specific parts of the immune system, enabling targeted responses. One concern on Kimanjano is that some immunostatic-like substances may have been released from destroyed chemical industries.

TL: 8-9 Price: Lv 25 per dose.

ImavantTM

Immunobooster drug originally made by KimChem, typical of the simpler drugs used in the colonies to regulate immune reactions. Taking the drug gives a temporary boost to the immune system

[+1 to STA for resisting an infection or parasites, reduces the immunosuppressive effects of enhancements one level (see Cybernetics file). Worsens autoimmune reactions and allergies.]

TL: 10 Price: Lv 40 per one-week treatment.

FuntavirTM

Anti-viral RNA-inhibitor abzyme produced on Kimanjano able to disrupt many kinds of RNA-viruses, including influenza, SARS, hepatitis C and diarrhoea-causing rotaviruses. While not as effective as a targeted treatment it is very useful as a broad spectrum, frontier treatment.

TL: 10 Price: Lv 10 for a one-week treatment.

Provolle Antiseptic powder

A mixture manufactured locally and delivered liberally by Life Foundation. The powder is an effective, long-lasting disinfectant that also tends to kill of lice and other small parasites.

Ingesting it produces a terrible case of gastric upset but is otherwise not harmful. It has a characteristic vanilla-sage smell most people recognize as the smell of refugee camps. TL: 7

Field Regen Therapy

Localized gene therapy stimulating regeneration. Normally this is done safely in hospitals, but out on the frontier rapid regeneration may be essential (especially among troops cut off from supplies). Field regen spray is used on and in a wound, triggering cell proliferation – essentially a "friendly cancer" as some military instructor called it in an unguarded moment. The regeneration helps healing but tends to leave ugly scar tissue. The genetic signal contains an apoptosis pathway enabling debridement at a hospital: the right substance is injected, and the tissue dissolves and can be replaced with properly regenerated tissue.

[Doubles healing rate, but any healing in the face or other exposed body parts may reduce appearance with 1.] TL: 10

Zapamoga Craniyum

Special nutrient bar developed by Zapamoga to protect the brain from acute starvation. It is rich in vitamins, energy, protein, neuroprotective drugs, mild cognition enhancers and substances that counteract the negative psychological effects of starvation. While unsuitable for general nutrition the bars are useful for protecting children's development. On Kimanjano Craniuyms are sought after "sweets". The packaging has small visual games, labyrinths or puzzles printed on them.

TL: 9 Price: Lv 1/kg.

Enhancement Drugs

A good rule to live by is to make sure nobody injects any unknown substances into your CSF.

Herc

Herc is a drug made popular by physical labourers in the frontier, and ground military forces have also used it on occasion. Each dose of the drug increases a character's strength by 1 point for a period of approximately ten hours (roll 2D10 for duration), after which time the user must rest (do nothing more strenuous than walking unencumbered) for an equivalent period of time. For example, if the drug's effect lasts for three hours, the character must rest afterwards for three hours. If the rest period is ignored, or if multiple doses of the drug are taken in a 24-hour period, the character risks painful muscle spasms and possible permanent damage (roll a STR check to avoid). If a STR check is failed, 1D6 hit points damage occurs as muscle spasms. A botch means a lost point of STR (which will require several months of rehabilitation to recover).

TL: 10 Price: Lv10 per dose

Kinepine[™], "Audace"

Marketed by PsiTechCorp as "the human answer to Kafer pseudoepinephrine", the drug was intended as a battle drug for use on intensive US missions in the Kafer War. It is a strong stimulant that promotes faster reactions and broad peripheral attention while inhibiting negative emotional responses to stress. It makes soldiers quick to adapt to surprises and changing battle conditions. The downside is jumpiness, inability to concentrate on single tasks for an extended time and a tendency to remain cheerfully unconcerned. While far better

than previous generations of battle drugs it was still regarded as suitable only for particular kinds of missions, in particular where Kafer ambushes were likely such as house-to-house fighting or storming a Ch*!!. However, the anti-stress and stimulant properties made it popular in the military as a form of recreational drug. It is not addictive in any biological sense, but many people find the energetic high useful. More seriously, people using it become slightly sociopathic for the duration.

[Gives +2 to initiative and one extra dice in perception rolls, reduces penalties from stress, tiredness or the fog of war by one. To maintain attention on something that requires time, the user has to roll Willpower. Gives a –1 dice penalty to empathy and other rolls requiring emotional concern.]

TL: 11

AlerzenTM, "Energique"

Alerzen from Becker-Umoff is a stimulant that removes the ability to sleep or even feel tired. For the duration (usually about 24 hours) users remain normally vigilant and active. They may experience fatigue in the muscles but their minds apparently stay as sharp as if fully rested. After more than 24 hours of sleeplessness performance starts to drop anyway, but as long as the drug is in the system there is no sensation of tiredness. However, all the tiredness is "stored" and will return after the drug wears off. This makes some people take new doses, postponing sleep further. Eventually they crash, suffering from delusions and serious immune instability.

[Normally there is one dice penalty for every 24 hours of sleep deprivation. If Alerzen is taken, for the next 24 hours no penalties due to sleep deprivation will occur. After the drug wears off they return, doubled. Usually the user sleeps a very heavy sleep afterwards, about twice as long as normally. Beyond 96 hours hallucinations and homeostatic problems begin; reduce intelligence and stamina by one dice every 24 hours. When one reaches zero the person collapses, either in delirium or a serious state of bodily dysregulation.] TL: 10

Anorexigènes

During the war military grade appetite suppressants appeared, and were widely used by the military and population alike to handle the privations. Among refugees use of anorexigenes is still dangerously high, as many find them useful to avoid a meal that can be traded for something valuable or given to a loved one in greater need. TL: 8

J ("Parler trop")

Memory enhancer drug with euphoria, talkativeness and lack of inhibition as side effects. When cued, people have a hard time not talking about their memories. This makes it useful as an interrogation drug, but there are some habitual J users and a few taking it as a regular enhancer.

[+2 bonus for recalling information, but -2 for keeping your mouth shut.] TL: 11 Price: Lv 2.0 per dose

Emspan[™] ("Acarid", "Communion")

Social cognition enhancer. It cannot truly improve empathy (the ability to figure out what other people feel or think) beyond the potential of a particular person, but the heightened social interest tends to improve empathy. However, it forcefully increases the experience of sympathy with other people (the experience of their emotions). Originally developed as a

treatment for sociopaths it was found to be far more popular as an enhancement or recreational drug. As a recreational drug it is often mixed with MDMA (Ecstasy), KYT or alcohol to lower inhibitions. It can also be used as a form of psychological torture by placing doped people together with clinically deranged or people undergoing torture. [Gives +2 to rolls involving understanding and feeling other people's emotions and views, but gives -2 to resist emotional manipulation.] TL: 11

Sobristat[™] ("Sober-up", "Knurd")

Antidote to alcohol intoxication. Based on the old Ro15-4513 inverse agonist against benzodiazepines, it does not remove the alcohol, just its effects on the brain. Hangovers and the risk of alcohol poisoning when people overconsume remains. Sobristat is PsiTechCorp's version of this kind of drug, promoted as for its long-lasting effects (a pill blocks intoxication for 24 hours) and anti-overdose control. It is still regulated in most countries due to the liability risks; normally it should only be used by professionals.

A popular misuse among mercenary soldiers (who often have easy access to the drug) is "The Ten Minute Bender": to take the drug, drink heavily, and then take the toxin-blocker Negain. Within a short time the Sobristat is removed and the person becomes roaring drunk. Several cases of fatal alcohol poisoning have occurred due to this game over the last few years.

[A dose will remove 3 dice of intoxication penalties, but not hangover. If the person was not strongly drunk or even sober he will feel tense and anxious.] TL: 8

Recreational Drugs

Trance

Inexpensive, euphoric drug manufactured locally. Gives euphoria for about 6 hours, followed by a fatigued down. Highly addictive, it is widely used among the refugees of Les Déchets and provides the main source of income for criminals there. TL: 6

Lum

Alcoholic beverage brewed in Les Déchets from vegetable matter and artificial cellulase. Famous for being useful both for degreasing, vehicle fuel, Molotov cocktails and dissolving human brains. Unlike more refined drinks like grass-alk, pruno or Déchet-beer Lum is just alcohol.

TL: 2

Cannabis

Cannabis sativa is grown licitly or illicitly across human space, including on Kimanjano. Despite its hardiness it does not thrive outdoors due to the long days but growers instead farm it in greenhouses or hidden indoor rooms with artificial light. It is not smoked on Kimanjano, but instead hashish is usually eaten, dissolved in alcohol ("Grass-Alk" and "Green Lum") or vaporized. Cannabis tea is used in Les Déchets as a general cure-all. TL: 1